

26<sup>th</sup> November 2024

OMAS-MOEF-L-01261

**Deputy Director General of Forests (C),**  
 Ministry of Environment Forest and Climate Change,  
 Integrated Regional Office,  
 A-209&218, Aranya Bhawan, Mahatma Gandhi Road,  
 Jhalana Institutional Area, Jaipur – 304002, Rajasthan

**Subject: Six-monthly progressive EC compliance reports for RJ-ON-90/1 Block for the period April 2024 to September 2024.**

**References: Nine Environmental Clearances (refer below table) for RJON-90/1 Block.**

Dear Sir/Madam,

Please find enclosed six-monthly status report for the period **April 2024 to September 2024** on progressive compliance to the conditions stipulated in the below mentioned Environmental Clearances.

EC File No. & Date	EC subject
J-11011/382/2005 - IA II (I) dated 21 <sup>st</sup> March 2006	Hydrocarbon development in RJ-ON-90/1 block (Mangala, Aishwariya, Saraswathi, Raageshwari fields) in Barmer, Rajasthan
J-11011/174/2007 - IA II (I) Dated 12 <sup>th</sup> March 2008	Hydrocarbon development of Bhagyam field in the RJ-ON-90/1 block, Rajasthan
J-11011/175/2007 - IA II (I) Dt. 17 <sup>th</sup> May 2007	Hydrocarbon development and production of Guda Field in RJ-ON 90/1, block
J-11011/98/2010 - IA II (I) Dated 23 <sup>rd</sup> Nov, 2010	Augmentation of Crude Oil Production (140,000 BoPD to 1,60,000 BoPD) and Associated Gas Production (20.4 MMSCFD to 32 MMSCFD) within RJ-ON-90/1 Block, Rajasthan
J-11011/98/2010 - IA II (I) dated 16 <sup>th</sup> Oct 2012	Augmentation of crude oil production (160,000 BoPD to 175,000 BoPD) and associated gas production (32 MMSCFD to 35 MMSCFD) within RJ-ON-90/1 block, Rajasthan
J-11011/108/2012 - IA II (I) dated 14 <sup>th</sup> June 2013	Increase in crude oil production capacity from 175,000 to 200,000 BoPD and associated gas from 35 to 40 MMSCFD within RJ-ON-90/1 block, Rajasthan
J-11011/80/2013 - IA II (I) dated 11 <sup>th</sup> Aug 2014 & amendment dated 26 <sup>th</sup> April' 16	Augmentation of Hydrocarbon production (2 lakh Bopd to 3 lakh BoPD) and 165 MMSCFD natural gas in RJ-ON – 90/01, block
J-11011/25/2013 - IA II (I) dated: 8 <sup>th</sup> August 2014	Drilling of Exploratory/Appraisal Wells (300) within RJ-ON-90/1 Block in Barmer and Jalore, Rajasthan
F. NoJ-11011/13/2018-IA-11(1) dated 11 <sup>th</sup> April, 2019	Enhancement of HC Production (3 lakh BOPD to 4 lakh BOPD and NG 165 MMSCFD to 750 MMSCFD) within RJ-ON-90/1 Block at Barmer (Rajasthan)

Six monthly EC compliance reports are also uploaded on our website and can be browsed through below link.  
<https://www.cairnindia.com/Pages/PoliciesandDisclosures.aspx>.

Thanking You  
 Yours truly

**Dr BR** Digitally  
 signed by  
**Jat** Dr BR Jat

**Dr. Bhoma Ram Jat**  
 Chief Environment Manager

**Copy to:**

1. Member Secretary, RPCB, Institutional Area, Jhalana Doongari, Jaipur – Rajasthan
2. Scientist 'E' & In-charge, Zonal Office (Bhopal), Central Pollution Control Board, 3rd Floor, Sahkar Bhawan, North TT Nagar, Bhopal- 462 003, Madhya Pradesh.
3. Regional Officer, RSPCB, Tilwara Road, Jasol, Balotra, Rajasthan 344024

**VEDANTA LIMITED**

**Cairn Oil & Gas:** ASF Center, Tower-A, Plot 362-363, Jwala Mill road, Phase-4, Udyog Vihar, Sector-18, Gurugram - 122016, Haryana, India  
 T +91 124 459 3000 | F +91 124 414 5612 | www.cairnindia.com

**Registered Office:** Vedanta Limited, 1<sup>st</sup> Floor, 'C' Wing, Unit 103, Corporate Avenue, Atul Projects, Chakala, Andheri (East), Mumbai – 400093, Maharashtra, India | T +91 22 664 34500 | F +91 22 664 34530 | www.vedantalimited.com

CIN: L13209MH1965PLC291394

**Name of the Project:** Hydrocarbon development of five fields namely, Mangala, Aishwariya, Saraswathi, Raageshwari oil and gas fields in RJ-ON-90/1 block of M/s Cairn India Ltd. Located in Barmer and Jalore Districts, Rajasthan – Environment Clearance

**Clearance Letter No:** J-11011/382/2005 – IA II (I) dated 21<sup>st</sup> March 2006

**Period of Compliance Report:** Progressive EC Compliance Reporting period is **April-24 to September-24**

Field wise the average production details for the reporting period is detailed below

S. No.	Field Name	Average production per day in BoPD (Barrels of Oil per Day)	Average Gas Production (MMSCFD)
1	Mangala	35325	15.82
2	Aishwariya & ABH	17242	10.60
3	Raageshwari	5473.9	119.3619
4	Saraswati	316.311	0.138

All the conditions mentioned in this EC are being complied. The production capacities and facilities detailed have been achieved and installed. The point wise compliance is detailed below:

**A. SPECIFIC CONDITIONS:**

S. No	Conditions	Compliance Status
i.	The company shall comply with the guidelines for disposal of solid waste, drill cutting and drilling fluids for onshore drilling operation notified vide GSR.546(E) dated 30th August 2005.	Water Based Mud (WBM) is used as the drilling fluid for drilling the upper section of well (~250 - 500 meters) or up to complete target depth of the well subject to geological formation. In case of hard strata, Synthetic Oil Based Mud (SOBM) is used to counter difficult drilling situations & incremental formation pressure, such as high down hole temperatures, hydrated shales, or salt, where the properties of WBMs would limit performance. The WBM cuttings generated are non-hazardous in nature. These cuttings are washed and used for construction activities like backfilling of low-lying areas, construction of well pads etc. SOBM drill cutting generated are segregated at the sources of generation and disposed in real time to cement industry for coprocessing. HDPE lined concrete pits are also available at site for interim storage & handling of drill cuttings. During drilling process, waste residual mud & drilling wastewater are collected in the container for treatment, recycling and disposal.  The drilling fluid after solid – liquid separation is being recycled and/or disposed through adequately designed and lined solar evaporation ponds and deep dump well disposal.
ii.	Drilling wastewater including drill cuttings wash water shall be collected in disposal pit lined with HDPE lining evaporated or treated and shall comply with the notified standards for on-shore disposal.	

S. No	Conditions	Compliance Status					
		The oil base drill cuttings and residual dry mud are shifted to the MPT captive hazardous landfill for appropriate disposal or being sent for co-processing in cement industry. Refer <b>Annexure – 11</b> for compliance to GSR. 546(E) dated 30 <sup>th</sup> August 2005.					
iii.	The data generated for ambient air quality during winter and summer seasons for SPM, RSPM, benzene, anions and cations etc. at 3 locations shall be submitted to CPCB and RSPCB on-line (every year) in consultation with CPCB when the project is in operation stage. Fresh ambient air quality monitoring on 24 hourly basis shall be carried out for at least one month for SPM and RSPM, benzene, anions and cations and submit the report before 31st July, 2006.	Environmental Monitoring for RJ-ON block is being carried out based on the Rajasthan State Pollution Control Board (RO) approved plan. The ambient air quality monitoring plan considers upwind and downwind direction, receptors and Ground Level Concentrations (GLCs). Ambient air quality monitoring is carried out as per the approved plan through a NABL accredited 3 <sup>rd</sup> party laboratory. Graphical representation of ambient air quality monitoring results is enclosed as <b>Annexure-01</b> . CH <sub>4</sub> , Non-Methane HC and CO are found BDL and all other parameters are found well within specified limits as per NAAQS. The reports are periodically submitted to RSPCB.					
iv.	Effluent generated from Group Gathering Station (GGS) and Central Processing Facility (CPF) shall be treated to conform to standards under E (P) Act, 1986 and subsequent amendments.	The various streams of wastewater generated from operational facilities are produced water, desalination plant reject water, ETP reject, filter backwash water, boiler blow down and domestic sewage. The produced water is treated for the removal of physical impurities such as total suspended solids and oil. Thus, treated water is injected back into the reservoir for maintaining reservoir pressure and void replacement. Reject from desalination plant, ETP and treated filter backwash water are disposed in deep disposal well of depth >1000 m depth below ground level complying with respect to suspended solids and oil and grease 100 mg/l and 10 mg/l, respectively as per The Environment (Protection) Rules, 1986.					
		<b>Parameter</b>	<b>MPT-OB STP</b>	<b>MPT STP</b>	<b>RGT STP (25 KLD)</b>	<b>RGT STP (40 KLD)</b>	<b>Reed Bed BH 06</b>
		pH (at 25 °C)	7.38	7.61	6.85	6.95	7.67
		TSS (mg/l)	11.5	11.3	14	14	8.40
		BOD (3 d at	8.8	8.6	7.2	7.2	4.22

EC Compliance Report - Hydrocarbon development of five fields namely, Mangala, Aishwariya, Saraswati, Raageshwari oil and gas fields in RJ-ON-90/1 block of Cairn Oil & Gas Division of Vedanta Limited located in Barmer and Jalore Districts, Rajasthan

S. No	Conditions	Compliance Status				
		27 <sup>0</sup> C) (mg/l)				
		COD (mg/l)	47.6	41.6	36.4	31.45 35
		NH4 (N)	2.76	2.45	4.7	2.62 2.87
		N total	6.45	4.34	2.6	6.4 5.74
		Fecal Coliform (MPN per 100 ml)	50	60	60	65 40
		<p>Currently, there are three sewage treatment plants in the block - 250 m<sup>3</sup>/day synchronized STP at Operations Base near MPT, 45m<sup>3</sup>/day STP at MPT, 40 m<sup>3</sup>/day and 25 STP m<sup>3</sup>/day at RGT OB. The monitored values of key parameters stipulated in Consent conditions during the reporting period are given below:</p> <p>Reed bed system is developed at BH-06 camp site for treatment of sewage. The treated water from STP and reed bed is used for greenbelt development within the premises. There is no wastewater discharge outside the facility boundary.</p>				
v.	The company shall install desalination plant to meet the freshwater requirement of 2000 m <sup>3</sup> /d. Rejects from the desalination plant shall be disposed off in environmentally sound manner.	Desalination plants of capacities 4,800 m <sup>3</sup> /d, 672 m <sup>3</sup> /d and 200 m <sup>3</sup> /d are installed at MPT, RGT, and RWP-07 respectively (after augmentation based on EC obtained on 11 <sup>th</sup> August 2014). It meets the domestic and process freshwater requirements during operations. The desalination and RO plant reject is disposed in deep disposal well of depth >1000 meters below ground level complying with respect to suspended solids and oil and grease 100 mg/l and 10 mg/l, respectively as per The Environment (Protection) Rules, 1986.				
vi.	The project authorities shall not extract fresh water from any surface or ground water and use of saline water shall be as per CGWB guidelines.	<p>No fresh water is being extracted for operational usage. Only deep saline water is being abstracted after obtaining necessary permission from CGWA.</p> <p>On an average, <b>15290</b> m<sup>3</sup>/day of saline ground water was abstracted in the reporting period from Thumbli (NR-01) through six deep saline wells against the permitted value of 51,500 m<sup>3</sup>/day. Also, on an average <b>913</b> m<sup>3</sup>/day of saline ground water was extracted from Jagadia (Raageshwari) through five wells against the permitted value of 3000 m<sup>3</sup>/day.</p>				

S. No	Conditions	Compliance Status
vii.	Project authorities shall-ensure that while injecting ground water into deep dump wells, injected water is free of anti-microbial and anti-corrosion property.	The water is being treated for key parameters before injection to the deep dump well.
viii.	The Company shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed. At place of ground flaring, the overhead flaring stack with knockout drums shall be installed to minimize gaseous emissions during Flaring.	<p>All storage tanks and process vessels have been installed with SIL (In simple terms, SIL is Safety Integrity Level, which is a measurement of performance required for a safety instrumented function) rated instrument systems including high, high-high and low, low-low alarms for information to DCS (Digital Control System) panel engineers for immediate intervention. Also, the process systems are installed with Emergency Shut Down Devices (ESDs)/ valves to isolate the supply during any leaks and prevent spills. Oil spill contingency plan is prepared and implemented at sites. Secondary containment has been provided at all hydrocarbon storage areas in accordance with OISD standards. The process vessels have been provided with kernes to contain accidental spills.</p> <p>Full-fledged 24x7 oil spill response team stationed at MPT providing coverage to entire Rajasthan field, backed up fire services team consisting of trained professionals. Firefighting measures include hydrant system, foam system, portable fire extinguishers, water spray systems, fireproof electrical fittings, and fire and gas detection systems. In addition to above, total 09 Nos. of Multipurpose Fire tenders stationed at MPT (4), RGT (2), Bhaygam (2), Aishwariya (1) for firefighting and emergency response round the clock in RJON block area.</p> <p>Central Control Room at MPT &amp; RGT, and critical sub-stations and instrument &amp; communication rooms in remotely located well-pads have been provided with clean agent (Inergen/ Novec 1230 total flooding system) for rapid fire extinguishing, in combination with fire and gas detection system. OISD Standards have been complied while the design and installation of both passive and active Fire protection system.</p> <p>All Elevated flare with knock out drum is being used for flaring of minimal associated gases. At some remote satellite fields, horizontal flare is installed. However, the stacks are connected to the knockout drums for effective separation of vapor-liquid. At local separation facilities enclosed ground flares are provided to avoid any impact due to heat and glare.</p>

S. No	Conditions	Compliance Status												
ix.	The Company shall take necessary measures to reduce noise levels such as proper casing at the drill site and meet DG set norms notified by the MOEF. Height of all the stacks/vents shall be provided as Per the CPCB guidelines.	DG sets are provided with acoustic enclosures and effective stack height in accordance with CPCB guidelines.												
x.	Proper infrastructure and sanitation facilities shall be provided for the construction workers during construction. All the construction wastes shall be managed so that there is no impact on the surrounding environment. Further, the company shall undertake health awareness programme for the construction workers in consultation with the Rajasthan State Health Department and District Administration.	The construction work is not directly taken up under CSR it is further sub let to a civil contractor. The workers are mainly hired by Contractors for the unskilled and semi-skilled activities, where no accommodation is provided as they have their own accommodation. Only skilled manpower as required are hired from other parts of India or outside India. In such cases, their accommodations are taken care by the Contractor through providing stay in hotels or guest houses in Barmer. Some of our contractors have also rented construction camps provided with all basic amenities. Refer <b>Annexure – 03</b> for CSR program details.												
xi.	Rehabilitation and resettlement plan for the affected persons shall be prepared, submitted and Implemented as per the policy of State Govt.	Till date massive land acquisition has not been carried out in the human colonies / habitat areas. Most of the land acquired are semi-arid or desert and or sand dune area, where there were hardly any settlements. Thus, the land acquisition process did not cause any displacement and therefore rehabilitation was not required.												
xii.	M/s CEIL shall undertake a feasibility study for using mix oily sands/sludge's in cement kiln with the assistance of National Council for Cement and Building Materials Institute and progress in this regard shall be intimated to the Ministry regularly.	<p>Cairn consulted NCCBM and carried out the detail analysis of Synthetic oil Based Mud (SOBM) to assess its suitability as alternate fuel and raw material (AFR) in cement industries and also carried out trial burn in ACC cement plant, Rajasthan. Trial burn study was carried out in the cement industry and the results have been found suitable for the disposal of SOBM drill cuttings and oily waste (oily sludge, oily rags and filter cloths) towards co-processing. Cairn also obtained regular disposal permission towards co-processing from RSPCB. Quantity disposed through co-processing are mentioned below:</p> <table border="1" data-bbox="940 1211 1843 1399"> <thead> <tr> <th colspan="4" data-bbox="940 1211 1843 1255"><b>Waste Disposed through Coprocessing - RJON Block</b></th> </tr> <tr> <th data-bbox="940 1255 1220 1360"></th> <th data-bbox="1220 1255 1459 1360">Oil contaminated Waste Cat. 5.2 (MT)</th> <th data-bbox="1459 1255 1627 1360">Oily Rags Cat. 33.2 (MT)</th> <th data-bbox="1627 1255 1843 1360">SOBM Drill Cuttings Cat 2.1 (MT)</th> </tr> </thead> <tbody> <tr> <td data-bbox="940 1360 1220 1399">FY 2016-17</td> <td data-bbox="1220 1360 1459 1399">150</td> <td data-bbox="1459 1360 1627 1399">-</td> <td data-bbox="1627 1360 1843 1399">0</td> </tr> </tbody> </table>	<b>Waste Disposed through Coprocessing - RJON Block</b>					Oil contaminated Waste Cat. 5.2 (MT)	Oily Rags Cat. 33.2 (MT)	SOBM Drill Cuttings Cat 2.1 (MT)	FY 2016-17	150	-	0
<b>Waste Disposed through Coprocessing - RJON Block</b>														
	Oil contaminated Waste Cat. 5.2 (MT)	Oily Rags Cat. 33.2 (MT)	SOBM Drill Cuttings Cat 2.1 (MT)											
FY 2016-17	150	-	0											

S. No	Conditions	Compliance Status			
		FY 2017-18	942	-	4296
		FY 2018-19	647	-	7753
		FY 2019-20	697	-	32686
		FY 2020-21	1400	-	22183
		FY 2021-22	2400	19.79	18596
		FY 2022-23	2813	37.785	20163
		FY 2023-24	8163	36.165	13746.76
		FY 2024-25	162	3.79	2310.75
		<b>Total</b>	<b>17374</b>	<b>97.53</b>	<b>121734.51</b>
<b>Note: From Dec-21 to Feb-22, oily rags is disposed into 33.2 Category and before that it was disposed under 5.2 Category.</b>					
xiii.	The design, material of construction, assembly, inspection, testing and safety aspects of operation and maintenance of oil and gas facilities and pipeline and transporting the natural gas shall be governed by ASME/ANSI and OISD standard.	Relevant standards and codes such as ASME/ANSI/OISD/BIS are followed in all aspects of design, construction, commissioning, operation and maintenance of the oil and gas facilities (both upstream and midstream).			
xiv.	Annual safety audit shall be carried out for the initial three years by an independent agency and report submitted to this Ministry for ensuring the strict compliance of safety regulations on operation and maintenance of facilities.	OISD (Oil Industry safety Directorate) carried out the compliance audit with respect to OISD safety standards in RJ Block during <b>October 2024</b> and all the recommendations have been fully implemented and communicated to OISD.			
xv.	The project authorities shall plant a minimum of 10 trees for every tree cut along the pipeline route in consultation with the local DFO (s). The company shall develop a social forestry programme to benefit the project affected local people in consultation with the local DFO/village	Till date, total 5496 plants (including small shrubs plants) are cut for development of various facilities within RJON block area. Cairn has planted 36800 tree saplings in 32 Ha. as compensatory plantation in Batadoo (village), Baytoo (Tehsil), Barmer District. The location for compensatory plantation was identified in consultation with local bodies. As per the latest plant count report, the number of live plants was 19544 at compensatory plantation site. This high mortality was observed at this site mainly due			

S. No	Conditions	Compliance Status
	panchayat / NGO.	<p>to termite attack and cuttings by locals for use as animal feed and fuel wood. Cairn has conducted site assessment and taken measures to restore the plantation area. The site is secured using dual fencing (barbed wire and chain-link fencing) and carrying out re-plantation work along with other suitable measures (like planting native plant saplings) to restore the greenbelt.</p> <p>Overall greenbelt area developed is <b>253.75 Ha</b> (includes <b>152.73 Ha</b> at source location &amp; <b>101.02 Ha.</b> at receptor location excluding <b>32 Ha.</b> of compensatory afforestation), the cumulative greenbelt <b>cover is 40.53% of current operational facilities areas.</b></p>
xvi.	<p>The project authorities shall patrol and inspect the pipeline regularly for detection of faults as per OISD guidelines and continuous monitoring of pipeline operation by adopting non-destructive method(s) of testing as envisaged in the EMP. Pearson survey and continues potential survey should be carried out at regular intervals to ensure the adequacy of cathodic Protection system.</p>	<p>Foot patrolling along pipeline ROU is followed as per the operational procedure. The adequacy of the cathodic protection system is checked through the following surveys:</p> <ul style="list-style-type: none"> <li>• Pipe to Soil Potential (PSP) Survey (once in every 3 months)</li> <li>• CIPS (Close Interval Potential Survey) (once in every 4 years)</li> <li>• DCVG (Direct Current Voltage Gradient) Survey (once in every 4 years)</li> <li>• Person Survey (once on every 4 years)</li> <li>• All pipelines are coated with either 3LPE or 3LPP.</li> <li>• Intelligent pigging of pipelines is being carried out regularly.</li> <li>• ICDA &amp; ECDA surveys done.</li> <li>• FFS completed for critical lines</li> </ul> <p>Corrosion inhibitor injection` has also been injected in inter-field pipelines as required to minimize/prevent corrosion. Continuous potential survey is carried out every three months to ensure adequacy of cathodic protection system. Corrosion monitoring by weight loss coupons and feed analysis has also been initiated. Revamping of Cathodic Protection system is also in progress.</p>
xvii.	<p>The fire water facilities at the terminals must be designed as per OISD-117 guidelines. However, for fighting prolonged fires, the company should firm up a plan for assured water supply from nearby ground Water source/ surface water source. This must be Complied before commissioning the project.</p>	<p>MPT and RGT fire water system and fire-fighting facility has been designed based on OISD-116 and OISD-117 standards. In addition to the above, Cairn has also implemented M.B. Lal's recommendations out of IOCL Jaipur depot fire incident investigation report.</p> <p>In Mangala and Aishwarya, the back-up water supply is available from Thumbli field and in case of major emergency the water can be diverted to the fire water tank for fire-fighting. In Raageshwari water supply is available through bore wells and in Bhagyam, the pipeline is laid from MPT for water supply. In marginal/satellite fields such as</p>



S. No	Conditions	Compliance Status
		Guda, Saraswathi, Raageshwari Oil etc., and fire water tanks are provided as per OISD-189 standard. In addition to above, total 09 Nos. of Multipurpose Fire tenders stationed at MPT (4), RGT (2), Bhaygam (2), Aishwariya (1) for firefighting and emergency response round the clock in RJON block area.

xviii.	Green belt of adequate width and density shall be provided to mitigate the effects of fugitive Emission all around the facilities pumping stations. A minimum of 25% of the total land acquired shall be developed as green belt as per CPCB guidelines.	Peripheral greenbelt is being developed in a phase-wise manner by undertaking Source Approach (SA) & Receptor Approach (RA) based plantation around the facilities to mitigate the impact of fugitive emission. Greenbelt cover of <b>40.53%</b> of the total operating facility area is achieved.  To minimize gaseous emissions Cairn has partnered with the United Nations Environment Programme's (UNEP) flagship methane reporting and mitigation initiative – Oil & Gas Methane Partnership (OGMP) 2.0. We are first oil and gas producer in India to sign OGMP 2.0 and commit to effectively reducing methane emissions.  Refer <b>Annexure – 4</b> for green belt development details.
xix.	Since Uttarlai airbase is located in the project area and is close to Mangala and Aishwariya fields, prior permission from the Ministry of Defense shall be obtained before commencement of the construction activity and a copy of the permission obtained shall be submitted to Ministry of Environment & Forests.	Cairn has obtained NOC from Ministry of Defense (MOD) vide. DGH letter No. DGH/RJ-ON-90/1/2006 dated 22-12-2006.
xx.	The company shall obtain permission from the Chief Wildlife Warden, govt. of Rajasthan before commencement of the construction activity and copy of the permission shall be submitted to Ministry of Environment & Forests	NOC has been obtained from Chief Wildlife Warden, Govt. of Rajasthan vide their letter Misc./CWLW/2005-06/7705 dated 25-11-2006. Refer <b>Annexure – 5</b>
xxi.	The Central Ground Water Authority (CGWA) has granted permission for drawl of 25000 m <sup>3</sup> /d of saline ground water for industrial purposes vide letter no.21-4(22) WR/CGWA/05-16 dated 6th January, 2006 subject	Refer <b>Annexure – 2</b> for CGWA compliance details.

	to the condition that the abstraction of ground water is permitted for a period of five years w.e.f. commencement of abstraction. Upon review of impacts of ground water abstraction after five years, further decision of CGWA will be conveyed for extension of period of abstraction. The project authorities shall comply with the condition stipulated by the CGWA. Validity of environmental clearance for the above project shall be subject to the extension of permission of CGWA for abstraction of water.	
xxii.	The project proponent shall also comply with the environmental protection measures and safeguards recommended in the EIA /EMP / risk analysis report as well as the recommendations of the public hearing panel.	The environmental protection measures and safeguards recommended in EIA-EMP & QRA are being implemented throughout the project life cycle. Cairn is committed to addressing all the issues and concerns raised in public hearing and is implementing time-bound actions. Refer Annexure – 06 for PH Compliance status.

### B. General Conditions

Sr no	Conditions	Compliance State
i.	The project authorities must strictly adhere to the stipulations made by the Rajasthan State Pollution Control Board and the State Government.	Being complied. Compliance reports are being submitted regularly to RSPCB regarding the Consent and Authorization conditions.
ii.	No further expansion or modification in the project shall be carried out without prior approval of the Ministry of Environment & Forests. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.	Noted and no activities presently being carried out without any EC requirements. Amendment in existing environmental clearances are periodically obtained from MoEF&CC for future expansion and modification projects as per the requirements. Vedanta has recently obtained Environmental Clearance for “Expansion of onshore oil and gas production from existing 300,000 to 400,000 bopd and 165 to 750 MMSCFD from RJ-ON-90/1 Block, Barmer, Rajasthan” vide letter no. F. No. J/11011/13/2018/IA-II(I) dated 11 <sup>th</sup> April 2019. Refer <b>Annexure – 07</b> for list of ECs obtained so far.
iii.	The project authorities must strictly comply with the rules and regulations under Manufacture, Storage and Import of Hazardous chemicals Rules, 1989 as amended	Provisions of Manufacture, Storage and Import of Hazardous chemicals Rules are not applicable as no scheduled chemicals are being handled at site. On-site and offsite emergency preparedness plans are implemented, and regular mock

Sr no	Conditions	Compliance State
	subsequently. Prior approvals from Chief Inspectorate of Factories, Chief Controller of Explosives, Fire Safety Inspectorate etc. must be obtained, wherever applicable.	drills are conducted at site to ensure effective response to any emergency situations. All the activities within RJ Block is governed by Oil Mine Regulations, 2017 and thus Factories Act is not applicable. However necessary licenses to store petroleum/hydrocarbons are obtained from the Chief Controller of Explosives, Nagpur. High voltage energization and equipment Type approvals for the electrical installations in the facilities are obtained from Director General of Mines Safety located at Ghaziabad (Zonal office), Ajmer (Regional office) and Dhanbad (Head quarter) are obtained.
iv.	The project authorities must strictly comply with the rules and regulation with regarding to handling and disposal of Hazardous Wastes (Management and Handling) Rules, 1989/ 2003 wherever applicable. Authorization form the State Pollution Control Board must be obtained for collections/ treatment/storage/disposal of hazardous wastes.	All operational facilities well pads, processing terminals etc. have valid hazardous waste authorization (HWA). The conditions mentioned in HWAs are being complied with and periodically the reports are submitted to RSPCB. The hazardous wastes are being collected, stored, handled and disposed as per Hazardous & Other Waste (Management & Handling) Rules, 2016. Records of hazardous waste generation is being maintained on monthly basis in Form-3 and submitted to the RSPCB in Annual Returns (i.e. Form-4). Manifest and TREM cards are also being maintained.
v.	The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (night time).	All the DGs are provided with acoustic enclosures, silencers etc. Ambient noise data show that day and night levels are within the prescribed limits as per the Noise Rules. Refer <b>Annexure – 01</b> for environmental condition monitoring details.
vi.	A separate Environmental Management Cell equipped with full-fledged laboratory facilities must be set up to carry out the environmental management and monitoring functions.	A team of fourteen environmental professionals are stationed at RJ site to provide necessary technical support to the projects, operation, drilling and Petroleum engineering activities in implementing the environmental management measures. Environmental laboratory is set up at the MPT for monitoring ambient air, stack, noise, wastewater, water, solid waste, soil etc., for entire RJ Block. This laboratory is NABL approved and equipped with all necessary equipment. Please refer Annexure – 8 for details. In addition, inhouse & periodic 3rd party NABL laboratory is engaged to carry out the environmental monitoring requirements as per the RSPCB approved environmental monitoring plan.

Sr no	Conditions	Compliance State																														
vii.	The project authorities will provide adequate funds both recurring and non-recurring to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purposes.	<p>Sufficient funds are being earmarked towards capital cost and recurring cost per annum to implement environmental initiatives and related facility operations. Approximate Capital Expenditure (CAPEX) and Operating Expenditure (OPEX) spent in RJ-ON-90/1 Block towards the provisions for environment management are detailed below.</p> <table border="1" data-bbox="1119 367 1789 891"> <thead> <tr> <th data-bbox="1119 367 1377 451">Financial Year</th> <th data-bbox="1377 367 1577 451">CAPEX (INR)</th> <th data-bbox="1577 367 1789 451">OPEX (INR)</th> </tr> </thead> <tbody> <tr> <td data-bbox="1119 451 1377 500">2016 - 17</td> <td data-bbox="1377 451 1577 500">188,40,943</td> <td data-bbox="1577 451 1789 500">699,40,366</td> </tr> <tr> <td data-bbox="1119 500 1377 548">2017 - 18</td> <td data-bbox="1377 500 1577 548">53,89,955</td> <td data-bbox="1577 500 1789 548">817,52,899</td> </tr> <tr> <td data-bbox="1119 548 1377 597">2018 - 19</td> <td data-bbox="1377 548 1577 597">1,825,43,669</td> <td data-bbox="1577 548 1789 597">1,373,57,426</td> </tr> <tr> <td data-bbox="1119 597 1377 646">2019 - 20</td> <td data-bbox="1377 597 1577 646">468,025,215</td> <td data-bbox="1577 597 1789 646">821,831,880</td> </tr> <tr> <td data-bbox="1119 646 1377 695">2020 - 21</td> <td data-bbox="1377 646 1577 695">3,002,256,713</td> <td data-bbox="1577 646 1789 695">381,673,756</td> </tr> <tr> <td data-bbox="1119 695 1377 743">2021 - 22</td> <td data-bbox="1377 695 1577 743">34,993,115</td> <td data-bbox="1577 695 1789 743">402,052,317</td> </tr> <tr> <td data-bbox="1119 743 1377 792">2022 - 23</td> <td data-bbox="1377 743 1577 792">6,168,47,901</td> <td data-bbox="1577 743 1789 792">305,04,305</td> </tr> <tr> <td data-bbox="1119 792 1377 841">2023 - 24</td> <td data-bbox="1377 792 1577 841">4,827,836</td> <td data-bbox="1577 792 1789 841">878,050,049</td> </tr> <tr> <td data-bbox="1119 841 1377 891"><b>2024 – 25(Apr'24-Sep'24)</b></td> <td data-bbox="1377 841 1577 891"><b>9,692,520</b></td> <td data-bbox="1577 841 1789 891"><b>444,091,891</b></td> </tr> </tbody> </table>	Financial Year	CAPEX (INR)	OPEX (INR)	2016 - 17	188,40,943	699,40,366	2017 - 18	53,89,955	817,52,899	2018 - 19	1,825,43,669	1,373,57,426	2019 - 20	468,025,215	821,831,880	2020 - 21	3,002,256,713	381,673,756	2021 - 22	34,993,115	402,052,317	2022 - 23	6,168,47,901	305,04,305	2023 - 24	4,827,836	878,050,049	<b>2024 – 25(Apr'24-Sep'24)</b>	<b>9,692,520</b>	<b>444,091,891</b>
Financial Year	CAPEX (INR)	OPEX (INR)																														
2016 - 17	188,40,943	699,40,366																														
2017 - 18	53,89,955	817,52,899																														
2018 - 19	1,825,43,669	1,373,57,426																														
2019 - 20	468,025,215	821,831,880																														
2020 - 21	3,002,256,713	381,673,756																														
2021 - 22	34,993,115	402,052,317																														
2022 - 23	6,168,47,901	305,04,305																														
2023 - 24	4,827,836	878,050,049																														
<b>2024 – 25(Apr'24-Sep'24)</b>	<b>9,692,520</b>	<b>444,091,891</b>																														
viii.	The Regional Office of this Ministry at Lucknow/Central Pollution Control Board/State Pollution Control Board will monitor the stipulated conditions. A six-monthly compliance report and the monitored data along with statistical interpretation shall be submitted to them regularly.	Periodical six-monthly compliance reports with statistical interpretation of ambient air quality and noise quality monitoring data, are being submitted to MoEF&CC regional office and RSPCB. Refer <b>Annexure – 01</b> for environment monitoring details.																														
ix.	The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the State Pollution Control Board/Committee and may also be seen at Website of the Ministry and Forests at <a href="http://www.envfor.nic.in">http://www.envfor.nic.in</a> . This shall be advertised within seven days of the issue of this letter in at least two local newspapers that are widely circulated in the region of which one shall be in the	<p>A public notice informing the grant of this EC by MOEF&amp;CC was published by Cairn as follows:</p> <ul style="list-style-type: none"> <li>• Rajasthan Patrika (English) on 04-04-2006</li> <li>• Dainik Bhaskar (Hindi) on 04-04-2006</li> </ul>																														

Sr no	Conditions	Compliance State
	vernacular language of the locality concerned.	
x.	The Project Authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.	RJ-ON block development was started in Quarter - 02 of 2006. The central processing hub, Mangala Processing Terminal was commissioned in April 2010. Fields covered in the ECs are being developed in a phase-wise manner. Financial closure will be communicated once all fields are developed.

**Name of the Project:** Proposed hydrocarbon development and production of Guda Field in RJ-ON 90/1, block in Barmer and Jalore district in Rajasthan by M/s Cairn India. Ltd – Environment Clearance

**Clearance Letter No:** J-11011/175/2007-IA II (I) dated: 17th May 2014 (The first Environmental Clearance for the Guda Field (File No. J-11011/175/2007-IA II (I) was issued on 17th May 2007 and later the extension of EC validity for further five years period was issued on 16th Dec 2013.

**Period of Compliance Report:** Progressive EC Compliance Reporting period is **April-24 to September-24**

Average production of crude oil is **83.51 BOPD** and natural associated gas is **0.043 MMSCFD** from Guda field during the reporting period.

All the conditions mentioned in this EC are being complied. The production capacities and facilities detailed have been achieved and installed. The point wise compliance is being detailed below:

S. No.	EC Conditions	COMPLIANCE STATUS
<b>A.</b>	<b>SPECIFIC CONDITIONS:</b>	
<b>i.</b>	The company shall comply with guidelines for disposal of solid waste, drill cutting and drill fluids for onshore drilling operation notified vide GSR 543 (E), dated 30 <sup>th</sup> August, 2005	<p>Water Based Mud (WBM) is used as the drilling fluid for drilling the upper section of well (~250 - 500 meters) or up to complete target depth of the well subject to geological formation. In case of hard strata, Synthetic Oil Based Mud (SOBM) is used to counter difficult drilling situations &amp; incremental formation pressure, such as high down hole temperatures, hydrated shales, or salt, where the properties of WBMs would limit performance. The WBM cuttings generated are non-hazardous in nature. These cuttings are washed and used for construction activities like backfilling of low-lying areas, construction of well pads etc. SOBM drill cutting generated are segregated at the sources of generation and disposed in real time to cement industry for coprocessing. HDPE line concrete pits are also available at site for interim storage &amp; handling of drill cuttings. During drilling process, waste residual mud &amp; drilling wastewater are collected in the container for treatment, recycling and disposal.</p> <p>The drilling fluid after solid – liquid separation is being recycled and/or disposed through adequately designed and lined solar evaporation ponds and deep dump well disposal.</p> <p>The oil base drill cuttings and residual dry mud are shifted to the MPT captive hazardous landfill for appropriate disposal or being sent for co-processing in cement industry. Refer <b>Annexure – 11</b> for compliance to GSR. 546(E) dated 30<sup>th</sup> August 2005.</p>

<p><b>ii.</b></p>	<p>The surface facilities shall be installed as per applicable codes and standards, international practices and applicable local regulations</p>	<p>The surface facilities have been installed according to relevant and applicable ASME/ANSI/OISD/BIS codes and OGP best practices.</p>
<p><b>iii.</b></p>	<p>The topsoil removed wherever suitable shall be stack separately for reuse during restoration process</p>	<p>Cairn has developed facilities on permanently acquired/long term leased land. Restoration will be carried out at the end of the project life cycle based on Cairn’s site restoration procedure. While developing the well pad, topsoil was removed and used back after the final cutting and filling is complete.</p>
<p><b>iv.</b></p>	<p>Drilling wastewater including drill cuttings wash water shall comply with notified standards for onshore disposal. The company shall dispose-off dry solids in common TSDF facilities in Mangla terminal or bioremediation and use as road filler or any other disposal method approved by MoEF.</p>	<p>During drilling process, waste residual mud &amp; drilling wastewater are collected in the container for treatment, recycling and disposal. The drilling fluid after solid – liquid separation is being recycled and/or disposed through adequately designed and lined solar evaporation ponds and deep dump well.</p> <p>Cairn has its own captive engineered hazardous waste landfill site (TSDF) in MPT, Barmer approved by concerned authorities for disposal of hazardous waste. Also, Cairn has entered contract with Cement industries towards disposal of oily contaminated waste and oil-based drill cuttings in real time during drilling activity.</p>

<p>v.</p>	<p>The company shall take necessary measure to prevent fire hazards oil spill and soil remediation as needed. At place of ground flaring, the flare pit shall be line with refractory bricks and efficient burning system shall be provided. In case of overhead flare stacks, the stack height shall be provided as per the norms to minimize gaseous emission and heating load during flaring.</p>	<p>All storage tanks and process vessels have been installed with SIL (In simple terms, SIL is Safety Integrity Level, which is a measurement of performance required for a safety instrumented function) rated instrument systems including high, high-high and low, low-low alarms for information to DCS (Digital Control System) panel engineers for immediate intervention. Also, the process systems are installed with Emergency Shut Down Devices (ESDs)/ valves to isolate the supply during any leaks and prevent spills. Oil spill contingency plan is prepared and implemented at sites. Secondary containment has been provided at all hydrocarbon storage areas in accordance with OISD standards. The process vessels have been provided with kerbs to contain accidental spills.</p> <p>Full-fledged dedicated oil spill response team stationed at MPT providing coverage to entire Rajasthan field, backed up fire services team consisting of trained professionals. Firefighting measures include hydrant system, foam system, portable fire extinguishers, water spray systems, fireproof electrical fittings, and fire and gas detection systems. In addition, mobile fire tenders are available in Guda and Raageshwari location.</p> <p>All Elevated flare with knock out drum is being used for flaring of minimal associated gases. At some remote satellite fields, horizontal flare is installed. However, the stacks are connected to the knockout drums for effective separation of vapor-liquid. The horizontal flare with the provision of refractory bricks construction in the flare pit.</p> <p>To minimize gaseous emissions Cairn has partnered with the United Nations Environment Programme' s (UNEP) flagship methane reporting and mitigation initiative – Oil &amp; Gas Methane Partnership (OGMP) 2.0. We are first oil and gas producer in India to sign OGMP 2.0 and commit to effectively reducing methane emissions.</p>
<p>vi.</p>	<p>The company shall take necessary to reduce noise levels at the drill site by providing mitigation measures such as proper acoustic enclosures to the DG set and meet the norms notified by the MoEF, Height of all the stacks / vents shall be provided as per the CPCB guidelines</p>	<p>All DG sets used for production meet the norms notified by MoEF &amp; CC and height of stacks/vents was provided as per CPCB guidelines. Regular monitoring is also being carried to check the noise level.</p>



<p><b>vii.</b></p>	<p>The company shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed.</p>	<p>All storage tanks and process vessels have been installed with SIL (In simple terms, SIL is Safety Integrity Level, which is a measurement of performance required for a safety instrumented function) rated instrument systems including high, high-high and low, low-low alarms for information to DCS (Digital Control System) panel engineers for immediate intervention. Also, the process systems are installed with Emergency Shut Down Devices (ESDs)/ valves to isolate the supply during any leaks and prevent spills. Oil spill contingency plan is prepared and implemented at sites. Secondary containment has been provided at all hydrocarbon storage areas in accordance with OISD standards. The process vessels have been provided with kerbs to contain accidental spills.</p> <p>Full-fledged 24x7 oil spill response team stationed at MPT providing coverage to entire Rajasthan field, backed up fire services team consisting of trained professionals. Firefighting measures include hydrant system, foam system, portable fire extinguishers, water spray systems, fireproof electrical fittings, and fire and gas detection systems. In addition, mobile fire tenders are available in Guda and Raageshwari location.</p>
<p><b>viii.</b></p>	<p>The design material of construction, assembly, inspection, testing and safety aspects of operation and maintenance of pipeline and transporting the oil shall be governed by ASME/ANSI B 31.8/B31.4 and OISD standards 141.</p>	<p>The relevant standards and codes are followed such as ASME/ANSI/OISD/BIS and OGP best practices as applicable for design, material of construction, assembly, inspection, testing and safety aspects of operation and maintenance of the facilities including pipeline and transportation.</p>
<p><b>ix.</b></p>	<p>Annual safety audit should be carried out for the initial three years by an independent agency and report submitted to this Ministry for ensuring the strict compliance of safety regulations on operation and maintenance.</p>	<p>During the initial years of Guda field operation, various safety audits were carried out. However periodic safety audits are carried out on regular intervals to ensure safe operation.</p>

<p><b>x.</b></p>	<p>The project authorities should plant a minimum of 10 trees cut along the pipeline route in consultation with the local (DFO) (s)</p>	<p>Guda field is remotely located scattered satellite well pads. The produced well fluid from the well pad is processed within the well pad location using modular quick processing facility to separate crude, associate gas and produced water. The associate gas is used within the well pad for utility and operational requirements, the final crude is transported to Mangala Processing terminal (around 180 km one way). There is no pipeline laid within the Guda field for receiving well fluid and transportation of crude. Thus, no RoU (Right of Usage) was required, and no tree was cut.</p>
<p><b>xi.</b></p>	<p>The project authorities shall patrol and inspect the pipeline regularly for detection of faults as per OISD guidelines and continuous monitoring of pipeline operation by adopting nondestructive method (s) of testing as envisaged in the EMP. Pearson survey and continuous potential survey should be carried out at regular intervals to ensure the adequacy of cathodic protection systems.</p>	<p>Satellite fields are operated as per the OISD guidelines and there are no infield pipelines laid within Guda field.</p>
<p><b>xii.</b></p>	<p>The fire water facilities at the terminals must be designed as per OISD 117 guidelines. However, for fighting prolonged fires, the company should firm up a plan for assured water supply from nearby ground water source / surface water source. This must be complied before commission the project</p>	<p>Fire water system is designed as per OISD 189 for all production oil well pads. OISD 117 guidelines are applicable for oil terminals and storage facilities. In case of prolonged fire, the fire tender at Guda field would be used and for support, additional fire tenders from Raageshwari gas Terminal would be mobilized.</p>

<p><b>xiii.</b></p>	<p>Proper infrastructure and sanitation facilities shall be provided for the construction workers during construction. All the construction wastes shall be managed so that there is no impact on the surrounding environment.</p>	<p>The locals are mainly hired by Contractors for the unskilled and semi-skilled activities. Only skilled manpower as required are hired from other parts of India or outside India. In such cases, their accommodation is taken care by the Contractor through providing stay in hotels or guest houses in Gudamalani. Thus, there were no requirements to provide any construction camp sites.</p> <p>All the construction waste is managed as per the EMP. All waste was effectively segregated, and possible recyclable materials were disposed to the authorized vendors. Inert waste was disposed to the low-lying area within the Cairn premises towards sub grade preparation (mainly the excess earth material).</p>
<p><b>xiv.</b></p>	<p>Compensation to the land outsees shall be paid as per land acquisition act.</p>	<p>This condition was compiled during land acquisition stage of the project development.</p> <p>All the compensations for the landowners were paid through Land Acquisition Officer nominated by District Collector.</p>

<p><b>xv.</b></p>	<p>Company shall make an effort to supply drinking water to the nearest village as part of Corporate social responsibility</p>	<p>In H2 of FY23-24, the community water project (Jevan Amrit) was successfully handed over to the communities and PHED. In addition to this, we continued our efforts towards providing water to the interior of villages through community borewell intervention. In partnership with PHED, ground level resource work has been completed in 4 out of 5 Borewell plants. These 4 borewells are operational in 4 villages Bandra, Kau ka Kheda, Nimbalkot and Dholatpura benefiting 800 households.</p> <p>Furthermore, In Rajasthan, water scarcity has been a persistent issue, particularly in remote areas. The team in collaboration with the Public Health &amp; Engineering department-initiated drilling of a borewell at Rohidi village. The village is at the Indo-Pak border. The initiative will provide immediate relief by ensuring perennial water supply but will contribute towards sustainable development of the communities.</p> <p>Cairn in the last financial year successfully handed over 92 plants to the village water committee and PHED for operation and maintenance. Thus, in the community an investment of establishing and operationalizing 124 RO plants have been taken by Cairn in the past years. In addition, the 15 community borewells development across the interior villages have been helping communities with safe drinking water at their doorsteps. Basis the community request received from Rohidi village (close to Indo-Pak border), we have also successfully commissioned the community borewell and supporting 100+ villagers.</p>
<p><b>xvi.</b></p>	<p>The project proponent shall also comply with the environmental protection measures and safeguards recommended in the EIA /EMP report as well as the recommendation</p>	<p>The environmental protection measures and safeguards recommended in EIA-EMP &amp; Quantity Risk assessment (QRA) are being implemented during construction and operation phase.</p>
<p><b>B.</b></p>	<p><b>GENERAL CONDITIONS:</b></p>	
<p><b>i.</b></p>	<p>The project authorities shall strictly adhere to the stipulations made by the Rajasthan State Pollution Control Board.</p>	<p>Being complied. Compliance reports are being submitted regularly to RSPCB regarding the Consent and Authorization conditions.</p>

<p><b>ii.</b></p>	<p>No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.</p>	<p>Noted and no activities presently being carried out without any EC requirements. Amendment in existing environmental clearances are periodically obtained from MoEF&amp;CC for future expansion and modification projects as per the requirements.</p> <p>Vedanta has obtained Environmental Clearance for “Expansion of onshore oil and gas production from existing 300,000 to 400,000 BOPD and 165 to 750 MMSCFD from RJ-ON-90/1 Block, Barmer, Rajasthan” vide letter no. F. No. J/11011/13/2018/IA-II(I) dated 11<sup>th</sup> April 2019. Refer <b>Annexure – 07</b> for list of ECs obtained so far.</p>
<p><b>iii.</b></p>	<p>The project authorities must strictly comply with the rules and regulations under Manufacture, storage and import of hazardous chemical rule, 1989 as amended subsequently. Prior approvals from chief inspectorate of factories, chief controller of explosives, fire, safety inspectorate etc. must be obtained, wherever applicable.</p>	<p>Provisions of Manufacture, Storage and Import of Hazardous chemicals Rules are not applicable as no scheduled chemicals are being handled at site. However, on-site and offsite emergency preparedness plans are implemented, and regular mock drills are conducted at site to ensure effective response to any emergency situations.</p> <p>All the activities within RJ Block are governed by Oil Mine Regulations, 2017 and thus Factories Act is not applicable. However necessary licenses to store petroleum/hydrocarbons are obtained from the Chief Controller of Explosives, Nagpur. High voltage energization and equipment Type approvals for the electrical installations in the facilities are obtained from Director General of Mines Safety located at Ghaziabad (Zonal office), Ajmer (Regional office) and Dhanbad (Head quarter) are obtained.</p>
<p><b>iv.</b></p>	<p>The project authorities must strictly comply with the rules and regulation with regarding to handling and disposal of hazardous waste (Management and Handling) rules 1989 / 2003 wherever applicable authorization form the State pollution control board must be obtained for collection / treatment / storage / disposal of hazardous waste.</p>	<p>All operational facilities well pads, processing terminals etc. have valid hazardous waste authorization (HWA). The conditions mentioned in HWAs are being complied with and periodically the reports are submitted to RSPCB.</p> <p>Hazardous wastes are being collected, stored, handled and disposed as per Hazardous &amp; Other Waste (Management &amp; Handling) Rules, 2016. Records of hazardous waste generation is being maintained on monthly basis in Form-3 and submitted to the RSPCB in Annual Returns (i.e. Form-4). Manifest and TREM cards are also being maintained.</p>

<p>v.</p>	<p>The overall noise levels in and around the plant area shall be kept well within the standards (85dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).</p>	<p>All DGs are provided with acoustic enclosures, silencers etc. Ambient noise data show that day and night levels are within the prescribed limits as per the Noise Rules. Refer <b>Annexure – 01</b> for details.</p>
<p>vi.</p>	<p>A separate Environment Management cell equipped with full-fledged laboratories facilities must be set up to carry out the environment management and monitoring functions.</p>	<p>A team of eleven environmental professionals are stationed at RJ site to provide necessary technical support to the projects, operation, drilling and Petroleum engineering activities in implementing the environmental management measures.</p> <p>Environmental laboratory is set up at the MPT for monitoring ambient air, stack, noise, wastewater, water, solid waste, soil etc., for entire RJ Block. This laboratory is NABL approved and equipped with all necessary equipment. Please refer <b>Annexure – 8</b> for details. In addition, inhouse &amp; periodic 3<sup>rd</sup> party NABL laboratory is engaged to carry out the environmental monitoring requirements as per the RSPCB approved environmental monitoring plan.</p>

<p><b>vii.</b></p>	<p>The project authorities will provide adequate funds both recurring and non-recurring to implement the conditions stipulated by the Ministry of Environment and Forests as well as the state government along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purposes.</p>	<p>Sufficient funds are being earmarked towards capital cost and recurring cost per annum to implement environmental initiatives and related facility operations. Approximate Capital Expenditure (CAPEX) and Operating Expenditure (OPEX) spent in RJ-ON-90/1 Block towards the provisions for environment management are detailed below.</p> <table border="1" data-bbox="1062 350 1833 846"> <thead> <tr> <th>Financial Year</th> <th>CAPEX (INR)</th> <th>OPEX (INR)</th> </tr> </thead> <tbody> <tr> <td>2016 - 17</td> <td>188,40,943</td> <td>699,40,366</td> </tr> <tr> <td>2017 - 18</td> <td>53,89,955</td> <td>817,52,899</td> </tr> <tr> <td>2018 - 19</td> <td>1,825,43,669</td> <td>1,373,57,426</td> </tr> <tr> <td>2019 - 20</td> <td>468,025,215</td> <td>821,831,880</td> </tr> <tr> <td>2020 - 21</td> <td>3,002,256,713</td> <td>381,673,756</td> </tr> <tr> <td>2021 - 22</td> <td>34,993,115</td> <td>402,052,317</td> </tr> <tr> <td>2022 - 23</td> <td>6,168,47,901</td> <td>305,04,305</td> </tr> <tr> <td>2023 - 24</td> <td>4,827,836</td> <td>878,050,049</td> </tr> <tr> <td><b>2024–25(Apr-Sep’24)</b></td> <td><b>9,692,520</b></td> <td><b>444,091,891</b></td> </tr> </tbody> </table>	Financial Year	CAPEX (INR)	OPEX (INR)	2016 - 17	188,40,943	699,40,366	2017 - 18	53,89,955	817,52,899	2018 - 19	1,825,43,669	1,373,57,426	2019 - 20	468,025,215	821,831,880	2020 - 21	3,002,256,713	381,673,756	2021 - 22	34,993,115	402,052,317	2022 - 23	6,168,47,901	305,04,305	2023 - 24	4,827,836	878,050,049	<b>2024–25(Apr-Sep’24)</b>	<b>9,692,520</b>	<b>444,091,891</b>
Financial Year	CAPEX (INR)	OPEX (INR)																														
2016 - 17	188,40,943	699,40,366																														
2017 - 18	53,89,955	817,52,899																														
2018 - 19	1,825,43,669	1,373,57,426																														
2019 - 20	468,025,215	821,831,880																														
2020 - 21	3,002,256,713	381,673,756																														
2021 - 22	34,993,115	402,052,317																														
2022 - 23	6,168,47,901	305,04,305																														
2023 - 24	4,827,836	878,050,049																														
<b>2024–25(Apr-Sep’24)</b>	<b>9,692,520</b>	<b>444,091,891</b>																														
<p><b>viii.</b></p>	<p>The regional office of this Ministry at Lucknow / CPCB / SPCB will monitor the stipulated conditions. A six-monthly compliance report and the monitored data along with statistical interpretation shall be submitted to them regularly</p>	<p>Periodical six-monthly compliance reports with statistical interpretation of ambient air quality and noise quality monitoring data, are being submitted to MoEF&amp;CC regional office and RSPCB. Refer <b>Annexure – 01</b> for monitoring details.</p>																														

ix.	<p>The project proponent shall inform the public that the project has been accorded environment clearance by the Ministry and copies of the clearance letter are available with the State pollution control board / committee and may also be seen at website of the Ministry and forest at <a href="http://www.envfor.nic.in">http://www.envfor.nic.in</a>. This shall be advertised within seven days of the issue of this letter in at least two local newspapers that are widely circulated in the region of which one shall be in vernacular language of the locality concerned.</p>	<p>A public notice informing the grant of EC by MOEF&amp;CC for the Hydrocarbon Development of Guda field in RJ-ON-90/1 block and availability of its copies was published in the e following Newspapers:</p> <ul style="list-style-type: none"> <li>• Dainik Bhaskar (5<sup>th</sup> June 2007) in Hindi</li> <li>• Hindustan Times (8<sup>th</sup> June 2007) in English</li> </ul>
x.	<p>The project authorities shall inform the regional office as well as the ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.</p>	<p>RJ-ON block development was started in Quarter - 02 of 2006. The central processing hub, Mangala Processing Terminal was commissioned in April 2010. Guda field is being developed in a phase-wise manner with additional well program and setting up surface facilities. The financial closure will be communicated once the field activities are completed considering the development activities.</p>
6	<p>The ministry may revoke or suspend the clearance, if implementation of any of the above condition is not satisfactory</p>	<p>Noted. All conditions shall be implemented to the satisfactory requirements.</p>
7	<p>The ministry reserves the right to stipulate additional conditions if found necessary. The company in a time bound manner will implement these conditions.</p>	<p>Noted. Any additional conditions communicated to Cairn shall be implemented to full satisfactory.</p>
8	<p>The above conditions will be enforced, inter alia under the provision of the water (prevention and control of pollution) Act 1974, the Air (prevention and control of pollution) act 1981, the environment (protection) act, 1986, hazardous wastes (management and handling) rules, 1989, 2003 and the public liability insurance act, 1991 along with their amendments and rules.</p>	<p>Noted for compliance.</p>



Compliance report to the conditions enlisted in Environmental clearance letter No. J-11011/174/2007 – IA II (I) dated 12-03-2008 for Hydrocarbon development of Bhagyam field in the RJ-ON-90/1 block, Rajasthan

**Name of the Project:** Hydrocarbon development of Bhagyam field in the RJ-ON-90/1 block, Rajasthan – Environment Clearance

**Clearance Letter No:** J-11011/174/2007 – IA II (I) dated 12<sup>th</sup> March 2008

**Period of Compliance Report:** Progressive EC Compliance Reporting period is **April-24 to September-24**

The average per day hydrocarbon production from Bhagyam field for the reporting period is **9926 BOPD and 2.79 MMSCFD**

**A. SPECIFIC CONDITIONS:**

S. No	Conditions	Compliance Status
i.	The company shall pay compensation for acquisition of private lands as per the Central Govt. / state govt. norms. The compensation to be paid to the land loser shall not be less than norms as per the policy on national resettlement and rehabilitation rules, 2007	This condition was complied during land acquisition stage of the project development.  All the compensations for the landowners were paid through Land Acquisition Officer nominated by District Collector.
ii	The company shall comply with the guidelines for disposal of solid waste, drill cutting & drilling fluids for onshore drilling operation notified vide GSR.546(E) dated 30 <sup>th</sup> august, 2005.	Water Based Mud (WBM) is used as the drilling fluid for drilling the upper section of well (~250 - 500 meters) or up to complete target depth of the well subject to geological formation. In case of hard strata, Synthetic Oil Based Mud (SOBM) is used to counter difficult drilling situations & incremental formation pressure, such as high down hole temperatures, hydrated shales, or salt, where the properties of WBMs would limit performance. The WBM cuttings generated are non-hazardous in nature. These cuttings are washed and used for construction activities like backfilling of low-lying areas, construction of well pads etc. SOBM drill cutting generated are segregated at the sources of generation and disposed in real time to cement industry for coprocessing. HDPE line concrete pits are also available at site for interim storage & handling of drill cuttings. During drilling process, waste residual mud & drilling wastewater are collected in the container for treatment, recycling and disposal.  The drilling fluid after solid – liquid separation is being recycled and/or disposed through adequately designed and lined solar evaporation ponds and deep dump well disposal.

S. No	Conditions	Compliance Status
		The oil base drill cuttings and residual dry mud are shifted to the MPT captive hazardous landfill for appropriate disposal or being sent for co-processing in cement industry. Refer Annexure – 11 for compliance to GSR. 546(E) dated 30th August 2005.
iii	The surface facilities shall be installed as per applicable codes & standards, international practices and applicable local regulations.	The surface facilities have been installed according to relevant and applicable ASME/ANSI/OISD/BIS codes and OGP best practices.
iv	The topsoil remove shall be stacked separately for reuse during restoration process.	There is no distinguishable topsoil layer in the arid/desert region of Barmer district. Cairn has developed facilities on permanently acquired land. Restoration will be carried out at the end of the project life cycle based on Cairn’s site restoration procedure. However, wherever laying of pipeline in RoU, was carried out, the topsoil (if available) was preserved and re-laid after pipeline laying work completed.
v	Drilling waste water including drill cuttings wash water shall be collected in disposal pit lined with HDPE lining evaporated or treated and shall comply with the notified standards for on-shore disposal. The membership of common TSDF shall be obtained for the disposal of drill cuttings & hazardous waste. Otherwise secured land fill shall be created at the site with the authorization by the SPCB.	<p>During drilling process, waste residual mud &amp; drilling wastewater are collected in the container for treatment, recycling and disposal.</p> <p>The drilling fluid after solid – liquid separation is being reused and/or disposed through adequately designed and lined solar evaporation ponds, mechanical evaporator and deep dump well disposal (complying with respect to suspended solids and oil and grease 100 mg/l and 10 mg/l, respectively as per The Environment (Protection) Rules, 1986).</p> <p>The oil base drill cuttings and residual dry mud are shifted to the MPT captive hazardous landfill for appropriate disposal or being sent for co-processing in cement industry. Refer <b>Annexure – 11</b> for compliance to GSR. 546(E) dated 30<sup>th</sup> August 2005. Cairn has captive TSDF (engineered designed landfill and incinerator) for disposal of hazardous waste approved by RPCB.</p>
vi	The recyclable waste (oily sludge) & spent oil shall be disposed of to the authorized recycler. The oily waste shall be used in the	Earlier, Cairn engaged TERI to carry out a pilot bioremediation study in FY 2006-2007 to assess feasibility of adopting bioremediation option for

S. No	Conditions	Compliance Status
	cement kiln after plant trials and conducting the feasibility study & bioremediation of drill cuttings as per the study carried by Tata Energy Research Institute.	treatment & disposal of oily drill cuttings. Though technical feasibility was established, few months of time was required to digest the oily layer present in the drill cuttings and also larger land area was required to spread the cuttings, thus made bioremediation not feasible. Since now oily contaminated waste such as oil-based drill cuttings, oily rags and oil filters are being disposed to cement industries towards co-processing (sustainable initiative). Further we have are seeking approval from RSPCB to carryout Bioremediation pilot project.
vii	Only water-based drilling mud shall be used. The drilling mud shall be recycled. In case of use of synthetic oil-based mud due to any problem due to geological formation for drilling, low toxicity, Oil Based Mud (OBM) having aromatic content <1% shall be used. If it is intended to use such OBM/SOBM to mitigate specific hole problem, it should be intimated to the Ministry of Environment and Forests/SPCB.	OBM is not used for drilling of the hydrocarbon wells, however biodegradable low toxicity SOBMs are only used, which is having aromatic content of < 1%. Refer <b>Annexure -1</b>
viii	Quantities of storage and chemicals & additives required for drilling mud preparation shall be below the specified storage permitted under the MSIHC rules.	The storage of drilling chemicals does not attract the provisions of MSIHC Rules, since the chemicals used are either much below the threshold limit mentioned in Schedules or are exempted from MSIHC rules.
ix	Pre hire rig inspection, safety meetings, toolbox meeting, job safety analysis & audits shall be carried out identify hidden/potential hazardous.	All the rigs before hiring is mandated to carry out the pre rig inspection. After close-out of the audit points only, the rig is finally hired for the particular activity. Pre-hire rig inspections have been carried out by reputed third-party agency. Daily/weekly safety meetings, toolbox meetings (prior to daily start of work in every shift), job safety analysis and audits are conducted at site. Job Safety assessment (JSA) is carried out prior to the start of any activity and work permit system is strictly followed.
x	The company shall take necessary measures to prevent fire hazards, containing oil spill & soil remediation as needed. At	The well fluids produced at Bhagyam field are being transported through a

S. No	Conditions	Compliance Status
	place of ground flaring, the overhead flaring stack with knockout drums shall be installed to minimize gaseous emission during flaring.	pipeline to MPT. Thus, there is no handling of crude oil which will lead to spills. Also, there is no processing of crude oil at Bhagyam facilities. The crude oil produced from Bhagyam is processed at MPT, where knockout drum and elevated flare meeting the OISD requirements have been installed and being operated. Elevated flare with knock out drum is installed at Bhagyam Wellpad-15 for flaring of partially separated associated gases.
xi	The company shall take necessary measures to reduce noise levels at the drill sites by providing mitigation measures such as proper acoustic enclosures to the DG sets & meet the norms notified by the MoEF. Height of all the stacks/vents shall be provided as per the CPCB guidelines.	All the high noisy rotating equipment's are provided with acoustic enclosures, silencers etc. Ambient noise data show that day and night levels are within the prescribed limits as per the Noise Rules. Refer <b>Annexure – 01</b> for details. Stack height for all stacks are provided as per applicable norms
xii	To prevent fire & explosion at oil & gas facility, potential ignitions shall be kept to a minimum & adequate separation distance between potential ignition sources and flammable material shall be in a place.	Potential ignition sources are kept at adequate distance from flammable materials. Also, any development/modification activities are controlled through effective Permit to Work system.
xiii	The company shall develop a contingency plan for H <sub>2</sub> S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with H <sub>2</sub> S detectors in locations of high risk of exposure along with self-containing breathing apparatus.	Cairn has developed a H <sub>2</sub> S management procedure. PPE, personal monitors and the other gadgets have been procured as per the requirements of the procedure.  An elaborate H <sub>2</sub> S induction program is included as part of employee and visitor's induction modules. One-day H <sub>2</sub> S certification program, as per ANSI Z390.1 guideline, is being conducted for all the Cairn technical employees and field supervisory staff. Personnel working at well pads and operational areas inside terminals are provided with personal H <sub>2</sub> S escape mask and H <sub>2</sub> S monitors that will trigger an alarm if TLV value exceeds 10 ppm. Self-Contained Breathing Apparatus (SCBA) sets have been installed at all critical locations in terminals and well pads for the personnel to use in case of inadvertent H <sub>2</sub> S exposure. Cairn has installed on-line H <sub>2</sub> S detection system at

S. No	Conditions	Compliance Status
		MPT, and well pads.
xiv	To prevent well blowout during drilling operations, Blow Out Prevent or (BOP) system shall be installed. Blow out prevention measures during drilling shall focus on maintaining well bore hydrostatic pressure by proper well planning & drilling fluid logging etc.	Blow out preventer stack is installed on each well during drilling and BOPs are maintained, inspected and periodically tested, to ensure their fit for purpose status. During well planning and during drilling, well bore hydrostatic pressure is maintained. Well Construction and Operations Minimum Standards Policy cover the minimum well control requirements to be followed during well construction and operations.
xv	The company shall take measures after completion of drilling process by well plugging & secured enclosures, decommissioning of rig upon abandonment of the well & drilling site shall be restored to near original conditions. In the event that no economic quantity of hydrocarbon is found a full abandonment plan shall be implemented for the drilling site in accordance with the applicable Petroleum regulations.	Site restoration will be carried out at the end of the project life cycle based on Cairn's site restoration procedure. During reporting period, Cairn has plugged and abandoned one well i.e. B-197 well in Bhagyam field during reporting period.
xvi	Occupational health surveillance of the workers shall be carried out as per the prevailing Acts & Rules.	<p>Annual industrial hygiene survey is carried out by third-party experts at MPT, RGT and Bhagyam. This survey includes qualitative and quantitative survey of exposure of workers to chemicals, dust, noise and heat, adequacy of illumination manual material handling conditions, and office ergonomics. Annual health checks are conducted for all workers exposed to annual work environment.</p> <p>The following facilities are available to provide first aid and emergency care to workers in Rajasthan.</p> <ul style="list-style-type: none"> <li>• Round-the-clock first aid and emergency medical facilities manned by qualified doctors and paramedics</li> <li>• Availability of advanced life-support ambulances at all medical centres</li> <li>• Cairn has entered contract with ASAP for fixed wing air-ambulance services equipped with emergency and critical medical (tertiary) care equipment.</li> </ul>

S. No	Conditions	Compliance Status
		<ul style="list-style-type: none"> <li>For secondary medical care, CAIRN has a formal contract with Thar hospital at Barmer.</li> <li>Medical fitness certificates are maintained at site medical centre as per the OMR Rules and DGMS requirements.</li> </ul>
xvii	The design, material of construction, assembly, inspection, testing & safety aspects of operation & maintenance of pipeline & transporting the oil shall be governed by ASME/ANSI B31.8/B31.4 & OISD standard 141.	Relevant standards and codes such as ASME/ANSI/OISD/BIS are followed in all aspects of design, construction, commissioning, operation and maintenance of the exploration and developmental facilities.
xviii	Annual safety audit shall be carried out for the initial three year by an independent agency & report submitted to this Ministry for ensuring the strict compliance of safety regulations on operation & maintenance.	OISD (Oil Industry safety Directorate) carried out the compliance audit with respect to OISD safety standards in RJ Block during October 2023 and all the recommendations have been fully implemented and communicated to OISD.
xix	The project authorities shall plant a minimum of 10 trees for every tree cut along the pipeline route in consultations with the local DFO (s)	<p>Till date, total 5496 plants (including small shrubs plants) are cut for development of various facilities within RJON block area. Cairn has planted 36800 tree saplings in 32 Ha. as compensatory plantation in Batadoo (village), Baytoo (Tehsil), Barmer District. The location for compensatory plantation was identified in consultation with local bodies. As per the latest plant count report, the number of live plants was 19544 at compensatory plantation site. This high mortality was observed at this site mainly due to termite attacks and cuttings by locals for use as animal feed and fuel wood. Cairn has conducted site assessments and taken measures to restore the plantation area. The site is secured using dual fencing (barbed wire and chain-link fencing) and carrying out re-plantation work along with other suitable measures (like planting native plant saplings) to restore the greenbelt.</p> <p>Overall greenbelt area developed is <b>253.75</b> (includes <b>152.73 Ha at source location &amp; 101.02 Ha.</b> at the receptor location excluding 32 Ha. of compensatory afforestation), the cumulative greenbelt <b>cover is 40.53% of current operational facilities areas.</b></p>
xx	The project authorities shall install SCADA system with dedicated optical fiber-based telecommunication link for safe	Foot patrolling along pipeline ROU is followed as per the operational procedure. The adequacy of the cathodic protection system is checked through

S. No	Conditions	Compliance Status
	operations of pipeline & Leak Detection System. Additional sectionalizing valves in the residential areas & sensitive installations should be provided to prevent the amount of gas going to the atmosphere in the event of pipeline failure. Intelligent pigging facility should be provided for the entire pipeline system for internal corrosion monitoring. Coating and impressed current cathodic protection system should be provided to prevent external corrosion.	<p>the following surveys:</p> <ul style="list-style-type: none"> <li>• Pipe to Soil Potential (PSP) Survey (once in every 3 months)</li> <li>• CIPS (Close Interval Potential Survey) (once in every 4 years)</li> <li>• DCVG (Direct Current Voltage Gradient) Survey (once in every 4 years)</li> <li>• Pearson Survey (once on every 4 years)</li> <li>• All pipelines are coated with either 3LPE or 3LPP.</li> <li>• Intelligent pigging of pipelines is being carried out regularly.</li> <li>• ICDA &amp; ECDA surveys done.</li> <li>• FFS completed for critical lines</li> </ul>
xxi	The project authorities shall patrol and inspect the pipeline regularly from detection of faults as per OISD guidelines and continuous monitoring of pipeline operation by adopting non – destructive method(s) of testing as envisaged in the EMP. Pearson survey and continuous potential survey shall be carried out at regular intervals to ensure the adequacy of cathodic protection system.	<p>Corrosion inhibitor injection has also been injected in inter-field pipelines as required to minimize/prevent corrosion. Continuous potential survey is carried out every three months to ensure adequacy of cathodic protection system. Corrosion monitoring by weight loss coupons and feed analysis has also been initiated. Revamping of Cathodic Protection system is also in progress.</p>
xxii	The fire water facilities at the terminals shall be designed as per OISD – 117 guidelines. However, for fighting prolonged fires, the company shall firm up plan for assured water supply from near by ground water source/surface water source. This must be complied before commissioning the project.	<p>MPT fire water system and fire-fighting facility has been designed based on OISD-116 and OISD-117 standards. CAIRN has also implemented M.B. Lal’s recommendations out of IOCL Jaipur depot fire incident investigation report</p> <p>In Bhagyam, the pipeline is laid from MPT for continuous water and fire water storage pits are provided. In addition to the above, Bhagyam has mobile foam tenders (2 nos.) and trailer pumps for firefighting and emergency response.</p>
xxiii	Proper infrastructure & sanitation facilities shall be provided for the construction workers during construction. All the construction wastes shall be managed so that there is no impact on the surrounding environment.	The construction work is not directly taken up under CSR it is further sub let to a civil contractor. The workers are mainly hired by Contractors for the unskilled and semi-skilled activities, where no accommodation is provided as they have their own accommodation. Only skilled manpower as required are hired from other parts of India or outside India. In such cases, their

S. No	Conditions	Compliance Status
		accommodations are taken care by the Contractor through providing stay in hotels or guest houses in Barmer. Some of our contractors have also rented construction camps provided with all basic amenities.
xxiv	The project shall also comply with the environmental protection measures and safeguards recommended in the EIA/EMP/risk analysis report as well as the recommendation of the public hearing panel.	The environmental protection measures and safeguards recommended in EIA-EMP & Quantity Risk assessment (QRA) are being implemented during construction and operation phase. Refer <b>Annexure – 6</b> for public hearing comments.

**B. GENERAL CONDITION**

S. No	Conditions	Compliance State
i.	The project authorities shall strictly adhere to the stipulations made by the Rajasthan state Pollution Control Board and the state Government.	Being complied. Compliance reports are being submitted regularly to RSPCB regarding the Consent and Authorization conditions.
ii	No further expansion or modification in the project shall be carried out without prior approval of the Ministry of Environment & Forests. In case of deviations or alterations in the project proposals from those submitted to the Ministry for clearance, afresh reference shall be made to the ministry to assess the adequacy of conditions imposed an to add additional environmental protection measures required, if any.	Noted and no activities presently being carried out without any EC requirements. Vedanta has recently obtained Environmental Clearance for “Expansion of onshore oil and gas production from existing 300,000 to 400,000 bopd and 165 to 750 MMSCFD from RJ-ON-90/1 Block, Barmer, Rajasthan” vide letter no. F. No. J/11011/13/2018/IA-II(I) dated 11 <sup>th</sup> April 2019. Refer <b>Annexure – 07</b> for list of ECs obtained so far.
iii	The project authorities shall strictly comply with the rules and regulations under manufacture, storage and import of hazardous chemicals rules, 1989 as amended subsequently. Prior approvals from chief inspectorate of factories, chief controller of explosives, Fire Safety inspectorate etc. must be obtained, wherever applicable.	Provisions of Manufacture, Storage and Import of Hazardous Chemicals Rules are not applicable as no prescribed substances are handled at site. However, On-site and offsite emergency preparedness plans are implemented, and regular mock drills are conducted at site to ensure effective response to any emergency situations. All the activities within RJ Block is governed by Oil Mine Regulations, 2017 and thus Factories Act is not applicable. However necessary licenses



S. No	Conditions	Compliance State
		to store petroleum/hydrocarbons are obtained from the Chief Controller of Explosives, Nagpur. High voltage energisation and equipment Type approvals for the electrical installations in the facilities are obtained from Director General of Mines Safety located at Ghaziabad (Zonal office), Ajmer (Regional office) and Dhanbad (Head quarter) are obtained.
iv	The project authorities shall strictly comply with the rules and regulations with regarding to handling and disposal of hazardous wastes (Management & handling) Rules, 1989/2003 wherever applicable authorization form the state pollution Control Board must be obtained for collections/ treatment/ storage/disposal/of hazardous wastes.	<p>All operational facilities, well pads, processing terminals etc. have valid hazardous waste authorization (HWA). The conditions mentioned in HWAs are being complied with and periodically the reports are submitted to RSPCB.</p> <p>The hazardous wastes are being collected, stored, handled and disposed as per Hazardous &amp; Other Waste (Management &amp; Handling) Rules, 2016. Records of hazardous waste generation is being maintained on monthly basis in Form-3 and submitted to the RSPCB in Annual Returns (i.e. Form-4). Manifest and TREM cards are also being issued.</p>
v	The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under EPA Rules, 1989 viz. 74dBA (daytime) and 70dBA (nighttime)	All the DGs are provided with acoustic enclosures, silencers etc. Ambient noise data show that day and night levels are within the prescribed limits as per the Noise Rules. Refer <b>Annexure – 01</b> for details.
vi	A separate environmental management cell equipped with full fledged laboratory facilities shall be set up to carry out the environmental management and monitoring functions.	<p>A team of fourteen environmental professionals are stationed at RJ site to provide necessary technical support to the projects, operation, drilling and Petroleum engineering activities in implementing the environmental management measures.</p> <p>Environmental laboratory is set up at the MPT for monitoring ambient air, stack, noise, wastewater, water, solid waste, soil etc., for entire RJ Block. This laboratory is NABL approved and equipped with all necessary equipment. Please refer <b>Annexure – 8</b> for details.</p>

S. No	Conditions	Compliance State																														
		In addition, inhouse & periodic 3 <sup>rd</sup> party NABL laboratory is engaged to carry out the environmental monitoring requirements as per the RSPCB approved environmental monitoring plan.																														
vii	The project authorities will provide adequate funds recurring and non – recurring to implement the conditions stipulated by the Ministry of Environment and Forests as well as the state Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purposes.	<p>Sufficient funds are being earmarked towards capital cost and recurring cost per annum to implement environmental initiatives and related facility operations. Approximate Capital Expenditure (CAPEX) and Operating Expenditure (OPEX) spent in RJ-ON-90/1 Block towards the provisions for environment management are detailed below.</p> <table border="1"> <thead> <tr> <th>Financial Year</th> <th>CAPEX (INR)</th> <th>OPEX (INR)</th> </tr> </thead> <tbody> <tr> <td>2016 - 17</td> <td>188,40,943</td> <td>699,40,366</td> </tr> <tr> <td>2017 - 18</td> <td>53,89,955</td> <td>817,52,899</td> </tr> <tr> <td>2018 - 19</td> <td>1,825,43,669</td> <td>1,373,57,426</td> </tr> <tr> <td>2019 - 20</td> <td>468,025,215</td> <td>821,831,880</td> </tr> <tr> <td>2020 - 21</td> <td>3,002,256,713</td> <td>381,673,756</td> </tr> <tr> <td>2021 - 22</td> <td>34,993,115</td> <td>402,052,317</td> </tr> <tr> <td>2022 - 23</td> <td>6,168,47,901</td> <td>305,04,305</td> </tr> <tr> <td>2023 - 24</td> <td>4,827,836</td> <td>878,050,049</td> </tr> <tr> <td><b>2024–25(Apr-Sep’24)</b></td> <td><b>9,692,520</b></td> <td><b>444,091,891</b></td> </tr> </tbody> </table>	Financial Year	CAPEX (INR)	OPEX (INR)	2016 - 17	188,40,943	699,40,366	2017 - 18	53,89,955	817,52,899	2018 - 19	1,825,43,669	1,373,57,426	2019 - 20	468,025,215	821,831,880	2020 - 21	3,002,256,713	381,673,756	2021 - 22	34,993,115	402,052,317	2022 - 23	6,168,47,901	305,04,305	2023 - 24	4,827,836	878,050,049	<b>2024–25(Apr-Sep’24)</b>	<b>9,692,520</b>	<b>444,091,891</b>
Financial Year	CAPEX (INR)	OPEX (INR)																														
2016 - 17	188,40,943	699,40,366																														
2017 - 18	53,89,955	817,52,899																														
2018 - 19	1,825,43,669	1,373,57,426																														
2019 - 20	468,025,215	821,831,880																														
2020 - 21	3,002,256,713	381,673,756																														
2021 - 22	34,993,115	402,052,317																														
2022 - 23	6,168,47,901	305,04,305																														
2023 - 24	4,827,836	878,050,049																														
<b>2024–25(Apr-Sep’24)</b>	<b>9,692,520</b>	<b>444,091,891</b>																														
viii	The Regional office of this Ministry at Lucknow/Central Pollution Board/State pollution Control Board will monitor the stipulated conditions. A six-monthly compliance report and the monitored data along with statistical interpretation shall be submitted to them regularly.	Periodical six-monthly compliance reports with statistical interpretation of ambient air quality and noise quality monitoring data, are being submitted to MoEF&CC regional office and RSPCB. Refer <b>Annexure – 01</b> for monitoring details.																														

S. No	Conditions	Compliance State
ix	<p>The Project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the state Pollution control Board/ Committee and may also be seen at Website of the Ministry and Forests at <a href="http://www.envfor.nic.in">http://www.envfor.nic.in</a>. this shall be advertised within seven days of the issue of this letter in at least two local newspaper that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned.</p>	<p>A public notice informing the grant of this EC by MOEF&amp;CC and availability of its copies with RSPCB and on MoEF&amp;CC website was published by CAIRN as follows:</p> <ul style="list-style-type: none"> <li>• Hindustan Times (English) on 29-04- 2008</li> <li>• Dainik Bhaskar (Hindi) on 29-04- 2008</li> </ul>
x	<p>The Project Authorities shall inform the Regional office as well as the Ministry, the date of financial closures and the final approval of the project by the concerned authorities and the date of commencing the land development work.</p>	<p>RJ-ON block development was started in Quarter - 02 of 2006. The central processing hub, Mangala Processing Terminal was commissioned in April 2010. Bhagyam field is being developed in a phase-wise manner with additional well program, EOR injection etc. The financial closure will be communicated once the field activities are completed considering the development activities.</p>

**Name of the Project:** Augmentation of Crude Oil Production & Processing Capacity (140,000 BoPD to 1,60,000 BoPD) and Associated Gas Production (20.4 MMSCFD to 32 MMSCFD) at Mangala Processing Terminal (MPT) and Well Pads within RJ-ON-90/1 Block at District Barmer, Rajasthan – Environment Clearance

**Clearance Letter No:** J -11011/98/2010-IA. II(I), dated: 23<sup>rd</sup> November 2010

**Period of Compliance Report:** April-24 to September-24

**Production profile:** Field wise average daily hydrocarbon production from RJON block during the reporting period is given below.

S. No.	Field Name	Average daily HC production during reporting period		Well pad details	
		Crude Oil (BOPD)	Natural Gas (MMSCFD)	No. of well pads permitted as per latest EC amendments	No. of Operational well pads during reporting period
1	Mangala	35325	15.82	Northern Field: 176 Low Marginal fields with early/quick production system: 49	21
2	Aishwariya & ABH	17242	10.60		11
3	Bhagyam	9926	2.79		15
4	NE/NI/NLB Field	2056	0.58		4
5	V2Y/Vandana1/Vijaya1	0	0		0
6	Shakti	18	0		1
7	Raageshwari	5473.900	119.362	Southern Field: 115 Low Marginal fields with early/quick production system: 90	10
8	Guda	83.51	0.043		3
9	Saraswati	316.311	0.138		3
10	Kameshwari	126.504	0.260		1
11	Tukaram	209.48	0.622		1
12	GSV	0	0		0
<b>Total average from RJON 90/1 block production</b>		<b>70776.705</b>	<b>150.215</b>		

Sites	Power Generation (MW)			
	Gas Based Boilers/Engines	Diesel Generator	Grid Supply	Renewable (Solar)
MPT	35.67	0.26	46.39	0.06
RGT	1.96	0.00075	16.55	
Well Pads	1.77	0.68	0.1682	
PSY	-	-	0.0043	

**Point-wise Compliance:** The status of compliances is described below.

**A. SPECIFIC CONDITIONS:**

S. No.	Specific Conditions	Compliance Status
I	Compliance to all the environmental conditions stipulated in the environmental clearance letter nos. J-11011/382/2005-IAII (I) dated 21 <sup>st</sup> March, 2006 and J-11011/174/2007-IAII (I) dated 12 <sup>th</sup> March 2008 shall be satisfactorily implemented.	The conditions mentioned in the said environmental clearance are being complied with.
ii.	Ambient air quality shall be monitored near the closest human settlement as per the National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826 (E) dated 16 <sup>th</sup> November 2009 for PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , NO <sub>x</sub> , CO, CH <sub>4</sub> , VOCs, HC (Non- methane) etc.	Ambient air quality monitoring is carried out periodically through in-house and 3rd party NABL accredited laboratory. Graphical representation of ambient air quality monitoring results during this EC compliance reporting period is provided in Annexure – 01. Ambient air is monitored as per the environmental monitoring plan approved by RSPCB.
iii.	Ambient air quality monitoring shall be carried out regularly and trend analysis w.r.t past monitoring results shall also be carried out. Adequate measures based on the trend analysis shall be taken to improve the ambient air quality in the project area. Mercury shall be analysed in air,	

S. No.	Specific Conditions	Compliance Status
	water and drill cuttings twice during drilling period.	
iv.	Low NOx burner shall be used in gas based power plant to reduce NOx emission into atmosphere. On-line NOx monitoring system shall be installed. Vent gas recovery units (VGRU) shall be provided to recover the hydrocarbon vapour from various processes units/vessels/tanks including oil storage tanks and fed into fuel gas system.	<p>Online emission monitoring system is installed in all the seven boiler stacks. The concentration of pollutant in boiler stack emission is within the limits. Refer <b>Annexure – 01</b> for monitoring details.</p> <p>All the process units, vessels and tanks are connected to vapour recovery systems. Six vapour recovery units (capacity 1390 SCM/ hr each) have been installed and recovered vapour is fed into the fuel gas system.</p>
v.	As proposed, vent gas recovery units shall be placed to recover the Hydrocarbon vapour from various process units/vessels/tanks including oil storage tanks and fed into 2-stage vapour recovery unit and fuel gas system.	NOx control systems are provided in the boilers.
vi.	The flare system shall be designed as per good oil field practices and oil industry safety directorate (OISD) guidelines. The stack height shall be provided as per the regulatory requirements and emissions from stacks shall meet the MoEF/CPCB guidelines.	The flare systems are designed as per the API 521 and OISD 106 standards. The height of flare stack installed at MPT and RGT is 30 m and emissions from stack are in compliance with regulatory requirements, the same is verified through ground level concentrations (ambient air quality monitoring) periodically. Enclosed ground flares are provided at local separation facilities.
vii.	The company shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed. At place of ground flaring, the overhead flaring stack with knockout drums shall be installed to minimize gaseous emissions during the operation. To prevent fire and explosion at oil and gas facility, potential ignition sources shall be kept to a minimum and adequate separation distance between potential ignition sources and flammable material shall be in place.	All storage tanks and process vessels have been installed with SIL (In simple terms, SIL is Safety Integrity Level, which is a measurement of performance required for a safety instrumented function) rated instrument systems including high, high-high and low, low-low alarms for information to DCS (Digital Control System) panel engineers for immediate intervention. Also, the process systems are installed with Emergency Shut Down Devices (ESDs)/ valves to isolate the supply during any leaks and prevent spills. Oil spill contingency plan is prepared and implemented at sites. Secondary containment has been provided at all hydrocarbon storage areas in accordance with OISD standards. The process vessels have been provided with kerbs to contain

S. No.	Specific Conditions	Compliance Status
		<p>accidental spills.</p> <p>Full-fledged dedicated oil spill response team stationed at MPT providing coverage to entire Rajasthan field, backed up fire services team consisting of trained professionals. Firefighting measures include hydrant system, foam system, portable fire extinguishers, water spray systems, fireproof electrical fittings, and fire and gas detection systems. In addition, mobile fire tenders of 4 no's are available in MPT and indigenous foam tenders of 5 no's are available at Bhagyam (2 nos.), Raageshwari (2 nos.) and Aishwariya (1 no.) location.</p> <p>Potential ignition sources are kept at adequate distance from flammable materials. Also, any development/modification activities are controlled through effective Permit to Work system.</p>
viii.	<p>No additional quantity of gas will be flared from the additional processing of oil carried out. Efforts shall be made to reduce existing flaring. Flaring shall be measured and recorded.</p>	<p>As part of well fluid processing, associated gas is generated. The quantity of associated gas generation varies based on the gas to oil ratio in the reservoir and the number of producer wells in operation. However, Cairn ensures maximum recovery and usage of associate gas. The gas is used for internal consumption requirements, including captive power generation. The net calorific value of associate gas is approximately 775 BTU/SCF and also contains approximately 23% of CO<sub>2</sub>. The associated gas needs supplement of rich natural gas having higher calorific value and less CO<sub>2</sub>. To meet this requirement, natural gas from Raageshwari Gas Terminal is being blended with associated gas produced at MPT. This ensures better fuel-mix for captive power generation through boilers. The percentage of associated gas flared is <b>9.89%</b> for the reporting period. Major contributor for gas flaring are Aishwariya field (<b>7.95%</b>) due to high CO<sub>2</sub> content (~86%) of associated gas and Satellite fields.</p> <p>In satellite fields &amp; LSF, as part of effective gas utilization to minimize flaring, gas engine generator (with lean burn and high efficiency) has been installed to meet plant loads. Also, further efforts are made to optimize the gas recovery and the existing diesel burner of IWBH has been converted as gas burner and there by further reduction of associated gas flaring achieved.</p>
ix.	<p>Regular stack monitoring of incinerator shall be carried out</p>	<p>The incinerator with dual burn chamber with achieving 1200°C and maintaining</p>

S. No.	Specific Conditions	Compliance Status
	as per guidelines prescribed by CPCB/MoEF. Control of Dioxin & Furan shall be ensured. Efficiency of pollution control device shall also be monitored time to time and records maintained.	residual time of 2 to 3 seconds is considered as part of the incinerator design stage to ensure efficiency of combustion and meeting the pollution control emission discharge standards. Water scrubber is part of the pollution control device to treat the emission discharge from the incinerator as per CPCB guidelines. However, Incinerator operation is restricted almost completely as the waste being disposed through co-processing at cement industry.
x.	The company shall make the arrangement for control of noise from the drilling activity and DG sets. The company shall take necessary measures to reduce noise levels such as proper casing at the drill site and meet DG set norms notified by the MoEF.	DG sets are provided with acoustic enclosures in accordance with E(P) Rules and effective stack height.
xi.	Total saline ground water requirement from Thumbli aquifer after proposed augmentation shall not exceed 32,500 m <sup>3</sup> /day. Permission for additional water requirement i.e. 7500 m <sup>3</sup> /day for proposed expansion shall be obtained from CGWA/SGWB. All the recommendations of the CGWA/SGWB shall be implemented. Validity of environmental clearance for the above project shall be subject to the extension of permission of CGWA for abstraction of water. A copy of the permission shall be submitted to the Ministry's Regional Office at Lucknow within 3 months of issue of environmental clearance.	No fresh water is being extracted for operational usage. Only deep saline water is being abstracted after obtaining necessary permission from CGWA. On an average, <b>15290</b> m <sup>3</sup> /day of saline ground water was abstracted in the reporting period from Thumbli (NR-01) through six deep saline wells against the permitted value of 51,500 m <sup>3</sup> /day. Also, on an average <b>913</b> m <sup>3</sup> /day of saline ground water was extracted from Jagadia (Raageshwari) through five wells against the permitted value of 3000 m <sup>3</sup> /day.
xii.	Treated waste water (produced water/desalination rejects/ CPP blow down/formation water/sanitary sewage) shall comply with the standards notified under the Environment (Protection) Act, 1986. As proposed the produced water generated shall be treated in the produce water treatment plant to separate solids and oil traces through induced gas floatation process. No water will be	The various streams of wastewater generated from operational facilities are produced water, desalination plant reject water, ETP reject, filter backwash water, boiler blow down and domestic sewage. The produced water is treated for the removal of physical impurities such as total suspended solids and oil. Thus, treated water is injected back into the reservoir for maintaining reservoir pressure and void replacement. Reject from desalination plant, ETP and treated filter backwash water are disposed in deep disposal well of depth >1000 m depth below ground level complying with respect to suspended



S. No.	Specific Conditions	Compliance Status																																																
	discharged outside the facility boundary.	solids and oil and grease 100 mg/l and 10 mg/l, respectively as per The Environment (Protection) Rules, 1986.																																																
xiii.	Domestic wastewater shall be treated in Sewage Treatment Plant (STP) and recycle/reuse entire treated waste water for green belt development and various activities at the site.	<p>Currently, there are three sewage treatment plants in the block - 250 m<sup>3</sup>/day STP at Operations Base near MPT, 45m<sup>3</sup>/day STP at MPT, 40 m<sup>3</sup>/day and 25 STP m<sup>3</sup>/day at RGT OB. The monitored values of key parameters stipulated in Consent conditions during the reporting period are given below:</p> <table border="1"> <thead> <tr> <th>Parameter</th> <th>MPT-OB STP</th> <th>MPT STP</th> <th>RGT STP (25 KLD)</th> <th>RGT STP (40 KLD)</th> <th>Reed Bed BH 06</th> </tr> </thead> <tbody> <tr> <td>pH (at 25 0C)</td> <td>7.38</td> <td>7.61</td> <td>6.85</td> <td>6.95</td> <td>7.67</td> </tr> <tr> <td>TSS (mg/l)</td> <td>11.5</td> <td>11.3</td> <td>14</td> <td>14</td> <td>8.40</td> </tr> <tr> <td>BOD (3 d at 270C) (mg/l)</td> <td>8.8</td> <td>8.6</td> <td>7.2</td> <td>7.2</td> <td>4.22</td> </tr> <tr> <td>COD (mg/l)</td> <td>47.6</td> <td>41.6</td> <td>36.4</td> <td>31.45</td> <td>35</td> </tr> <tr> <td>NH4 (N)</td> <td>2.76</td> <td>2.45</td> <td>4.7</td> <td>2.62</td> <td>2.87</td> </tr> <tr> <td>N total</td> <td>6.45</td> <td>4.34</td> <td>2.6</td> <td>6.4</td> <td>5.74</td> </tr> <tr> <td>Fecal Coliform (MPN per 100 ml)</td> <td>50</td> <td>60</td> <td>60</td> <td>65</td> <td>40</td> </tr> </tbody> </table>	Parameter	MPT-OB STP	MPT STP	RGT STP (25 KLD)	RGT STP (40 KLD)	Reed Bed BH 06	pH (at 25 0C)	7.38	7.61	6.85	6.95	7.67	TSS (mg/l)	11.5	11.3	14	14	8.40	BOD (3 d at 270C) (mg/l)	8.8	8.6	7.2	7.2	4.22	COD (mg/l)	47.6	41.6	36.4	31.45	35	NH4 (N)	2.76	2.45	4.7	2.62	2.87	N total	6.45	4.34	2.6	6.4	5.74	Fecal Coliform (MPN per 100 ml)	50	60	60	65	40
Parameter	MPT-OB STP	MPT STP	RGT STP (25 KLD)	RGT STP (40 KLD)	Reed Bed BH 06																																													
pH (at 25 0C)	7.38	7.61	6.85	6.95	7.67																																													
TSS (mg/l)	11.5	11.3	14	14	8.40																																													
BOD (3 d at 270C) (mg/l)	8.8	8.6	7.2	7.2	4.22																																													
COD (mg/l)	47.6	41.6	36.4	31.45	35																																													
NH4 (N)	2.76	2.45	4.7	2.62	2.87																																													
N total	6.45	4.34	2.6	6.4	5.74																																													
Fecal Coliform (MPN per 100 ml)	50	60	60	65	40																																													

S. No.	Specific Conditions	Compliance Status
		<p>Reed bed system is developed at BH-06 camp site for treatment of sewage. The treated water from STP and reed bed is used for greenbelt development within the premises. There is no wastewater discharge outside the facility boundary.</p>
xiv.	<p>Adequate no. of ground water quality monitoring stations by providing piezometers around the captive landfill site and project area shall be set up. Sampling and trend analysis monitoring must be made on monthly basis and report submitted to Rajasthan Pollution Control Board and this Ministry.</p>	<p>There are seven monitoring wells with piezometers around the captive landfill at MPT to monitor ground water quality. The average value of key parameters for all seven observatory wells are as follow:</p> <ul style="list-style-type: none"> <li>● pH : 7.12 – 8.58</li> <li>● TDS : 1666 – 3152 mg/l</li> <li>● TPH – BDL (Below detectable Level)</li> <li>● Heavy metals (Hg, As, Pb, Se, Cu, Cr, etc.) - BDL</li> </ul> <p>Quarterly report containing monitoring results of various parameters is being submitted to the RSPCB along with TSDF operations return as per CPCB guidelines. Refer <b>Annexure – 10</b> for Quarterly TSDF Return submitted to RPCB.</p>
xv.	<p>The drill cutting (DC) wash water shall be treated to conform to limits notified vide GSR.546 (E) dated 30<sup>th</sup> August, 2005 under the Environment (Protection) Act, 1986 before disposal of solid waste, drill cutting fluids for onshore drilling operation. The treated effluent shall be monitored regularly.</p>	<p>Water Based Mud (WBM) is used as the drilling fluid for drilling the upper section of well (~250 - 500 meters) or up to complete target depth of the well subject to geological formation. In case of hard strata, Synthetic Oil Based Mud (SOBM) is used to counter difficult drilling situations &amp; incremental formation pressure, such as high down hole temperatures, hydrated shales, or salt, where the properties of WBMs would limit performance. The WBM cuttings generated are non-hazardous in nature. These cuttings are washed and used for construction activities like backfilling of low-lying areas, construction of well pads etc. SOBM drill cutting generated are segregated at the sources of generation and disposed in real time to cement industry for coprocessing. HDPE line concrete pits are also available at site for interim storage &amp; handling of drill cuttings. During drilling process, waste residual mud &amp; drilling wastewater are collected in the container for treatment, recycling and disposal.</p> <p>The drilling fluid after solid – liquid separation is being recycled and/or disposed through adequately designed and lined solar evaporation ponds and deep dump well disposal.</p>

S. No.	Specific Conditions	Compliance Status
		The oil base drill cuttings and residual dry mud are shifted to the MPT captive hazardous landfill for appropriate disposal or being sent for co-processing in cement industry. Refer Annexure – 11 for compliance to GSR. 546(E) dated 30th August 2005.
xvi.	Only water based drilling mud shall be used. Quantities of storage and chemicals and additives required for drilling mud preparation shall be below the specified threshold for specified storage permitted under the MSIHC Rules.	Diesel based mud or oil-based mud (OBM) is not used in any of the drilling of the wells. Water Based Mud (WBM) is used as the drilling fluid for drilling the upper section of well (~250 - 500 meters) or up to complete target depth of the well subject to geological formation. In case of hard strata, Synthetic Based Mud (SOBM) is used to counter difficult drilling situations, such as high down hole temperatures, hydrated shales, or salt, where the properties of WBMs would limit performance. The storage of drilling chemicals does not attract the provisions of MSIHC Rules.
xvii.	Non-recyclable waste generated from the MPT operation, associated well and incineration ash shall be segregated and disposed off into hazardous and non-hazardous waste section of the landfill and finally burnt in the existing incinerator. Leachate from the landfill and liquid waste from laboratory shall be collected into a collection tank and evaporated in the solar evaporation tank. Oily waste/oily sands/oil contaminated drill cutting, bottom oil sludge and resins/sludge waste shall also be incinerated in the incinerator. Spent /waste oil shall be sold to authorized recyclers.	The waste management philosophy is given below: <ul style="list-style-type: none"> <li>• 3 R concept (reduce, reuse, reprocess/recycle) is being followed for management of all waste material</li> <li>• Non-recyclable, low / no calorific value hazardous waste disposed to the captive secured hazardous waste landfill in MPT.</li> <li>• Non-recyclable, high calorific hazardous waste (non-recyclable) disposed through co-processing at cement industry and incinerator in MPT. Incinerator ash disposed of in the hazardous waste landfill after necessary stabilization.</li> <li>• Leachate from the landfill and liquid waste from incinerator disposed in solar evaporation pits and residue of evaporation disposed in landfill.</li> <li>• SOBM drill cutting is being disposed through co-processing in cement industry to use as raw material for clinkers. Permission for regular co-processing of hazardous waste containing oil and SOBM drill cutting waste are also obtained.</li> <li>• Recyclable hazardous wastes such as used oil, waste oil, used barrels disposed to CPCB registered and SPCB authorized recycler.</li> </ul>

S. No.	Specific Conditions	Compliance Status
		<ul style="list-style-type: none"> <li>• Non-recyclable, non-hazardous wastes disposed in captive non-hazardous waste landfill in MPT.</li> <li>• Recyclable non-hazardous wastes such as metals (steel, alloy, aluminum, copper etc.) and nonmetals (plastic, wood, rubber, glass, paper, carton etc.) disposed to local recyclers.</li> </ul>
xviii.	All the hazardous waste generated shall be properly treated and disposed off in accordance with the hazardous Waste (Management, Handling and Trans boundary Movement) Rules 2008. Used oil shall be sold to MoEF/CPCB authorized recyclers/re processors.	Hazardous wastes are segregated, stored, transported and disposed in accordance with Hazardous Waste Authorizations obtained under prescribed Rules.
xix	The company shall construct the garland drain all around the drilling site to prevent runoff of any oil containing wastes into the nearby water bodies. Separate drainage system shall be created for oil contaminated and non – oil contaminated. Effluent shall be properly treated and treated wastewater shall conform to CPCB standards.	<p>Garland drains are provided at well pads for collection of storm water.</p> <p>The drilling wastewater is stored in concrete and HDPE lined pits at drilling sites and treated for reuse/disposal through deep dump well (depth &gt;1000 m) and confirm the prescribed standards. Separate drainage system provided at processing terminal for oil contaminated and non-oil contaminated effluents.</p> <p>RO reject &amp; SRP reject are being disposed in deep dump wells of depth &gt;1000 m depth below ground level complying with respect to suspended solids and oil and grease 100 mg/l and 10 mg/l, respectively as per The Environment (Protection) Rules, 1986.</p>
xx.	Oil spillage scheme shall be prepared. In case of oil spillage/contamination, action plan shall be prepared to clean the site by adopting proven technology. The recyclable waste (oily sludge) and spent oil shall be disposed off to the authorized recyclers/re-processors.	<p>Oil Spill Management Plan is prepared and in place. A dedicated oil spill response team is stationed at MPT, backed by the fire services team.</p> <p>The oil contaminated soil and wastes are being disposed to captive TSDF or co-processing at cement industry. Waste oil disposed to CPCB registered and SPCB authorized recyclers.</p>
xxi.	The company shall develop a contingency plan for H <sub>2</sub> S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with personal H <sub>2</sub> S detectors in location of high	<p>Cairn has developed a H<sub>2</sub>S management procedure. PPE, personal monitors and the other gadgets have been procured as per the requirements of the procedure.</p> <p>An elaborate H<sub>2</sub>S induction program is included as part of employee and visitor's induction modules. One-day H<sub>2</sub>S certification program, as per ANSI Z390.1 guideline,</p>

S. No.	Specific Conditions	Compliance Status
	risk of exposure along with self-containing breathing apparatus.	is being conducted for all the Cairn technical employees and field supervisory staff. Personnel working at well pads and operational areas inside terminals are provided with personal H <sub>2</sub> S escape mask and H <sub>2</sub> S monitors that will trigger an alarm if TLV value exceeds 10 ppm. Self-Contained Breathing Apparatus (SCBA) sets have been installed at all critical locations in terminals and well pads for the personnel to use in case of inadvertent H <sub>2</sub> S exposure. Cairn has installed on-line H <sub>2</sub> S detection system at MPT, Mangala and Bhagyam well pads.
xxii.	The topsoil removed shall be stacked separately for reuse during restoration process.	There is no distinguishable topsoil layer in the arid/desert region of Barmer district. Cairn has developed facilities on permanently acquired land. Restoration will be carried out at the end of the project life cycle based on Cairn's site restoration procedure. However, in pipeline ROU, the topsoil (if available) is being preserved and re-laid after pipeline laying work completed.
xxiii.	Full drawings and details of Blow Out Preventer (BOP) to encounter well kick due to high formation presence, if encountered, shall be submitted to the Ministry within 3 months of the issue of environment clearance. BOP measures during drilling shall focus on maintaining well bore hydrocarbon pressure by proper pre-well planning and drilling fluid logging etc.	Refer <b>Annexure –12</b> for details of BOP being used during developmental drilling activities.
xxiv	Emergency response plan shall be based on the guidelines prepared by OISD, DGMS and Govt of India.	Incident/Emergency Response Plan is in place based on national and international guidelines. Each field in the Block has a separate Response Plan. This plan was submitted to the regulatory and district administration.
xxv.	On completion of activities the well shall be either plugged and suspended (if the well evaluation indicates commercial quantities of hydrocarbon) or killed and permanently abandoned with mechanical plugs and well cap. If well is suspended, it shall be filled with a brine solution containing small quantities of inhibitors to protect the well. In the	All the wells drilled are in secured sites. Wells are temporary abandoned until commercial production is started, or economic viability is determined. Wells not economically viable to produce are abandoned following regulatory requirements of OMR and OISD guidelines.  During reporting period, Cairn has abandoned three wells only in Mangla field. Cairn complies with OMR 58 regarding well plugged & abandoned requirements.

S. No.	Specific Conditions	Compliance Status
	<p>event that no economic quantity of hydrocarbon is found a full abandonment plan shall be implemented for the drilling site in accordance with the applicable Indian Petroleum Regulations. In case the commercial viability of the project is established, the company shall prepare a detailed plan for development of oil and gas fields and obtain fresh environmental clearance from the Ministry.</p>	
xxvi.	<p>Occupational health surveillance of the workers shall be carried out as per the prevailing Act and Rules.</p>	<p>Annual industrial hygiene survey is carried out by third-party experts at MPT, RGT and Bhagyam. This survey includes qualitative and quantitative survey of exposure of workers to chemicals, dust, noise and heat, adequacy of illumination manual material handling conditions, and office ergonomics. Annual health checks are conducted for all workers exposed to annual work environment.</p> <p>The following facilities are available to provide first aid and emergency care to workers in Rajasthan.</p> <ul style="list-style-type: none"> <li>• Round-the-clock first aid and emergency medical facilities manned by qualified doctors and paramedics</li> <li>• Availability of advanced life-support ambulances at all medical centres</li> <li>• Cairn has entered contract with ASAP for fixed wing air-ambulance services equipped with emergency and critical medical (tertiary) care equipment.</li> <li>• For secondary medical care, CAIRN has a formal contract with Thar hospital at Barmer.</li> <li>• Medical fitness certificates are maintained at site medical centre as per the OMR Rules and DGMS requirements.</li> </ul>
xxvii.	<p>The project proponent shall also comply with the environmental protection measures and safeguards recommended in the EIA/EMP/RA report.</p>	<p>The environmental protection measures and safeguards recommended in EIA-EMP &amp; QRA are being implemented throughout the project life cycle. Cairn is committed to addressing all the issues and concerns raised in public hearing and is implementing time-bound actions. Refer Annexure – 06 for PH Compliance status.</p>
XXVI	<p>Recommendations mentioned in the Risk Assessment &amp;</p>	<p>The environmental protection and risk mitigation measures and safeguards</p>

S. No.	Specific Conditions	Compliance Status
II	Consequences Analysis and Disaster Management Plan shall be strictly followed.	recommended in the various studies including HAZOP (Hazard and Operability), HAZID (Hazard Identification) and COMAH (Control of Major Accident Hazards) are implemented during the project and operations stages. Recommendations mentioned in the Risk Assessment and Disaster Management Plan is followed and practiced through periodic drills.
XXIX	The surface facilities shall be installed as per applicable codes and standards, international practices, and applicable local regulations.	The surface facilities have been installed according to relevant and applicable ASME/ANSI/OISD/BIS codes and OGP best practices.
XXX	Pre-hire rig inspection safety meetings, tool-box meeting, job safety analysis and audits shall be carried out to identify hidden potential hazardous.	All the rigs before hiring is mandated to carry out the pre rig inspection. After close-out of the audit points only, the rig is finally hired for the particular activity. Pre-hire rig inspections being carried out by third-party agency. Daily/weekly safety meetings, toolbox meetings (prior to daily start of work in every shift), job safety analysis and audits are conducted at site. Job Safety assessment (JSA) is carried out prior to the start of any activity and work permit system is strictly followed.
XXXI	The design, material of construction, assembly inspection, testing and safety aspects of operation and maintenance of pipeline and transporting the natural gas/oil shall be governed by ASME/ANSI B 31.8/B31.4 and OISD standards 141.	Relevant standards and codes such as ASME/ANSI/OISD/BIS are followed in all aspects of design, construction, commissioning, operation and maintenance of the exploration and developmental facilities.
XXXI I	The project authorities shall install SCADA system with dedicated optical fibre-based telecommunication link for safe operation of pipelines and leak detection system intelligent pigging facility shall be provided for the entire pipeline system for internal corrosion monitoring. Coating an impressed current cathodic protection system shall be provided to prevent external corrosion.	Foot patrolling along pipeline ROU is followed as per the operational procedure. The adequacy of the cathodic protection system is checked through the following surveys: <ul style="list-style-type: none"> <li>• Pipe to Soil Potential (PSP) Survey (once in every 3 months)</li> <li>• CIPS (Close Interval Potential Survey) (once in every 4 years)</li> <li>• DCVG (Direct Current Voltage Gradient) Survey (once in every 4 years)</li> <li>• Pearson Survey (once on every 4 years)</li> <li>• All pipelines are coated with either 3LPE or 3LPP.</li> <li>• Intelligent pigging of pipelines is being carried out regularly.</li> </ul>

S. No.	Specific Conditions	Compliance Status
		<ul style="list-style-type: none"> <li>• ICDA &amp; ECDA surveys done.</li> <li>• FFS completed for critical lines</li> </ul> <p>Corrosion inhibitor injection has also been injected in inter-field pipelines as required to minimize/prevent corrosion. Continuous potential survey is carried out every three months to ensure adequacy of cathodic protection system. Corrosion monitoring by weight loss coupons and feed analysis has also been initiated. Revamping of Cathodic Protection system is also in progress.</p>
XXXI II	The company shall undertake rainwater harvesting measures to recharge the ground water. The storm water shall be passed through oil trap before discharging into rainwater storage tank.	<p>Rainwater recharge pits have been developed in MPT (of capacity 72225 m3) and in RGT (of capacity 22720 m3). Rainwater from roof top and surface run-off are collected in paved drains and channeled to the groundwater recharge pit after passing through the oil trap. Infiltration wells have been built for recharging groundwater and used for green belt development.</p> <p>Rainwater recharge pit (of capacity ~58,000 m3) at NR-1 (Madpura Barwala, Baitu) has been made with provision to conserve the water in deep saline aquifer. Rainwater recharge structures have been developed in 28 operating well pads at various locations within the RJ Block, having 63 rainwater recharge structures with rainwater harvesting potential of 0.28 million KL per annum.</p> <p>Towards natural resource management, CAIRN has constructed 1056 khadins and renovated 28 traditional water harvesting structures (nadi) till date developing the harvesting capacity of the area by ~18 lakh cu m water every year. Cairn is also instrumental in tapping roof top water through proper harvesting facilities in 95 schools, benefitting 8,000+ students and developing rainwater harvesting capacity of 5 lac cubic meter.</p>
XXXI V	Adequate funds both recurring and non-recurring shall be earmarked to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purposes.	Sufficient funds are being earmarked towards capital cost and recurring cost per annum to implement environmental initiatives and related facility operations. Approximate Capital Expenditure (CAPEX) and Operating Expenditure (OPEX) spent in RJ-ON-90/1 Block towards the provisions for environment management are detailed below.



S. No.	Specific Conditions	Compliance Status		
		Financial Year	CAPEX (INR)	OPEX (INR)
		2016 – 17	188,40,943	699,40,366
		2017 – 18	53,89,955	817,52,899
		2018 - 19	1,825,43,669	1,373,57,426
		2019 – 20	468,025,215	821,831,880
		2020 – 21	3,002,256,713	381,673,756
		2021-22	34,993,115	402,052,317
		2022 – 23	6,168,47,901	305,04,305
		2023 - 24	4,827,836	878,050,049
		<b>2024-25(Apr'24-Sep'24)</b>	<b>9,692,520</b>	<b>444,091,891</b>
XXX V	Provisions shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, Safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	<p>The locals are mainly hired by contractors for the unskilled and semi-skilled activities, where no accommodation is provided as they have their own accommodation. Only skilled manpower as required are hired from other parts of India or outside India. In such cases, their accommodations are taken care by the contractor through providing stay in hotels or guest houses in Barmer. Some contractors have also rented construction camps provided with all required infrastructures and sanitation facilities in existing buildings at nearby village/town.</p> <p>To improve the healthcare facilities in Barmer, Cairn has implemented various initiative like running MHV for primary health care services at the doorstep of the community, establishing trauma center, functionalizing FRU's, improving services at PHC and CHC as well as providing cleanliness and 4 specialist doctors support to District Hospital.</p> <p>In addition to the above services' various multi-specialist health camps, awareness camps are frequently organized to address the seasonal diseases as well as make community sensitized towards the health and hygiene practices. Refer <b>Annexure – 03</b></p>		

S. No.	Specific Conditions	Compliance Status
		for CSR program details.

**B. GENERAL CONDITIONS**

S. No.	General Conditions	Compliance status
i	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board (SPCB), State Government and any other statutory authority.	Being complied. Compliance reports are being submitted regularly to RSPCB regarding the Consent and Authorization conditions.
ii	No further expansion or modification in the project shall be carried out without prior approval of the Ministry of Environment and Forests. In case of deviations or alterations in project proposal from those submitted to the Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.	Noted and no activities presently being carried out without any EC requirements. Amendment in existing environmental clearances are periodically obtained from MoEF&CC for future expansion and modification projects as per the requirements.  Vedanta has obtained Environmental Clearance for “Expansion of onshore oil and gas production from existing 300,000 to 400,000 bopd and 165 to 750 MMSCFD from RJ-ON-90/1 Block, Barmer, Rajasthan” vide letter no. F. No. J/11011/13/2018/IA-II(I) dated 11 <sup>th</sup> April 2019. Refer <b>Annexure – 07</b> for list of ECs obtained so far.
iii	The project authorities must strictly comply with the rules and regulations under Manufacture, Storage and Import of Hazardous Chemicals Rules, 2000 as amended subsequently. Prior approvals from Chief Inspectors of Factories, Chief Controller of Explosives, Fire Safety Inspectorate etc. must be obtained, wherever applicable.	Provisions of Manufacture, Storage and Import of Hazardous chemicals Rules are complied. On-site and offsite emergency preparedness plans are implemented, and regular mock drills are conducted at site to ensure effective response to any emergency situations.  All the activities within RJ Block are governed by Oil Mine Regulations, 1984 and thus Factories Act is not applicable. However necessary licenses to store petroleum/hydrocarbons are obtained from the Chief Controller of Explosives, Nagpur. High voltage energisation and equipment Type approvals for the electrical installations in the facilities are obtained from Director General of Mines Safety located at Ghaziabad (Zonal office), Ajmer (Regional office) and Dhanbad (Head quarter) are obtained.

S. No.	General Conditions	Compliance status
Iv	The project authorities must strictly comply with the rules and regulation with regarding to handling and disposal of Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008 wherever applicable. Authorization from the State Pollution Control Board must be obtained for collections/treatment/storage/disposal of hazardous wastes.	All operational facilities well pads, processing terminals etc. have valid hazardous waste authorization (HWA). The conditions mentioned in HWAs are being complied with and periodically the reports are submitted to RSPCB. The hazardous wastes are being collected, stored, handled and disposed as per Hazardous & Other Waste (Management & Handling) Rules, 2016. Records of hazardous waste generation is being maintained on monthly basis in Form-3. Annual return in Form 4 is being submitted to the RSPCB. Manifest and TREM cards are also being issued.
V	The overall noise levels in and around the plant area shall be kept well within the standards by the providing noise control measures including acoustic hoods, silencers enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under EPA Rules, 1989 viz 75 dBA (daytime) and 70 dBA (night time).	All the high noise rotating equipment's are provided with acoustic enclosures, silencers etc. Ambient noise data show that day and night levels are within the prescribed limits as per the Noise Rules. Refer <b>Annexure – 01</b> for details.
vi	A separate Environment Management Cell equipped with full fledged laboratory facilities must be set up to carry out the environmental management and monitoring functions.	A team of fourteen environmental professionals are stationed at RJ site to provide necessary technical support to the projects, operation, drilling and Petroleum engineering activities in implementing the environmental management measures.  Environmental laboratory is set up at the MPT for monitoring ambient air, stack, noise, wastewater, water, solid waste, soil etc., for entire RJ Block. This laboratory is NABL approved and equipped with all necessary equipment. Please refer <b>Annexure – 8</b> for details. In addition, inhouse & periodic 3rd party NABL laboratory is engaged to carry out the environmental monitoring requirements as per the RSPCB approved environmental monitoring plan.
Vii	The project authorities shall provide adequate funds both recurring and non-recurring to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the	Sufficient funds are being earmarked towards capital cost and recurring cost per annum to implement environmental initiatives and related facility operations. Approximate Capital Expenditure (CAPEX) and Operating Expenditure (OPEX) spent in RJ-ON-90/1 Block towards the provisions for

S. No.	General Conditions	Compliance status																														
	<p>conditions stipulated herein. The funds so provided shall not be diverted for any other purposes.</p>	<p>environment management are detailed below.</p> <table border="1" data-bbox="1267 272 1939 815"> <thead> <tr> <th data-bbox="1267 272 1527 328">Financial Year</th> <th data-bbox="1527 272 1742 328">CAPEX (INR)</th> <th data-bbox="1742 272 1939 328">OPEX (INR)</th> </tr> </thead> <tbody> <tr> <td data-bbox="1267 328 1527 384">2016 – 17</td> <td data-bbox="1527 328 1742 384">188,40,943</td> <td data-bbox="1742 328 1939 384">699,40,366</td> </tr> <tr> <td data-bbox="1267 384 1527 440">2017 – 18</td> <td data-bbox="1527 384 1742 440">53,89,955</td> <td data-bbox="1742 384 1939 440">817,52,899</td> </tr> <tr> <td data-bbox="1267 440 1527 496">2018 - 19</td> <td data-bbox="1527 440 1742 496">1,825,43,669</td> <td data-bbox="1742 440 1939 496">1,373,57,426</td> </tr> <tr> <td data-bbox="1267 496 1527 552">2019 – 20</td> <td data-bbox="1527 496 1742 552">468,025,215</td> <td data-bbox="1742 496 1939 552">821,831,880</td> </tr> <tr> <td data-bbox="1267 552 1527 608">2020 – 21</td> <td data-bbox="1527 552 1742 608">3,002,256,713</td> <td data-bbox="1742 552 1939 608">381,673,756</td> </tr> <tr> <td data-bbox="1267 608 1527 663">2021-22</td> <td data-bbox="1527 608 1742 663">34,993,115</td> <td data-bbox="1742 608 1939 663">402,052,317</td> </tr> <tr> <td data-bbox="1267 663 1527 719">2022 – 23</td> <td data-bbox="1527 663 1742 719">6,168,47,901</td> <td data-bbox="1742 663 1939 719">305,04,305</td> </tr> <tr> <td data-bbox="1267 719 1527 775">2023 - 24</td> <td data-bbox="1527 719 1742 775">4,827,836</td> <td data-bbox="1742 719 1939 775">878,050,049</td> </tr> <tr> <td data-bbox="1267 775 1527 815"><b>2024 – 25(Apr-Sep'24)</b></td> <td data-bbox="1527 775 1742 815"><b>9,692,520</b></td> <td data-bbox="1742 775 1939 815"><b>412,849,892</b></td> </tr> </tbody> </table>	Financial Year	CAPEX (INR)	OPEX (INR)	2016 – 17	188,40,943	699,40,366	2017 – 18	53,89,955	817,52,899	2018 - 19	1,825,43,669	1,373,57,426	2019 – 20	468,025,215	821,831,880	2020 – 21	3,002,256,713	381,673,756	2021-22	34,993,115	402,052,317	2022 – 23	6,168,47,901	305,04,305	2023 - 24	4,827,836	878,050,049	<b>2024 – 25(Apr-Sep'24)</b>	<b>9,692,520</b>	<b>412,849,892</b>
Financial Year	CAPEX (INR)	OPEX (INR)																														
2016 – 17	188,40,943	699,40,366																														
2017 – 18	53,89,955	817,52,899																														
2018 - 19	1,825,43,669	1,373,57,426																														
2019 – 20	468,025,215	821,831,880																														
2020 – 21	3,002,256,713	381,673,756																														
2021-22	34,993,115	402,052,317																														
2022 – 23	6,168,47,901	305,04,305																														
2023 - 24	4,827,836	878,050,049																														
<b>2024 – 25(Apr-Sep'24)</b>	<b>9,692,520</b>	<b>412,849,892</b>																														
viii	<p>The regional office of this Ministry/Central Pollution Control Board/ State Pollution Control Board will monitor the stipulated conditions. A six-monthly compliance report and the monitored data along with statistical interpretation shall be submitted to them regularly.</p>	<p>Periodical six-monthly compliance reports with statistical interpretation of ambient air quality and noise quality monitoring data, are being submitted to MoEF&amp;CC regional office and RSPCB. Refer <b>Annexure – 01</b> for monitoring details.</p>																														
ix	<p>A copy of clearance letter shall be sent by the proponent to concern Panchayat, Zila Parishad/Municipal Corporation, Urban Local Body and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the web site of the company by the proponent.</p>	<p>Copy of Environment clearance is submitted to Panchayat, District Collector office, RSPCB and NGO. No suggestion or representations from any of NGO and or local bodies were received in the said EC compliance reporting period.</p>																														
x	<p>The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of</p>	<p>Periodical six-monthly compliance reports with statistical interpretation of ambient air quality and noise quality monitoring data, are being submitted to</p>																														

S. No.	General Conditions	Compliance status
	<p>monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office or the MoEF, the respective Zonal Office of CPCB and the RSPCB. The criteria pollutant levels namely SPM, RSPM, SO<sub>2</sub>, NO<sub>x</sub>, HC (Methane &amp; Non methane), VOCs (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.</p>	<p>MoEF&amp;CC regional office and RSPCB. Refer <b>Annexure – 01</b> for monitoring details. Also, the reports are uploaded in company website. Refer the below link for details.  <a href="https://www.cairnindia.com/Pages/PoliciesandDisclosures.aspx">https://www.cairnindia.com/Pages/PoliciesandDisclosures.aspx</a>                      The required environmental information is also displayed on a board near the main gate of each operational facility and is updated on a monthly basis.</p>
xi	<p>The project proponent shall also submit six monthly reports on the status of the compliances of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MoEF, the respective Zonal Office of CPCB and the RSPCB. The Regional Office of this Ministry/ CPCB/ RSPCB shall monitor the stipulated conditions.</p>	<p>Six-monthly EC compliance reports are submitted regularly to various regulatory authorities such as CPCB, RSPCB and MoEF&amp;CC regional office and also uploaded in company website. Refer the below link for details.  <a href="https://www.cairnindia.com/Pages/PoliciesandDisclosures.aspx">https://www.cairnindia.com/Pages/PoliciesandDisclosures.aspx</a></p>
xii	<p>The environment statement for each financial year ending 31<sup>st</sup> March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental conditions and shall also be sent to the respective Regional Offices of the MOEF by e-mail.</p>	<p>The environmental statement (Form-V) for each financial year ending 31<sup>st</sup> March is being submitted to RSPCB. Refer <b>Annexure-09</b> for details. Also, the reports are uploaded in company website. Refer the below link for details.  <a href="https://www.cairnindia.com/Pages/PoliciesandDisclosures.aspx">https://www.cairnindia.com/Pages/PoliciesandDisclosures.aspx</a></p>
xiii.	<p>The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the RSPCB and may also be seen at website of the Ministry of Environment and Forests at <a href="http://envfor.nic.in">http://envfor.nic.in</a> . This shall be advertised within seven days from the date of issue of clearance letter, at least in two local newspapers that are widely circulated in the region of which one</p>	<p>A public notice informing the grant of this EC by MOEF&amp;CC and availability of its copies with RSPCB and on MoEF&amp; CC website was published by CAIRN as follows:</p> <ul style="list-style-type: none"> <li>• Times of India (English) on 11-12-2010</li> <li>• Dainik Bhaskar (Hindi) on 11-12-2010</li> </ul>

S. No.	General Conditions	Compliance status
	shall be in the vernacular language of the locality concerned and a copy of the same be forwarded to the Regional Office.	
xiv	Project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.	RJ-ON block development was started in Quarter - 02 of 2006. The central processing hub, Mangala Processing Terminal was commissioned in April 2010. Fields covered in the ECs are being developed in a phase-wise manner. The financial closure will be communicated once all fields are developed.
8.0	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Noted. All conditions shall be implemented to the satisfactory requirements.
9.0	The Ministry reserves the right to stipulate additional conditions if found necessary. The company in a time bound manner shall implement these conditions.	Noted. Any additional conditions communicated to Cairn shall be implemented to full satisfactory.
10.0	Any appeal against this environmental clearance shall lie with the National Environment Appellate Authority, if preferred within a period of 30 days as prescribed under section 11 of the National Environment Appellate Act, 1997.	Noted.
11.0	The above conditions shall be enforced, inter-alia under the provisions of the water (Prevention and control of pollution) Act 1974, the Air (Prevention and Control of Pollution) Act 1981, the Environment (Protection) Act 1986, Hazardous Wastes (Management and Handling) Rules 2003 and the Public (Insurance Liability Act 1991 along with their amendments and rules.	Noted for compliance.

**Name of the Project:** Augmentation of crude oil production & processing capacity (160,000 BoPD to 175,000 BoPD) and associated gas production (32 MMSCFD to 35 MMSCFD) at Mangala Processing Terminal (MPT) and well pads within RJ-ON-90/1 block, Rajasthan – Environment Clearance

**Clearance Letter No:** J-11011/98/2010-IA II(I) dated 16<sup>th</sup> Oct 2012

**Period of Compliance Report:** Progressive EC Compliance Reporting period is **April-24 to September-24.**

**Production profile:** Field wise average daily hydrocarbon production from RJON block during the reporting period is given below

S. No.	Field Name	Average daily HC production during reporting period (October-23 to March-24)		Well pad details		
		Crude (BOPD)	Oil	Natural Gas (MMSCFD)	No. of well pads permitted as per latest EC amendments	No. of Operational well pads during reporting period
1	Mangala	35325		15.82	Northern Field: 176 Low Marginal fields with early/quick production system: 49	21
2	Aishwariya & ABH	17242		10.60		11
3	Bhagyam	9926		2.79		15
4	NE/NI/NLB Field	2056		0.58		4
5	V2Y/Vandana1/Vijaya1	0		0		0
6	Shakti	18		0		1
7	Raageshwari	5473.900		119.362	Southern Field: 115 Low Marginal fields with early/quick production system: 90	10
8	Guda	83.51		0.043		3
9	Saraswati	316.311		0.138		3
10	Kameshwari	126.504		0.260		1
11	Tukaram	209.48		0.622		1
12	GSV	0		0		0
<b>Total average from RJON 90/1 block production</b>		<b>70775.705</b>		<b>150.215</b>		

Sites	Power Generation (MWH)			
	Gas Boilers/Engines	Based Diesel Generator	Grid Supply	Renewable (Solar)
MPT	35.67	0.26	46.39	0.06
RGT	1.96	0.00075	16.55	
Well Pads	1.77	0.68	0.1682	
PSY	-	-	0.0043	

**Point-wise Compliance:** The status of compliances is described below.

**A. SPECIFIC CONDITIONS:**

S. No	Specific Conditions	Compliance Status
i.	Compliance to all the specific and general conditions mentioned in environmental clearance letters nos. J-11011/382/2005-IAII (I) dated 21st March, 2006, J-11011/174/2007-IAII(I) dated 12th March, 2008, J-11011/98/2019-IAII(I) dated 23rd November, 2010 should be ensured.	Complied with the conditions mentioned in the said environmental clearance and six-monthly progressive compliance reports are submitted to Regional Office, MoEF&CC, RSPCB and CPCB.
ii.	Monitoring of air pollutants (PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>x</sub> , NMHC) to be conducted following CPCB protocol. The calibration of all analyzer including flow measuring devices should be done as per CPCB protocol. The data should be posted on the Cairn Energy website for public information.	Monitoring of air pollutants being carried out as per the CPCB protocol. Primary environmental monitoring is being periodically done by inhouse & 3 <sup>rd</sup> party NABL accredited laboratory. Calibration of field monitoring equipment is being done by these 3 <sup>rd</sup> party laboratory as per the NABL requirements. Refer <b>Annexure – 01</b> for environmental monitoring details. Environmental monitoring data is provided as annexure in EC compliance report and same is uploaded on Cairn India website in the following link <a href="https://www.cairnindia.com/Pages/PoliciesandDisclosures.aspx">https://www.cairnindia.com/Pages/PoliciesandDisclosures.aspx</a>
iii.	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests. In case of deviations or alterations in the project proposal	Noted and no activities presently being carried out without any EC requirements. Amendment in existing environmental clearances are periodically obtained from MoEF&CC for future expansion and modification projects as per the requirements. Vedanta has recently obtained Environmental Clearance for “Expansion of onshore oil



S. No	Specific Conditions	Compliance Status
	from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.	and gas production from existing 300,000 to 400,000 bopd and 165 to 750 MMSCFD from RJ-ON-90/1 Block, Barmer, Rajasthan” vide letter no. F. No. J/11011/13/2018/IA-II(I) dated 11 <sup>th</sup> April 2019. Refer <b>Annexure – 07</b> for list of ECs obtained so far.
Iv	The project authorities shall strictly adhere to the stipulations made by the Rajasthan State Pollution Control Board (RSPCB). All the conditions mentioned in the Consent to Operate and Authorization shall be implemented.	Being complied. Compliance reports are being submitted regularly to RSPCB regarding the Consent and Authorization conditions.
v	Efforts shall be made to maximize the flare gas recovery	As part of well fluid processing, associated gas is generated. The quantity of associated gas generation varies based on the gas to oil ratio in the reservoir and the number of producer wells in operation. However, Cairn ensures maximum recovery and usage of associate gas. The gas is used for internal consumption requirements, including captive power generation. The net calorific value of associate gas is approximately 775 BTU/SCF and also contains approximately 23% of CO <sub>2</sub> . The associated gas needs supplement of rich natural gas having higher calorific value and less CO <sub>2</sub> . To meet this requirement, natural gas from Raageshwari Gas Terminal is being blended with associated gas produced at MPT. This ensures better fuel-mix for captive power generation through boilers. This ensures better fuel-mix for captive power generation through boilers. The percentage of associated gas flared is <b>9.89%</b> for the reporting period. Major contributor for gas flaring are Aishwariya field ( <b>7.95%</b> ) due to high CO <sub>2</sub> content (~86%) of associated gas and Satellite fields.
vi	Effective use of gas generated shall be made and installation of waste heat recovery system shall be explored.	In satellite fields & LSF, as part of effective gas utilization to minimize flaring, gas engine generator (with lean burn and high efficiency) has been installed to meet plant loads. Also, further efforts are made to optimize the gas recovery and the existing diesel burner of IWBH has been converted as gas burner and there by further reduction of associated gas flaring achieved.
vii	In future layout of the crude storage tanks shall be so planned that access for fire fighting is from all side.	The layout of the storage tanks will be designed as per the requirements of OISD-118 for future project. In addition to the firefighting requirements, CAIRN has also implemented all applicable M.B. Lal’s recommendations out of IOCL Jaipur depot fire

S. No	Specific Conditions	Compliance Status																		
		incident investigation report.																		
viii	The location of the fire monitor shall be such as to make its manual operation safe. Alternatively, remote operation of the monitor shall be implemented.	Fire monitors are installed as per OISD-117 requirements and are at safe distances. As per M.B. Lal Committee recommendations, eight numbers of remote operated high-volume long-range fire monitors are commissioned around MPT storage tanks.																		
ix	Company shall adopt Corporate Environment Policy as per the Ministry's O.M. No. J-11013/41/2006-IA.II(I) dated 26 <sup>th</sup> April, 2011 and implemented. Under Corporate Social Responsibility (CSR), sufficient budgetary provision shall be made for health improvement, education, water and electricity supply etc. in and around the project.	Noted and complied with the condition. Cairn has defined goals and objective regarding CSR programs. Sufficient funds have been allocated for CSR programs and provision made for health improvement, education, water and sanitation, natural resource management etc. Refer <b>Annexure – 03</b> for CSR programs implemented.																		
X	The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/pollution control measures shall not be diverted for any other purpose.	<p>Sufficient funds are being earmarked towards capital cost and recurring cost per annum to implement environmental initiatives and related facility operations. Approximate Capital Expenditure (CAPEX) and Operating Expenditure (OPEX) spent in RJ-ON-90/1 Block towards the provisions for environment management are detailed below.</p> <table border="1" data-bbox="1031 1029 1856 1446"> <thead> <tr> <th data-bbox="1031 1029 1352 1097">Financial Year</th> <th data-bbox="1352 1029 1612 1097">CAPEX (INR)</th> <th data-bbox="1612 1029 1856 1097">OPEX (INR)</th> </tr> </thead> <tbody> <tr> <td data-bbox="1031 1097 1352 1166">2016 - 17</td> <td data-bbox="1352 1097 1612 1166">188,40,943</td> <td data-bbox="1612 1097 1856 1166">699,40,366</td> </tr> <tr> <td data-bbox="1031 1166 1352 1234">2017 - 18</td> <td data-bbox="1352 1166 1612 1234">53,89,955</td> <td data-bbox="1612 1166 1856 1234">817,52,899</td> </tr> <tr> <td data-bbox="1031 1234 1352 1302">2018 - 19</td> <td data-bbox="1352 1234 1612 1302">1,825,43,669</td> <td data-bbox="1612 1234 1856 1302">1,373,57,426</td> </tr> <tr> <td data-bbox="1031 1302 1352 1370">2019 - 20</td> <td data-bbox="1352 1302 1612 1370">468,025,215</td> <td data-bbox="1612 1302 1856 1370">821,831,880</td> </tr> <tr> <td data-bbox="1031 1370 1352 1446">2020 - 21</td> <td data-bbox="1352 1370 1612 1446">3,002,256,713</td> <td data-bbox="1612 1370 1856 1446">381,673,756</td> </tr> </tbody> </table>	Financial Year	CAPEX (INR)	OPEX (INR)	2016 - 17	188,40,943	699,40,366	2017 - 18	53,89,955	817,52,899	2018 - 19	1,825,43,669	1,373,57,426	2019 - 20	468,025,215	821,831,880	2020 - 21	3,002,256,713	381,673,756
Financial Year	CAPEX (INR)	OPEX (INR)																		
2016 - 17	188,40,943	699,40,366																		
2017 - 18	53,89,955	817,52,899																		
2018 - 19	1,825,43,669	1,373,57,426																		
2019 - 20	468,025,215	821,831,880																		
2020 - 21	3,002,256,713	381,673,756																		

S. No	Specific Conditions	Compliance Status			
		2021 - 22	34,993,115	402,052,317	
		2022 - 23	6,168,47,901	305,04,305	
		2023 - 24	4,827,836	878,050,049	
		<b>2024-25(Apr'24-Sep'24)</b>	<b>9,692,520</b>	<b>444,091,891</b>	
xi.	Green belt shall be developed in 33 % area to mitigate the effects of fugitive emissions all around the plant as per CPCB guidelines in consultation with the local DFO. Thick greenbelt with suitable plant species shall be developed around the proposed expansion.	<p>Till date, total 5496 plants (including small shrubs plants) are cut for development of various facilities within RJON block area. Cairn has planted 36800 tree saplings in 32 Ha. as compensatory plantation in Batadoo (village), Baytoo (Tehsil), Barmer District. The location for compensatory plantation was identified in consultation with local bodies. As per the latest plant count report, the number of live plants was 19544 at compensatory plantation site. This high mortality was observed at this site mainly due to termite attack and cuttings by locals for use as animal feed and fuel wood. Cairn has conducted site assessment and taken measures to restore the plantation area. The site is secured using dual fencing (barbed wire and chain-link fencing) and carrying out re-plantation work along with other suitable measures (like planting native plant saplings) to restore the greenbelt.</p> <p>Overall greenbelt area developed is <b>253.75 Ha</b> (includes <b>152.73 Ha</b> at source location &amp; <b>101.02 Ha</b> at receptor location excluding <b>32 Ha</b> of compensatory afforestation), the cumulative greenbelt cover is <b>40.53%</b> of current operational facilities areas.</p>			
xii.	Occupational health surveillance programme shall be undertaken as regular exercise for all the employees. The first aid facilities in the occupational health centre shall be strengthened and the regular medical test records of each employee shall be maintained separately.	<p>Annual industrial hygiene survey is carried out by third-party experts at MPT, RGT and Bhagyam. This survey includes qualitative and quantitative survey of exposure of workers to chemicals, dust, noise and heat, adequacy of illumination manual material handling conditions, and office ergonomics. Annual health checks are conducted for all workers exposed to annual work environment.</p> <p>The following facilities are available to provide first aid and emergency care to workers in Rajasthan.</p> <ul style="list-style-type: none"> <li>• Round-the-clock first aid and emergency medical facilities manned by</li> </ul>			

S. No	Specific Conditions	Compliance Status
		<p>qualified doctors and paramedics</p> <ul style="list-style-type: none"> <li>• Availability of advanced life-support ambulances at all medical centres</li> <li>• Cairn has entered contract with ASAP for fixed wing air-ambulance services equipped with emergency and critical medical (tertiary) care equipment.</li> <li>• For secondary medical care, CAIRN has a formal contract with Thar hospital at Barmer.</li> <li>• Medical fitness certificates are maintained at site medical centre as per the OMR Rules and DGMS requirements.</li> </ul>

EC Compliance Report - Increase in crude oil production capacity from Mangala Processing Terminal (MPT) (in RJ-ON-9011 Block, Rajasthan) from 175,000 to 200,000 BOPD (Barrels of oil per day) and associated gas from 35 to 40 million standard cubic feet per day at village Nagana, Tehsil & District Barmer, Rajasthan by Cairn Oil & Gas Division of Vedanta Limited.

**Name of the Project:** Increase in crude oil production capacity from Mangala Processing Terminal (MPT) (in RJ-ON-9011 Block, Rajasthan) from 175,000 to 200,000 Bopd (Barrels of oil per day) and associated gas from 35 to 40 million standard cubic feet per day at village Nagana, Tehsil & District Barmer, Rajasthan by M/s Cairn India. Ltd.

**Clearance Letter No:** J -11011/108/2012-IA. II(I), dated: 14<sup>th</sup> June 2013

**Period of Compliance Report:** Progressive EC Compliance Reporting period is **April-24 to September-24**

**Production profile:** Field wise average daily hydrocarbon production from RJON block during the reporting period is given below.

S. No.	Field Name	Average daily HC production during reporting period (October-23 to March-24)		Well pad details		
		Crude (BOPD)	Oil	Natural Gas (MMSCFD)	No. of well pads permitted as per latest EC amendments	No. of Operational well pads during reporting period
1	Mangala	35325		15.82	Northern Field: 176 Low Marginal fields with early/quick production system: 49	21
2	Aishwariya & ABH	17242		10.60		11
3	Bhagyam	9926		2.79		15
4	NE/NI/NLB Field	2056		0.58		4
5	V2Y/Vandana1/Vijaya1	0		0		0
6	Shakti	18		0		1
7	Raageshwari	5473.900		119.362	Southern Field: 115 Low Marginal fields with early/quick production system: 90	10
8	Guda	83.51		0.043		3
9	Saraswati	316.311		0.138		3
10	Kameshwari	126.504		0.260		1
11	Tukaram	209.48		0.622		1
12	GSV	0		0		0
<b>Total average from RJON 90/1 block production</b>		<b>70776.705</b>		<b>150.215</b>		

Sites	Power Generation (MW)			
	Gas Based Boilers/Engines	Diesel Generator	Grid Supply	Renewable (Solar)
MPT	35.67	0.26	46.39	0.06
RGT	1.96	0.00075	16.55	
Well Pads	1.77	0.68	0.1682	
PSY	-	-	0.0043	

**Point-wise Compliance:** The status of compliances is described below.

**A. SPECIFIC CONDITIONS:**

S. No.	Specific conditions	Compliance status
i.	Compliance to all the specific and general conditions mentioned in environmental clearance letters nos. J-11011/382/2005-IAII (I) dated 21 <sup>st</sup> March, 2006, J-11011/174/2007-IAII(I) dated 12 <sup>th</sup> March, 2008, J-11011/98/2019-IAII(I) dated 23 <sup>rd</sup> November, 2010 and 16 <sup>th</sup> October, 2012 shall be ensured.	Complied with the conditions mentioned in the said environmental clearance and six-monthly progressive compliance reports are submitted to Regional Office, MoEF&CC, RSPCB and CPCB.
ii.	The stack emissions from various units shall conform to the standards prescribed under the Environment (Protection) Act. At no time, the emission levels shall go beyond the stipulated standards. In the event of failure of pollution control system(s) adopted by the unit, the unit shall be immediately put out of operation and shall not be restarted until the desired efficiency of the pollution control device has been achieved.	The continuous sources of stack emission are the gas-fired boilers at MPT, gas engine generators at RGT, Gas Generators at Satellite well pads (Raag oil), DG sets at the satellite fields and diesel-fired injection water bath heater. The boiler stack has been fitted with Continuous Emission Monitoring System (CEMS). Emissions from all the other stacks are monitored on a periodic basis through NABL accredited inhouse lab and a third-party laboratory and reports are submitted to RSPCB. Refer <b>Annexure – 01</b> for environmental monitoring details.

S. No.	Specific conditions	Compliance status
iii.	Leak Detection and Repair programme shall be prepared and implemented to control HC/NOC emissions. Focus shall be given to prevent fugitive emissions for which preventive maintenance of pumps, valves, pipelines are required Proper maintenance of mechanical seals of pumps and valves shall be given. A preventive maintenance schedule for each unit shall be prepared and adhered to. Fugitive emissions of HC from product storage tank yards etc. must be regularly monitored. Sensors for detecting HC leakage shall be provided at strategic locations.	<p>Cairn has built the facilities using “Fire and Gas Detection and Protection (fire extinguishers using CO<sub>2</sub>, foam, water, inergen gas etc.) Philosophy” in accordance with American Petroleum Institute (API), National Fire Protection Association and Oil Industry Safety Directorate (OISD) standards.</p> <p>All the pop ups from the PSVs are routed to flare and there are no fugitive emissions and or cold venting of gases.</p> <p>Cairn carried out fugitive emission monitoring study through independent third-party agency during FY 2023-24 and the outcome of the study reveals that VOC’s level of emission is very minimal and well below the limits of specified as per Environment Protection Act 1986. This demonstrate Cairn’s stringent preventive maintenance of equipment’s/joints etc. which prevents process leaks.</p> <p>The preventive maintenance, critical function test and Annual Maintenance Contract (AMC) activities are carried out through SAP system driven “preventive module” prepared based on OEM’s recommendation and risk-based inspection approach.</p> <p>To minimize gaseous emissions Cairn has partnered with the United Nations Environment Programme’ s (UNEP) flagship methane reporting and mitigation initiative – Oil &amp; Gas Methane Partnership (OGMP) 2.0. We are first oil and gas producer in India to sign OGMP 2.0 and commit to effectively reducing methane emissions.</p>
iv.	The company shall upload the status of compliance of the stipulated environmental clearance conditions, including results of monitored data on its website and shall update the same periodically. It shall simultaneously be sent to the Regional office of MOEF, the respective Zonal office of CPCB and the RSPCB. The levels of PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>x</sub> , CO and non-methane hydrocarbon in ambient air and emissions from the stacks shall be monitored and/ displayed at a convenient location near the main gate of the company and at important public places.	<p>Periodical six-monthly compliance reports with statistical interpretation of ambient air quality and noise quality monitoring data, are being submitted to MoEF&amp;CC regional office and RSPCB. Refer <b>Annexure – 01</b> for monitoring details. Also, the reports are uploaded in Cairn India website. Refer the below link for details.  <a href="https://www.cairnindia.com/Pages/PoliciesandDisclosures.aspx">https://www.cairnindia.com/Pages/PoliciesandDisclosures.aspx</a></p> <p>The required environmental information is also displayed on a board near the main gate of each operational facility and is updated on a monthly basis.</p>
v.	As proposed, three additional vapour recovery units shall be provided to recover low pressure gas/ vapour vented from various production equipment.	All the process units, vessels and tanks are connected to vapor recovery systems. Six vapor recovery units (capacity 1390 SCM/ hr each) have been installed and recovered vapour is fed into the fuel gas system.
vi.	Total saline ground water requirement from Thumbli	No fresh water is being extracted for operational usage. Only deep saline water is

S. No.	Specific conditions	Compliance status																								
	aquifer shall not exceed 32,500 m <sup>3</sup> /day.	being abstracted after obtaining necessary permission from CGWA. On an average, <b>15290</b> m <sup>3</sup> /day of saline ground water was abstracted in the reporting period from Thumbli (NR-01) through six deep saline wells against the permitted value of 51,500 m <sup>3</sup> /day. Also, on an average <b>913</b> m <sup>3</sup> /day of saline ground water was extracted from Jagadia (Raageshwari) through five wells against the permitted value of 3000 m <sup>3</sup> /day.																								
vii.	Treated wastewater (produced water/desalination rejects/ CPP blow down/ formation water/sanitary sewage) shall comply with the standards notified under the Environment (Protection) Act, 1986. As proposed, the produced water generated shall be treated in the produce water treatment plant to separate solids and oil traces through induced gas floatation process. No water shall be discharged outside the facility boundary.	The various streams of wastewater generated from operational facilities are produced water, desalination plant reject water, ETP reject, filter backwash water, boiler blow down and domestic sewage. The produced water is treated for the removal of physical impurities such as total suspended solids and oil. Thus, treated water is injected back into the reservoir for maintaining reservoir pressure and void replacement. Reject from desalination plant, ETP and treated filter backwash water are disposed in deep disposal well of depth >1000 m depth below ground level complying with respect to suspended solids and oil and grease 100 mg/l and 10 mg/l, respectively as per The Environment (Protection) Rules, 1986.																								
viii.	Domestic wastewater shall be treated in Sewage Treatment Plant (STP) and recycle/reuse entire treated wastewater for green belt development and various activities at the site.	<p>Currently, there are three sewage treatment plants in the block - 250 m<sup>3</sup>/day synchronized STP at Operations Base near MPT, 45m<sup>3</sup>/day STP at MPT, 40 m<sup>3</sup>/day and 25 STP m<sup>3</sup>/day at RGT OB. The monitored values of key parameters stipulated in Consent conditions during the reporting period are given below:</p> <table border="1"> <thead> <tr> <th>Parameter</th> <th>MPT-OB STP</th> <th>MPT STP</th> <th>RGT STP</th> </tr> </thead> <tbody> <tr> <td>pH (at 25 0C)</td> <td>7.42</td> <td>7.12</td> <td>7.31</td> </tr> <tr> <td>TSS (mg/l)</td> <td>27.03</td> <td>30.56</td> <td>44.56</td> </tr> <tr> <td>BOD (3 d at 270C) (mg/l)</td> <td>13.00</td> <td>9.10</td> <td>23.49</td> </tr> <tr> <td>COD (mg/l)</td> <td>37.51</td> <td>34.7</td> <td>72.98</td> </tr> <tr> <td>Oil &amp; Grease (mg/l)</td> <td>4.84</td> <td>3.88</td> <td>3.45</td> </tr> </tbody> </table> <p>Reed bed system is developed at BH-06 camp site for treatment of sewage. The</p>	Parameter	MPT-OB STP	MPT STP	RGT STP	pH (at 25 0C)	7.42	7.12	7.31	TSS (mg/l)	27.03	30.56	44.56	BOD (3 d at 270C) (mg/l)	13.00	9.10	23.49	COD (mg/l)	37.51	34.7	72.98	Oil & Grease (mg/l)	4.84	3.88	3.45
Parameter	MPT-OB STP	MPT STP	RGT STP																							
pH (at 25 0C)	7.42	7.12	7.31																							
TSS (mg/l)	27.03	30.56	44.56																							
BOD (3 d at 270C) (mg/l)	13.00	9.10	23.49																							
COD (mg/l)	37.51	34.7	72.98																							
Oil & Grease (mg/l)	4.84	3.88	3.45																							



S. No.	Specific conditions	Compliance status
		treated water from STP and reed bed is used for greenbelt development within the premises. There is no wastewater discharge outside the facility boundary.
ix.	Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.	MPT & RGT have separate paved drainage for storm water collection and this drainage is connected to the rainwater recharge pit. The collected storm water passes through an oil trap before entering into the recharge pit. The drainage from hydrocarbon processing and storage areas is collected in closed drains. Closed hazardous drain goes through Closed Drain Vessel to Off-Spec Tank.
x.	Adequate numbers of ground water quality monitoring stations by providing piezometers around the captive landfill site and project area shall be set up. Sampling and trend analysis monitoring must be made on monthly a basis and report submitted to Rajasthan Pollution Control Board and this Ministry.	There are seven monitoring wells with piezometers around the captive landfill at MPT to monitor ground water quality. The average value of key parameters for all seven observatory wells are as follow: <ul style="list-style-type: none"> <li>• pH : 7.12 – 8.58</li> <li>• TDS : 1666 – 3152 mg/l</li> <li>• TPH – BDL (Below detectable Level)</li> <li>• Heavy metals (Hg, As, Pb, Se, Cu, Cr, etc.) - BDL</li> </ul> Quarterly report containing monitoring results of various parameters is being submitted to the RSPCB along with TSDF operations return as per CPCB guidelines. Refer <b>Annexure – 10</b> for Quarterly TSDF Return submitted to RPCB.
xi.	The drill cutting (DC) wash water shall be treated to conform to limits notified vide GSR.546(E) dated 30th August 2005 under the Environment (Protection) Act, 1986 before disposal of solid waste, drill cutting and drilling fluids for onshore drilling operation. The treated effluent shall be monitored regularly.	Water Based Mud (WBM) is used as the drilling fluid for drilling the upper section of well (~250 - 500 meters) or up to complete target depth of the well subject to geological formation. In case of hard strata, Synthetic Oil Based Mud (SOBM) is used to counter difficult drilling situations, such as high down hole temperatures, hydrated shales, or salt, where the properties of WBMs would limit performance. WBM cuttings generated are non-hazardous in nature. These cuttings are washed and used for construction activities like backfilling of low-lying areas, construction of well pads etc. SOBM drill cutting generated are segregated at the sources of generation and disposed in real time to cement industry for coprocessing. HDPE line concrete pits are also available at site for interim storage & handling of drill cuttings. During drilling process, waste residual mud & drilling wastewater are collected in the container for treatment, recycling and disposal. The drilling fluid after solid – liquid separation is being recycled and/or disposed through adequately designed and lined solar evaporation ponds, mechanical evaporator and deep sump well disposal. The oil base drill cuttings and residual dry mud are shifted to the MPT captive hazardous landfill for appropriate disposal or being sent for co-processing in cement

S. No.	Specific conditions	Compliance status
		industry. Refer <b>Annexure – 11</b> for compliance to GSR. 546(E) dated 30 <sup>th</sup> August 2005.
xii.	The company shall obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2008 and amended as on date for management of Hazardous wastes and prior permission from RSPCB shall be obtained for disposal of solid/hazardous waste in the TSDF.	Individual production well pads, processing terminals and TSDF (Treatment Storage and Disposal Facility) have valid Hazardous Waste Authorizations for collection, storage and/or disposal of wastes granted by the RSPCB.
xiii.	Incinerator comprising primary and secondary chamber shall be designed as per CPCB guidelines. SO <sub>2</sub> , NO <sub>x</sub> , HCI and CO emissions shall be monitored in the stack regularly.	The incinerator has dual burn chamber to achieve 1200°C and maintains residual time of 2 to 3 seconds to ensure efficiency of combustion and compliance with the pollution control emission discharge standards. Water scrubber has been provided as pollution control device as per CPCB guidelines. Incinerator operation is restricted completely as the hazardous waste is being disposed through co-processing at cement industry.
xiv.	Green belt shall be developed at least in 33 % of the plant area in and around the plant premises to mitigate the effects of fugitive emissions all around the plant as per the CPCB guidelines in consultation with DFO. Thick greenbelt with suitable plant species shall be developed around unit. Selection of plant species shall be as per the CPCB guidelines.	Peripheral greenbelt is being developed in a phase-wise manner by undertaking Source Approach (SA) & Receptor Approach (RA) based plantation around the facilities to mitigate the impact of fugitive emission. Greenbelt cover of <b>40.53%</b> of the total operating facility area is achieved.  To minimize gaseous emissions Cairn has partnered with the United Nations Environment Programme' s (UNEP) flagship methane reporting and mitigation initiative – Oil & Gas Methane Partnership (OGMP) 2.0. We are first oil and gas producer in India to sign OGMP 2.0 and commit to effectively reducing methane emissions.  Refer <b>Annexure – 4</b> for details.
xv.	Company shall prepare operating manual in respect of all	Cairn is certified for Environmental Management System as per ISO 14001: 2015 &

S. No.	Specific conditions	Compliance status								
	<p>activities. It shall cover all safety &amp; environment related issues and monitoring system. One set of environmental manual shall be made available at the drilling site project site. Awareness shall be created at each level of the management. All the schedules and results of environmental monitoring shall be available at the project site office.</p>	<p>ISO 45001:2018. As part of EMS &amp; OH&amp;S standards, manuals and procedures are in place for management and monitoring of health, safety and environmental issues. The manuals and procedures are circulated to all concerned. The drilling contractors have their own HSE procedures, however project specific bridging HSE document is prepared to ensure Cairn HSE minimum requirements are followed by the drilling contractor.</p>								
<p><b>xvi.</b></p>	<p>All the recommendations mentioned in the rapid risk assessment report, disaster management plan and safety guidelines shall be implemented.</p>	<p>The environmental protection and risk mitigation measures and safeguards recommended in the various studies including HAZOP (Hazard and Operability), HAZID (Hazard Identification) and COMAH (Control of Major Accident Hazards) are implemented during the project and operations stages. Recommendations mentioned in the Risk Assessment and Disaster Management Plan is followed and practiced through periodic drills.</p>								
<p><b>xvii.</b></p>	<p>At least 5 % of the total cost of the project should be earmarked towards the Enterprise Social Commitment based on locals need, issues raised during the earlier public hearing meeting and item-wise details along with time bound action plan should be prepared and submitted to the Ministry's Regional Office at Lucknow Implementation of such program should be ensured accordingly in a time bound manner.</p>	<p>Working with communities is an integral part of Cairn sustainability strategy and the development of our long-term plans. Our ability to work collaboratively and our customized approach for every community we function in, is what sets us apart. These are crucial to our long term success and our prerogative to operate.</p> <p>In order to ensure uniformity in approach towards conceptualizing and implementing any CSR project, a clearly laid down CSR policy is been prepared which is in line with section VII of companies act. To further elaborate and decipher the policy a CSR process document highlighting the monitoring mechanism, reporting, assessments, etc. has also been developed specific to Cairn business operations.</p> <p>Furthermore, to have a detail understanding of all the initiatives implemented under CSR for Apr'24-Sep'24, refer <b>Annexure 03</b>. Cairn spent on CSR is detailed below.</p> <p>During the period of Apr'24-Sep'24 ~3.5 cr has been spent towards CSR activities in the operational areas of Cairn.</p> <table border="1" data-bbox="1262 1224 1766 1450"> <thead> <tr> <th data-bbox="1262 1224 1520 1333">Financial Year</th> <th data-bbox="1520 1224 1766 1333">CSR expenditure in Rs.</th> </tr> </thead> <tbody> <tr> <td data-bbox="1262 1333 1520 1370">2016 - 17</td> <td data-bbox="1520 1333 1766 1370">32,00,00,000</td> </tr> <tr> <td data-bbox="1262 1370 1520 1408">2017 - 18</td> <td data-bbox="1520 1370 1766 1408">23,33,00,000</td> </tr> <tr> <td data-bbox="1262 1408 1520 1450">2018 - 19</td> <td data-bbox="1520 1408 1766 1450">29,67,00,000</td> </tr> </tbody> </table>	Financial Year	CSR expenditure in Rs.	2016 - 17	32,00,00,000	2017 - 18	23,33,00,000	2018 - 19	29,67,00,000
Financial Year	CSR expenditure in Rs.									
2016 - 17	32,00,00,000									
2017 - 18	23,33,00,000									
2018 - 19	29,67,00,000									

S. No.	Specific conditions	Compliance status		
			2019 - 20	26,36,50,000
			2020 - 21	16,47,00,000
			2021 - 22	25,53,00,000
			2022 - 23	1,27,20,000
			2023 - 24	12,00,00,000
			2024-25(April'24-Sep'24)	3,50,00,000
xviii.	The Company shall submit within three months their policy towards Corporate Environment Responsibility which shall inter-alia address (i) Standard operating process/ procedure to being into focus any infringement/deviation/violation of environmental or forest norms/conditions, (ii) Hierarchical system or Administrative order of the Company to deal with environmental issues and ensuring compliance to the environmental clearance conditions and (iii) System of reporting of noncompliance/violation environmental norms to the Board of Directors of the company and/or stakeholders or shareholders.	<p>Cairn is committed to address all the issues and concerns raised in public hearing and is implementing time-bound actions. Refer <b>Annexure – 06</b> for status of action on public hearing points.</p> <p>Cairn as part of Vedanta Group has a Health, Safety &amp; Environment Policy which provides overall commitment and direction towards management of environmental issues and compliance to regulatory requirements. The policy is implemented through the Cairn's HSE management system that lays down the process and procedure for effective management.</p> <p>The RJ-ON-90/1 operation have implemented EMS (ISO-14001:2015) &amp; OH&amp;S standard (45001:2018) and standard operating procedures have been developed for ensuring compliance to environmental regulations. Management review meetings are conducted at regular intervals where senior management is apprised of deviations if any to environmental norms. Overall environmental performance is also discussed during these meetings. Cairn has a documented policy on CSR program for implementation in Rajasthan.</p> <p>Cairn also has systems in place for HSE audits, incident response management, HSE leadership meetings and online compliance management tool.</p> <p>Cairn's online compliance management system is a fully automated system accessed online to ensure timely legal compliances applicable to the company under various acts and also reporting of noncompliance/violation to the top management.</p>		

**B. GENERAL CONDITIONS:**

S. No.	General Conditions	Compliance Status
i.	The project authorities shall strictly adhere to the stipulations made by the Rajasthan State Pollution Control Board.	Being complied. Compliance reports are being submitted regularly to RSPCB regarding the Consent and Authorization conditions.
ii.	No further expansion or modifications in the plant shall be	Noted and no activities presently being carried out without any EC requirements.

S. No.	General Conditions	Compliance Status
	carried out without prior approval of the Ministry of Environment and Forests. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.	Amendment in existing environmental clearances are periodically obtained from MoEF&CC for future expansion and modification projects as per the requirements. Vedanta has recently obtained Environmental Clearance for “Expansion of onshore oil and gas production from existing 300,000 to 400,000 bopd and 165 to 750 MMSCFD from RJ-ON-90/1 Block, Barmer, Rajasthan” vide letter no. F. No. J/11011/13/2018/IA-II(I) dated 11 <sup>th</sup> April 2019. Refer <b>Annexure – 07</b> for list of ECs obtained so far.
iii.	The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16 <sup>th</sup> November, 2009 shall be followed.	Ambient air quality monitoring is carried out periodically through inhouse and a 3 <sup>rd</sup> party NABL accredited laboratory. Graphical representation of ambient air quality monitoring results during this EC compliance reporting period is provided in <b>Annexure – 01</b> . The average concentrations of all the parameters during the reporting period are within the NAAQS limits. Ambient air is monitored in each location as per the environmental monitoring plan approved by RSPCB.
iv.	The locations of ambient air quality monitoring stations shall be decided in consultation with the State Pollution Control Board (SPCB) and it shall be ensured that at least one stations is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.	Environmental Monitoring Plan for RJ-ON block is being carried out based on the Rajasthan State Pollution Control Board (RO) approved plan. The ambient air quality monitoring plan considers upwind and downwind direction, receptors and Ground Level Concentrations (GLCs). Ambient air quality monitoring is carried out as per the approved plan through an NABL accredited inhouse and 3 <sup>rd</sup> party laboratory. Graphical representation of ambient air quality monitoring results is enclosed as <b>Annexure-01</b> . The reports are periodically submitted to RSPCB.
v.	The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (night time).	All the DGs are provided with acoustic enclosures, silencers etc. Ambient noise data show that day and night levels are within the prescribed limits as per the Noise Rules. Refer <b>Annexure – 01</b> for details.
vi.	The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and use the same water for the process activities of the project to conserve fresh water.	Rainwater recharge pits have been developed in MPT (of capacity 72225 m <sup>3</sup> ) and in RGT (of capacity 22720 m <sup>3</sup> ). Rainwater from roof top and surface run-off are collected in paved drains and channeled to the groundwater recharge pit after passing through the oil trap. Infiltration wells have been built for recharging groundwater and used for green belt development. Rainwater recharge pit (of capacity ~58,000 m <sup>3</sup> ) at NR-1 (Madpura Barwala, Baitu) has been made with provision to conserve the water in deep saline aquifer.

S. No.	General Conditions	Compliance Status
		<p>Rainwater recharge structures have been developed in 28 operating well pads at various locations within the RJ Block, having 50 rainwater recharge structures with rainwater harvesting potential of 0.3 Million KL per annum.</p> <p>Towards natural resource management, CAIRN has constructed of 1056 khadins and renovated of 28 traditional water harvesting structures (nadi) till date developing the harvesting capacity of the area by ~18 lakh cu m water every year. Cairn is also instrumental in tapping roof top water through proper harvesting facilities in 95 schools, benefitting 8,000+ students and developing rainwater harvesting capacity of 5 lac cubic meter.</p>
vii.	<p>Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.</p>	<p>Training on various HSE aspects, including chemicals handling and management, are given to all the employees and contractors periodically. Medical fitness certificates including premedical and routine periodical medical examinations are maintained at site medical center as per the OMR Rules and DGMS requirements.</p>
viii.	<p>The company shall also comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, risk mitigation measures and public hearing relating to the project shall be implemented.</p>	<p>The environmental protection measures and safeguards recommended in EIA-EMP &amp; QRA are being implemented throughout the project life cycle. Cairn is committed to address all the issues and concerns raised in public hearing and is implementing time-bound actions. Refer <b>Annexure – 06</b> for PH Compliance status.</p>
ix.	<p>The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. CSR activities shall be undertaken by involving local villages and administration.</p>	<p>Company involves the local communities for the implementation of CSR programs. In-addition even during the program development phase the stakeholders are consulted, and their inputs/ feedbacks are reviewed and considered wherever possible. Refer <b>Annexure – 03</b> regarding CSR programs implemented regarding improving the socio-economic as well as environmental conditions in block area.</p>
x.	<p>The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.</p>	
xi.	<p>A separate Environmental Management Cell equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.</p>	<p>A team of eleven environmental professionals are stationed at RJ site to provide necessary technical support to the projects, operation, drilling and Petroleum engineering activities in implementing the environmental management measures.</p> <p>Environmental laboratory is set up at the MPT for monitoring ambient air, stack, noise, wastewater, water, solid waste, soil etc., for entire RJ Block. This laboratory is NABL approved and equipped with all necessary equipment's. Please refer <b>Annexure – 8</b> for details. In addition, periodic inhouse and 3<sup>rd</sup> party NABL</p>

S. No.	General Conditions	Compliance Status																														
		laboratory is engaged to carry out the environmental monitoring requirements as per the RSPCB approved environmental monitoring plan.																														
xii.	The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management pollution control measures shall not be diverted for any other purpose.	<p>Sufficient funds are being earmarked towards capital cost and recurring cost per annum to implement environmental initiatives and related facility operations. Approximate Capital Expenditure (CAPEX) and Operating Expenditure (OPEX) spent in RJ-ON-90/1 Block towards the provisions for environment management are detailed below.</p> <table border="1"> <thead> <tr> <th>Financial Year</th> <th>CAPEX (INR)</th> <th>OPEX (INR)</th> </tr> </thead> <tbody> <tr> <td>2016 - 17</td> <td>188,40,943</td> <td>699,40,366</td> </tr> <tr> <td>2017 - 18</td> <td>53,89,955</td> <td>817,52,899</td> </tr> <tr> <td>2018 - 19</td> <td>1,825,43,669</td> <td>1,373,57,426</td> </tr> <tr> <td>2019 - 20</td> <td>468,025,215</td> <td>821,831,880</td> </tr> <tr> <td>2020 - 21</td> <td>3,002,256,713</td> <td>381,673,756</td> </tr> <tr> <td>2021 - 22</td> <td>34,993,115</td> <td>402,052,317</td> </tr> <tr> <td>2022 - 23</td> <td>6,168,47,901</td> <td>305,04,305</td> </tr> <tr> <td>2023 - 24</td> <td>4,827,836</td> <td>878,050,049</td> </tr> <tr> <td><b>2024-25(Apr'24-Sep'24)</b></td> <td><b>9,692,520</b></td> <td><b>412,849,892</b></td> </tr> </tbody> </table>	Financial Year	CAPEX (INR)	OPEX (INR)	2016 - 17	188,40,943	699,40,366	2017 - 18	53,89,955	817,52,899	2018 - 19	1,825,43,669	1,373,57,426	2019 - 20	468,025,215	821,831,880	2020 - 21	3,002,256,713	381,673,756	2021 - 22	34,993,115	402,052,317	2022 - 23	6,168,47,901	305,04,305	2023 - 24	4,827,836	878,050,049	<b>2024-25(Apr'24-Sep'24)</b>	<b>9,692,520</b>	<b>412,849,892</b>
Financial Year	CAPEX (INR)	OPEX (INR)																														
2016 - 17	188,40,943	699,40,366																														
2017 - 18	53,89,955	817,52,899																														
2018 - 19	1,825,43,669	1,373,57,426																														
2019 - 20	468,025,215	821,831,880																														
2020 - 21	3,002,256,713	381,673,756																														
2021 - 22	34,993,115	402,052,317																														
2022 - 23	6,168,47,901	305,04,305																														
2023 - 24	4,827,836	878,050,049																														
<b>2024-25(Apr'24-Sep'24)</b>	<b>9,692,520</b>	<b>412,849,892</b>																														
xiii.	A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zila Parisad/Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.	Copy of Environment clearance is submitted to Panchayat, District Collector office, RSPCB and NGO. No suggestion or representations from any of NGO and or local bodies were received in the said EC compliance reporting period.																														
xiv.	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and RSPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.	<p>Six-monthly EC compliance reports are submitted regularly to various regulatory authorities such as CPCB, RSPCB and MoEF&amp;CC regional office and also uploaded in Cairn India website. Refer the below link for details. Refer <b>Annexure – 1</b> of this report for environmental monitoring reports. Refer the below link for details.</p> <p><a href="https://www.cairnindia.com/Pages/PoliciesandDisclosures.aspx">https://www.cairnindia.com/Pages/PoliciesandDisclosures.aspx</a></p>																														

S. No.	General Conditions	Compliance Status
xv.	The environmental statement for each financial year ending 31 <sup>st</sup> March in Form-V as is mandated shall be submitted to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.	The environmental statement (Form-V) for each financial year ending 31 <sup>st</sup> March is being submitted to RSPCB. Refer <b>Annexure-09</b> for details. Also, the reports are uploaded in Cairn India website. Refer the below link for details. <a href="https://www.cairnindia.com/Pages/PoliciesandDisclosures.aspx">https://www.cairnindia.com/Pages/PoliciesandDisclosures.aspx</a>
xvi.	The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCS/Committee and may also be seen at Website of the Ministry at <a href="http://www.moef.nic.in">www.moef.nic.in</a> . This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.	Public Notice was published in the following newspapers: <ul style="list-style-type: none"> <li>• “Rajasthan Patrika” in Hindi language on 11<sup>th</sup> July ‘2013</li> <li>• “Times of India” in English language, Jaipur edition on 11<sup>th</sup> July ‘2013</li> </ul>
xvii.	The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.	RJ-ON block development was started in Quarter - 02 of 2006. The central processing hub, Mangala Processing Terminal was commissioned in April 2010. Fields covered in the ECs are being developed in a phase-wise manner. The financial closure will be communicated once all fields are developed.
9.0	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory	Noted. All conditions shall be implemented to the satisfactory requirements.
10.0	The Ministry reserves the right to stipulate additional conditions, if found necessary. The company in a time bound manner will implement these conditions.	Noted. Any additional conditions communicated to Cairn shall be implemented to full satisfactory.
11.0	The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of Water Pollution) Act, 1981, the Environment (Protection) Act, 1986 Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules, 2008 and the Public Liability	Noted for compliance.



EC Compliance Report - Increase in crude oil production capacity from Mangala Processing Terminal (MPT) (in RJ-ON-9011 Block, Rajasthan) from 175,000 to 200,000 BOPD (Barrels of oil per day) and associated gas from 35 to 40 million standard cubic feet per day at village Nagana, Tehsil & District Barmer, Rajasthan by Cairn Oil & Gas Division of Vedanta Limited.

S. No.	General Conditions	Compliance Status
	Insurance Act, 1991 along with their amendments and rules.	

**Name of the Project:** Augmentation of Hydrocarbon production (2 lakh Bopd to 3 lakh Bopd) and 165 MMSCFD natural gas in RJ-ON – 90/01, block of M/s Vedanta Ltd. Located in Barmer and Jalore Districts, Rajasthan – Environment Clearance

**Clearance Letter No:** J -11011/80/2013-IA. II(I), dated: 11<sup>th</sup> August 2014

**Period of Compliance Report:** Progressive EC Compliance Reporting period is **April-24 to September-24**

**Production profile:** Field wise average daily hydrocarbon production from RJON block during the reporting period is given below:

S. No.	Field Name	Average daily HC production during reporting period (October-23 to March-24)		Well pad details	
		Crude Oil (BOPD)	Natural Gas (MMSCFD)	No. of well pads permitted as per latest EC amendments	No. of Operational well pads during reporting period
1	Mangala	35325	15.82	Northern Field: 176 Low Marginal fields with early/quick production system: 49	21
2	Aishwariya & ABH	17242	10.60		11
3	Bhagyam	9926	2.79		15
4	NE/NI/NLB Field	2056	0.58		4
5	V2Y/Vandana1/Vijaya1	0	0		0
6	Shakti	18	0		1
7	Raageshwari	5473.900	119.362	Southern Field: 115 Low Marginal fields with early/quick production system: 90	10
8	Guda	83.51	0.043		3
9	Saraswati	316.311	0.138		3
10	Kameshwari	126.504	0.260		1
11	Tukaram	209.48	0.622		1
12	GSV	0	0		0
<b>Total average from RJON 90/1 block production</b>		<b>70775.705</b>	<b>150.215</b>		

Sites	Power Generation (MW)			
	Gas Based Boilers/Engines	Diesel Generator	Grid Supply	Renewable (Solar)
MPT	35.67	0.26	46.39	0.06
RGT	1.96	0.00075	16.55	
Well Pads	1.77	0.68	0.1682	
PSY	-	-	0.0043	

**Point-wise compliance:** The status of compliances is described below.

**A. SPECIFIC CONDITIONS:**

S. No.	Specific conditions	Compliance status
i.	Compliance to all the specific and general conditions mentioned in environmental clearance letters nos. J-11011/382/2005-IAII (I) dated 21 <sup>st</sup> March, 2006, J-11011/174/2007-IAII (I) dated 12 <sup>th</sup> March, 2008, J-11011/98/2019-IAII (I) dated 23 <sup>rd</sup> November, 2010 and 16 <sup>th</sup> October, 2012 shall be ensured.	Complied with the conditions mentioned in the said environmental clearance and six-monthly progressive compliance reports are being submitted to Regional Office, MoEF&CC, RSPCB and CPCB.
ii.	The stack emissions from various units shall conform to the standards prescribed under the Environment (Protection) Act. At no time, the emission levels shall go beyond the stipulated standards. In the event of failure of pollution control system(s) adopted by the unit, the unit shall be immediately put out of operation and shall not be restarted until the desired efficiency of the pollution control device has been achieved. Low NOx burner shall be installed in the captive power plant along with flue gas recirculation to reduce NOx.	The continuous sources of stack emission are the gas-fired boilers at MPT, gas engine generators & gas turbine generators at RGT, Gas Generators at Satellite well pads (Raag oil), DG sets at the satellite fields and diesel-fired injection water bath heater. The boiler stacks are fitted with Continuous Emission Monitoring System (CEMS). Emissions from all the stacks are monitored on a periodic basis through a NABL accredited inhouse & third-party laboratory and reports are submitted to RSPCB. Refer <b>Annexure – 01</b> for environmental monitoring details.  Low NOx burners are installed in the additional boilers mentioned in the EC

S. No.	Specific conditions	Compliance status
iii.	<p>Leak Detection and Repair programme shall be prepared and implemented to control HC/VOC emissions. Focus shall be given to prevent fugitive emissions for which preventive maintenance of pumps, valves, pipelines are required. Proper maintenance of mechanical seals of pumps and valves shall be given. A preventive maintenance schedule for each unit shall be prepared and adhered to. Fugitive emissions of HC from product storage tank yards etc. must be regularly monitored. Sensors for detecting HC leakage shall be provided at strategic locations.</p>	<p>Cairn has built the facilities using “Fire and Gas Detection and Protection (fire extinguishers using CO<sub>2</sub>, foam, water, inergen gas etc.) Philosophy” in accordance with American Petroleum Institute (API), National Fire Protection Association and Oil Industry Safety Directorate (OISD) standards.</p> <p>All the pop ups from the PSVs are routed to flare and there are no fugitive emissions and or cold venting of gases.</p> <p>Cairn carried out fugitive emission monitoring study through independent third-party agency during FY 2023-24 and the outcome of the study reveals that Methane &amp; VOC’s level of emission is very minimal and well below the limits of specified as per Environment Protection Act 1986. This demonstrate Cairn’s stringent preventive maintenance of equipment’s/joints etc. which prevents process leaks.</p> <p>The preventive maintenance, critical function test and Annual Maintenance Contract (AMC) activities are carried out through SAP system driven “preventive module” prepared based on OEM’s recommendation and risk-based inspection approach.</p> <p>To minimize gaseous emissions Cairn has partnered with the United Nations Environment Programme’ s (UNEP) flagship methane reporting and mitigation initiative – Oil &amp; Gas Methane Partnership (OGMP) 2.0. We are first oil and gas producer in India to sign OGMP 2.0 and commit to effectively reducing methane emissions.</p>
iv.	<p>The company shall upload the status of compliance of the stipulated environmental clearance conditions, including results of monitored data on its website and shall update the same periodically. It shall simultaneously be sent to the Regional office of MOEF, the respective Zonal office of CPCB and the RSPCB. The levels of PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, CO and non-methane hydrocarbon in ambient air and emissions from the stacks shall be monitored and/ displayed at a convenient location near the main gate of the company and at important public places.</p>	<p>Periodical six-monthly compliance reports with statistical interpretation of ambient air quality and noise quality monitoring data, are being submitted to MoEF&amp;CC regional office and RSPCB. Refer <b>Annexure – 1</b> for monitoring details. Also, the reports are uploaded in company website. Refer the below link for details.</p> <p><a href="https://www.cairnindia.com/Pages/PoliciesandDisclosures.aspx">https://www.cairnindia.com/Pages/PoliciesandDisclosures.aspx</a></p> <p>The required environmental information is also displayed on a board near the main gate of each operational facility and is updated on a monthly basis.</p>

S. No.	Specific conditions	Compliance status																																																
v	Total saline ground water requirement from Thumbli aquifer, Fatehgarh aquifer and Jagadia (Quaternary) aquifer shall not exceed 51500 m <sup>3</sup> /day, 15000m <sup>3</sup> /day and 2175 m <sup>3</sup> /day respectively. Clearance from CGWA shall be obtained and submitted to the Regional office, Lucknow	No fresh water is being extracted for operational usage. Only deep saline water is being abstracted after obtaining necessary permission from CGWA.  On an average, <b>15290</b> m <sup>3</sup> /day of saline ground water was abstracted in the reporting period from Thumbli (NR-01) through six deep saline wells against the permitted value of 51,500 m <sup>3</sup> /day. Also, on an average <b>913</b> m <sup>3</sup> /day of saline ground water was extracted from Jagadia (Raageshwari) through five wells against the permitted value of 3000 m <sup>3</sup> /day																																																
vi.	Treated wastewater (produced water/desalination rejects/ CPP blow down/ formation water/sanitary sewage) shall comply with the standards notified under the Environment (Protection) Act, 1986. As proposed, the produced water generated shall be treated in the produce water treatment plant to separate solids and oil traces through induced gas floatation process. No water shall be discharged outside the facility boundary. Produce water shall be treated in reject waste water treatment plant and treated water will be injected in ground water as per CPCB/ MoEF guidelines	Currently, there are three sewage treatment plants in the block - 250 m <sup>3</sup> /day STP at Operations Base near MPT, 45m <sup>3</sup> /day STP at MPT, 40 m <sup>3</sup> /day and 25 STP m <sup>3</sup> /day at RGT OB. The monitored values of key parameters stipulated in Consent conditions during the reporting period are given below:																																																
vii.	Domestic wastewater shall be treated in Sewage Treatment Plant (STP) and recycle/reuse entire treated wastewater for green belt development and various activities at the site.	<table border="1"> <thead> <tr> <th>Parameter</th> <th>MPT-OB STP</th> <th>MPT STP</th> <th>RGT STP (25 KLD)</th> <th>RGT STP (40 KLD)</th> <th>Reed Bed BH 06</th> </tr> </thead> <tbody> <tr> <td>pH (at 25 0C)</td> <td>7.38</td> <td>7.61</td> <td>6.85</td> <td>6.95</td> <td>7.67</td> </tr> <tr> <td>TSS (mg/l)</td> <td>11.5</td> <td>11.3</td> <td>14</td> <td>14</td> <td>8.40</td> </tr> <tr> <td>BOD (3 d at 270C) (mg/l)</td> <td>8.8</td> <td>8.6</td> <td>7.2</td> <td>7.2</td> <td>4.22</td> </tr> <tr> <td>COD (mg/l)</td> <td>47.6</td> <td>41.6</td> <td>36.4</td> <td>31.45</td> <td>35</td> </tr> <tr> <td>NH4 (N)</td> <td>2.76</td> <td>2.45</td> <td>4.7</td> <td>2.62</td> <td>2.87</td> </tr> <tr> <td>N total</td> <td>6.45</td> <td>4.34</td> <td>2.6</td> <td>6.4</td> <td>5.74</td> </tr> <tr> <td>Fecal Coliform</td> <td>50</td> <td>60</td> <td>60</td> <td>65</td> <td>40</td> </tr> </tbody> </table>	Parameter	MPT-OB STP	MPT STP	RGT STP (25 KLD)	RGT STP (40 KLD)	Reed Bed BH 06	pH (at 25 0C)	7.38	7.61	6.85	6.95	7.67	TSS (mg/l)	11.5	11.3	14	14	8.40	BOD (3 d at 270C) (mg/l)	8.8	8.6	7.2	7.2	4.22	COD (mg/l)	47.6	41.6	36.4	31.45	35	NH4 (N)	2.76	2.45	4.7	2.62	2.87	N total	6.45	4.34	2.6	6.4	5.74	Fecal Coliform	50	60	60	65	40
Parameter	MPT-OB STP	MPT STP	RGT STP (25 KLD)	RGT STP (40 KLD)	Reed Bed BH 06																																													
pH (at 25 0C)	7.38	7.61	6.85	6.95	7.67																																													
TSS (mg/l)	11.5	11.3	14	14	8.40																																													
BOD (3 d at 270C) (mg/l)	8.8	8.6	7.2	7.2	4.22																																													
COD (mg/l)	47.6	41.6	36.4	31.45	35																																													
NH4 (N)	2.76	2.45	4.7	2.62	2.87																																													
N total	6.45	4.34	2.6	6.4	5.74																																													
Fecal Coliform	50	60	60	65	40																																													

S. No.	Specific conditions	Compliance status						
		<table border="1" data-bbox="1014 248 1984 332"> <tr> <td data-bbox="1014 248 1201 332">(MPN per 100 ml)</td> <td data-bbox="1201 248 1325 332"></td> <td data-bbox="1325 248 1472 332"></td> <td data-bbox="1472 248 1640 332"></td> <td data-bbox="1640 248 1766 332"></td> <td data-bbox="1766 248 1984 332"></td> </tr> </table> <p data-bbox="1014 386 1984 480">Reed bed system is developed at BH-06 camp site for treatment of sewage. The treated water from STP and reed bed is used for greenbelt development within the premises. There is no wastewater discharge outside the facility boundary.</p>	(MPN per 100 ml)					
(MPN per 100 ml)								
vii.	Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.	<p data-bbox="1014 496 1984 602">MPT &amp; RGT have separate paved drainage for storm water collection and drainage is connected to the rainwater harvesting cum recharge pit. The storm water collected passes through an oil trap before entering the harvesting cum recharge pit.</p> <p data-bbox="1014 621 1984 686">The drainage from hydrocarbon processing and storage areas is collected in closed drains. Closed hazardous drain goes through Closed Drain Vessel to Off-Spec Tank.</p>						
ix.	Adequate numbers of ground water quality monitoring stations by providing piezometers around the captive landfill site and project area shall be set up. Sampling and trend analysis monitoring must be made on monthly a basis and report submitted to Rajasthan Pollution Control Board and this Ministry.	<p data-bbox="1014 711 1984 808">There are seven monitoring wells with piezometers around the captive landfill at MPT to monitor ground water quality. The average value of key parameters for all seven observatory wells are as follow:</p> <ul data-bbox="1014 821 1650 963" style="list-style-type: none"> <li>• pH : 7.12 – 8.58</li> <li>• TDS : 1666 – 3152 mg/l</li> <li>• TPH – BDL (Below detectable Level)</li> <li>• Heavy metals (Hg, As, Pb, Se, Cu, Cr, etc.) - BDL</li> </ul> <p data-bbox="1014 976 1984 1081">Quarterly report containing monitoring results of various parameters is being submitted to the RSPCB along with TSDf operations return as per CPCB guidelines. Refer <b>Annexure – 10</b> for Quarterly TSDf Return submitted to RPCB.</p>						
x.	The drill cutting (DC) wash water shall be treated to conform to limits notified vide GSR.546(E) dated 30 <sup>th</sup> August, 2005 under the Environment (Protection) Act, 1986 before disposal of solid waste, drill cutting and drilling fluids for onshore drilling operation. The treated effluent shall be monitored regularly.	<p data-bbox="1014 1105 1984 1398">Water Based Mud (WBM) is used as the drilling fluid for drilling the upper section of well (~250 - 500 meters) or up to complete target depth of the well subject to geological formation. In case of hard strata, Synthetic Oil Based Mud (SOBM) is used to counter difficult drilling situations &amp; incremental formation pressure, such as high down hole temperatures, hydrated shales, or salt, where the properties of WBMs would limit performance. The WBM cuttings generated are non-hazardous in nature. These cuttings are washed and used for construction activities like backfilling of low-lying areas, construction of well pads etc. SOBM drill cutting generated are segregated at the sources of generation and disposed in real time to</p>						

S. No.	Specific conditions	Compliance status
		<p>cement industry for coprocessing. HDPE lined pits are also available at site for interim storage &amp; handling of drill cuttings. During drilling process, waste residual mud &amp; drilling liquid waste are collected in the HDPE lined secure pits and further transfer to centralized location for treatment, recycling and disposal.</p> <p>The drilling fluid after solid – liquid separation is being recycled and/or disposed through adequately designed and lined solar evaporation ponds and deep dump well disposal.</p> <p>The oil base drill cuttings &amp; mud being process through the VCD (Vertical cutting dryers) to recover the oil base mud for re-use in subsequent drilling and dry cuttings been transported to cement industry for final secure disposal through co-processing as per approval or authorization obtained from SPCB. Waste pits bottom residual mud &amp; sludge are shifted to the MPT captive hazardous landfill for moisture stabilization &amp; further sent for co-processing in cement industry for secure disposal. Refer Annexure – 11 for compliance to GSR. 546(E) dated 30th August 2005.</p>
xi.	<p>The company shall obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2008 and amended as on date for management of Hazardous wastes and prior permission from RSPCB shall be obtained for disposal of solid hazardous waste in the TSDF.</p>	<p>Individual production well pads, processing terminals and TSDF (Treatment Storage and Disposal Facility) have valid Hazardous Waste Authorizations for collection, storage and/or disposal of wastes granted by the RSPCB.</p>
xii.	<p>Additional incinerator comprising primary and secondary chamber shall be designed as per CPCB guideline. SO<sub>2</sub>, NO<sub>x</sub>, HCL and CO emissions shall be monitored in the stack regularly</p>	<p>Noted. Additional Incinerator is not installed, and operation of existing Incinerator is restricted completely as the hazardous waste is being disposed through co-processing at cement industry.</p>

S. No.	Specific conditions	Compliance status
xiii.	Green belt shall be developed at least in 33 % of the plant area in and around the plant premises to mitigate the effects of fugitive emissions all around the plant as per the CPCB guidelines in consultation with DFO. Thick greenbelt with suitable plant species shall be developed around unit. Selection of plant species shall be as per the CPCB guidelines.	<p>Peripheral greenbelt is being developed in a phase-wise manner by undertaking Source Approach (SA) &amp; Receptor Approach (RA) based plantation around the facilities to mitigate the impact of fugitive emission. Greenbelt cover of <b>40.53</b> % of the total operating facility area is achieved.</p> <p>To minimize gaseous emissions Cairn has partnered with the United Nations Environment Programme' s (UNEP) flagship methane reporting and mitigation initiative – Oil &amp; Gas Methane Partnership (OGMP) 2.0. We are first oil and gas producer in India to sign OGMP 2.0 and commit to effectively reducing methane emissions.</p> <p>Refer <b>Annexure – 4</b> for details.</p>
xiv.	All the recommendations mentioned in the rapid risk assessment report, disaster management plan and safety guidelines shall be implemented.	The environmental protection and risk mitigation measures and safeguards recommended in the various studies including HAZOP (Hazard and Operability), HAZID (Hazard Identification) and COMAH (Control of Major Accident Hazards) are implemented during the project and operations stages. Recommendations mentioned in the Risk Assessment and Disaster Management Plan is followed and practiced through periodic drills.
xv.	As proposed, an amount of Rs. 300 crores has been earmarked towards the commitment based on local need, issues raised during the earlier public hearing meeting and item-wise details along with time bound action plan should be prepared and submitted to the Ministry's Regional Office at Lucknow. Implementation of such program should be ensured accordingly in a time bound manner.	<p>Working with communities is an integral part of Cairn sustainability strategy and the development of our long-term plans. Our ability to work collaboratively and our customized approach for every community we function in, is what sets us apart. These are crucial to our long-term success and our prerogative to operate.</p> <p>In order to ensure uniformity in approach towards conceptualizing and implementing any CSR project, a clearly laid down CSR policy has been prepared which is in line with section VII of companies act. To further elaborate and decipher the policy a CSR process document highlighting the monitoring mechanism, reporting, assessments, etc. has also been developed specific to Cairn business operations.</p> <p>Furthermore, to have a detail understanding of all the initiatives implemented under CSR for Apr'24-Sep'24, refer <b>Annexure 03</b>. Cairn spent on CSR is detailed below.</p>



S. No.	Specific conditions	Compliance status																				
		<p>During the period of Apr'24-Sep'24 ~ 3.5 cr has been spent towards CSR activities in the operational areas of Cairn.</p> <table border="1" data-bbox="1251 329 1751 914"> <thead> <tr> <th data-bbox="1251 329 1509 418">Financial Year</th> <th data-bbox="1509 329 1751 418">CSR expenditure in Rs.</th> </tr> </thead> <tbody> <tr> <td data-bbox="1251 418 1509 469">2016 - 17</td> <td data-bbox="1509 418 1751 469">32,00,00,000</td> </tr> <tr> <td data-bbox="1251 469 1509 519">2017 - 18</td> <td data-bbox="1509 469 1751 519">23,33,00,000</td> </tr> <tr> <td data-bbox="1251 519 1509 570">2018 - 19</td> <td data-bbox="1509 519 1751 570">29,67,00,000</td> </tr> <tr> <td data-bbox="1251 570 1509 620">2019 - 20</td> <td data-bbox="1509 570 1751 620">26,36,50,000</td> </tr> <tr> <td data-bbox="1251 620 1509 670">2020 - 21</td> <td data-bbox="1509 620 1751 670">16,47,00,000</td> </tr> <tr> <td data-bbox="1251 670 1509 721">2021 - 22</td> <td data-bbox="1509 670 1751 721">25,53,00,000</td> </tr> <tr> <td data-bbox="1251 721 1509 771">2022 - 23</td> <td data-bbox="1509 721 1751 771">1,27,20,000</td> </tr> <tr> <td data-bbox="1251 771 1509 821">2023 - 24</td> <td data-bbox="1509 771 1751 821">12,00,00,000</td> </tr> <tr> <td data-bbox="1251 821 1509 914">2024 – 25(apr'24-Sep'24)</td> <td data-bbox="1509 821 1751 914">3,50,00,000</td> </tr> </tbody> </table>	Financial Year	CSR expenditure in Rs.	2016 - 17	32,00,00,000	2017 - 18	23,33,00,000	2018 - 19	29,67,00,000	2019 - 20	26,36,50,000	2020 - 21	16,47,00,000	2021 - 22	25,53,00,000	2022 - 23	1,27,20,000	2023 - 24	12,00,00,000	2024 – 25(apr'24-Sep'24)	3,50,00,000
Financial Year	CSR expenditure in Rs.																					
2016 - 17	32,00,00,000																					
2017 - 18	23,33,00,000																					
2018 - 19	29,67,00,000																					
2019 - 20	26,36,50,000																					
2020 - 21	16,47,00,000																					
2021 - 22	25,53,00,000																					
2022 - 23	1,27,20,000																					
2023 - 24	12,00,00,000																					
2024 – 25(apr'24-Sep'24)	3,50,00,000																					
xvi.	<p>The Company shall submit within three months their policy towards Corporate Environment Responsibility which shall inter-alia address (i) Standard operating process/ procedure to being into focus any infringement/deviation/violation of environmental or forest norms/conditions, (ii) Hierarchical system or Administrative order of the Company to deal with environmental issues and ensuring compliance to the environmental clearance conditions and (iii) System of reporting of noncompliance/violation environmental norms to the Board of Directors of the company and/or stakeholders or shareholders.</p>	<p>Cairn as part of Vedanta Group has a Health, Safety &amp; Environment Policy which provides overall commitment and direction towards management of environmental issues and compliance to regulatory requirements. The policy is implemented through the Cairn's HSE management system that lays down the process and procedure for effective management.</p> <p>The RJ-ON-90/1 operation have implemented EMS (ISO-14001:2015) &amp; OH&amp;S System (ISO (45001:2018) and standard operating procedures have been developed for ensuring compliance to environmental regulations. Management review meetings are conducted at regular intervals where senior management is apprised of deviations if any to environmental norms. Overall environmental performance is also discussed during these meetings. Cairn has a documented policy on CSR program for implementation in Rajasthan.</p>																				

S. No.	Specific conditions	Compliance status
		Cairn also has systems in place for HSE audits, incident response management, HSE leadership meetings and online compliance management tool. Cairn’s online compliance management system is a fully automated system accessed online to ensure timely legal compliances applicable to the company under various acts and also reporting of noncompliance/violation to the top management.

**B. GENERAL CONDITIONS:**

S. No.	General Conditions	Compliance Status
i.	The project authorities shall strictly adhere to the stipulations made by the Rajasthan State Pollution Control Board.	Being complied. Compliance reports are being submitted regularly to RSPCB regarding the Consent and Authorization conditions.
ii.	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests. In <i>case</i> of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.	Noted and no activities presently being carried out without any EC requirements. Amendment in existing environmental clearances are periodically obtained from MoEF & CC for future expansion and modification projects as per the requirements.  Vedanta has obtained Environmental Clearance for “Expansion of onshore oil and gas production from existing 300,000 to 400,000 bopd and 165 to 750 MMSCFD from RJ-ON-90/1 Block, Barmer, Rajasthan” vide letter no. F. No. J/11011/13/2018/IA-II(I) dated 11 <sup>th</sup> April 2019. Refer <b>Annexure – 07</b> for list of ECs obtained so far.
iii.	The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16 <sup>th</sup> November, 2009 shall be followed.	Ambient air quality monitoring is carried out periodically through inhouse and 3 <sup>rd</sup> party NABL accredited laboratory. Graphical representation of ambient air quality monitoring results during this EC compliance reporting period is provided in <b>Annexure – 01</b> . Ambient air is monitored in each location as per the environmental monitoring plan approved by RSPCB.
iv.	The locations of ambient air quality monitoring stations shall be decided in consultation with the State Pollution Control Board (SPCB) and it shall be ensured that at least one stations	Environmental Monitoring Plan for RJ-ON block is being carried out based on the Rajasthan State Pollution Control Board (RO) approved plan. The ambient air quality monitoring plan considers upwind and downwind direction, receptors, and Ground Level Concentrations (GLCs). Ambient air

S. No.	General Conditions	Compliance Status
	is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.	quality monitoring is carried out as per the approved plan through an NABL accredited inhouse and 3 <sup>rd</sup> party laboratory. Graphical representation of ambient air quality monitoring results is enclosed as <b>Annexure - 01</b> . The average concentrations of all the parameters are well below the NAAQS. The reports are periodically submitted to RSPCB.
v.	The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).	All the high noisy rotating equipment's are provided with acoustic enclosures, silencers etc. Ambient noise data show that day and night levels are within the prescribed limits as per the Noise Rules. Refer <b>Annexure – 01</b> for details.
vi.	The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and use the same water for the process activities of the project to conserve fresh water.	<p>Rainwater recharge pits have been developed in MPT (of capacity 72225 m3) and in RGT (of capacity 22720 m3). Rainwater from roof top and surface run-off are collected in paved drains and channeled to the groundwater recharge pit after passing through the oil trap. Infiltration wells have been built for recharging groundwater and used for green belt development.</p> <p>Rainwater recharge pit (of capacity ~58,000 m3) at NR-1 (Madpura Barwala, Baitu) has been made with provision to conserve the water in deep saline aquifer. Rainwater recharge structures have been developed in 28 operating well pads at various locations within the RJ Block, having 63 rainwater recharge structures with rainwater harvesting potential of 0.28 million kilo liter per annum.</p> <p>Towards natural resource management, CAIRN has constructed 1056 khadins and renovated of 28 traditional water harvesting structures (nadi) till date developing the harvesting capacity of the area by ~18 lakh cu m water every year. Cairn is also instrumental in tapping roof top water through proper harvesting facilities in 95 schools, benefitting 8,000+ students and developing rainwater harvesting capacity of 5 lac cubic meter.</p>
vii.	Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine	Training on various HSE aspects, including chemicals handling and management, are given to all the employees and contractors periodically.

S. No.	General Conditions	Compliance Status
	periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.	Medical fitness certificates including pre-medical and routine periodical medical examinations are maintained at site medical center as per the OMR Rules and DGMS requirements.
viii.	The company shall also comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA-EMP in respect of environmental management, risk mitigation measures and public hearing relating to the project shall be implemented.	The environmental protection measures and safeguards recommended in EIA-EMP & QRA are being implemented throughout the project life cycle. CAIRN is committed to address all the issues and concerns raised in public hearing and is implementing time-bound actions. Refer <b>Annexure – 06</b> for PH Compliance status.
ix.	The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. CSR activities shall be undertaken by involving local villages and administration.	Complied with the requirements. Refer <b>Annexure – 03</b> regarding CSR programs implemented regarding improving the socio-economic conditions.
x.	The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.	
xi.	A separate Environmental Management Cell equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.	<p>A team of eleven environmental professionals are stationed at RJ site to provide necessary technical support to the projects, operation, drilling and Petroleum engineering activities in implementing the environmental management measures.</p> <p>Environmental laboratory is set up at the MPT for monitoring ambient air, stack, noise, wastewater, water, solid waste, soil etc., for entire RJ Block. This laboratory is equipped with all necessary equipment's. Please refer <b>Annexure – 8</b> for details. In addition, periodic inhouse and 3<sup>rd</sup> party NABL laboratory is engaged to carry out the environmental monitoring requirements as per the RSPCB approved environmental monitoring plan.</p>

S. No.	General Conditions	Compliance Status																														
xii.	<p>The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management pollution control measures shall not be diverted for any other purpose.</p>	<p>Sufficient funds are being earmarked towards capital cost and recurring cost per annum to implement environmental initiatives and related facility operations. Approximate Capital Expenditure (CAPEX) and Operating Expenditure (OPEX) spent in RJ-ON-90/1 Block towards the provisions for environment management are detailed below.</p> <table border="1" data-bbox="1205 472 1877 1052"> <thead> <tr> <th data-bbox="1213 479 1465 565">Financial Year</th> <th data-bbox="1472 479 1675 565">CAPEX (INR)</th> <th data-bbox="1682 479 1871 565">OPEX (INR)</th> </tr> </thead> <tbody> <tr> <td data-bbox="1213 570 1465 618">2016 - 17</td> <td data-bbox="1472 570 1675 618">188,40,943</td> <td data-bbox="1682 570 1871 618">699,40,366</td> </tr> <tr> <td data-bbox="1213 623 1465 672">2017 - 18</td> <td data-bbox="1472 623 1675 672">53,89,955</td> <td data-bbox="1682 623 1871 672">817,52,899</td> </tr> <tr> <td data-bbox="1213 677 1465 725">2018 - 19</td> <td data-bbox="1472 677 1675 725">1,825,43,669</td> <td data-bbox="1682 677 1871 725">1,373,57,426</td> </tr> <tr> <td data-bbox="1213 730 1465 779">2019 - 20</td> <td data-bbox="1472 730 1675 779">468,025,215</td> <td data-bbox="1682 730 1871 779">821,831,880</td> </tr> <tr> <td data-bbox="1213 784 1465 833">2020 - 21</td> <td data-bbox="1472 784 1675 833">3,002,256,713</td> <td data-bbox="1682 784 1871 833">381,673,756</td> </tr> <tr> <td data-bbox="1213 837 1465 886">2021 - 22</td> <td data-bbox="1472 837 1675 886">34,993,115</td> <td data-bbox="1682 837 1871 886">402,052,317</td> </tr> <tr> <td data-bbox="1213 891 1465 940">2022 - 23</td> <td data-bbox="1472 891 1675 940">6,168,47,901</td> <td data-bbox="1682 891 1871 940">305,04,305</td> </tr> <tr> <td data-bbox="1213 945 1465 993">2023 - 24</td> <td data-bbox="1472 945 1675 993">4,827,836</td> <td data-bbox="1682 945 1871 993">878,050,049</td> </tr> <tr> <td data-bbox="1213 998 1465 1047"><b>2024-25(Apr'24-Sep'24)</b></td> <td data-bbox="1472 998 1675 1047"><b>9,692,520</b></td> <td data-bbox="1682 998 1871 1047"><b>412,849,892</b></td> </tr> </tbody> </table>	Financial Year	CAPEX (INR)	OPEX (INR)	2016 - 17	188,40,943	699,40,366	2017 - 18	53,89,955	817,52,899	2018 - 19	1,825,43,669	1,373,57,426	2019 - 20	468,025,215	821,831,880	2020 - 21	3,002,256,713	381,673,756	2021 - 22	34,993,115	402,052,317	2022 - 23	6,168,47,901	305,04,305	2023 - 24	4,827,836	878,050,049	<b>2024-25(Apr'24-Sep'24)</b>	<b>9,692,520</b>	<b>412,849,892</b>
Financial Year	CAPEX (INR)	OPEX (INR)																														
2016 - 17	188,40,943	699,40,366																														
2017 - 18	53,89,955	817,52,899																														
2018 - 19	1,825,43,669	1,373,57,426																														
2019 - 20	468,025,215	821,831,880																														
2020 - 21	3,002,256,713	381,673,756																														
2021 - 22	34,993,115	402,052,317																														
2022 - 23	6,168,47,901	305,04,305																														
2023 - 24	4,827,836	878,050,049																														
<b>2024-25(Apr'24-Sep'24)</b>	<b>9,692,520</b>	<b>412,849,892</b>																														
xiii.	<p>A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zila Parisad/Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.</p>	<p>Copy of Environment clearance is submitted to Panchayat, District Collector office, RSPCB and NGO. No suggestion or representation from any of NGO and or local bodies were received in the said EC compliance reporting period.</p>																														
xiv.	<p>The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional</p>	<p>Six-monthly EC compliance reports are submitted regularly to various regulatory authorities such as CPCB, RSPCB and MoEF&amp;CC regional office and also uploaded in Cairn India website. Refer the below link for details.</p>																														

S. No.	General Conditions	Compliance Status
	Office of MoEF, the respective Zonal Office of CPCB and RSPCB. A copy of Environmental Clearance and six-monthly compliance status report shall be posted on the website of the company.	Refer <b>Annexure – 1</b> of this report for environmental monitoring reports. Refer the below link for details. <a href="https://www.cairnindia.com/Pages/PoliciesandDisclosures.aspx">https://www.cairnindia.com/Pages/PoliciesandDisclosures.aspx</a>
xv.	The environmental statement for each financial year ending 31 <sup>st</sup> March in Form-V as is mandated shall be submitted to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.	The environmental statement (Form-V) for each financial year ending 31 <sup>st</sup> March is being submitted to RSPCB. Refer <b>Annexure - 9</b> for details. Also, the reports are uploaded in Cairn India website. Refer the below link for details. <a href="https://www.cairnindia.com/Pages/PoliciesandDisclosures.aspx">https://www.cairnindia.com/Pages/PoliciesandDisclosures.aspx</a>
xvi.	The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCS/Committee and may also be seen at Website of the Ministry at www.moef.nic.in. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.	A public notice informing the grant of this EC by MOEF&CC and availability of its copies with RSPCB and on MoEF & CC website was published by Cairn as follows <ul style="list-style-type: none"> <li>• Daily Janta Sahar (Hindi) Barmer &amp; Jalore District editions on 27-08-2014</li> <li>• Bhaskar (Hindi) Barmer &amp; Jalore District editions on 27-08-2014</li> </ul>
xvii.	The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.	RJ-ON block development was started in Quarter - 02 of 2006. The central processing hub, Mangala Processing Terminal was commissioned in April 2010. Fields covered in the ECs are being developed in a phase-wise manner. The financial closure will be communicated once all fields are developed.

S. No.	General Conditions	Compliance Status
10.0	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory	Noted. All conditions shall be implemented to the satisfactory requirements.
11.0	The Ministry reserves the right to stipulate additional conditions, if found necessary. The company in a time bound manner will implement these conditions.	Noted. Any additional conditions communicated to Cairn shall be implemented to full satisfactory.
12.0	The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of Water Pollution) Act, 1981, the Environment (Protection) Act, 1986 Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules, 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules.	Noted for compliance.

**Name of the Project:** Enhancement of onshore oil and gas production from RJ-ON-90/1 Block at Barmer (Rajasthan) by M/s Vedanta limited (Cairn Oil & Gas Division)

Enhancement of HC Production (3 lakh BOPD to 4 lakh BOPD and NG 165 MMSCFD to 750 MMSCFD) within RJ-ON-90/1 Block at Barmer (Rajasthan)

**Clearance Letter No:** F. No. J-11011/13/2018-IA-11(1) Government of India, Ministry of Environment, Forest and Climate Change, (IA-11 Section) 11<sup>th</sup> April 2019

**Period of Compliance Report:** Progressive EC Compliance Reporting period is April-24 to September-24

**Production profile:** Field wise average daily hydrocarbon production from RJON block during the reporting period is given below

S. No.	Field Name	Average daily HC production during reporting period		Well pad details	
		Crude Oil (BOPD)	Natural Gas (MMSCFD)	No. of well pads permitted as per latest EC amendments	No. of Operational well pads during reporting period
1	Mangala	35325	15.82	Northern Field: 176 Low Marginal fields with early/quick production system: 49	21
2	Aishwariya & ABH	17242	10.60		11
3	Bhagyam	9926	2.79		15
4	NE/NI/NLB Field	2056	0.58		4
5	V2Y/Vandana1/Vijaya1	0	0		0
6	Shakti	18	0		1
7	Raageshwari	5473.900	119.362	Southern Field: 115 Low Marginal fields with early/quick production system: 90	10
8	Guda	83.51	0.043		3
9	Saraswati	316.311	0.138		3
10	Kameshwari	126.504	0.260		1
11	Tukaram	209.48	0.622		1
12	GSV	0	0		0
<b>Total average from RJON 90/1 block production</b>		<b>70776.705</b>	<b>150.215</b>		



Sites	Power Generation (MW)			
	Gas Based Boilers/Engines	Diesel Generator	Grid Supply	Renewable (Solar)
MPT	35.67	0.26	46.39	0.06
RGT	1.96	0.00075	16.55	
Well Pads	1.77	0.68	0.1682	
PSY	-	-	0.0043	

**Point-wise Compliance:** The status of compliances is described below.

**A. SPECIFIC CONDITIONS:**

S. No.	Specific conditions	Compliance status
(a)	Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board as required.	Consents under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable are being obtained from the State Pollution Control Board as required.
(b)	As proposed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged to any surface water body, sea and/or on land.	The various streams of wastewater generated from operational facilities are produced water, desalination plant reject water, ETP reject, filter backwash water, boiler blow down and domestic sewage. The produced water is treated for the removal of physical impurities such as total suspended solids and Oil. Thus, treated water is injected back into the reservoir for maintaining reservoir pressure and void replacement.  RO reject & SRP reject are being disposed in deep dump wells of depth >1000 m depth below ground level complying with respect to suspended solids and oil and grease 100 mg/l and 10 mg/l, respectively as per The Environment (Protection) Rules, 1986.

S. No.	Specific conditions	Compliance status
		<p>There are four sewage treatment plants in the block - 250 m<sup>3</sup>/day STP at Operations Base near MPT, 45m<sup>3</sup>/day STP at MPT, 40 m<sup>3</sup>/day and 25 m<sup>3</sup>/day STPs at RGT OB for treatment of domestic sewage. Reedbed system (man-made wetland to handle ~ 25KLD) is constructed at BH-06 camp site for treatment of sewage. The treated water from STPs &amp; Reedbed is used for greenbelt development within the premises. Septic tank soak pits are provided at well pads for handling of sewage. There is no wastewater discharge outside the facility boundary.</p>
(c)	<p>To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.</p>	<p>All the process units, vessels and tanks are connected to Vapor Recovery Units (VRUs). Six VRUs (capacity 1390 SCM/hr each) have been installed and recovered vapor is fed into fuel gas system. All the pop ups from the PSVs are routed to flare and there is no fugitive emissions and/or cold venting of gases.</p> <p>All the point emission sources are provided with adequate stack height for proper dispersion of pollutants. Emissions from all the stacks are meeting the prescribed standards and monitored on a periodic basis through NABL accredited inhouse and third-party laboratory and reports are submitted to RSPCB. Refer <b>Annexure – 01</b> for environmental monitoring details.</p> <p>Cairn carried out fugitive emission monitoring study through independent third-party agency during FY 2023-24 and the outcome of the study reveals that Methane &amp; VOC's level of emission is very minimal and well below the limits of specified as per Environment Protection Act 1986. This demonstrates Cairn's stringent preventive maintenance of equipment's/joints etc. which prevents process leaks.</p> <p>To minimize gaseous emissions Cairn has partnered with the United Nations Environment Programme's (UNEP) flagship methane reporting and mitigation initiative – Oil &amp; Gas Methane Partnership (OGMP) 2.0. We are first oil and gas producer in India to sign OGMP 2.0 and commit to effectively reducing methane emissions.</p>

S. No.	Specific conditions	Compliance status
		The preventive maintenance, critical function test and Annual Maintenance Contract (AMC) activities are carried out through SAP system driven “preventive module” prepared based on OEM’s recommendation and risk-based inspection approach.
(d)	Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.	Authorizations required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016 are already obtained and the provisions contained in the rules are adhered with.
(e)	Ambient air quality shall be monitored at the nearest human settlements as per the National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16 <sup>th</sup> November, 2009 for PM10, PM2.5, SO <sub>2</sub> , NO <sub>x</sub> , CO, CH <sub>4</sub> , HC, Non-methane HC etc.	Environmental Monitoring for operational sites within RJ-ON block is being carried out based on the Rajasthan State Pollution Control Board (RO) approved plan. The ambient air quality monitoring plan considers upwind and downwind direction, receptors and Ground Level Concentrations (GLCs). Graphical representation of ambient air quality monitoring results is enclosed as <b>Annexure - 01</b> . The average concentrations of all the parameters are well below the NAAQS. The monitoring reports are periodically submitted to RSPCB.
(f)	During exploration, production, storage and handling, the fugitive emission of methane, if any, shall be monitored using Infra-red camera/ appropriate technology.	Cairn carried out fugitive emission monitoring study through independent third-party agency during Mar’24-April’24, and the outcome of the study reveals that Methane & VOC’s level of emission is very minimal and well below the limits.  This demonstrates Cairn’s stringent preventive maintenance of equipment’s/joints etc. which prevents process leaks. Gas detectors are installed at multiple locations in terminal and at well pads to detect the leakage of gases (if any).  To minimize gaseous emissions Cairn has partnered with the United Nations Environment Programme’ s (UNEP) flagship methane reporting and mitigation initiative – Oil & Gas Methane Partnership (OGMP) 2.0. We are first oil and gas producer in India to sign OGMP 2.0 and commit to effectively reducing methane emissions.
(g)	The project proponent also to ensure trapping/storing of the CO <sub>2</sub> generated, if any, during the process and handling	Cairn is carrying out pilot study to capture CO <sub>2</sub> produce as part of associated gas and re-injection of same into hydrocarbon reservoir. Currently, associated gas containing high CO <sub>2</sub> (>80%) is being burned

S. No.	Specific conditions	Compliance status
		in Thermal Oxidizer (TO) and EGF after mixing with fuel gas to avoid cold venting of associated gas. Feasibility study for reinjection of CO <sub>2</sub> as part of EOR project is under progress.
(h)	Approach road shall be made pucca to minimize generation of suspended dust.	Well pad corridor roads are made pucca to minimize dust generation. As far as possible, the pucca roads are being used for the vehicle movements. Wherever the roads to be laid / repaired, the same has been carried out. However, where pucca roads cannot be laid, then periodic water sprinkling is being carried out to minimize generation of the dust. Cairn has also implemented speed limit (30 KMPH) in corridor roads to minimise generation of suspended solids.
(i)	The company shall make all arrangements for control of noise from the drilling activity. Acoustic enclosure shall be provided for the DG sets along with the adequate stack height as per CPCB guidelines.	All the DGs are provided with acoustic enclosures, silencers etc. Ambient noise data show that day and night levels are within the prescribed limits as per the Noise Rules. Refer <b>Annexure – 01</b> for details. Adequate stack height is provided for DG sets at drilling sites.
(j)	Total water requirement shall not exceed 93,500 m <sup>3</sup> /day proposed to be met from ground water. Prior permission in this regard shall be obtained from the concerned regulatory authority/ CGWA.	No fresh water is being extracted for operational usage. Only deep saline water is being abstracted after obtaining necessary permission from CGWA.  On an average, <b>15290</b> m <sup>3</sup> /day of saline ground water was abstracted in the reporting period from Thumbli (NR-01) through six deep saline wells against the permitted value of 51,500 m <sup>3</sup> /day. Also, on an average <b>913</b> m <sup>3</sup> /day of saline ground water was extracted from Jagadia (Raageshwari) through five wells against the permitted value of 3000 m <sup>3</sup> /day
(k)	The company shall construct garland drain all around the drilling site to prevent runoff of any oil containing waste into the nearby water bodies. Separate drainage system shall be created for oil contaminated and non-oil contaminated. Effluent shall be properly treated, and treated wastewater shall conform to CPCB standards.	Garland drains are provided at well pads for collection of storm water.  The drilling wastewater is stored in concrete and HDPE lined pits at drilling sites and treated for reuse/disposal through deep dump well (depth >1000 m) and confirm the prescribed standards. Separate drainage system provided at processing terminal for oil contaminated and non-oil contaminated effluents.  RO reject & SRP reject are being disposed in deep dump wells of depth >1000 m depth below ground level complying with respect to suspended solids and oil and grease 100 mg/l and 10 mg/l, respectively as per The Environment (Protection) Rules, 1986.

S. No.	Specific conditions	Compliance status
(l)	<p>Drill cuttings separated from drilling fluid shall be adequately washed and disposed in HDPE lined pit. Waste mud shall be tested for hazardous contaminants and disposed according to HWMH Rules, 2016. No effluent drilling mud/drill cutting shall be discharged/disposed-off into nearby surface water bodies. The company shall comply with the guidelines for disposal of solid waste, drill cutting and drilling fluids for onshore drilling operation notified vide GSR.546(E) dated 301 August, 2005.</p>	<p>Water Based Mud (WBM) is used as the drilling fluid for drilling the upper section of well (~250 - 500 meters) or up to complete target depth of the well subject to geological formation. In case of hard strata, Synthetic Oil Based Mud (SOBM) is used to counter difficult drilling situations &amp; incremental formation pressure, such as high down hole temperatures, hydrated shales, or salt, where the properties of WBMs would limit performance. The WBM cuttings generated are non-hazardous in nature. These cuttings are washed and used for construction activities like backfilling of low-lying areas, construction of well pads etc. SOBM drill cutting generated are segregated at the sources of generation and disposed in real time to cement industry for coprocessing. HDPE lined concrete pits are also available at site for interim storage &amp; handling of drill cuttings. During drilling process, waste residual mud &amp; drilling wastewater are collected in the container for treatment, recycling and disposal.</p> <p>The drilling fluid after solid – liquid separation is being recycled and/or disposed through adequately designed and lined solar evaporation ponds and deep dump well disposal.</p> <p>The oil base drill cuttings and residual dry mud are shifted to the MPT captive hazardous landfill for appropriate disposal or being sent for co-processing in cement industry. Refer <b>Annexure – 11</b> for compliance to GSR. 546(E) dated 30<sup>th</sup> August 2005.</p>
(m)	<p>Oil spillage prevention and mitigation scheme shall be prepared. In case of oil spillage/ contamination, action plan shall be prepared to clean the site by adopting proven technology. The recyclable waste (oily sludge) and spent oil shall be disposed of to the authorized recyclers.</p>	<p>Oil Spill Management Plan is prepared and in place. Dedicated oil spill response team is stationed at MPT, backed by the fire services team.</p> <p>The oil contaminated soil and wastes are being disposed to captive TSDF or co-processing at cement industry. Waste oil disposed to CPCB registered and SPCB authorized recyclers.</p>
(n)	<p>The Company shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed. Possibility of using ground flare shall be explored. At the place of ground flaring, the overhead flaring stack with knockout drums shall be installed to minimize gaseous emissions during operation.</p>	<p>All storage tanks and process vessels have been installed with SIL (In simple terms, SIL is Safety Integrity Level, which is a measurement of performance required for a safety instrumented function) rated instrument systems including high, high-high and low, low-low alarms for information to DCS (Digital Control System) panel engineers for immediate intervention. Also, the process systems are installed with Emergency Shut Down Devices (ESDs)/ valves to isolate the supply during any leaks and prevent spills. Oil spill contingency plan is</p>

S. No.	Specific conditions	Compliance status
		<p>prepared and implemented at sites. Secondary containment has been provided at all hydrocarbon storage areas in accordance with OISD standards. The process vessels have been provided with kerbs to contain accidental spills.</p> <p>Full-fledged dedicated oil spill response team stationed at MPT providing coverage to entire Rajasthan field, backed up fire services team consisting of trained professionals. Firefighting measures include hydrant system, foam system, portable fire extinguishers, water spray systems, fireproof electrical fittings, and fire and gas detection systems. In addition to above, total 09 Nos. of Multipurpose Fire tenders stationed at MPT (4), RGT (2), Bhagyam (2), Aishwariya (1) for firefighting and emergency response round the clock in RJON block area.</p> <p>The flare systems are designed as per the API 521 and OISD 106 standards. The height of flare stack installed at MPT and RGT is 30 m and emissions from stack are in compliance with regulatory requirements, the same is verified through ground level concentrations (ambient air quality monitoring) periodically. Ground and enclosed flare is being at few isolated well pads with all necessary precautions (knockout drum, brick wall etc) in place.</p>
(o)	<p>The company shall develop a contingency plan for H<sub>2</sub>S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with personal H<sub>2</sub>S detectors in locations of high risk of exposure along with self-containing breathing apparatus.</p>	<p>Cairn has developed a H<sub>2</sub>S management procedure. PPE, personal monitors and the other gadgets have been procured as per the requirements of the procedure.</p> <p>An elaborate H<sub>2</sub>S induction program is included as part of employee and visitors' induction modules. One-day H<sub>2</sub>S certification program, as per ANSI Z390.1 guideline, is being conducted for all the Cairn technical employees and field supervisory staff. Personnel working at well pads and operational areas inside terminals are provided with personal H<sub>2</sub>S escape mask and H<sub>2</sub>S monitors that will trigger an alarm if TLV value exceeds 10 ppm. Self-Contained Breathing Apparatus (SCBA) sets have been installed at all critical locations in terminals and well pads for the personnel to use in case of inadvertent H<sub>2</sub>S exposure. Cairn has installed on-line H<sub>2</sub>S detection system at MPT, Mangala and Bhagyam well pads.</p>

EC Compliance Report - Enhancement of onshore oil and gas production from RJ-ON-90/1 Block at Barmer (Rajasthan) by M/s Vedanta limited (Cairn Oil & Gas Division)

S. No.	Specific conditions	Compliance status
(p)	The Company shall carry out long term subsidence study by collecting base line data before initiating drilling operation till the project lasts. The data so collected shall be submitted six-monthly to the Ministry and Regional Office.	Company has collected baseline data at more than 10 locations in various fields within RJON block by establishing monitoring stations. Data has been collected using Geodetic grade DGPS equipment and same is submitted to CGWA as part of six-monthly compliances report. Refer <b>Annexure -02</b> for six monthly compliances submitted to CGWA and land subsidence monitoring report respectively.
(q)	Blow Out Preventer system shall be installed to prevent well blow outs during drilling operations. BOP measures during drilling shall focus on maintaining well bore hydrostatic pressure by proper pre-well planning and drilling fluid logging etc.	Blow out preventer stack is installed on each well during drilling and BOPs are maintained, inspected, and periodically tested, to ensure their fit for purpose status. During well planning and during drilling, well bore hydrostatic pressure is maintained. Well Construction and Operations Minimum Standards Policy cover the minimum well control requirements to be followed during well construction and operations. Refer <b>Annexure –12</b> for details of BOP being used in on-going developmental drilling activities.
(r)	Emergency Response Plan shall be based on the guidelines prepared by OISD, DGMS and Govt. of India.	Incident/Emergency Response Plan is in place based on national and international guidelines. Each field in the Block has a separate Response Plan. This plan was submitted to the regulatory and district administration.
(s)	After completion of drilling operations, the company shall take adequate measures for plugging of wells, decommissioning of rig upon abandonment of the well, and drilling site shall be restored to the original condition and the report in this regard shall be submitted to the Ministry's Regional Office. In case of no economical prospecting of Hydrocarbon, complete abandonment plan shall be implemented in accordance with the applicable Indian Petroleum Regulations.	All the wells drilled are in secured sites. Wells are temporary abandoned until commercial production is started, or economic viability is determined. Wells not economically viable to produce are abandoned following regulatory requirements of OMR and OISD guidelines. During reporting period, Cairn has abandoned three wells only in Mangla field. Cairn complies with OMR 58 regarding well plugged & abandoned requirements.
(t)	All the commitments made to the public during public hearing/consultation shall be satisfactorily implemented.	Refer <b>Annexure-06</b> for status of PH points
(u)	At least 1.5% of the total project cost shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.	Cairn received EC amendment letter dated 11 <sup>th</sup> December 2020 with revised condition related to CER budget allocation as “Percentage of CER budget allocation shall be as per office memorandum on CER issued vide letter no. F. No. 22-65/2017 IA-III dated 1 <sup>st</sup> May, 2018 (i.e. in case of additional capital investment >INR 10,000 crore for brown field project maximum 0.125% of additional CI to be allocated

S. No.	Specific conditions	Compliance status
		<p>for CER). Tentative cost of Cairn’s expansion projects INR 12000 crore. Post above EC amendment, Cairn has already obtained budget alignment from JV partner M/s. ONGC. Cairn has already identified projects to be carried out under CER and details is provided in <b>Annexure 13</b>. A step towards our ESG commitment of planting 02 million trees by 2030; organization has signed MOU with Rajasthan Forest Development Agency to develop carbon sink by plantation of 0.35 M trees over 700 hectares of forest land in Barmer district.</p> <p>Also, Cairn is already carrying out similar activities as part of its CSR activities in project area. Refer <b>Annexure 3</b> for various projects being carried out as part of CSR activities.</p>
(v)	<p>Occupational health surveillance of the workers shall be carried out as per the prevailing Acts and Rules.</p>	<p>Annual industrial hygiene survey is carried out by third-party experts at MPT, RGT and Bhagyam. This survey includes qualitative and quantitative survey of exposure of workers to chemicals, dust, noise and heat, adequacy of illumination manual material handling conditions, and office ergonomics. Annual health checks are conducted for all workers exposed to annual work environment.</p> <p>The following facilities are available to provide first aid and emergency care to workers in Rajasthan.</p> <ul style="list-style-type: none"> <li>• Round-the-clock first aid and emergency medical facilities manned by qualified doctors and paramedics</li> <li>• Availability of advanced life-support ambulances at all medical centres</li> <li>• Cairn has entered contract with ASAP for fixed wing air-ambulance services equipped with emergency and critical medical (tertiary) care equipment.</li> <li>• For secondary medical care, CAIRN has a formal contract with Thar hospital at Barmer.</li> <li>• Medical fitness certificates are maintained at site medical centre as per the OMR Rules and DGMS requirements.</li> </ul>
(w)	<p>Oil content in the drill cuttings shall be monitored by some Authorized agency and report shall be sent to the Ministry's Regional Office.</p>	<p>Water Based Mud (WBM) is used as the drilling fluid for drilling the upper section of well (~250 - 500 meters) or up to complete target depth of the well subject to geological formation. In case of hard strata, Synthetic Oil Based Mud (SOBM) is used to counter difficult drilling situations, such as high down hole temperatures, hydrated</p>



S. No.	Specific conditions	Compliance status
		shales, or salt, where the properties of WBM's would limit performance. Composition of drilling mud & drill cutting is being monitored through NABL approved agencies. Results are provided as part of <b>Annexure -1</b> .
(x)	Company shall prepare operating manual in respect of all activities, which would cover all safety & environment related issues and measures to be taken for protection. One set of environmental manuals shall be made available at the drilling site/ project site. Awareness shall be created at each level of the management. All the schedules and results of environmental monitoring shall be available at the project site office. Remote monitoring of site should be done.	Standard Operating Procedures have been developed for rig move and drilling related activities and are being implemented under the supervision of dedicated HSE field staff. These include Permit to Work, Confined Space entry, Lock Out Tag Out, Work at Height, route survey map, waste management etc. Cairn has prepared the HSE manual specific to the drilling operations covering all the Occupational health, safety and environmental requirements. New joiner induction, toolbox talks and HSE trainings ensure that all crew are made aware of the HSE requirements and procedures to follow at the drill site. Environmental monitoring is being conducted as per schedule and records are maintained.
(y)	Process safety and risk assessment studies shall be further carried out using advanced models, and the mitigating measures shall be undertaken accordingly.	Process safety and risk assessment studies like; HAZOP (Hazard and Operability), HAZID (Hazard Identification), QRA (Qualitative Risk Assessment), FERA (Fire & Explosion Risk Assessment) and COMAH (Control of Major Accident Hazards), P&D and Cause and effect regular update, robust MOC procedure, 100% completion of CFTs, carrying out Risk assessments and JSA for all critical activities, etc. are being implemented during the project and operations stages, as appropriate. Further Recommendations mentioned in the Risk Assessment Studies being implemented & followed. Cairn has also conducted process safety study using advance 3D models.

**B. GENERAL CONDITIONS:**

S. No.	General condition	Compliance Status
(i)	The project authorities must strictly adhere to the stipulations made by the state Pollution Control Board (SPCB), State Government and/ or any other statutory authority.	Being complied. Compliance reports are being submitted regularly to RSPCB regarding the Consent and Authorization conditions.
(ii)	No further expansion or modifications in the plant shall be	Noted and no activities presently being carried out without any EC

S. No.	General condition	Compliance Status
	carried out without prior approval of the Ministry of Environment, Forest and Climate Change. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.	requirements. Amendment in existing environmental clearances are periodically obtained from MoEF & CC for future expansion and modification projects as per the requirements.
(iii)	The locations of ambient air quality monitoring stations shall be decided in consultation with the State Pollution Control Board (SPCB) and it shall be ensured that at least one stations each is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.	Ambient air quality monitoring is carried out periodically through in-house and 3 <sup>rd</sup> party NABL accredited laboratory. Graphical representation of ambient air quality monitoring results during this EC compliance reporting period is provided in <b>Annexure – 01</b> . Ambient air is monitored as per the environmental monitoring plan approved by RSPCB.
(iv)	The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16 <sup>th</sup> November, 2009 shall be complied with.	Environmental Monitoring for operational sites within RJ-ON block is being carried out based on the Rajasthan State Pollution Control Board (RO) approved plan. The ambient air quality monitoring plan considers upwind and downwind direction, receptors and Ground Level Concentrations (GLCs). Ambient air quality monitoring is carried out as per the approved plan through an NABL accredited inhouse and 3 <sup>rd</sup> party laboratory. Graphical representation of ambient air quality monitoring results is enclosed as <b>Annexure - 01</b> . The average concentrations of all the parameters are well below the NAAQS. The reports are periodically submitted to RSPCB.
(v)	The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).	All the high noisy rotating equipment's are provided with acoustic enclosures, silencers etc. Ambient noise data show that day and night levels are within the prescribed limits as per the Noise Rules. Refer <b>Annexure – 01</b> for details.
(vi)	The Company shall harvest rainwater from the roof tops of the buildings to recharge ground water, and to utilize the same for different industrial operations within the plant.	Rainwater recharge pits have been developed in MPT (of capacity 72225 m <sup>3</sup> ) and in RGT (of capacity 22720 m <sup>3</sup> ). Rainwater from roof top and surface run-off are collected in paved drains and channeled to the groundwater recharge pit after passing through the oil trap. Infiltration wells have been built for recharging groundwater and used for green belt development.

S. No.	General condition	Compliance Status
		<p>Rainwater recharge pit (of capacity ~58,000 m<sup>3</sup>) at NR-1 (Madpura Barwala, Baitu) has been made with provision to conserve the water in deep saline aquifer. Rainwater recharge structures have been developed in 28 operating well pads at various locations within the RJ Block, having 63 rainwater recharge structures with rainwater harvesting potential of 0.28 million KL per annum.</p> <p>Towards natural resource management, CAIRN has constructed 1056 khadins and renovated 28 traditional water harvesting structures (nadi) till date developing the harvesting capacity of the area by ~18 lakh cu m water every year. Cairn is also instrumental in tapping roof top water through proper harvesting facilities in 95 schools, benefitting 8,000+ students and developing rainwater harvesting capacity of 5 lac cubic meter.</p>
(vii)	<p>Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis.</p>	<p>Training on various HSE aspects, including chemicals handling and management, are given to all the employees and contractors periodically. Medical fitness certificates including premedical and routine periodical medical examinations are maintained at site medical center as per the OMR Rules and DGMS requirements.</p>
(viii)	<p>The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, risk mitigation measures and public hearing shall be implemented.</p>	<p>The environmental protection measures and safeguards recommended in EIA-EMP &amp; QRA are being implemented throughout the project life cycle. Cairn is committed to addressing all the issues and concerns raised in public hearing and is implementing time-bound actions. Refer <b>Annexure – 06</b> for PH Compliance status.</p>
(ix)	<p>The company shall undertake all measures for improving socio-economic conditions of the surrounding area. CSR activities shall be undertaken by involving local villagers, administration and other stake holders. Also, eco-developmental measures shall be undertaken for overall improvement of the environment.</p>	<p>Our CSR programs are focused on key areas like Health, Education, Skill Development, Dairy, Natural Resource Management, Drinking Water and Sanitation. Company involves the local communities for the implementation of CSR programs. In addition, even during the program development phase the stakeholders are consulted, and their inputs/ feedback are reviewed and considered wherever possible. Refer <b>Annexure 3</b> for the CSR activities.</p>
(x)	<p>A separate Environmental Management Cell equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.</p>	<p>A team of fourteen environmental professionals are stationed at RJ site to provide necessary technical support to the projects, operation, drilling and Petroleum engineering activities in implementing the</p>

S. No.	General condition	Compliance Status																														
		environmental management measures. Environmental laboratory is set up at the MPT for monitoring ambient air, stack, noise, wastewater, water, solid waste, soil etc., for entire RJ Block. This laboratory is NABL approved and equipped with all necessary equipment. Please refer <b>Annexure – 8</b> for details. In addition, inhouse & periodic 3 <sup>rd</sup> party NABL laboratory is engaged to carry out the environmental monitoring requirements as per the RSPCB approved environmental monitoring plan.																														
(xi)	The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/ pollution control measures shall not be diverted for any other purpose.	Sufficient funds are being earmarked towards capital cost and recurring cost per annum to implement environmental initiatives and related facility operations. Approximate Capital Expenditure (CAPEX) and Operating Expenditure (OPEX) spent in RJ-ON-90/1 Block towards the provisions for environment management are detailed below. <table border="1" data-bbox="1144 662 1812 1247"> <thead> <tr> <th>Financial Year</th> <th>CAPEX (INR)</th> <th>OPEX (INR)</th> </tr> </thead> <tbody> <tr> <td>2016 - 17</td> <td>188,40,943</td> <td>699,40,366</td> </tr> <tr> <td>2017 - 18</td> <td>53,89,955</td> <td>817,52,899</td> </tr> <tr> <td>2018 - 19</td> <td>1,825,43,669</td> <td>1,373,57,426</td> </tr> <tr> <td>2019 - 20</td> <td>468,025,215</td> <td>821,831,880</td> </tr> <tr> <td>2020 - 21</td> <td>3,002,256,713</td> <td>381,673,756</td> </tr> <tr> <td>2021 - 22</td> <td>34,993,115</td> <td>402,052,317</td> </tr> <tr> <td>2022 - 23</td> <td>6,168,47,901</td> <td>305,04,305</td> </tr> <tr> <td>2023 - 24</td> <td>4,827,836</td> <td>878,050,049</td> </tr> <tr> <td><b>2024-25(Apr'24-Sep'24)</b></td> <td><b>9,692,520</b></td> <td><b>444,091,891</b></td> </tr> </tbody> </table>	Financial Year	CAPEX (INR)	OPEX (INR)	2016 - 17	188,40,943	699,40,366	2017 - 18	53,89,955	817,52,899	2018 - 19	1,825,43,669	1,373,57,426	2019 - 20	468,025,215	821,831,880	2020 - 21	3,002,256,713	381,673,756	2021 - 22	34,993,115	402,052,317	2022 - 23	6,168,47,901	305,04,305	2023 - 24	4,827,836	878,050,049	<b>2024-25(Apr'24-Sep'24)</b>	<b>9,692,520</b>	<b>444,091,891</b>
Financial Year	CAPEX (INR)	OPEX (INR)																														
2016 - 17	188,40,943	699,40,366																														
2017 - 18	53,89,955	817,52,899																														
2018 - 19	1,825,43,669	1,373,57,426																														
2019 - 20	468,025,215	821,831,880																														
2020 - 21	3,002,256,713	381,673,756																														
2021 - 22	34,993,115	402,052,317																														
2022 - 23	6,168,47,901	305,04,305																														
2023 - 24	4,827,836	878,050,049																														
<b>2024-25(Apr'24-Sep'24)</b>	<b>9,692,520</b>	<b>444,091,891</b>																														
(xii)	A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zila Parishad/ Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.	Copy of Environment clearance submitted to Panchayat, District Collector office, Barmer Municipal Corporation and NGO. Acknowledge copies of same were submitted during six-monthly EC compliance report for period from April' 19-Sept'19.																														

S. No.	General condition	Compliance Status
(xiii)	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF&CC, the respective Zonal office of CPCB and SPCB. A copy of Environmental Clearance and six-monthly compliance status report shall be posted on the website of the company.	Six-monthly EC compliance reports are submitted regularly to various regulatory authorities such as CPCB, RSPCB and MoEF&CC regional office and uploaded in Cairn India website. Refer the below link for details. <a href="https://www.cairnindia.com/Pages/PoliciesandDisclosures.aspx">https://www.cairnindia.com/Pages/PoliciesandDisclosures.aspx</a>
(xiv)	The environmental statement for each financial year ending 31 <sup>st</sup> March in Form-V as is mandated shall be submitted to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional offices of MoEF&CC by e-mail.	The environmental statement (Form-V) for each financial year ending 31 <sup>st</sup> March is being submitted to RSPCB. Refer <b>Annexure - 9</b> for details. Also, the reports are uploaded in Cairn India website. Refer the below link for details. <a href="https://www.cairnindia.com/Pages/PoliciesandDisclosures.aspx">https://www.cairnindia.com/Pages/PoliciesandDisclosures.aspx</a>
(xv)	The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry at <a href="http://moef.nic.in">http://moef.nic.in</a> . This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers, that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional office of the Ministry.	A public notice informing the grant of this EC by MOEF&CC and availability of its copies with RSPCB and on MoEF&CC website was published by Cairn as follows <ul style="list-style-type: none"> <li>• First India Express (English), Jaipur on 17-04-2019</li> <li>• Janta Shakar (Hindi) Barmer District edition on 17-04-2019</li> </ul>
10.	The Ministry reserves the right to stipulate additional conditions, if found necessary at subsequent stages and the project proponent shall implement all the said conditions in a time bound manner. The Ministry may revoke or suspend the environmental clearance, if implementation of any of the above conditions is not found satisfactory.	Noted. All conditions shall be implemented to the satisfactory requirements. Noted.
11	The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Water Pollution) Act, 1981, the Environment (Protection)	Noted for compliance.

S. No.	General condition	Compliance Status
	Act, 1986, the Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991, read with subsequent amendments therein.	

**Name of the Project:** Drilling of Exploratory/Appraisal Wells (300) at RJ-ON-90/1 Block of M/s Cairn India Ltd. at District Barmer & Jalore, Rajasthan - Environment Clearance

**Clearance Letter No:** F. No. J-11011/25/2013-IA II (I), dated: 8<sup>th</sup> August 2014

**Period of Compliance Report:** EC Compliance Reporting period is **April-24 to September-24**

The point wise compliance is being detailed below:

S. No.	EC Conditions	Compliance Status
<b>A.</b>	<b>SPECIFIC CONDITIONS</b>	
i	This EC is only for Exploratory Drilling. In case Development drilling is to be done in future, prior clearance must be obtained from the Ministry	Vedanta has already obtained Environmental Clearance for “Expansion of onshore oil and gas production from existing 300,000 to 400,000 bopd and 165 to 750 MMSCFD from RJ-ON-90/1 Block, Barmer, Rajasthan” vide letter no. F. No. J/11011/13/2018/IA-II(I) dated 11 <sup>th</sup> April 2019. Refer <b>Annexure – 7</b> for EC details.
ii.	Ambient air quality shall be monitored near the closest human settlements as per the National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16 <sup>th</sup> November 2009 for PM10, PM2.5, S02, NOx, CO, methane & Non-methane HC etc.	Environmental Monitoring for RJ-ON block is being carried out based on the Rajasthan State Pollution Control Board (RO) approved plan. Ambient air quality monitoring along with Noise monitoring twice upwind and downwind direction predrilling as well as during drilling period. The reports are periodically submitted to RSPCB. Graphical representation of ambient air quality monitoring results is enclosed as <b>Annexure - 01</b> . Ambient air quality monitoring is also being carried out during drilling activities.
iii.	Mercury shall also be analyzed in air, water and drill cuttings twice during drilling period.	Mercury is being analyzed in air, water and drill cuttings during drilling activities.
iv.	Approach road shall be made pucca to minimize generation of suspended dust.	As far as possible, the existing pucca roads are being used for the drilling rig and associated facilities movements. Wherever the roads to be laid / repaired, the same has been carried out. However, where pucca roads cannot be laid, then periodic water sprinkling is being carried out to minimize generation of the dust.
v.	The company shall make the arrangement for control of noise from the drilling activity. Acoustic enclosure shall be provided to DG sets and proper stack height	Noted for compliance. Temporary DG sets used in the drilling activity are provided with acoustic enclosures on exhaust to control noise emissions and adequate stack height for effective air

S. No.	EC Conditions	Compliance Status
	shall be provided as per CPCB guidelines.	pollution dispersion as per CPCB guidelines.
vi.	Total water requirement shall not exceed 25m <sup>3</sup> /day and prior permission shall be obtained from the concerned agency.	As per amended EC obtained on 23 <sup>rd</sup> March 2015, MoEF & CC has permitted water consumption up to 66 m <sup>3</sup> /day depending on well depth. Cairn shall use the water for drilling and associated facilities purposes such as camps, civil works etc., and source the same from the nearest terminals. CGWA NOC for Cairn RJ-ON-90/1 block has expired and renewal is already applied to obtained permission for sourcing of ground water from deep saline aquifers within block area. However, wherever Cairn supplied water cannot be used considering the distance, then water from local approved sources shall be used.
vii.	The company shall construct the garland drain all around the drilling site to prevent run off of any oil containing waste into the nearby water bodies. Separate drainage system shall be created for oil contaminated and non-oil contaminated. Effluent shall be properly treated, and treated wastewater shall conform to CPCB standards.	Storm water management measures are being taken at drill sites. The drilling fluid is stored in HDPE lined pits inside drill sites for time being and further it's treated for re-use and final disposal, the residual liquid at bottom of pits also disposed securely post solar evaporation of water. The synthetic oil-based drill cuttings are disposed to the cement industries towards co-processing and water-based mud drill cuttings are used for sub grade preparation within Cairn land.
viii.	Drilling wastewater including drill cuttings wash water shall be collected in disposal pit lined with HDPE lining evaporated or treated and shall comply with the notified standards for onshore disposal. The membership of common TSDF shall be obtained for the disposal of drill cuttings and hazardous waste. Otherwise, secured land fill shall be created at the site as per the design approved by the CPCB and obtain authorization from the SPCB. Copy of authorization or membership of TSDF shall be submitted to Ministry's Regional Office at Lucknow.	The following practices are typically being followed: <ul style="list-style-type: none"> <li>• Drilling fluids coming out of the drilled hole is passed through shale shaker to remove drill cuttings and the separated mud is recirculated for drilling.</li> <li>• Water Based Mud (WBM) and Synthetic Oil Based Mud (SOBM) are recycled till the rheological properties of the mud are lost. The spent WBM is disposed while SOBM is preserved for next drilling activity.</li> <li>• WBM drill cuttings are being utilized in subgrade construction (filling of low-lying areas and construction of well pads etc.)</li> <li>• The solid residue is transported to secured captive hazardous waste landfill for disposal situated at Mangala Processing Terminal (MPT) or directly transported to cement industry for coprocessing.</li> <li>• The landfill is provided with leachate collection system and the design and operation is carried out as per CPCB guidelines and approved by the Rajasthan State Pollution</li> </ul>



S. No.	EC Conditions	Compliance Status
		<p>Control Board (RSPCB).</p> <ul style="list-style-type: none"> <li>• The drilling wastewater is treated through solid liquid separation unit partially for reuse for drilling activity and partially for injection purpose.</li> <li>• Cairn is disposing Synthetic Oil Based Mud (SOBM) drill cuttings towards co-processing as alternate fuel and raw material (AFR) to the cement industries. RSPCB permission is also obtained for regular co-processing of SOBM drill cuttings.</li> <li>• Cairn has captive TSDF at Mangala Processing terminal (MPT) for disposal of hazardous waste, thus no membership is required with common TSDF.</li> </ul>
ix.	<p>Good sanitation facility shall be provided at the drilling site. Domestic sewage shall be disposed off through septic tank/ soak pit.</p>	<p>Each drill site is provided with mobile toilets. These toilets are connected to the septic tanks followed by soak pits.</p>
x.	<p>Oil spillage prevention scheme shall be prepared. In case of oil spillage/contamination, action plan shall be prepared to clean the site by adopting proven technology. The recyclable waste (oily sludge) and spent oil shall be disposed of to the authorized recyclers.</p>	<p>Oil Spill Management Plan is prepared and in place. Dedicated oil spill response team is stationed at MPT, backed by the fire services team.</p> <p>The oil contaminated soil and wastes are being disposed to captive TSDF or co-processing at cement industry. Waste oil disposed to CPCB registered and SPCB authorized recyclers.</p>
xi.	<p>The company shall comply with the guidelines for disposal of solid waste, drill cutting and drilling fluids for onshore drilling operation notified vide GSR.546 (E) dated 30<sup>th</sup> August, 2005.</p>	<p>During drilling campaign, Cairn complied with the following requirements.</p> <ul style="list-style-type: none"> <li>• Diesel based mud or oil-based mud (OBM) is not used in any of the drilling of the wells.</li> <li>• Water Based Mud (WBM) is used as the drilling fluid for drilling the upper section of well (~250 - 500 meters) or up to complete target depth of the well subject to geological formation. In case of hard strata, Synthetic Oil Based Mud (SOBM) is used to counter difficult drilling situations, such as high down hole temperatures, hydrated shales, or salt, where the properties of WBMs would limit performance.</li> <li>• SOBM Saraline 185v/ MAK Drillol is biodegradable, has low toxicity and aromatic content &lt;1%. Barite used in preparation of DF contain Hg&lt;1 mg/kg &amp; Cd&lt;3mg/kg.</li> <li>• Drill sites are temporarily acquired and based on the drilling success; permanent land acquisition is planned. If the drilling is unsuccessful, the drilled well is plugged</li> </ul>

S. No.	EC Conditions	Compliance Status
		<p>drilling site is restored.</p> <p>Refer <b>Annexure – 11</b> for GSR 546 (E) compliance details.</p>
xii.	<p>The Company shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed. Possibility of using ground flare shall be explored. At the place of ground flaring, the overhead flaring stack with knockout drums shall be installed to minimize gaseous emissions during operation.</p>	<p>All storage tanks and process vessels have been installed with SIL (In simple terms, SIL is Safety Integrity Level, which is a measurement of performance required for a safety instrumented function) rated instrument systems including high, high-high and low, low-low alarms for information to DCS (Digital Control System) panel engineers for immediate intervention. Also, the process systems are installed with Emergency Shut Down Devices (ESDs)/ valves to isolate the supply during any leaks and prevent spills. Oil spill contingency plan is prepared and implemented at sites. Secondary containment has been provided at all hydrocarbon storage areas in accordance with OISD standards. The process vessels have been provided with kerbs to contain accidental spills.</p> <p>Full-fledged dedicated oil spill response team stationed at MPT providing coverage to entire Rajasthan field, backed up fire services team consisting of trained professionals. Firefighting measures include hydrant system, foam system, portable fire extinguishers, water spray systems, fireproof electrical fittings, and fire and gas detection systems. In addition to above, total 09 Nos. of Multipurpose Fire tenders stationed at MPT (4), RGT (2), Bhagyam (2), Aishwariya (1) for firefighting and emergency response round the clock in RJON block area.</p>
xiii.	<p>The company shall develop a contingency plan for H<sub>2</sub>S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with personal H<sub>2</sub>S detectors in locations of high risk of exposure along with self-containing breathing apparatus.</p>	<p>Cairn has developed a H<sub>2</sub>S management procedure. PPE, personal monitors and the other gadgets have been procured as per the requirements of the procedure.</p> <p>An elaborate H<sub>2</sub>S induction program is included as part of employee and visitor's induction modules. One-day H<sub>2</sub>S certification program, as per ANSI Z390.1 guideline, is being conducted for all the Cairn technical employees and field supervisory staff. Personnel working at well pads and operational areas inside terminals are provided with personal H<sub>2</sub>S escape mask and H<sub>2</sub>S monitors that will trigger an alarm if TLV value exceeds 10 ppm. Self-Contained Breathing Apparatus (SCBA) sets have been installed at all critical locations in terminals and well pads for the personnel to use in case of inadvertent H<sub>2</sub>S exposure. Cairn has installed on-line H<sub>2</sub>S detection system at MPT, Mangala and Bhagyam well pads.</p>

S. No.	EC Conditions	Compliance Status
xiv.	On completion of drilling, the company has to plug the drilled wells safely and obtain certificate from environment safety angle from the concerned authority.	All the wells drilled are in secured sites. Wells are temporary abandoned until commercial production is started, or economic viability is determined. Wells not economically viable to produce are abandoned following regulatory requirements of OMR and OISD guidelines.  In the said reporting period, Cairn has not plugged & abandoned any exploratory well. Cairn complies with OMR 58 regarding well plugged & abandoned requirements.
xv.	Blow Out Preventer (BOP) system shall be installed to prevent well blowouts during drilling operations. BOP measures during drilling shall focus on maintaining well bore hydrostatic pressure by proper pre-well planning and drilling fluid logging etc.	Noted for the compliance.  Refer <b>Annexure – 12</b> for details of BOP
xvi.	Emergency Response Plan (ERP) shall be based on the guidelines prepared by OISD, DGMS and Govt. of India.	Incident/Emergency Response Plan is in place based on national and international guidelines. Each field in the Block has a separate Response Plan. This plan was submitted to the regulatory and district administration.
xvii.	The company shall take measures after completion of drilling process by well plugging and secured enclosures, decommissioning of rig upon abandonment of the well and drilling site shall be restored to the original condition. In the event that no economic quantity of hydrocarbon is found a full abandonment plan shall be implemented for the drilling site in accordance with the applicable Indian Petroleum Regulations.	All the wells drilled are in secured sites. Wells are temporary abandoned until commercial production is started, or economic viability is determined. Wells not economically viable to produce are abandoned following regulatory requirements of OMR and OISD guidelines. Cairn complies with OMR 58 regarding well plugged & abandoned requirements during reporting period.
xviii.	Abandoned well inventory and remediation plan shall be submitted within six months from the date of issue of letter.	
xix.	Occupational health surveillance of the workers should be carried out as per the prevailing Acts and Rules.	Annual industrial hygiene survey is carried out by third-party experts at MPT, RGT and Bhagyam. This survey includes qualitative and quantitative survey of exposure of workers to chemicals, dust, noise and heat, adequacy of illumination manual material handling conditions, and office ergonomics. Annual health checks are conducted for all

S. No.	EC Conditions	Compliance Status
		<p>workers exposed to hazardous work environment. The following facilities are available to provide first aid and emergency care to workers in Rajasthan.</p> <ul style="list-style-type: none"> <li>• Round-the-clock first-aid and emergency medical facilities manned by qualified doctors and paramedics</li> <li>• Availability of advanced life-support ambulances at all medical centers</li> <li>• Cairn has entered contract with ASAP for fixed wing air-ambulance services equipped with emergency and critical medical (tertiary) care equipment.</li> <li>• For secondary medical care, Cairn has a formal contract with Thar hospital at Barmer.</li> <li>• Medical fitness certificates are maintained at site medical center as per the OMR Rules and DGMS requirements.</li> </ul>
xx.	<p>In case the commercial viability of the project is established, the Company shall prepare a detailed plan for development of oil and gas fields and obtain fresh environmental clearance from the Ministry.</p>	<p>Noted for compliance.</p> <p>Vedanta has obtained Environmental Clearance for “Expansion of onshore oil and gas production from existing 300,000 to 400,000 bopd and 165 to 750 MMSCFD from RJ-ON-90/1 Block, Barmer, Rajasthan” vide letter no. F. No. J/11011/13/2018/IA-II(I) dated 11<sup>th</sup> April 2019. Refer <b>Annexure – 07</b> for EC details.</p>
xxi.	<p>Restoration of the project site shall be carried out satisfactorily and report shall be sent to the Ministry's Regional Office at Lucknow.</p>	<p>No site was restored during the compliance period.</p>
xxii.	<p>Oil content in the drill cuttings shall be monitored by some authorized agency and report shall be sent to the Ministry's Regional Office at Lucknow.</p>	<p>Water Based Mud (WBM) is used as the drilling fluid for drilling the upper section of well (~250 - 500 meters) or up to complete target depth of the well subject to geological formation. In case of hard strata, Synthetic Based Mud (SOBM) is used to counter difficult drilling situations, such as high down hole temperatures, hydrated shales, or salt, where the properties of WBMs would limit performance. The WBM cuttings generated are non-hazardous in nature. The drill cuttings from SOBM section are passed through cutting dryer to separate the SOBM to extent possible for reuse and drill cuttings are disposed to cement industry for coprocessing on real time basis. Oil content in SOBM drill cuttings is around 10 mg/kg.</p>

S. No.	EC Conditions	Compliance Status																				
xxiii.	Under Enterprise Social Commitment (ESC), sufficient budgetary provision shall be made for health improvement, education, water and electricity supply etc. in and around the project.	<p>Working with communities is an integral part of Cairn sustainability strategy and the development of our long-term plans. Our ability to work collaboratively and our customized approach for every community we function in, is what sets us apart. These are crucial to our long-term success and our prerogative to operate.</p> <p>In order to ensure uniformity in approach towards conceptualizing and implementing any CSR project, a clearly laid down CSR policy has been prepared which is in line with section VII of companies act. To further elaborate and decipher the policy a CSR process document highlighting the monitoring mechanism, reporting, assessments, etc. has also been developed specific to Cairn business operations.</p> <p>Furthermore, to have a detail understanding of all the initiatives implemented under CSR for Apr'24-Sep'24, refer <b>Annexure 03</b>. Cairn spent on CSR is detailed below.</p> <p>During the period of Apr'24-Sep'24 ~ 3.5 cr has been spent towards CSR activities in the operational areas of Cairn.</p> <table border="1" data-bbox="1121 695 1835 1203"> <thead> <tr> <th data-bbox="1121 695 1499 743">Financial Year</th> <th data-bbox="1499 695 1835 743">CSR expenditure in Rs.</th> </tr> </thead> <tbody> <tr> <td data-bbox="1121 743 1499 797">2016 - 17</td> <td data-bbox="1499 743 1835 797">32,00,00,000</td> </tr> <tr> <td data-bbox="1121 797 1499 850">2017 - 18</td> <td data-bbox="1499 797 1835 850">23,33,00,000</td> </tr> <tr> <td data-bbox="1121 850 1499 904">2018 - 19</td> <td data-bbox="1499 850 1835 904">29,67,00,000</td> </tr> <tr> <td data-bbox="1121 904 1499 958">2019 - 20</td> <td data-bbox="1499 904 1835 958">26,36,50,000</td> </tr> <tr> <td data-bbox="1121 958 1499 1011">2020 - 21</td> <td data-bbox="1499 958 1835 1011">16,47,00,000</td> </tr> <tr> <td data-bbox="1121 1011 1499 1065">2021 - 22</td> <td data-bbox="1499 1011 1835 1065">25,53,00,000</td> </tr> <tr> <td data-bbox="1121 1065 1499 1118">2022 - 23</td> <td data-bbox="1499 1065 1835 1118">1,27,20,000</td> </tr> <tr> <td data-bbox="1121 1118 1499 1172">2023 - 24</td> <td data-bbox="1499 1118 1835 1172">12,00,00,000</td> </tr> <tr> <td data-bbox="1121 1172 1499 1203">2024 – 25(Apr'24-Sep'24)</td> <td data-bbox="1499 1172 1835 1203">3,50,00,000</td> </tr> </tbody> </table>	Financial Year	CSR expenditure in Rs.	2016 - 17	32,00,00,000	2017 - 18	23,33,00,000	2018 - 19	29,67,00,000	2019 - 20	26,36,50,000	2020 - 21	16,47,00,000	2021 - 22	25,53,00,000	2022 - 23	1,27,20,000	2023 - 24	12,00,00,000	2024 – 25(Apr'24-Sep'24)	3,50,00,000
Financial Year	CSR expenditure in Rs.																					
2016 - 17	32,00,00,000																					
2017 - 18	23,33,00,000																					
2018 - 19	29,67,00,000																					
2019 - 20	26,36,50,000																					
2020 - 21	16,47,00,000																					
2021 - 22	25,53,00,000																					
2022 - 23	1,27,20,000																					
2023 - 24	12,00,00,000																					
2024 – 25(Apr'24-Sep'24)	3,50,00,000																					
xxiv.	An audit shall be done to ensure that the Environment Management Plan is implemented in totality and report shall be submitted to the Ministry's Regional Office.	The EMP is being implemented during drilling campaign. The audit was conducted during exploratory and appraisal drilling activity and report is enclosed as <b>Annexure - 14</b>																				
xxv.	All the commitment made regarding issues raised	Being complied with. Refer <b>Annexure – 06</b> for details.																				

S. No.	EC Conditions	Compliance Status
	during the Public Hearing/ consultation meeting held on 12 <sup>th</sup> November 2013 and 13 <sup>th</sup> November 2013 and shall be satisfactorily implemented.	
xxvi.	All personnel including those of contractors shall be trained and made fully aware of the hazards, risks and controls in place.	Drilling activities are always conducted with highly specialized and skilled personnel. Cairn ensures adequate supervision and inspections to ensure drilling contractor conducts training and certification as per schedule. In daily toolbox talk, hazards, risk associated and control measures to be adopted/ in place is being briefed.
xxvii.	Company shall have own Environment Management Cell having qualified persons with proper background.	A team of eleven environmental professionals are stationed at RJ site to provide necessary technical support to the projects, operation, drilling and Petroleum engineering activities in implementing the environmental management measures.  Environmental laboratory is set up at the MPT for monitoring ambient air, stack, noise, wastewater, water, solid waste, soil etc., for entire RJ Block. This laboratory is NABL approved and equipped with all necessary equipment's. Please refer <b>Annexure – 8</b> for details. In addition, periodic 3 <sup>rd</sup> party & inhouse NABL laboratory is engaged to carry out the environmental monitoring requirements as per the RSPCB approved environmental monitoring plan.
xxviii.	Company shall prepare operating manual in respect of all activities. It shall cover all safety & environment related issues and system. Measures to be taken for protection. One set of environmental manual shall be made available at the drilling site/ project site. Awareness shall be created at each level of the management. All the schedules and results of environmental monitoring shall be available at the project site office.	Standard Operating Procedures have been developed for rig move and drilling related activities and are being implemented under the supervision of dedicated HSE field staff. These include Permit to Work, Confined Space entry, Lock Out Tag Out, Work at Height, route survey map etc. Cairn has prepared the HSE manual specific to the drilling operations covering all the Occupational health, safety and environmental requirements.  New joiner induction, toolbox talk and HSE trainings ensure that all crew are made aware of the HSE requirements and procedures to follow at the drill site. Environmental monitoring schedule is prepared based on the drilling plan and records are maintained.
<b>B</b>	<b>GENERAL CONDITIONS:</b>	
i	The project authorities must strictly adhere to the stipulations made by the Rajasthan State Pollution	Being complied. Compliance reports are being submitted regularly to RSPCB regarding the Consent and Authorization conditions.

S. No.	EC Conditions	Compliance Status
	Control Board (RSPCB), State Government and any other statutory authority.	
ii	No further expansion or modification in the project shall be carried out without prior approval of the Ministry of Environment & Forests. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.	Noted and no activities presently being carried out without any EC requirements.
iii	The project authorities must strictly comply with the rules and regulations under Manufacture, Storage and Import of Hazardous Chemicals Rules, 2000 as amended subsequently. Prior approvals from Chief Inspectorate of Factories, Chief Controller of Explosives, Fire Safety Inspectorate etc. must be obtained, wherever applicable.	<p>Provisions of Manufacture, Storage and Import of Hazardous chemicals Rules are complied. On-site and offsite emergency preparedness plans are implemented, and regular mock drills are conducted at site to ensure effective response to any emergency situations.</p> <p>All the activities within RJ Block are governed by Oil Mine Regulations, 2017 and thus Factories Act is not applicable. However necessary licenses to store petroleum/hydrocarbons are obtained from the Chief Controller of Explosives, Nagpur. High voltage energization and equipment Type approvals for the electrical installations in the facilities are obtained from Director General of Mines Safety located at Ghaziabad (Zonal office), Ajmer (Regional office) and Dhanbad (Head quarter) are obtained.</p>
iv	The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).	<p>All the DGs used for drilling and in mud plants are provided with acoustic enclosures, silencers etc. Also, the drilling is temporary activity being carried out for maximum 45 days per exploratory well. Ambient noise levels conform to the standards prescribed under EPA Rules, 1989.</p> <p>Graphical representation of ambient environment quality monitoring results is enclosed as <b>Annexure - 01</b>.</p>

S. No.	EC Conditions	Compliance Status
v	A separate Environmental Management Cell equipped with full-fledged laboratory facilities must be set up to carry out the environmental management and monitoring functions.	<p>A team of eleven environmental professionals are stationed at RJ site to provide necessary technical support to the projects, operation, drilling and Petroleum engineering activities in implementing the environmental management measures.</p> <p>Environmental laboratory is set up at the MPT for monitoring ambient air, stack, noise, wastewater, water, solid waste, soil etc., for entire RJ Block. This laboratory is NABL approved and equipped with all necessary equipment's. Please refer <b>Annexure – 8</b> for details. In addition, periodic 3<sup>rd</sup> party &amp; inhouse NABL laboratory is engaged to carry out the environmental monitoring requirements as per the RSPCB approved environmental monitoring plan.</p>
vi	A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad, Municipal Corporation, Urban Local Body and the local NGO, if any, from whom suggestions representations, if any, were received while processing the proposal. The clearance letter shall also be put on the web site of the company by the proponent.	Copy of Environment clearance is submitted to Panchayat, District Collector office, RSPCB and NGO. No suggestion or representation from any of NGO and or local bodies were received in the said EC compliance reporting period.
vii	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MOEF, the respective Zonal Office of CPCB and the RSPCB. The criteria pollutant levels namely; PM10, SO <sub>2</sub> , NO <sub>x</sub> , HC (Methane & Non-methane), VOCs (ambient levels as well as stack emissions) or critical sectorial parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	<p>Six-monthly EC compliance reports are submitted regularly to various regulatory authorities such as CPCB, RSPCB and MoEF&amp;CC regional office and also uploaded in Cairn India website. Refer the below link for details. However environmental monitoring was not carried in the said reporting period, since no exploratory and appraisal well were drilled. Refer the below link for details.</p> <p><a href="https://www.cairnindia.com/Pages/PoliciesandDisclosures.aspx">https://www.cairnindia.com/Pages/PoliciesandDisclosures.aspx</a></p>



S. No.	EC Conditions	Compliance Status
viii	<p>The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MOEF, the respective Zonal Office of CPCB and the RSPCB. The Regional Office of this Ministry / CPCB / RSPCB shall monitor the stipulated conditions. Environmental Clearance and six-monthly compliance status reports shall be posted on the website of the company.</p>	
ix	<p>The environmental statement for each financial year ending 31<sup>st</sup> March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental conditions and shall also be sent to the respective Regional Offices of the MOEF by e-mail.</p>	<p>The environmental statement (Form-V) for each financial year ending 31<sup>st</sup> March is being submitted to RSPCB. Refer <b>Annexure - 9</b> for details. Also, the reports are uploaded in Cairn India website. Refer the below link for details.  <a href="https://www.cairnindia.com/Pages/PoliciesandDisclosures.aspx">https://www.cairnindia.com/Pages/PoliciesandDisclosures.aspx</a></p>
x	<p>The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the RSPCB and may also be seen at Website of the Ministry of Environment and Forests at <a href="http://envfor.nic.in">http://envfor.nic.in</a>. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality</p>	<p>The advertisement was issued in two local Newspapers widely circulated in Barmer and Jalore Districts of Rajasthan. Details of same were submitted during last EC compliance report in Dec'15.</p> <ul style="list-style-type: none"> <li>• "Daily Janta Sahar" in Hindi language, Barmer District edition - published on 27<sup>th</sup> August 2014.</li> <li>• "Daily Janta Sahar" in Hindi language, Jalore District edition - published on 27<sup>th</sup> August 2014.</li> <li>• "Bhaskar" in Hindi language, Barmer District edition - published on 26<sup>th</sup> August 2014.</li> <li>• "Bhaskar" in Hindi language, Jalore District edition - published on 26<sup>th</sup> August</li> </ul>

S. No.	EC Conditions	Compliance Status
	concerned and a copy of the same shall be forwarded to the Regional office.	2014.
xi	Project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.	Land for each well exploratory well is acquired under temporary lease for initial three years based on the exploratory and appraisal drilling campaign. The first well was drilled on 3 <sup>rd</sup> September 2014. Cairn will inform MoEF&CC on financial closure of the project once all the exploratory and appraisal wells are drilled.

## **ANNEXURE NO. 01**

Environmental Monitoring Report  
(For the Period 1<sup>st</sup> April 2024 to 30<sup>th</sup> September 2024)

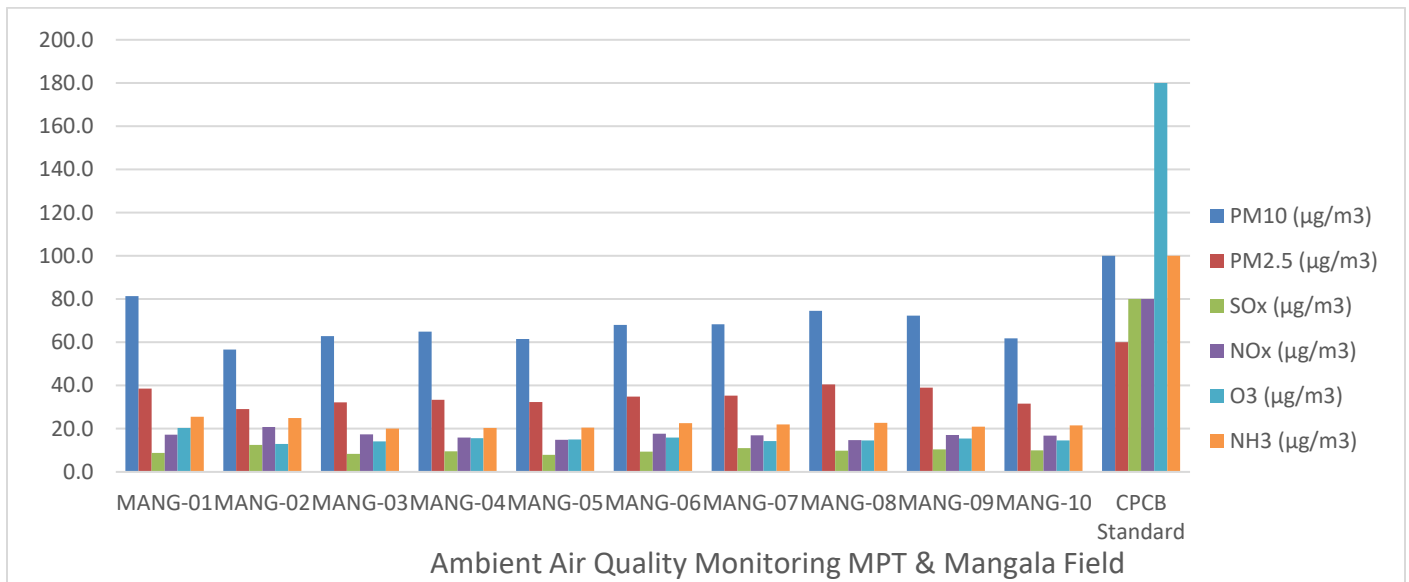
### Ambient Air Quality Monitoring Results in RJ-ON-90/1 Block Area

Monthly ambient air quality monitoring is carried out at 43 locations across the block. The monitoring locations are approved by the RSPCB and listed in table below.

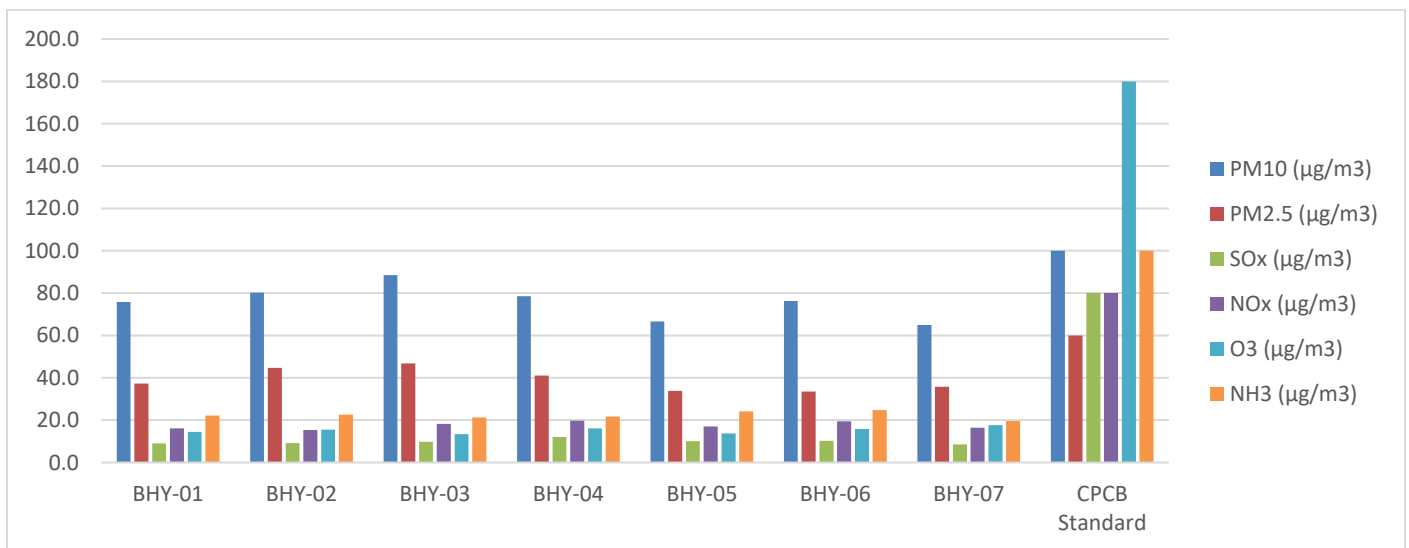
S. No.	Monitoring Location	Location Code
1.	North warehouse & Liquid Mud Plant	MANG-01
2.	Enhanced Oil Recovery Chemical Storage Warehouse Plant for EOR and MPT Gate No. 06	MANG-02
3.	Mangala Processing Terminal Main Gate No.1	MANG-03
4.	Mangala Processing Terminal Main Gate No.2	MANG-04
5.	OB Main Gate	MANG-05
6.	Mangala Processing Terminal Main Gate No.3 for Well Pad 7, 8 and 9	MANG-06
7.	Mangala WP-17	MANG-07
8.	Mangala Well Pad 01 for 3, 10, 11 & 18	MANG-08
9.	Central Polymer Facility (CPF) for 2, 4, 5, 6, 12, 13, 14, 15 and 16	MANG-09
10.	Nagana Police Station	MANG-10
11.	Bhagyam Well Pad 6 for Cluster WP 4, 5, 6, 7 & BH 06	BHY-01
12.	Bhagyam Well Pad 15 for Cluster WP 3, 10, 12, 13 & 15	BHY-02
13.	Bhagyam Well Pad 14 For WP 1, 2 & 14	BHY-03
14.	Bhagyam Well Pad 11 for WP 8, 9 & 11	BHY-04
15.	N-I-B (N-I-2)	BHY-05
16.	N-I-C (N-I-3)	BHY-06
17.	N-E-A (N-E-1)	BHY-07
18.	Aishwariya Well Pad 8 for AWP 8 and NA-1	AISH-01
19.	Aishwariya Well Pad 1	AISH-02
20.	Aishwariya Well Pad 2	AISH-03
21.	Aishwariya Well Pad 5	AISH-04
22.	Aishwariya Well Pad 7& 9	AISH-05
23.	Aishwariya Well Pad 3 & 6	AISH-06
24.	Saraswati WP-01	SARA-01
25.	Saraswati Oil WP-02(Down Stream)	SARA-02
26.	Raageshwari Gas Terminal Main Gate No 2	RAAG-01
27.	Raageshwari Gas Terminal OB Camp	RAAG-02
28.	Raageshwari Gas Terminal Well Pad 4	RAAG-03
29.	Raageshwari Gas Terminal Well Pad 7	RAAG-04
30.	Raageshwari Gas Terminal Well Pad 5	RAAG-05
31.	Raageshwari Gas Terminal Well Pad 1	RAAG-06
32.	Raag Oil Well Pad 2	RAAG-07
33.	Raag Oil Well Pad 3	RAAG-08
34.	Raageshwari Deep Gas Project Location-2	RAAG-09
35.	Guda Well Pad 07	RAAG-10
36.	Guda South -02	RAAG-11
37.	Guda Well pad (S-1&S-2)	RAAG-12

38.	Kaameshwari - 02	RAAG-13
39.	Raag oil well pad 01	RAAG-14
40.	Tukaram	RAAG-15
41.	Raageshwari Gas Well Pad 11	RAAG-16
42.	Guda Well Pad 02	RAAG-17
43.	Raag Gas WP-02	RAAG-18
44.	Guda South -7	RAAG-19

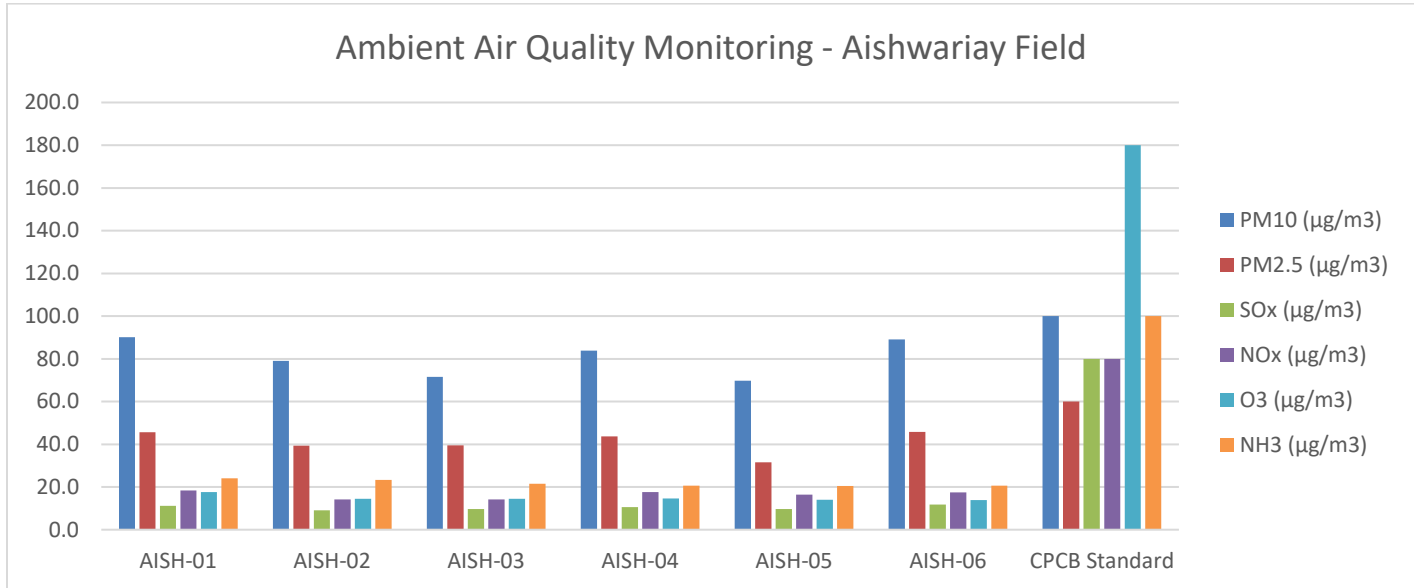
The graphical interpretation of the results is provided below. Methane, NMHC and CO are found BDL at most of the locations.



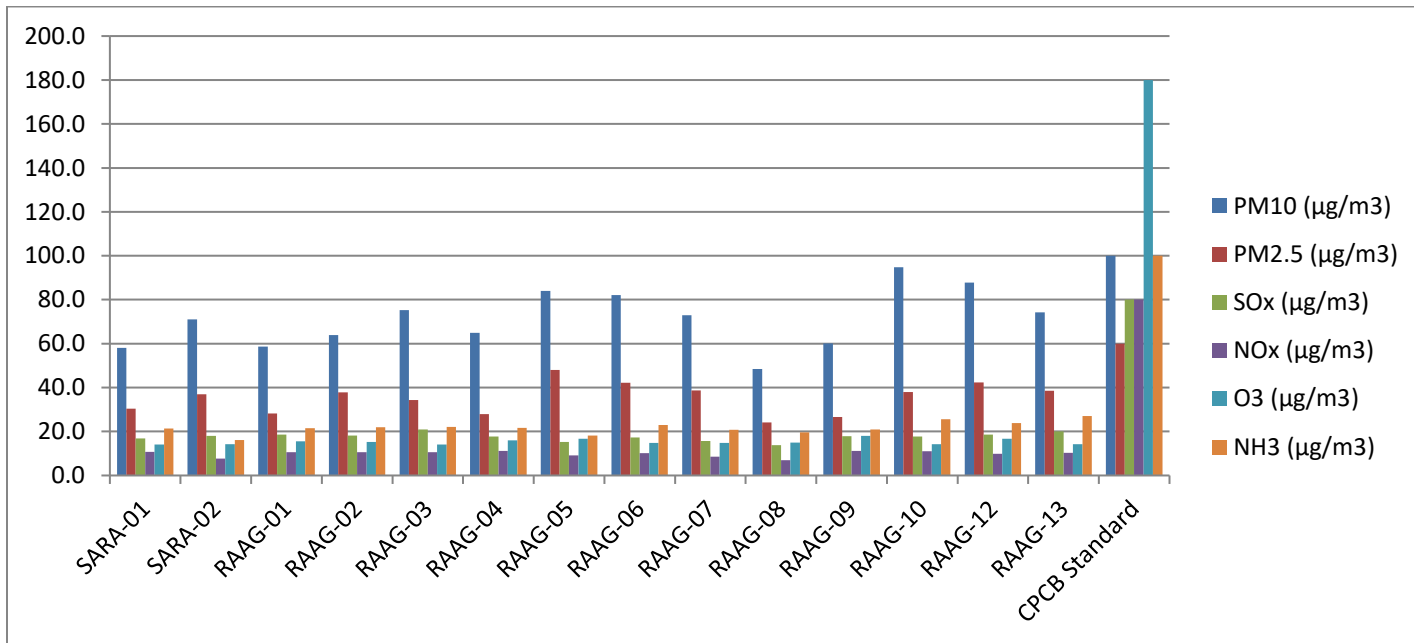
**Figure 1: Graph showing trend of AAQ Monitoring at MPT & Mangala Field**



**Figure 2: Graph showing trend of AAQ Monitoring in Bhagyam & N fields**

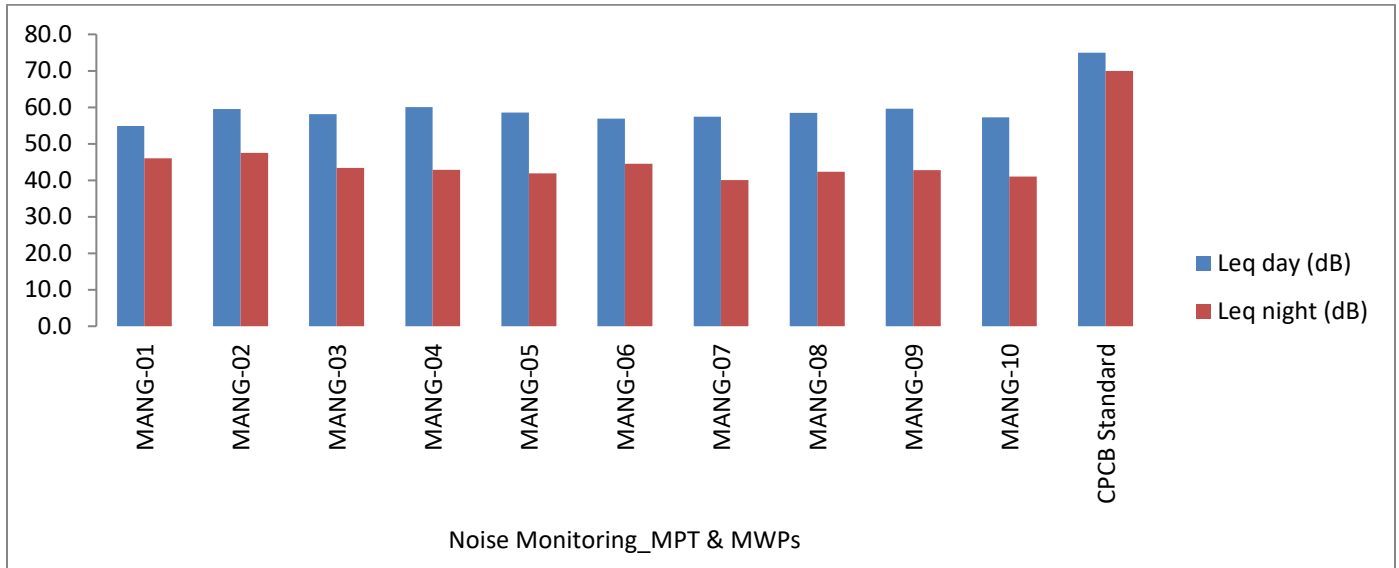


**Figure 3: Graph showing trend of AAQ Monitoring in Aishwariya Field**

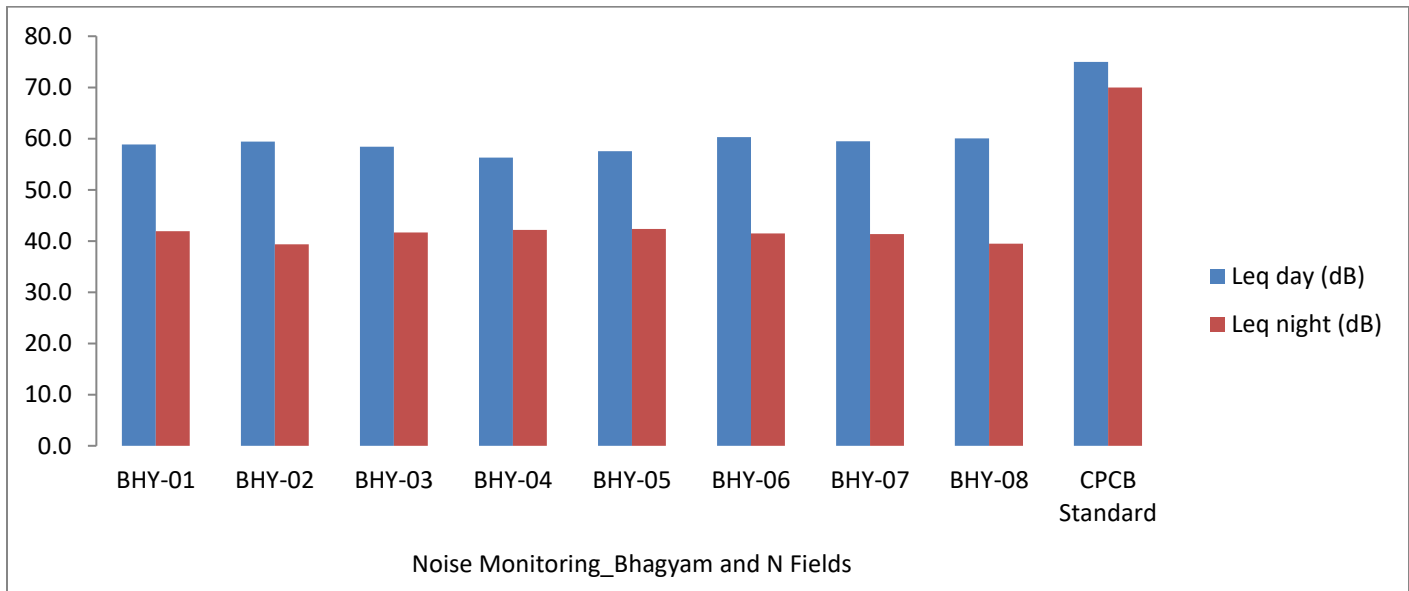


**Figure 4: Graph showing trend of AAQ Monitoring in RGT & South Fields**

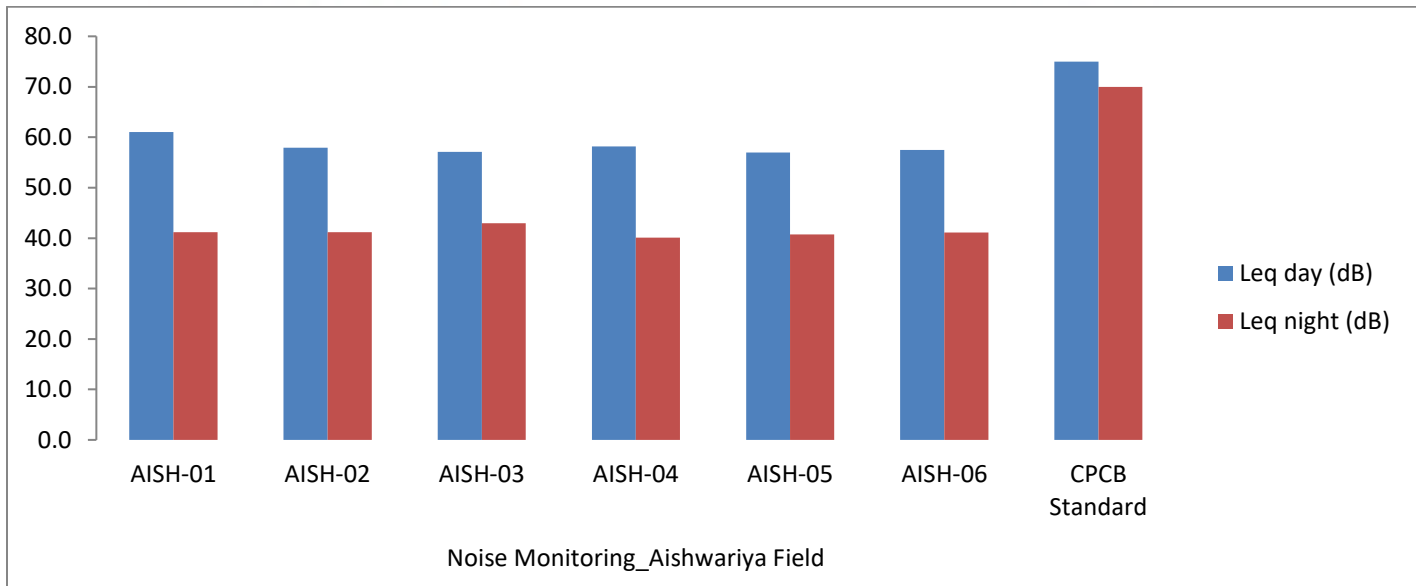
**Graphical Representation of Average Ambient Noise Quality Monitoring Results in RJ-ON-90/1 Block during reporting period:**



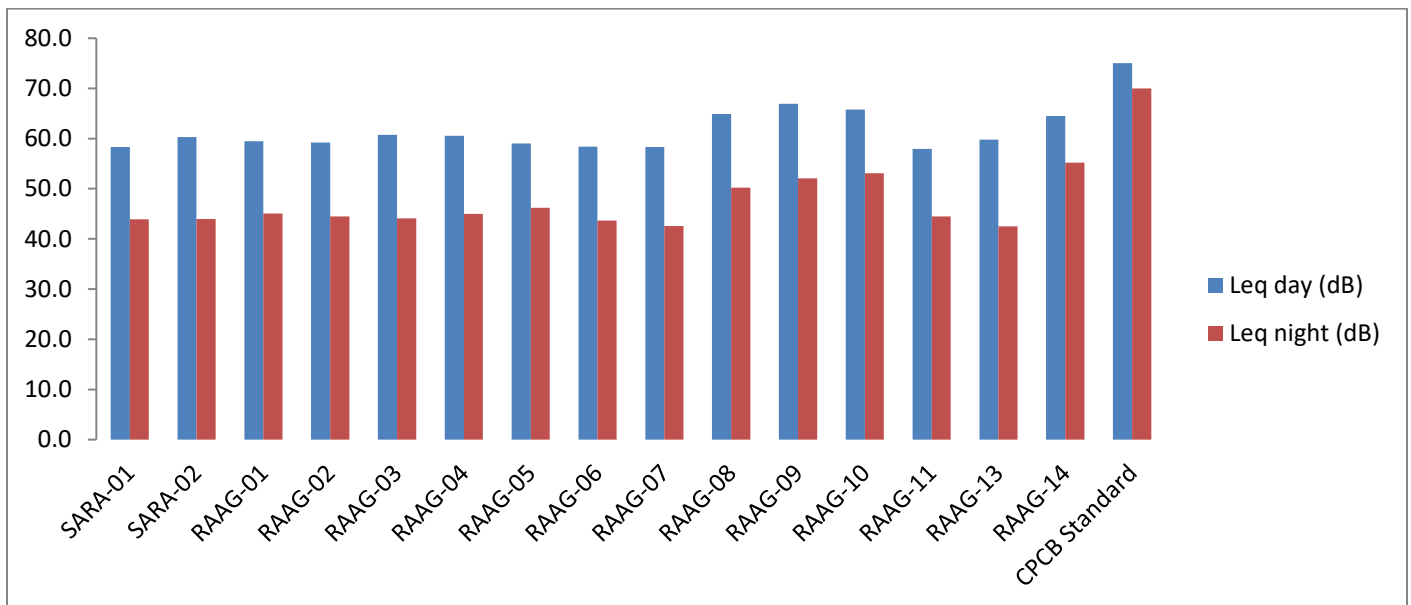
**Figure 5: Graph showing trend of Noise Level equivalent in dB (A) at MPT & Mangala Field**



**Figure 6: Graph showing trend of Noise Level equivalent in dB (A) at Bhagyam and N Fields**



**Figure 7: Graph showing trend of Noise Level equivalent in dB(A) at Aishwariya Field**



**Figure 8: Graph showing trend of Noise Level equivalent in dB(A) at South Fields & Satellite WPs**

### **Stack Monitoring Results in RJ-ON-90/1 Block**

The fuel gas used in boiler does not have any direct traces of NO<sub>x</sub> and SO<sub>x</sub>. However, the same may be available in the form of organic bound with the gaseous, which is directly measured from the flue gas and found to be within the permissible limits.

### **MPT Fuel Gas (Natural Gas) Composition**



Sample Name		Associated Gas
Methane	%	73.69
Ethane	%	6.07
Propane	%	3.29
Carbon Dioxide	%	13.16
i-Butane N-Butane Neo-Pentane I-Pentane N-Pentane	%	3.20
N-Hexane	%	0.05
Nitrogen	%	0.54
Helium	%	0.00
Hydrogen	%	0.00
<b>Total</b>	<b>%</b>	<b>100.0</b>

Graphical representation of average emission monitoring results during the reporting period for boiler stacks are provided below:

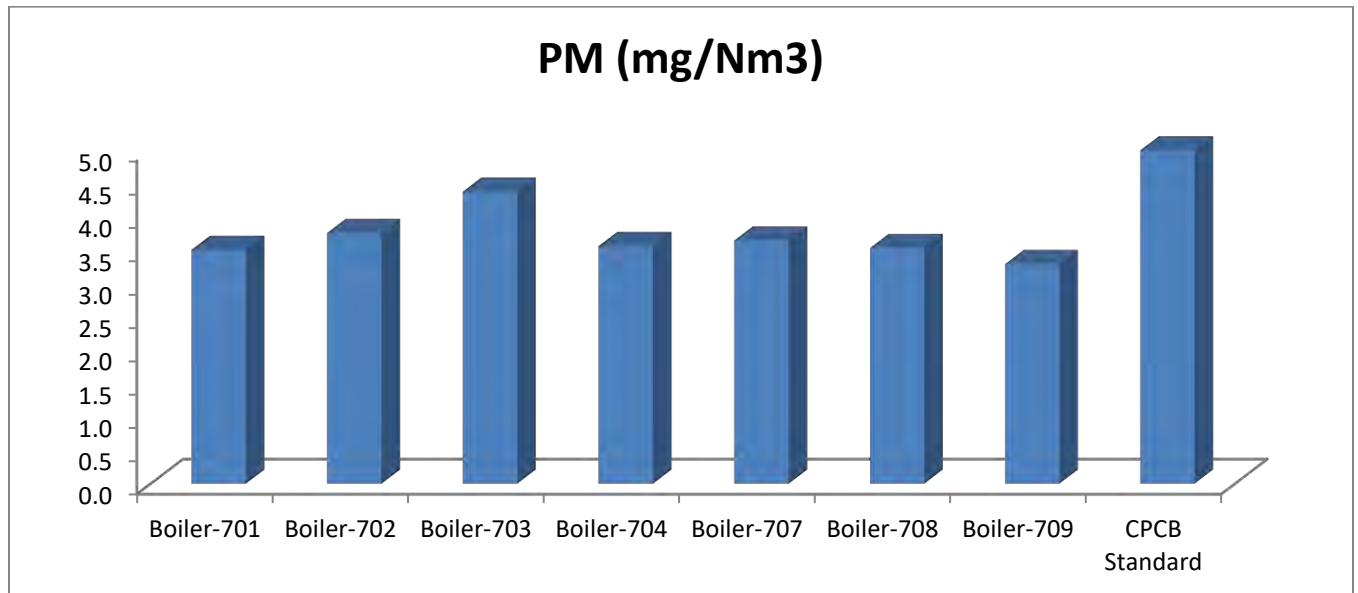
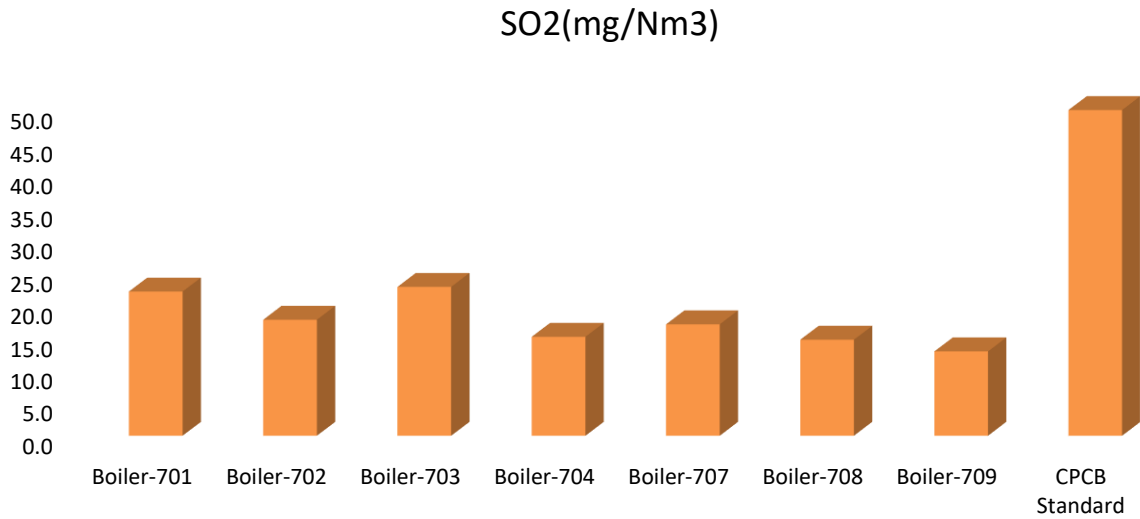
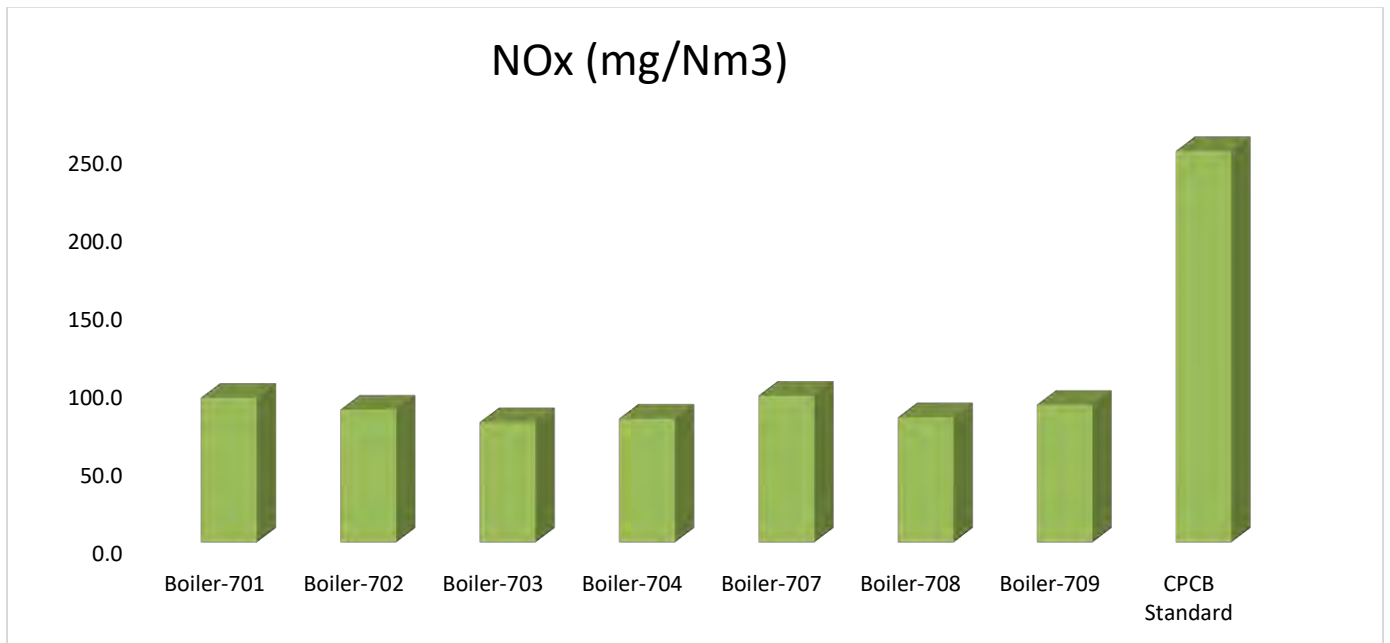


Figure 9: Graph showing average emission of Particulate Matter (PM) mg/NM<sup>3</sup>



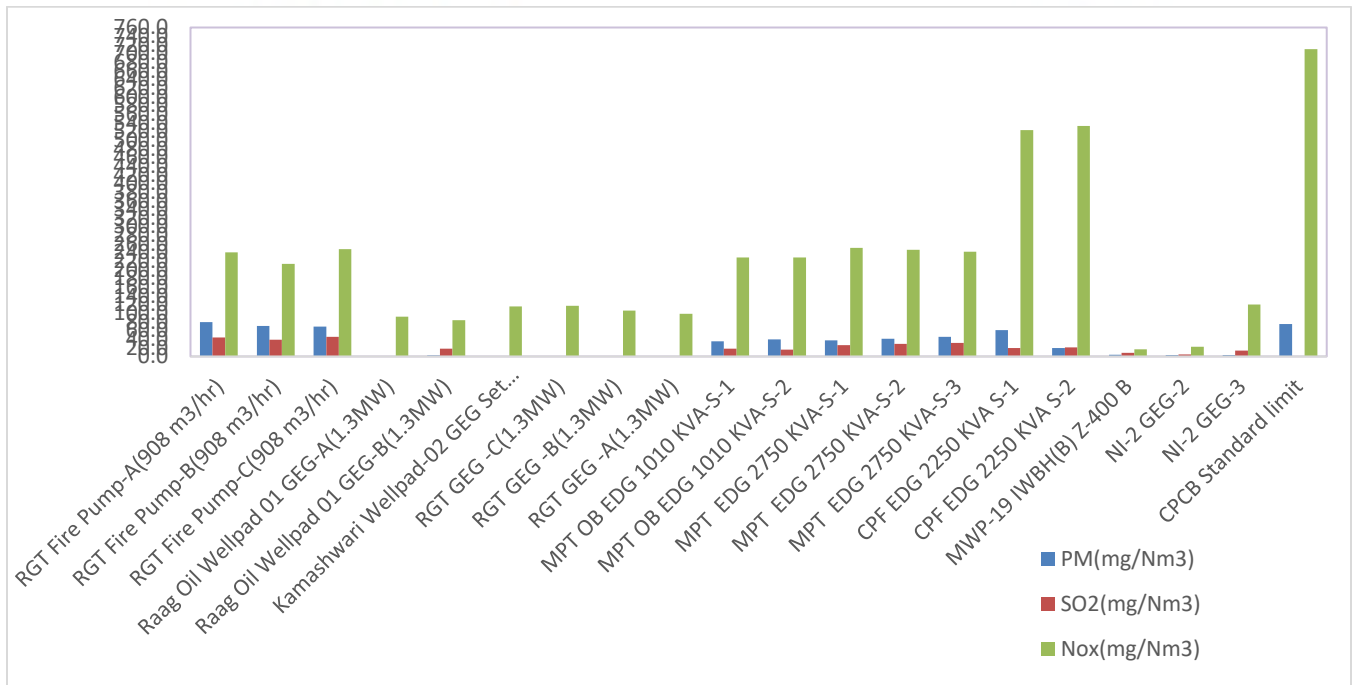
**Figure 10: Graph showing average emission of Sulphur Di-oxides (SO<sub>2</sub>) mg/NM<sup>3</sup>**



**Figure 11: Graph showing average emission of Oxides of Nitrogen (NO<sub>x</sub>) mg/NM<sup>3</sup>**

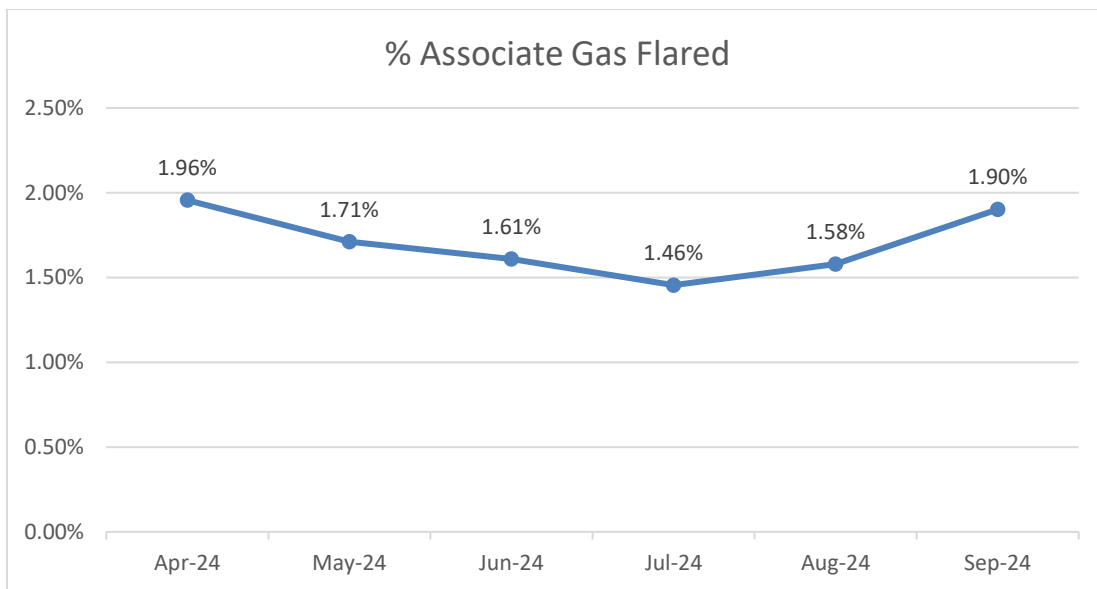
**Note: Levels of HC as methane were found below detection level**

**Monitoring of Other Operational Stacks**



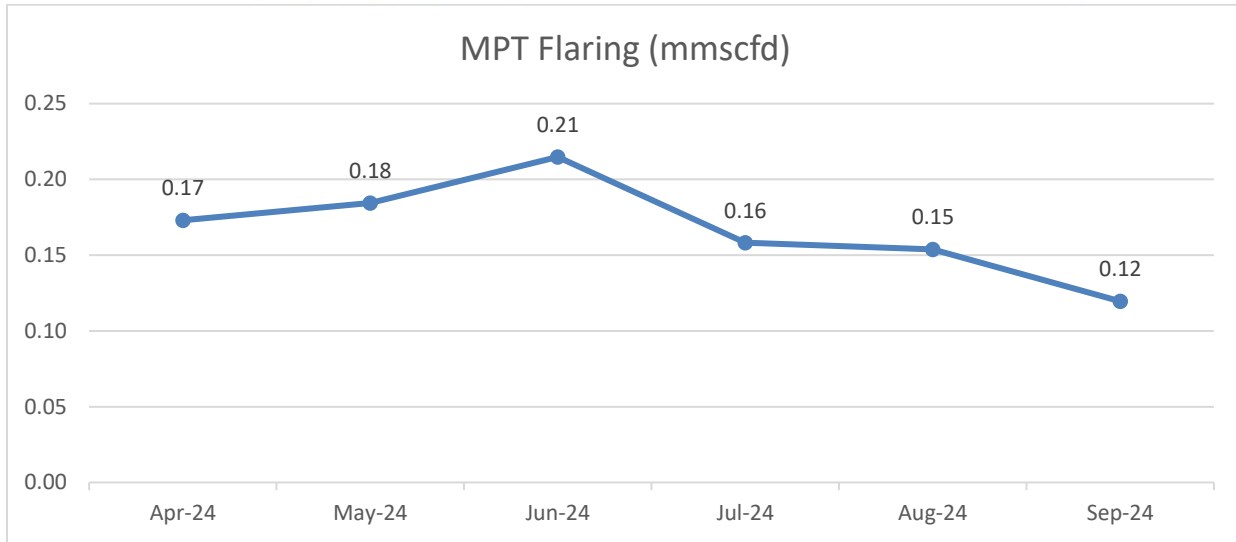
**Figure 12: Graph showing average emission of Operational Stacks**

**Gas Flaring Trend at RGT**



**Figure 13: Graph showing trend of associate gas flaring at RGT**

**Gas Flaring Trend at MPT**



**Figure 14: Graph showing trend of associate gas flaring at MPT**

Note: Cairn has achieved technical zero flaring of associated gas at MPT processing terminal. However, associated gas produced at Aishwariya field is 100% flared due to high CO<sub>2</sub> content (average ~80%). Average flaring at Aishwariya is 8.3 % during reporting period. Associated gas at Satellite field (remote sites) and Local Separation Facilities is being used as fuel for Gas Generators and Gas engines and leftover quantity is being flared.

**Drilling Mud & Cutting Monitoring:**

SBM Drilling Cutting		
Parameters	Unit	SBM Drilling Mud (Mangala-20)
pH	-	8.79
Hexavalent Chromium	mg/Kg	6.14
Cadmium	mg/Kg	BLQ (LOQ-0.1)
Lead	mg/Kg	BLQ (LOQ-0.1)
Arsenic as As	mg/Kg	BLQ (LOQ-0.1)
Nickel	mg/Kg	BLQ (LOQ-0.1)
Copper as Cu	mg/Kg	BLQ (LOQ-0.1)
Benzene	mg/Kg	Nil
Polycyclic Aromatic Hydrocarbons (PAH)	mg/Kg	Nil
Polychlorinated Biphenyls (PCB)	mg/Kg	Nil
Oil & grease	Wt%	10.0

**Government of India**  
**Ministry of Jal Shakti**  
**Department of Water Resources, River Development and Ganga Rejuvenation**  
**Central Ground Water Authority (CGWA)**  
**Application for Issue of NOC to Abstract Ground Water (NOCAP)**

**Application for Renew of NOC Issued to Existing Industrial Projects Abstracting GroundWater**  
**(Application For Renewal of NOC)**

Application Number : 21-4/688/RJ/IND/2015

Old Application Number : 21-4(688)/WR/CGWA/2015

Applied For Renewal : 2nd

<b>1. General Information:</b>	
<b>Water Quality:</b>	Saline/ Brackish
<b>Application Type Category/ Type of Application:</b>	Crude oil storage and pumping
<b>(i) Name of Industry:</b>	M/S CAIRN OIL AND GAS VEDANTA LIMITED
<b>(ii) Location Details of the Industrial Unit- (Attach Site Plan and Certified Revenue Sketch) (\$)</b>	
<b>Address Line 1 :</b>	SONGARON KI DHANI AND NAYA NAGAR
<b>Address Line 2 :</b>	
<b>Address Line 3 :</b>	
<b>State:</b>	RAJASTHAN
<b>District:</b>	BARMER
<b>Sub-District:</b>	DHORIMANNA
<b>Village/Town:</b>	Dhandhlawas
<b>Latitude:</b>	
<b>Logitude:</b>	
<b>Area Type :</b>	Non-Notified
<b>Area Type Category :</b>	Over Exploited
<b>Whether industry is MSME:</b>	No
<b>(iii) Communication Address</b>	
<b>Address Line 1:</b>	362 RAO GAJRAJ SINGH MARG
<b>Address Line 2:</b>	PHASE IV UDYOG VIHAR SECTOR 18
<b>Address Line 3:</b>	GURUGRAM HARYANA 122008
<b>State:</b>	HARYANA
<b>District:</b>	GURGAON
<b>Sub-District:</b>	GURGAON
<b>Pincode:</b>	122002
<b>Phone Number with Area Code:</b>	91 124 2703000
<b>Mobile Number:</b>	91-9717891276
<b>Fax Number:</b>	
<b>(v) E-Mails of Existing NOC issued by CGWA (enclose copy)</b>	ranjan.sinha@cairindia.com
<b>NOC Letter No:</b>	CGWA/NOC/IND/REN/1/2022/7109
<b>Date of Issuance:</b>	29/07/2022
<b>Vailidity (Start):</b>	30/11/2021
<b>Validity (End):</b>	29/11/2023

**Government of India**  
**Ministry of Jal Shakti**  
**Department of Water Resources, River Development and Ganga Rejuvenation**  
**Central Ground Water Authority (CGWA)**  
**Application for Issue of NOC to Abstract Ground Water (NOCAP)**

**Application for Renew of NOC Issued to Existing Industrial Projects Abstracting GroundWater**  
**(Application For Renewal of NOC)**

Application Number : 21-4/688/RJ/IND/2015  
 Old Application Number : 21-4(688)/WR/CGWA/2015  
 Applied For Renewal : 2nd

	<b>Reason for not applying for renewal before expiry of NOC Validity (Attach Affidavit):</b>	We are applying within the stipulated timeline before expiry of NOC.								
	<b>(vi) Purpose of Renewal Application:</b>	Existing with Additional Ground Water Requirement								
<b>2.</b>	<b>Details of Water Requirement (Fresh and Recycled Water Usage):</b> (Please Enclose Water Flow Chart of Activities and Requirement of Water at each Stage) (\$)									
	<b>(i) Total Water Requirement (a+b+c+d) (m3/day)</b>			<b>Existing</b>		<b>Additional</b>		<b>Total</b>		
	<b>Water Requirement Details (Fresh Water) (m3/day)</b>									
	<b>(a) Ground Water Requirement (m3/day):</b>			1000.00		1000.00		2000.00		
	<b>(b) Surface Water Available (Canal, River, Ponds etc.) (m3/day):</b>			0.00		0.00		0.00		
	<b>(c) Water Supply from Any Agency (m3/day):</b>			0.00		0.00		0.00		
	<b>Total Fresh Water Requirement (a+b+c)(m3/day):</b>			<b>1000.00</b>		<b>1000.00</b>		<b>2000.00</b>		
	<b>(d) Recycled Water Usage (m3/day):</b>			35.00		65.00		100.00		
	<b>Total Water Requirement : (a+b+c+d)(m3/day)</b>			<b>1035.00</b>		<b>1065.00</b>		<b>2100.00</b>		
	<b>(ii) Breakup of Water Requirement and Usage:</b>									
	<b>Activity</b>	<b>Existing Requirement (m3/day)</b>		<b>Additional Requirement (m3/day)</b>		<b>Total Requirement (m3/day)</b>		<b>No. of Operational Days in a Year</b>		<b>Annual Requirement (m3/year)</b>
	<b>Industrial Activity</b>	822.00		748.00		1570.00		365		573050.00
	<b>Residential / Domestic</b>	90.00		160.00		250.00		365		91250.00
	<b>Greenbelt Development /Environment Maintenance</b>	85.00		100.00		185.00		365		67525.00
	<b>Other Use</b>	38.00		57.00		95.00		365		34675.00
	<b>Grand Total</b>	1035.00		1065.00		2100.00				766500.00
	<b>(iii) Details of Water Availability from ETP / STP for Recycle / Resuse usage:</b>									
		<b>Existing</b>			<b>Additional</b>			<b>Total</b>		
		<b>(m3/day)</b>	<b>No. Of Days</b>	<b>(m3/year)</b>	<b>(m3/day)</b>	<b>No. Of Days</b>	<b>(m3/year)</b>	<b>(m3/day)</b>	<b>(m3/year)</b>	
	<b>Effluent / Sewerage generated and treated in ETP / STP:</b>	70.00	365	25550.00	130.00	365	47450.00	200.00	73000.00	
	<b>Availability treated Effluent / Sewerage for usage:</b>	35.00	365	12775.00	65.00	365	23725.00	100.00	36500.00	

**Government of India**  
**Ministry of Jal Shakti**  
**Department of Water Resources, River Development and Ganga Rejuvenation**  
**Central Ground Water Authority (CGWA)**  
**Application for Issue of NOC to Abstract Ground Water (NOCAP)**

**Application for Renew of NOC Issued to Existing Industrial Projects Abstracting GroundWater**  
**(Application For Renewal of NOC)**

Application Number : 21-4/688/RJ/IND/2015  
 Old Application Number : 21-4(688)/WR/CGWA/2015  
 Applied For Renewal : 2nd

	Effluent / Sewerage discharge after treatment:	35.00	365	12775.00	65.00	365	23725.00	100.00	36500.00
(iv)	Availability treated effluent usage : Total quantity same as 2 i (d) and 2 ii (b) above								
					<b>Existing (m3/day)</b>		<b>Additional availability (m3/day)</b>		<b>Total Use + Availability (m3/day)</b>
	<b>Industrial Activity / Commercial Use</b>				0.00		0.00		0.00
	<b>Domestic / Residential Use</b>				0.00		0.00		0.00
	<b>Greenbelt development / Environment maintenance</b>				35.00		65.00		100.00
	<b>Other Use / Flushing Req.</b>				0.00		0.00		0.00
	<b>Total</b>				35.00		65.00		100.00

**3. (a). Groundwater Abstraction Structure- Existing:**

<b>Number of Existing Structures:</b>						5				
SNo.	Type of Structure Name / Year of Construction	Depth (Meter) / Diameter (mm)	Depth to Water Level (Meters below Ground Level)	Discharge (m3/Hour)	Operational Hours (Day) / Days (Year)	Mode of Lift Name	Horse Power of Pump	Whether Fitted with Water Meter	Whether Permission Registered with CGWA / If so Details Thereof	
1	Tubewell / 2016	224.00 / 203	15.00	34.00	12 / 365	Submersible Pump	20.00	Yes	Yes / CGWA/NOC/IND/R EN/1/2022/710	
2	Tubewell / 2015	216.00 / 203	15.00	34.00	12 / 365	Submersible Pump	20.00	Yes	Yes / CGWA/NOC/IND/R EN/1/2022/710	
3	Tubewell / 2016	226.00 / 203	15.00	34.00	12 / 365	Submersible Pump	20.00	Yes	Yes / CGWA/NOC/IND/R EN/1/2022/710	
4	Tubewell / 2017	276.00 / 203	18.00	34.00	12 / 365	Submersible Pump	20.00	Yes	Yes / CGWA/NOC/IND/R EN/1/2022/710	
5	Tubewell / 2017	281.00 / 203	19.00	34.00	12 / 365	Submersible Pump	20.00	Yes	Yes / CGWA/NOC/IND/R EN/1/2022/710	

**(b). Groundwater Abstraction Structure- Additional:**

<b>Number of Additional Structures:</b>	0
---	---

**Government of India**  
**Ministry of Jal Shakti**  
**Department of Water Resources, River Development and Ganga Rejuvenation**  
**Central Ground Water Authority (CGWA)**  
**Application for Issue of NOC to Abstract Ground Water (NOCAP)**

**Application for Renew of NOC Issued to Existing Industrial Projects Abstracting GroundWater**  
**(Application For Renewal of NOC)**

Application Number : 21-4/688/RJ/IND/2015  
 Old Application Number : 21-4(688)/WR/CGWA/2015  
 Applied For Renewal : 2nd

SNo.	Type of Structure Name / Year of Construction	Depth (Meter) / Diameter (mm)	Depth to Water Level (Meters below Ground Level)	Discharge (m3/Hour)	Operational Hours (Day) / Days (Year)	Mode of Lift Name	Horse Power of Pump	Whether fitted with Water Meter	Whether Permission Registered with CGWA / If so Details Thereof
------	---	-------------------------------	--	---------------------	---------------------------------------	-------------------	---------------------	---------------------------------	---

**4. (a). Compliance to the Condition prescribed in the NOC**

SNo.	Conditions given in NOC	Compliance Conditions Applicable	Status of Compliance
1	Area Specific Plantation	Yes	Complied
2	Domestic Water School Sanitation	Yes	Complied
3	Groundwater quality monitoring - Pre monsoon and Post monsoon	Yes	Complied
4	Maintenance of recharge structures	Yes	Complied
5	Number of Pizometers as per NOC and Water Level Record	Yes	2 piezometers (Automatic Digital Water Level Recorder) fitted with Telemetry system are installed.
6	Number of Tubewells Borewales as per NOC	Yes	5 tubewells (Automatic Digital Flow Meter) fitted with Telemetry system are installed.
7	Pizometer fitted with AWLRs with telemetry as per NOC	Yes	2 piezometers (Automatic Digital Water Level Recorder) fitted with Telemetry system are installed.
8	Quantum of Groundwater as per NOC	Yes	1000 KLD per annum and 365000 cum/annum
9	Recharge through ponds	Not Applicable	
10	Recycle and reuse of water	Yes	Complied
11	RWH and AR structures implemented	Yes	Complied
12	Submission of Compliance report to the Region	Yes	Complied
13	Water conservation measures	Yes	Complied
14	Water Security Plan of villages	Yes	Complied
15	Well monitored around the plant premises	Yes	Complied
16	Wells fitted with water meter and its Record	Yes	Complied

**(b). Compliance to the Condition prescribed in the NOC - Other**

SNo.	Conditions given in NOC	Status of Compliance
1	Annual compliance report has been submitted with timely compliances.	Complied



**Government of India**  
**Ministry of Jal Shakti**  
**Department of Water Resources, River Development and Ganga Rejuvenation**  
**Central Ground Water Authority (CGWA)**  
**Application for Issue of NOC to Abstract Ground Water (NOCAP)**

**Application for Renew of NOC Issued to Existing Industrial Projects Abstracting GroundWater**  
**(Application For Renewal of NOC)**

Application Number : 21-4/688/RJ/IND/2015  
Old Application Number : 21-4(688)/WR/CGWA/2015  
Applied For Renewal : 2nd

5.	<b>Groundwater Availability (Please Enclose a Comprehensive Report / Note on Groundwater Condition / Groundwater Quality in and Around the Area) Applicable to Industries Consuming Greater Than 500 m3/day and / or having a Land Area of Greater Than 2 Ha.- (\$)</b>
6.	<b>Details of Rainwater Harvesting and Artificial Recharge Measures for Groundwater Recharge in the Area. If the Firm has Proposed to take up Rainwater Harvesting and Recharge outside the Industrial Unit Premises, then provide NOC from the Concern Authority / Agency where the Harvesting Measures are Proposed, if Already implemented, details may be furnished. (Attach Report on Comprehensive &amp; Feasible Rainwater Harvesting / Recharge Proposal).- (\$)</b>
	Cairn has implemented various measures to harvest rainwater. The structures for rainwater harvesting inside and outside the RDG terminal contribute 29,624 m3/year, which includes 28,500 m3/year from the terminal premises and well pads, along with an additional 1,124 m3/year from school rooftop RWH. The rainwater harvested from the Khadins is calculated to be 66,640 m3/year, while the Nadi structures contribute 400,000 m3/year of rainwater. Therefore, total RWH amounts to 496,264 m3/year.

**INDUSTRIAL USE- Self Declaration**

I hereby certify that the data and information furnished above are true to the best of my knowledge and belief and I am aware that if any part of the data / information submitted is found to be false or misleading at any stage, the application will be rejected outright.

I hereby declare that all the mandatory documents prescribed in the application form have been uploaded and no blank /irrelevant documents have been uploaded. I am also aware that any false/ wrong submission /uploading of document will lead to rejection of my application without any notice.

It is to certify that no case related to ground water withdrawal/ contamination is pending against the industry/ project/ unit as on date. Any such case filed against the company/ project/ unit in respect of ground water withdrawal/ contamination during the pendency of this application shall be immediately brought to the notice of CGWA.

I hereby undertake that in case any environmental compensation/ penalty is imposed on the firm by any statutory authority, I shall comply with the decision of such authority.

1. Application proforma is subject to modification from time to time.

2. Application is submitted online on website <http://cgwa-noc.gov.in> to following office.

**Regional Director, Central Ground Water Board Western Region, 6-A, Jhalana Doongri, JAIPUR, RAJASTHAN, 302004**

3. Incomplete application will be summarily rejected.

**Scanned copy of last page of application with signature and seal should be attached at prescribed place before submission of application.**

4. Receipt of Processing Fee of Rs. 5000.00/- (Rupees Five Thousand Only) submitted through NON TAX RECEIPT PORTAL (<https://bharatkosh.gov.in>) should be attached along with hard copy of application.

**Processing Fee:-**

Bharat Kosh Transaction  
Ref. No:-

Bharat Kosh Transaction  
Date:-

**Note:- The Processing Fee is Non-Refundable. Applicant should ensure and Check Eligibility of Submission of Application and Required Documents before Submitting Online Application.**

**Government of India**  
**Ministry of Jal Shakti**  
**Department of Water Resources, River Development and Ganga Rejuvenation**  
**Central Ground Water Authority (CGWA)**  
**Application for Issue of NOC to Abstract Ground Water (NOCAP)**

**Application for Renew of NOC Issued to Existing Industrial Projects Abstracting GroundWater**  
**(Application For Renewal of NOC)**

**Application Number : 21-4/688/RJ/IND/2015**  
**Old Application Number : 21-4(688)/WR/CGWA/2015**  
**Applied For Renewal : 2nd**

5.	Hard copy of application required:	No	
6.	Ground Water Quality Approved	Not Define	Ground Water Charge Required: Not Define
	Ground Water Charge Recieve:	No	Ground Water Charge Amount:
			Ground Water Arear Amount:

**Attached Files:**

**1). Site Plan : (Refer: 1 (ii))**

No Attachment Found!

**2). Certified Revenue Sketch : (Refer: 1 (ii))**

No Attachment Found!

**3). Reason for Not Applying for Renewal before Expiring NOC : (Refer: 1 (v))**

No Attachment Found!

**4). Existing NOC : (Refer: 1 (vii))**

S.No	Attachment Name	File Name
1	NOC	Annexure A_ Copy of NOC_RDG2022.pdf

**5). Enclose Flow Chart of Activity and Requirement of Water: (Refer: 2)**

No Attachment Found!

**6). Groundwater Availability Report : (Refer: 4)**

No Attachment Found!

**7). Details of Rainwater Harvesting / Artificial Recharge Measures : (Refer: 5)**

S.No	Attachment Name	File Name
1	RWH Plan	Annexure H_Water Conservation Report.pdf

**8). Authorization :**

No Attachment Found!

**9). Extra Attachment :**

S.No	Attachment Name	File Name
1	Annexure A_Affidavit for Saline Water_RDG_2023	Annexure A_Affidavit for Saline Water_RDG_2023.pdf
2	IAR and GW Modleling Report-RDG	IAR and GW Modleling Report-RDG.pdf

**Government of India**  
**Ministry of Jal Shakti**  
**Department of Water Resources, River Development and Ganga Rejuvenation**  
**Central Ground Water Authority (CGWA)**  
**Application for Issue of NOC to Abstract Ground Water (NOCAP)**

**Application for Renew of NOC Issued to Existing Industrial Projects Abstracting GroundWater**  
**(Application For Renewal of NOC)**

Application Number : 21-4/688/RJ/IND/2015  
 Old Application Number : 21-4(688)/WR/CGWA/2015  
 Applied For Renewal : 2nd

10). Compliance to the Condition prescribed in the NOC					
S.No.	Conditions given in NOC	Attachments			
		S.No.	Attachment Name	File Name	
1	Area Specific Plantation	1	Geotagged photographs of Greenbelt Plantation	Geotagged photographs of Greenbelt Plantation.pdf	
2	Domestic Water School Sanitation	1	Water Conservation Report	Water Conservation Report.pdf	
3	Groundwater quality monitoring - Pre monsoon and Post monsoon	1	Annexure E_GW Quality Report	Annexure E_GW Quality Report.pdf	
4	Maintenance of recharge structures	1	Water Conservation Report	Water Conservation Report.pdf	
5	Number of Pizometers as per NOC and Water Level Record	1	Annexure D_GW Monitoring Data RGT 2023	Annexure D_GW Monitoring Data RGT 2023.pdf	
6	Number of Tubewells Borewales as per NOC	1	Geotagged Photos of Abstraction Wells	Geotagged Photos of Abstraction Wells.pdf	
7	Pizometer fitted with AWLRs with telemetry as per NOC	1	Geotagged Piezometer Photographs	Geotagged Piezometer Photographs.pdf	
8	Quantum of Groundwater as per NOC	1	Annexure A_Copy of NOC_RDG2022	Annexure A_Copy of NOC_RDG2022.pdf	
9	Recharge through ponds	No Attachment Found!			
10	Recycle and reuse of water	1	Geotagged photographs of STP	Geotagged photographs of STP.pdf	
11	RWH and AR structures implemented	1	Geotagged RWH Photographs	Geotagged RWH Photographs.pdf	
12	Submission of Compliance report to the Region	1	Annual Compliance Report	Annual Compliance Report_with Annexures.pdf	
13	Water conservation measures	1	Annexure H_Water Conservation Report	Annexure H_Water Conservation Report.pdf	
14	Water Security Plan of villages	1	Annexure H_Water Conservation Report	Annexure H_Water Conservation Report.pdf	
15	Well monitored around the plant premises	1	Annexure D_GW Monitoring Data RGT 2023	Annexure D_GW Monitoring Data RGT 2023.pdf	
16	Wells fitted with water meter and its Record	1	GW abstraction Rate	GW abstraction Rate.pdf	

11). Compliance to the Condition prescribed in the NOC - Other					
S.No.	Conditions given in NOC	Attachments			
		S.No.	Attachment Name	File Name	
1	Annual compliance report has been submitted with timely compliances.	No Attachment Found!			

12). Bharat Kosh Receipt (Processing Fee):

**Government of India**  
**Ministry of Jal Shakti**  
**Department of Water Resources, River Development and Ganga Rejuvenation**  
**Central Ground Water Authority (CGWA)**  
**Application for Issue of NOC to Abstract Ground Water (NOCAP)**

**Application for Renew of NOC Issued to Existing Industrial Projects Abstracting GroundWater**  
**(Application For Renewal of NOC)**

**Application Number : 21-4/688/RJ/IND/2015**  
**Old Application Number : 21-4(688)/WR/CGWA/2015**  
**Applied For Renewal : 2nd**

No Attachment Found!

**13). Application with Signature and Seal:**

S.No	Attachment Name	File Name
1	Signed last Page	Signed last Page.pdf

**14). MSME certificate in case of MSME:**

No Attachment Found!

Date :

Name & Signature of the applicant

Place :

(With official seal)

**Associated User :** Ranjan

**Submitted By User :** Ranjan

**Submission Date :** 09/11/2023

\* In case signed by any authorized signatory, the details of the signatory with the authorization shall be enclosed.

-----

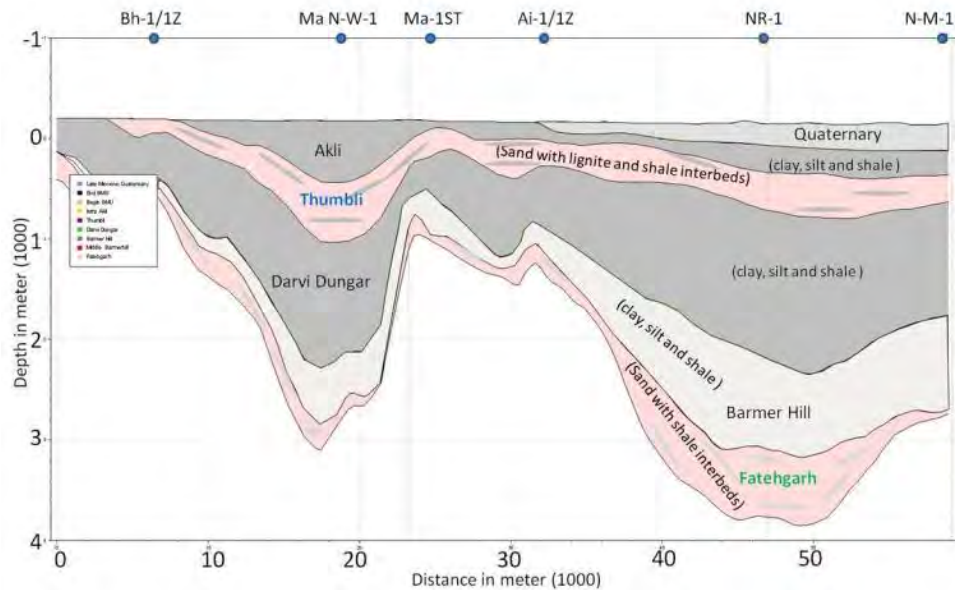
## ANNEXURE I LAND SUBSIDENCE STUDY REPORT

In Barmer, land subsidence may result from aquifer water extraction, particularly if it diminishes pore volume in compacted aquitards. Cairn adheres to CGWA permit mandates by monitoring this phenomenon. The risk escalates when withdrawing saline water from confined aquifers. Monitoring aids impact assessment and mitigation, ensuring regulatory compliance and safeguarding the aquifer and surrounding land.

The lithological section of the Barmer basin reveals two prominent sand aquifers: the Thumbli and Fatehgarh formations, underlain and overlain by thick shale deposits. The stratigraphy includes the Fatehgarh reservoir beneath the regional seal, the Barmer Hill Formation, consisting primarily of shales and silica-rich diatomaceous sediments. Above this are the Dharvi Dungar, Thumbli, and Akli formations, mainly shale with fluvio-deltaic sand deposits sourced from the basin margins. Notably, the northern part of the basin features an extensive and thick sandstone layer within the Thumbli formation, providing a superior aquifer compared to other shale-dominated sequences.

**Table 1: Lithological sequence of the Barmer Basin**

Formation	Unit	Thickness (m)	Lithology
Akli Formation & younger		0->1000	Shales and lignites; sands in Miocene.
Thumbli Formation	Thumbli Sand	0-1000	Sand and semi-consolidated sandstones with interbedded clay, shale and lignite.
	Thumbli Shale	0-500	Shale, locally carbonaceous, rare sands.
Dharvi Dungar Formation		200-1200	Shales, locally carbonaceous, rare sands
Barmer Hill Formation		100-1000	Shales and diatomaceous siltstones
Fatehgarh Formation		50-400	Sandstones and shales



**Figure 1: Simplified lithological section across the Barmer Basin**

The decline in water levels within the Thumbli formation could lead to land subsidence due to aquifer compaction, primarily caused by fine-grained sediments such as silts and clays. A 5km by 8km area surrounding the NR-1 saline wellfield in the Mangala Area has been designated based on numerical modeling. The modeling shows that the drawdown cone of depression centers on the NR-1 pumping wells, with maximum drawdown predicted to be 25m at the wells and diminishing to 4-5m at the area's edge. This suggests that any potential land subsidence will be most pronounced near the pumping wells and diminish as distance increases from them.

#### **LAND SUBSIDENCE MONITORING NETWORK**

Campaign stations were strategically positioned based on aquifer pressure cone of depression and model-derived land subsidence estimates. A stable geological formation hosts the base station, while 13 campaign stations were erected around the saline water wellfield. Pillars at these stations, tailored to site-specific soil profiles, are typically 10-15 ft deep, extending 5-6 ft above ground, with an 18-inch diameter at the surface. They accommodate GPS rover antenna mounting. Subsequent determination of marker coordinates referenced Survey of India's benchmark.

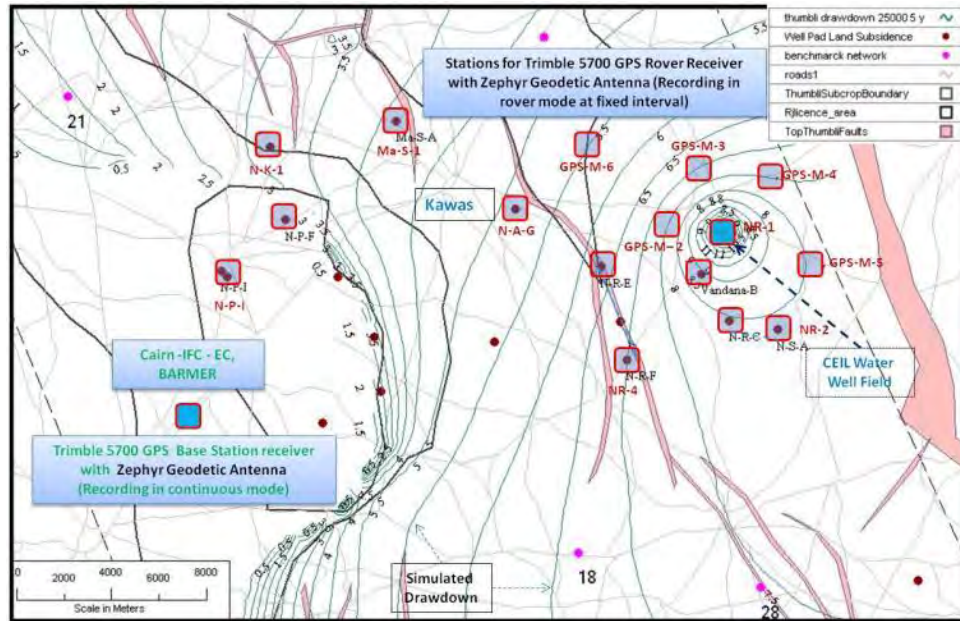


Figure 2: Location of the campaign stations

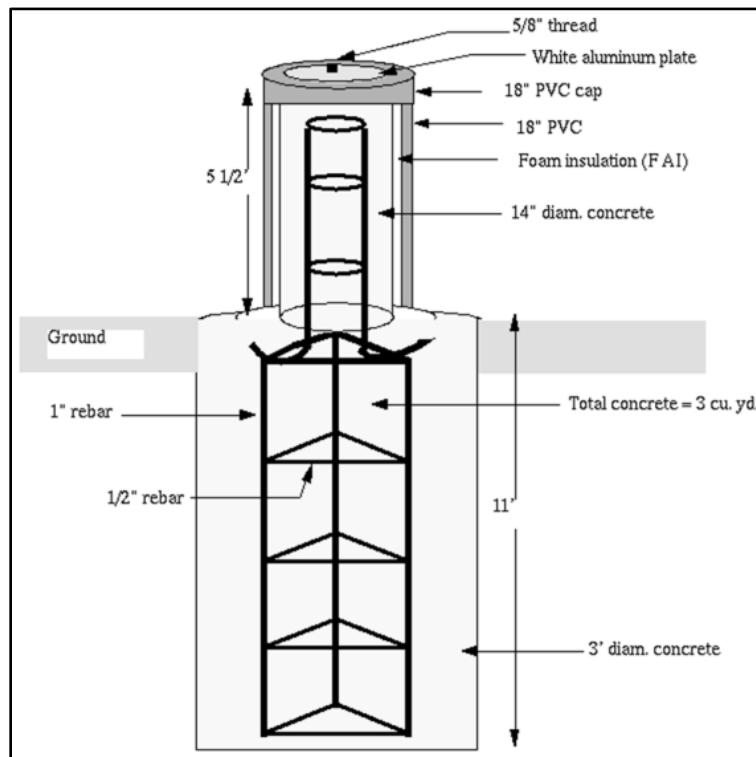


Figure 3: Generic design of the campaign station pillar

### Instrumentations

The base station features a high-precision Trimble 5700 II receiver paired with a Zephyr Geodetic antenna (Figure 4), while campaign stations utilize a high-precision Trimble Rover 5700 II receiver with the same antenna (Figure 5). The Trimble 5700

receiver tracks GPS satellites on both L1 (1575.42 MHz) and L2 (1227.60 MHz) frequencies, ensuring accurate position data for land survey purposes. Three-dimensional coordinates (X, Y, Z) are measured relative to the antenna phase.

#### **Instrumentation Details**

Antenna Type : Zephyr Geodetic  
Receiver Type : Trimble 5700 II

#### **Project Setup**

Co-ordinate System : UTM  
Zone : 42N  
Project Datum : WGS84

#### **Vertical Datum**

Geoids Model : EGM96 (Global)  
Co-ordinate Units : meters  
Distance Units : meters  
Height Units : meters



**Figure 4: Base station is located on top of IFC EC centre and fitted with Trimble 5700 II receiver with Zephyr Geodetic antenna.**



**Figure 5: Campaign station showing pillar fitted with rover Trimble 5700 II receiver and Zephyr Geodetic antenna.**

**Field Measurement** Recording times for rover GPS at each campaign station are predetermined (Figure 6), considering distance from base stations and satellite availability in the horizon. Antenna heights at monitoring points are manually



measured before data recording during each campaign. DGPS data from both base and campaign stations are collected at regular intervals.



**Figure 6: Different recording time zone for campaign station**

#### **Processing of field data**

The field data from base and campaign stations undergo analysis using advanced GPS processing software to achieve vertical elevation accuracy up to 10mm. Processing occurs in the UTM coordinate system, with WGS 1984 as the Project Datum and EGM96 (Global) as the Geoid model. Accuracy is evaluated based on RMS error, influenced by data quality and satellite availability during recording. Results yield precise X, Y, and Z coordinates for each campaign station (Figure 7). Comparison of rover receiver readings with the base station determines the fixed monument's height change.

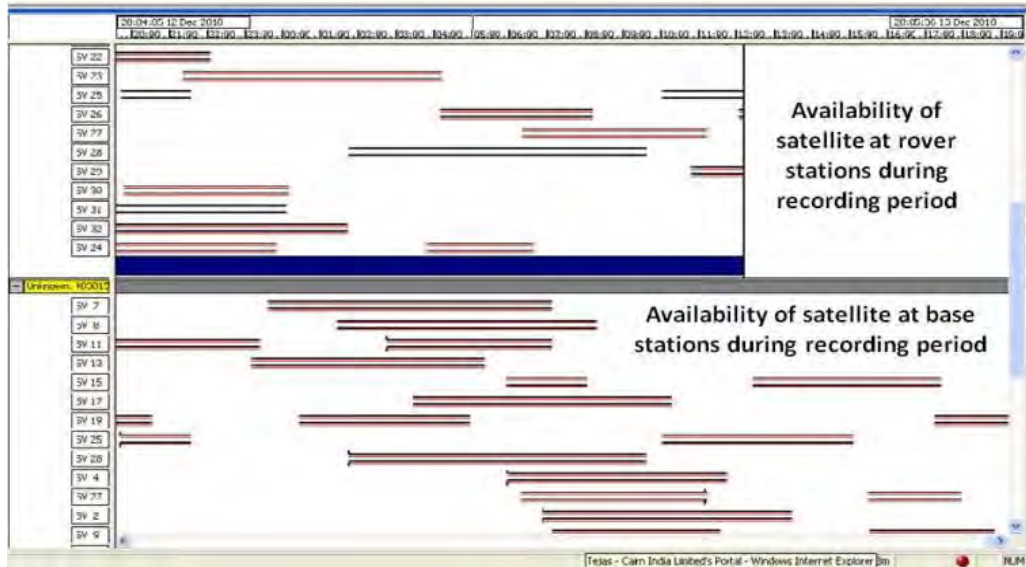


Figure 7: Availability of Satellites during at base and rover station during measurement period

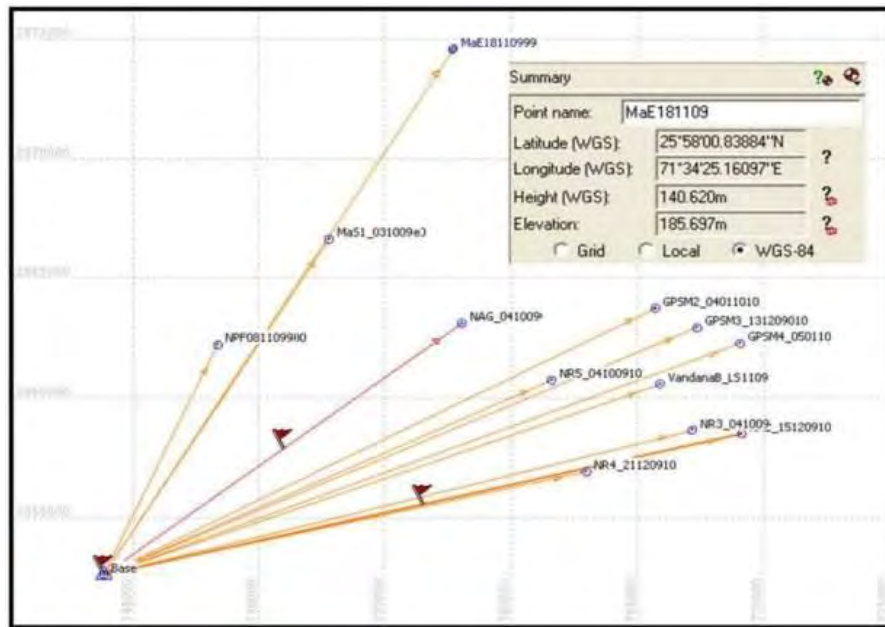


Figure 8: Processed data showing rover stations tied up with base station and final results

## Results

The estimation of land subsidence resulting from aquifer de-saturation involves rigorous analysis through groundwater modeling and DGPS measurements. It is crucial to note that marker elevation accuracy during campaigns may vary by approximately 10cm (+/-) due to factors such as satellite network availability, adverse weather conditions (e.g., thunderstorms, dust storms), and horizon visibility. Despite these challenges, trends observed in marker elevation changes provide valuable insights (Table 2).

**Table 2: Results**

Campaign	Longitude	Latitude	Reference Elevation	April-June 2021	July-September 2021	October-December 2021	January-March 2022	April-June 2022	July-Sep 2022	Oct-Dec 2022	Jan-Mar 2023	April-June 2023	July-Sep 2023	Oct-Dec 2023	Jan-Mar 2024
Stations	( WGS 84)	( WGS 84)	(m AMSL)												
Location				Elevation of Campaign Station Marker (m)		Elevation of Campaign Station Marker (m)		Elevation of Campaign Station Marker (m)		Elevation of Campaign Station Marker (m)		Elevation of Campaign Station Marker (m)		Elevation of Campaign Station Marker (m)	
NR-1	71.657101	25.853197	154.063	154.05	154.053	154.06	154.061	154.05	154.063	154.15	154.054	154.05	154.051	154.064	154.061
Ma-S-1	71.5230187	25.8962592	169.041	169.032	169.032	169.04	169.041	169.038	169.043	169.038	169.033	169.042	169.041	169.04	169.039
NPF	71.4783685	25.8573954	153.357	153.359	153.359	153.352	153.355	153.354	153.357	153.314	153.317	153.356	153.358	153.355	153.356
NAG	71.574872	25.863865	157.753	157.759	157.755	157.751	157.752	157.752	157.751	157.752	157.751	157.753	157.751	157.753	157.751
NRE	71.6099224	25.8416667	153.389	153.385	153.389	153.388	153.387	153.389	153.388	153.379	153.378	153.388	153.391	153.387	153.388
Vandana-B	71.6527935	25.8395106	150.382	150.378	150.379	150.379	150.381	150.381	150.382	150.371	150.372	150.383	150.382	150.381	150.381
NRC	71.6650211	25.821973	149.643	149.642	149.643	149.644	149.642	149.643	149.641	149.623	149.631	149.644	149.641	149.642	149.64
NR-4	71.6229312	25.8071136	149.455	149.467	149.463	149.456	149.457	149.454	149.456	149.434	149.446	149.454	149.456	149.454	149.456
NR-2	71.6846396	25.8202825	150.408	150.413	150.407	150.405	150.411	150.407	150.408	150.41	150.4	150.409	150.407	150.407	150.406
Ma-E-1	71.5736687	25.9669249	180.897	180.8913	180.894	180.896	180.895	180.897	180.896	180.867	180.87	180.888	180.897	180.898	180.896
AWP#2	71.565334	25.895907	208	*	*	208.0094	208.0111	208.001	208.0023	208.0021	208.0023	208.001	208.002	208.003	207.98
BWP#2	71.344162	25.981657	213	*	*	213.011	213.012	213.013	213.001	213.014	213.011	213.011	213.012	213.01	213.011
MWP#09	71.508222	25.934064	198	*	*	198.001	198.01	198.002	198.001	198.011	198.012	198.011	198.012	198.001	198.002
MWP#14	71.516814	25.958128	206	*	*	206.0021	206.005	206.002	206.004	206.0012	206.013	206.001	206.02	206.014	206.01

Deviation (in meter) (Ref-Avg)															
NR-1	71.657101	25.853197	154.063	0.013	0.01	0.003	0.002	0.013	0	-0.087	0.009	0.013	0.012	-0.001	0.002
Ma-S-1	71.5230187	25.8962592	169.041	0.009	0.009	0.001	0	0.003	-0.002	0.003	0.008	-0.001	0	0.001	0.002
NPF	71.4783685	25.8573954	153.357	-0.002	-0.002	0.005	0.002	0.003	0	0.043	0.04	0.001	-0.001	0.002	0.001
NAG	71.574872	25.863865	157.753	-0.006	-0.002	0.002	0.001	0.001	0.002	0.001	0.002	0	0.002	0	0.002
NRE	71.6099224	25.8416667	153.389	0.004	0	0.001	0.002	0	0.001	0.01	0.011	0.001	-0.002	0.002	0.001
Vandana-B	71.6527935	25.8395106	150.382	0.004	0.003	0.003	0.001	0.001	0	0.011	0.01	-0.001	0	0.001	0.001
NRC	71.6650211	25.821973	149.643	0.001	0	-0.001	0.001	0	0.002	0.02	0.012	-0.001	0.002	0.001	0.003
NR-4	71.6229312	25.8071136	149.455	-0.012	-0.008	-0.001	-0.002	0.001	-0.001	0.021	0.009	0.001	-0.001	0.001	-0.001
NR-2	71.6846396	25.8202825	150.408	-0.005	0.001	0.003	-0.003	0.001	0	-0.002	0.008	-0.001	0.001	0.001	0.002
Ma-E-1	71.5736687	25.9669249	180.897	0.0057	0.003	0.001	0.002	0	0.001	0.03	0.027	0.009	0	-0.001	0.001
AWP#2	71.565334	25.895907	208	*	*	-0.0094	-0.0111	-0.001	-0.0023	-0.0021	-0.0023	-0.001	-0.002	-0.003	0.02
BWP#2	71.344162	25.981657	213	*	*	-0.011	-0.012	-0.013	-0.001	-0.014	-0.011	-0.011	-0.012	-0.01	-0.011
MWP#09	71.508222	25.934064	198	*	*	-0.001	-0.01	-0.002	-0.001	-0.011	-0.012	-0.011	-0.012	-0.001	-0.002
MWP#14	71.516814	25.958128	206	*	*	-0.0021	-0.005	-0.002	-0.004	-0.0012	-0.013	-0.001	-0.02	-0.014	-0.01

\*These stations were set up in October 2021.

# CGWA Compliance Submission Proofs

Welcome Range  
 Previous Login Date Time: 23/05/2024 09:47:43 AM IP Address: 185.233.124.130 Logout

[Applicant Home](#) | [Apply](#) | [Feedback](#) | [Change Password](#) | [Profile](#) | [Compliance](#) | [Submitted Application Payment](#) | [User Request](#) | [Application Pass Book](#) | [Upload EAR](#) | [Upload Attachment](#) | [Payment for Associate](#)

**Information**

**Application Detail**

Application No : 21-488/RJ/ND/2015  
 Name of Industry : MIS CARBON OIL AND GAS VEDANTA LIMITED

**Renew 2nd - Present**

Existing NOC	Status	File	Self Declaration	Digital Signed Letter	Scan Letter	Issued NOC	Apply Type	Submitted Date
DGWA/NOC/ND/REN/1/2022/7108 (30/11/2021 - 28/11/2023)	In Process View	File	Self Declaration			Self Compliance	Online	09 Nov 2023

**Renew 1st**

Existing NOC	Status	File	Self Declaration	Digital Signed Letter	Scan Letter	Issued NOC	Apply Type	Submitted Date
DGWA/NOC/ND/ORIS/2019/1818 (30/11/2018 - 28/11/2017)	Approved View	File	Self Declaration		Scan Letter	DGWA/NOC/ND/REN/1/2022/7108 (30/11/2021 - 28/11/2023) Self Compliance (Filed) Self Inspection	Online	28 Jun 2021

**Track Status**

Application Status  
▶ Online

**Location**

[Go Back](#)

**Government of India**  
**Ministry of Jal Shakti**  
**Department of Water Resources, River Development and Ganga Rejuvenation**  
**Central Ground Water Authority (CGWA)**  
**Application for Issue of NOC to Abstract Ground Water (NOCAP)**

**Application for Renew of NOC Issued to Existing Industrial Projects Abstracting GroundWater**  
**(Application For Renewal of NOC)**

Application Number : 21-4/22/RJ/IND/2005  
 Old Application Number : 21-4(22)/WR/CGWA/2005  
 Applied For Renewal : 3rd

<b>1. General Information:</b>	
<b>Water Quality:</b>	Saline/ Brackish
<b>Application Type Category/ Type of Application:</b>	Crude oil storage and pumping
<b>(i) Name of Industry:</b>	M/S CAIRN INDIA LTD.
<b>(ii) Location Details of the Industrial Unit- (Attach Site Plan and Certified Revenue Sketch) (\$)</b>	
<b>Address Line 1 :</b>	M/S CAIRN INDIA LTD.
<b>Address Line 2 :</b>	
<b>Address Line 3 :</b>	
<b>State:</b>	RAJASTHAN
<b>District:</b>	BARMER
<b>Sub-District:</b>	BAYTOO
<b>Village/Town:</b>	Madpura Barwala
<b>Latitude:</b>	
<b>Logitude:</b>	
<b>Area Type :</b>	Non-Notified
<b>Area Type Category :</b>	Over Exploited
<b>Whether industry is MSME:</b>	No
<b>(iii) Communication Address</b>	
<b>Address Line 1:</b>	362-363 ASF CENTRE RAO GAJRAJ SINGH MARG
<b>Address Line 2:</b>	PHASE IV UDYOG VIHAR SECTOR 18
<b>Address Line 3:</b>	GURUGRAM HARYANA 122008
<b>State:</b>	HARYANA
<b>District:</b>	GURGAON
<b>Sub-District:</b>	GURGAON
<b>Pincode:</b>	122008
<b>Phone Number with Area Code:</b>	
<b>Mobile Number:</b>	91-9717891276
<b>Fax Number:</b>	
<b>(v) E-Mails of Existing NOC issued by CGWA (enclose copy)</b>	ranjan.sinha@cairindia.com
<b>NOC Letter No:</b>	CGWA/NOC/IND/REN/2/2022/7111
<b>Date of Issuance:</b>	29/07/2022
<b>Vailidity (Start):</b>	12/08/2021
<b>Validity (End):</b>	11/08/2023

**Government of India**  
**Ministry of Jal Shakti**  
**Department of Water Resources, River Development and Ganga Rejuvenation**  
**Central Ground Water Authority (CGWA)**  
**Application for Issue of NOC to Abstract Ground Water (NOCAP)**

**Application for Renew of NOC Issued to Existing Industrial Projects Abstracting GroundWater**  
**(Application For Renewal of NOC)**

Application Number : 21-4/22/RJ/IND/2005  
 Old Application Number : 21-4(22)/WR/CGWA/2005  
 Applied For Renewal : 3rd

	<b>Reason for not applying for renewal before expiry of NOC Validity (Attach Affidavit):</b>	We are applying for renewal of NOC within the stipulated timeline before expiry of NOC.								
	<b>(vi) Purpose of Renewal Application:</b>	Existing Ground Water								
<b>2.</b>	<b>Details of Water Requirement (Fresh and Recycled Water Usage):</b> (Please Enclose Water Flow Chart of Activities and Requirement of Water at each Stage) (\$)									
	<b>(i) Total Water Requirement (a+b+c+d) (m3/day)</b>				<b>Existing</b>		<b>Additional</b>		<b>Total</b>	
	<b>Water Requirement Details (Fresh Water) (m3/day)</b>									
	<b>(a) Ground Water Requirement (m3/day):</b>				51500.00		0.00		51500.00	
	<b>(b) Surface Water Available (Canal, River, Ponds etc.) (m3/day):</b>				0.00		0.00		0.00	
	<b>(c) Water Supply from Any Agency (m3/day):</b>				0.00		0.00		0.00	
	<b>Total Fresh Water Requirement (a+b+c)(m3/day):</b>				<b>51500.00</b>		<b>0.00</b>		<b>51500.00</b>	
	<b>(d) Recycled Water Usage (m3/day):</b>				300.00		0.00		300.00	
	<b>Total Water Requirement : (a+b+c+d)(m3/day)</b>				<b>51800.00</b>		<b>0.00</b>		<b>51800.00</b>	
	<b>(ii) Breakup of Water Requirement and Usage:</b>									
	<b>Activity</b>	<b>Existing Requirement (m3/day)</b>		<b>Additional Requirement (m3/day)</b>		<b>Total Requirement (m3/day)</b>		<b>No. of Operational Days in a Year</b>		<b>Annual Requirement (m3/year)</b>
	<b>Industrial Activity</b>	49018.00		0.00		49018.00		365		17891570.00
	<b>Residential / Domestic</b>	132.00		0.00		132.00		365		48180.00
	<b>Greenbelt Development /Environment Maintenance</b>	1423.00		0.00		1423.00		365		519395.00
	<b>Other Use</b>	1227.00		0.00		1227.00		365		447855.00
	<b>Grand Total</b>	51800.00		0.00		51800.00				18907000.00
	<b>(iii) Details of Water Availability from ETP / STP for Recycle / Resuse usage:</b>									
		<b>Existing</b>			<b>Additional</b>			<b>Total</b>		
		<b>(m3/day)</b>	<b>No. Of Days</b>	<b>(m3/year)</b>	<b>(m3/day)</b>	<b>No. Of Days</b>	<b>(m3/year)</b>	<b>(m3/day)</b>	<b>(m3/year)</b>	
	<b>Effluent / Sewerage generated and treated in ETP / STP:</b>	300.00	365	109500.00				300.00	109500.00	
	<b>Availability treated Effluent / Sewerage for usage:</b>	300.00	365	109500.00				300.00	109500.00	

**Government of India**  
**Ministry of Jal Shakti**  
**Department of Water Resources, River Development and Ganga Rejuvenation**  
**Central Ground Water Authority (CGWA)**  
**Application for Issue of NOC to Abstract Ground Water (NOCAP)**

**Application for Renew of NOC Issued to Existing Industrial Projects Abstracting GroundWater**  
**(Application For Renewal of NOC)**

Application Number : 21-4/22/RJ/IND/2005  
 Old Application Number : 21-4(22)/WR/CGWA/2005  
 Applied For Renewal : 3rd

	Effluent / Sewerage discharge after treatment:	0.00	365	0.00				0.00	0.00
(iv)	Availability treated effluent usage : Total quantity same as 2 i (d) and 2 ii (b) above								
				<b>Existing (m3/day)</b>			<b>Additional availability (m3/day)</b>		<b>Total Use + Availability (m3/day)</b>
	<b>Industrial Activity / Commercial Use</b>			0.00			0.00		0.00
	<b>Domestic / Residential Use</b>			0.00			0.00		0.00
	<b>Greenbelt development / Environment maintenance</b>			300.00			0.00		300.00
	<b>Other Use / Flushing Req.</b>			0.00			0.00		0.00
	<b>Total</b>			300.00			0.00		300.00

**3. (a). Groundwater Abstraction Structure- Existing:**

<b>Number of Existing Structures:</b>						6				
SNo.	Type of Structure Name / Year of Construction	Depth (Meter) / Diameter (mm)	Depth to Water Level (Meters below Ground Level)	Discharge (m3/Hour)	Operational Hours (Day) / Days (Year)	Mode of Lift Name	Horse Power of Pump	Whether Fitted with Water Meter	Whether Permission Registered with CGWA / If so Details Thereof	
1	Tubewell / 2009	480.00 / 400	56.00	429.00	20 / 365	Submersible Pump	300.00	Yes	Yes / CGWA/NOC/IND/R EN/2/2022/7111	
2	Tubewell / 2009	480.00 / 400	56.00	429.00	20 / 365	Submersible Pump	300.00	Yes	Yes / CGWA/NOC/IND/R EN/2/2022/7111	
3	Tubewell / 2009	480.00 / 400	56.00	429.00	20 / 365	Submersible Pump	300.00	Yes	Yes / CGWA/NOC/IND/R EN/2/2022/7111	
4	Tubewell / 2010	480.00 / 400	56.00	429.00	20 / 365	Submersible Pump	300.00	Yes	Yes / CGWA/NOC/IND/R EN/2/2022/7111	
5	Tubewell / 2010	480.00 / 400	56.00	429.00	20 / 365	Submersible Pump	300.00	Yes	Yes / CGWA/NOC/IND/R EN/2/2022/7111	
6	Tubewell / 2013	480.00 / 400	56.00	429.00	20 / 365	Submersible Pump	300.00	Yes	Yes / CGWA/NOC/IND/R EN/2/2022/7111	

**(b). Groundwater Abstraction Structure- Additional:**

<b>Number of Additional Structures:</b>						0				
---	--	--	--	--	--	---	--	--	--	--



**Government of India**  
**Ministry of Jal Shakti**  
**Department of Water Resources, River Development and Ganga Rejuvenation**  
**Central Ground Water Authority (CGWA)**  
**Application for Issue of NOC to Abstract Ground Water (NOCAP)**

**Application for Renew of NOC Issued to Existing Industrial Projects Abstracting GroundWater**  
**(Application For Renewal of NOC)**

Application Number : 21-4/22/RJ/IND/2005  
 Old Application Number : 21-4(22)/WR/CGWA/2005  
 Applied For Renewal : 3rd

SNo.	Type of Structure Name / Year of Construction	Depth (Meter) / Diameter (mm)	Depth to Water Level (Meters below Ground Level)	Discharge (m3/Hour)	Operational Hours (Day) / Days (Year)	Mode of Lift Name	Horse Power of Pump	Whether fitted with Water Meter	Whether Permission Registered with CGWA / If so Details Thereof
------	---	-------------------------------	--	---------------------	---------------------------------------	-------------------	---------------------	---------------------------------	---

**4. (a). Compliance to the Condition prescribed in the NOC**

SNo.	Conditions given in NOC	Compliance Conditions Applicable	Status of Compliance
1	Area Specific Plantation	Yes	The Company has taken large initiative for development of greenbelt and plantation within the project premises to balance the greenery in the surrounding. Total 88600 plant species are planted.
2	Domestic Water School Sanitation	Yes	Cairn has adopted various vast network of Domestic Water School Sanitation in the nearby schools in the villages to ensure the fulfilment of its environmental and social responsibility as CSR activity
3	Groundwater quality monitoring - Pre monsoon and Post monsoon	Yes	There are periodic GW quality monitoring of pre and post monsoon season in the NABL accredited laboratory.
4	Maintenance of recharge structures	Yes	The proponent has constructed various water conservation structures in nearby villages to harvest rainwater to be used for agriculture purposes such as Khadins, Nadis, Tankas and Tanklis and Pits.
5	Number of Pizometers as per NOC and Water Level Record	Yes	The Company has constructed two piezometers with DWLR with telemetry as per NOC Condition for regular ground water level monitoring.
6	Number of Tubewells Borewales as per NOC	Yes	There are six production wells (Tube wells) as granted in NOC for abstraction of Saline Water to meet the industrial requirement of the company.
7	Pizometer fitted with AWLRs with telemetry as per NOC	Yes	The Company has constructed two piezometers with DWLR with telemetry as per NOC Condition for regular ground water level monitoring.

**Government of India**  
**Ministry of Jal Shakti**  
**Department of Water Resources, River Development and Ganga Rejuvenation**  
**Central Ground Water Authority (CGWA)**  
**Application for Issue of NOC to Abstract Ground Water (NOCAP)**

**Application for Renew of NOC Issued to Existing Industrial Projects Abstracting GroundWater**  
**(Application For Renewal of NOC)**

**Application Number : 21-4/22/RJ/IND/2005**  
**Old Application Number : 21-4(22)/WR/CGWA/2005**  
**Applied For Renewal : 3rd**

8	Quantum of Groundwater as per NOC	Yes	NOC was obtained for renewal of NOC for permission of saline groundwater abstraction for 51500 m <sup>3</sup> /day vide CGWA NOC No. CGWA/NOC/IND/REN/2/2022/7111, valid from 12-08-2021 to 11-08-2023.
9	Recharge through ponds	Yes	The Company has adopted recharge in the tune of 18,27,437 cum/annum through roof top RWH structures, Khadins, Village Ponds, RWH inside Well Pads and aids in regular maintenance.
10	Recycle and reuse of water	Yes	Cairn has constructed Sewage Treatment Plant (STP) of 320 m <sup>3</sup> /day capacity at NR 1 for treating wastewater generated due to domestic activities in the NR 1 plant.
11	RWH and AR structures implemented	Yes	The Company has adopted recharge in the tune of 18,27,437 cum/annum through roof top RWH structures, Khadins, Village Ponds, RWH inside Well Pads and aids in regular maintenance.
12	Submission of Compliance report to the Region	Yes	We have submitted annual self compliance and self inspection report online as well as vial mail to CGWB and CGWA, New Delhi.
13	Water conservation measures	Yes	The Company has adopted recharge in the tune of 18,27,437 cum/annum through roof top RWH structures, Khadins, Village Ponds, RWH inside Well Pads and aids in regular maintenance.
14	Water Security Plan of villages	Yes	Cairn has taken large initiative for water conservation measures all around Barmer area. Various rainwater harvesting structures were constructed as a part of corporate social responsibility.
15	Well monitored around the plant premises	Yes	Cairn has constructed a state-of-the-art monitoring network which uses continuous monitoring of key monitoring wells, private wells, Public Health Engineering Department wells and public wells.
16	Wells fitted with water meter and its Record	Yes	There are six production wells (Tube wells) as granted in NOC for abstraction of Saline Water to meet the industrial requirement of the company.

**Government of India**  
**Ministry of Jal Shakti**  
**Department of Water Resources, River Development and Ganga Rejuvenation**  
**Central Ground Water Authority (CGWA)**  
**Application for Issue of NOC to Abstract Ground Water (NOCAP)**

**Application for Renew of NOC Issued to Existing Industrial Projects Abstracting GroundWater**  
**(Application For Renewal of NOC)**

**Application Number : 21-4/22/RJ/IND/2005**  
**Old Application Number : 21-4(22)/WR/CGWA/2005**  
**Applied For Renewal : 3rd**

<b>(b). Compliance to the Condition prescribed in the NOC - Other</b>		
<b>SNo.</b>	<b>Conditions given in NOC</b>	<b>Status of Compliance</b>
1	Wherever the NOC is for abstraction of saline water and the existing wells (s) is /are yielding fresh water, the same shall be sealed and new tube well (s) tapping saline water zone shall be constructe	Saline water is being used for injection purposed for oil field development. The reject water produced through various operational activity is being disposed in deep disposal well below 1000m below gr
5.	<b>Groundwater Availability (Please Enclose a Comprehensive Report / Note on Groundwater Condition / Groundwater Quality in and Around the Area) Applicable to Industries Consuming Greater Than 500 m3/day and / or having a Land Area of Greater Than 2 Ha.- (\$)</b>	
6.	<b>Details of Rainwater Harvesting and Artificial Recharge Measures for Groundwater Recharge in the Area. If the Firm has Proposed to take up Rainwater Harvesting and Recharge outside the Industrial Unit Premises, then provide NOC from the Concern Authority / Agency where the Harvesting Measures are Proposed, if Already implemented, details may be furnished. (Attach Report on Comprehensive &amp; Feasible Rainwater Harvesting / Recharge Proposal).- (\$)</b>	
	Cairn has adopted various water conservation and mitigation measures to ensure the fulfilment of its environmental and social responsibility as CSR activity. The Company has adopted rainwater harvested in the tune of 18,27,437 cum/annum through roof top rainwater harvesting structures, Khadins, Village Ponds and RWH inside Plant (Well Pads).	

**INDUSTRIAL USE- Self Declaration**

I hereby certify that the data and information furnished above are true to the best of my knowledge and belief and I am aware that if any part of the data / information submitted is found to be false or misleading at any stage, the application will be rejected outright.

I hereby declare that all the mandatory documents prescribed in the application form have been uploaded and no blank /irrelevant documents have been uploaded. I am also aware that any false/ wrong submission /uploading of document will lead to rejection of my application without any notice.

It is to certify that no case related to ground water withdrawal/ contamination is pending against the industry/ project/ unit as on date. Any such case filed against the company/ project/ unit in respect of ground water withdrawal/ contamination during the pendency of this application shall be immediately brought to the notice of CGWA.

I hereby undertake that in case any environmental compensation/ penalty is imposed on the firm by any statutory authority, I shall comply with the decision of such authority.

1. Application proforma is subject to modification from time to time.

2. Application is submitted online on website <http://cgwa-noc.gov.in> to following office.

**Regional Director,Central Ground Water Board Western Region, 6-A, Jhalana Doongri, JAIPUR, RAJASTHAN, 302004**

3. Incomplete application will be summarily rejected.

**Scanned copy of last page of application with signature and seal should be attached at presribed place before submission of application.**

4. Receipt of Processing Fee of Rs. 5000.00/- (Rupees Five Thousand Only) submitted through NON TAX RECEIPT PORTAL (<https://bharatkosh.gov.in>) should be attached along with hard copy of application.

**Processing Fee:-**

**Government of India**  
**Ministry of Jal Shakti**  
**Department of Water Resources, River Development and Ganga Rejuvenation**  
**Central Ground Water Authority (CGWA)**  
**Application for Issue of NOC to Abstract Ground Water (NOCAP)**

**Application for Renew of NOC Issued to Existing Industrial Projects Abstracting GroundWater**  
**(Application For Renewal of NOC)**

**Application Number : 21-4/22/RJ/IND/2005**  
**Old Application Number : 21-4(22)/WR/CGWA/2005**  
**Applied For Renewal : 3rd**

Bharat Kosh Transaction Ref. No:-	
-----------------------------------	--

Bharat Kosh Transaction Date:-	
--------------------------------	--

**Note:- The Processing Fee is Non-Refundable. Applicant should ensure and Check Eligibility of Submission of Application and Required Documents before Submitting Online Application.**

5.	Hard copy of application required:	No		
6.	Ground Water Quality Approved	Not Define	Ground Water Charge Required:	Not Define
	Ground Water Charge Recieve:	No	Ground Water Charge Amount:	
			Ground Water Arear Amount:	

**Attached Files:**

**1). Site Plan : (Refer: 1 (ii))**

No Attachment Found!

**2). Certified Revenue Sketch : (Refer: 1 (ii))**

No Attachment Found!

**3). Reason for Not Applying for Renewal before Expiring NOC : (Refer: 1 (v))**

No Attachment Found!

**4). Existing NOC : (Refer: 1 (vii))**

S.No	Attachment Name	File Name
1	NOC	Annexure A_Thumbli NOC.pdf

**5). Enclose Flow Chart of Activity and Requirement of Water: (Refer: 2)**

No Attachment Found!

**6). Groundwater Availability Report : (Refer: 4)**

No Attachment Found!

**7). Details of Rainwater Harvesting / Artificial Recharge Measures : (Refer: 5)**

S.No	Attachment Name	File Name
1	RWH Proposal	Water Conservation Report.pdf

**8). Authorization :**

No Attachment Found!

**9). Extra Attachment :**

**Government of India**  
**Ministry of Jal Shakti**  
**Department of Water Resources, River Development and Ganga Rejuvenation**  
**Central Ground Water Authority (CGWA)**  
**Application for Issue of NOC to Abstract Ground Water (NOCAP)**

**Application for Renew of NOC Issued to Existing Industrial Projects Abstracting GroundWater**  
**(Application For Renewal of NOC)**

Application Number : 21-4/22/RJ/IND/2005  
 Old Application Number : 21-4(22)/WR/CGWA/2005  
 Applied For Renewal : 3rd

S.No	Attachment Name	File Name
1	Thumbli_IAR_2023	Thumbli_IAR_2023_compressed.pdf
2	GW Modelling Report	GW Modelling Report_Thumbli_2023.pdf

**10). Compliance to the Condition prescribed in the NOC**

S.No.	Conditions given in NOC	Attachments		
		S.No.	Attachment Name	File Name
1	Area Specific Plantation	1	Photographs	Geotagged photographs of Greenbelt Plantation.pdf
2	Domestic Water School Sanitation	1	Water Conservation Report	Water Conservation Report.pdf
3	Groundwater quality monitoring - Pre monsoon and Post monsoon	1	GW Quality Report	GW Quality Report.pdf
4	Maintenance of recharge structures	1	Water Conservation Report	Water Conservation Report.pdf
5	Number of Pizometers as per NOC and Water Level Record	1	Geotagged Photographs of Piezometers	Geotagged Piezometer Photographs.pdf
6	Number of Tubewells Borewales as per NOC	1	Geotagged Photographs	Geotagged Photos of Abstraction Wells.pdf
7	Pizometer fitted with AWLRs with telemetry as per NOC	1	Piezometers fitted with telemetry	Geotagged Piezometer Photographs.pdf
8	Quantum of Groundwater as per NOC	1	NOC	Annexure A_Thumbli NOC.pdf
9	Recharge through ponds	1	Water Conservation Report	Water Conservation Report.pdf
10	Recycle and reuse of water	1	STP Photographs	Geotagged photographs of STP.pdf
11	RWH and AR structures implemented	1	RWH Photographs	Geotagged RWH Photographs.pdf
12	Submission of Compliance report to the Region	1	Annual Compliance Report	Annual Compliance Report_with Annexures.pdf
13	Water conservation measures	1	Water Conservation Report	Water Conservation Report.pdf
14	Water Security Plan of villages	1	Water Conservation Report	Water Conservation Report.pdf
15	Well monitored around the plant premises	1	GW Monitoring Data	Annexure D_GW Monitoring Data Thumbli 2023.pdf
16	Wells fitted with water meter and its Record	1	GW abstraction data	GW abstraction Rate.pdf

**Government of India**  
**Ministry of Jal Shakti**  
**Department of Water Resources, River Development and Ganga Rejuvenation**  
**Central Ground Water Authority (CGWA)**  
**Application for Issue of NOC to Abstract Ground Water (NOCAP)**

**Application for Renew of NOC Issued to Existing Industrial Projects Abstracting GroundWater**  
**(Application For Renewal of NOC)**

Application Number : 21-4/22/RJ/IND/2005  
Old Application Number : 21-4(22)/WR/CGWA/2005  
Applied For Renewal : 3rd

12). Compliance Receipt (Returns) Filed in the NOC - Other			
S.No.	Conditions given in NOC	Attachments	
		S.No.	Attachment Name
1	Wherever the NOC is for abstraction of saline water and the existing wells (s) is /are yielding fresh water, the same shall be sealed and new tube well(s) tapping saline water zone shall be constructe	No Attachment Found!	

No Attachment Found!

**13). Application with Signature and Seal:**

S.No	Attachment Name	File Name
1	Application Last Page	Last page Seal and Signature.pdf

**14). MSME certificate in case of MSME:**

No Attachment Found!

Date :

Name & Signature of the applicant

Place :

(With official seal)

**Associated User :** Ranjan

**Submitted By User :** Ranjan

**Submission Date :** 28/07/2023

\* In case signed by any authorized signatory, the details of the signatory with the authorization shall be enclosed.

-----

## CSR Report RJ – April – September'24

**Business Unit:** Cairn Oil & Gas, Vedanta Ltd.

### **Introduction:**

Cairn Oil & Gas conducts Corporate Social Responsibility (CSR) programs with the objective of improvement in the socio-economic status of the local community in our operational areas. We believe in the importance of strong stakeholder relationships to strengthen CSR efforts in the community. This is achieved through a two-pronged approach that includes partnership with the Government and community ownership.

### **CSR Footprint:**

**In reporting period, we touched ~ 12.30 lac lives through our various CSR interventions under the below thematic areas:**

- Children's Well-being & Education
- Health Care
- Drinking Water & Sanitation
- Agriculture and Animal Husbandry
- Skill Development
- IEC & Microlevel intervention

### **Key Focus area and impact/lives touched in Rajasthan -**

Thematic area	Thematic area	Project Name	Total beneficiaries
Skill Development	Unnati	CEC	1,620
Skill Development	Unnati	CCoE	3,570
Agri NRM & Animal Husbandry	Unnati	Barmer Unnati	6,260
Agri NRM & Animal Husbandry	Unnati	Dairy Development	42,576
Health	Aarogya	MHV (OPD + Health Camp) - RJ & GJ	45,706
Health	Aarogya	Spl. Doctor support (OPD+ID+surgery) - RJ	14,596
Health	Aarogya	Clean Barmer Green Barmer (Visitor + Hospital OPD)	10,72,932
Health	Aarogya	CHC Kawas	35,000
Children Education and Well Being	Udaan	Desk kits	1,211
Drinking water & sanitation	Nirmaan	Borewell	-
IEC & Micro Level Intervention	Nirmaan	MLI - RJ OALP	6,706
<b>Total</b>			<b>12,30,777</b>

## I. Project Description (Thematic wise)

### A. Agriculture and Animal Husbandry

#### i. Barmer Unnati

The project aims to develop livelihood models and value chain interventions, and to increase the income of the farming communities by introducing and promoting new crops and technologies in the region through natural resource management practices.

#### Project Outcomes –

- 161 new waadis (fruit orchards) would be established during the year in Barmer and Gudamalani clusters in order to help farmers generate additional income.
- Total 6,800 Kg of cumin seeds were produced by farmers of Barmer & Gudamalani. The total cultivated area was 23 hectares
- 15 youth was selected under Cairn Agri fellow program. The youth were trained on tractor repair and maintenance at Agriculture university Jodhpur.
- 2 Biogas plant have been established under the project which will produce gas equivalent to ~12-14 LPG annually.
- Soil testing has been done in collaboration with Agricultural University Jodhpur. A special soil testing van has been dispatched to both the clusters. 1138+ Soil and water samples from both the clusters have been collected to help farmers with climate resilient farming and to help them understand the composition of their soil for better productivity.
- Jiji Bai SHG interventions was showcased at the “BIB Expo” of Vedanta Zinc City Half Marathon at Udaipur.
- Community meetings with farmers were conducted to provide them with technical training towards sustainable agriculture practices and to select them for fruit orchard, earthen bund development. In total 590 farmers participated.

#### ii. Dairy Development Project

The flagship programme of Vedanta Cairn Oil & Gas, started with an aim to enhance the income of dairy farmers and mitigate regional problems such as the adulteration of milk, the involvement of middlemen, lack of bargaining power, etc. Since its inception, the project has had a significant impact by engaging more than 6000+ farmers across 62 villages.

#### Project Outcome –

- Two days demonstration on dairy, livestock management along with best practices was organized in presence of District Collector Balotra at Mallinath Animal fair tilwara. The demonstration was organized in collaboration with Animal Husbandry department.
- On the occasion of Camel Day, a Camel Health and Counseling Camp was held on June 22, 2024, in Sanchore. Approximately 115 camels were vaccinated for dermatitis diseases.



- Around 414 milk containers, in sizes of 15 Liters, 10 Liters, 7.5 Liters, and 5 Liters, were distributed to milk producer committee members as part of the incentives generated by them during 2022-23
- 41,625 rootstocks of Super Napier grass were given to 1274 dairy members.
- Through 2 Vet Solution Shops 4,348 cattle of 927 family members were benefitted.
- 30 days stitching training was organized in which total 169 females participated and benefitted from the sessions.
- 435 veterinary camps were conducted under Mobile Veterinary Van and 23,169 cattle were treated thus benefiting 2,037 family members.
- 6 Kitchen garden training was conducted in this quarter where 151 members were given kits and were benefitted from this trainings
- Annual convention meet was conducted in Narinadi, Hariyali Gram Panchayat, under this project. The event was a gathering of over 350 farmers from 63 villages, united in their dedication to dairy farming. Experts shared invaluable insights on government and non-government schemes, agriculture, and finance, enriching our collective knowledge.
- In collaboration with The Animal Care Organization (TACO), we have successfully conducted a Cattle Health and Counselling Camp at Paddrji, Gram Panchayat Sindhaswas, Gudamalani, Barmer District on 19th July 2024. The camp aimed to address the seasonal diseases affecting cattle in the area. Doctors provided treatment to a total of 417 animals, including 65 camels and 352 other animals such as cows, buffaloes, sheep, and goats. The camp benefited 23 families in the region.
- A two-day training and awareness program on spice farming (masala cultivation) was held at Bhadrana Gram Panchayat on 2nd and 3rd September 2024. This session aimed to equip farmers with the knowledge and techniques needed to cultivate spices on their farms.

## **B. Children's Wellbeing and Education**

- Distribution of Desk Kits** - 300+ desk bags have been distributed to support primary school students. These function as both a bag and a portable desk which in turn bridges the infrastructural gap in schools in rural areas.

## **C. Skill Development**

### **i. Cairn Enterprise Center (CEC)**

One of the pressing needs of the community has been employment, for which Cairn has established two vocational skill training centres, namely – Cairn Enterprise Centre (CEC), Barmer. Through this centres, various vocational courses related to electricians, masonry, computers, plumber, etc. have been imparted.

### Project Outcome –

- More than 300 students have been trained through CEC with 89% placement record
- CEC students and the CSR team, with support from the district election officer and the PR team of the Rajasthan government, organized a human chain to raise awareness for maximum voting.

- CEC expanded its offerings to rural youths by hosting guest lectures from banks like SBI and Kotak
- Launched the second batch of the Debt Recovery Agent (DRA) program with 35 students with placement of 18 students.
- Towards fostering better stakeholder relationships and enhancing ITI youth future, we have launched soft skills and digital literacy classes for the current batch of students at Barmer ITI.
- Kaushal Vikas Yatra – an awareness drive to promote entrepreneurship in youths, a 4-day drive was formally launched in RGT. The van covered 98 villages of 29 blocks. Key stakeholders were engaged along with holding a mega registration camp as the closing of this drive.
- Organised World Youth Skills Day engaged over 400 youths and 20+ stakeholders, launched a coffee table book with 30 success stories, and announced a new beautician batch to empower women.
- Launched the Beautician Assistance Course empowered 30 women with skills to run or work in beauty parlours, enhancing their self-reliance and financial stability and organized exposure visits at CEC and Makeover Salon, providing hands-on learning
- In response to the district administration's request and to foster strong stakeholder relations, Cairn Enterprise Centre students supported the "Ek Ped Apni Maa Ke Naam Abhiyan" initiative by contributing 200+ saplings.
- As zero cost project in convergence with The Pradhan Mantri Vishwakarma Scheme at operates as a zero-cost project. This initiative aims to enhance visibility and promote a convergence model for better integration and impact.

## ii. Cairn Center of Excellence (CCoE) –

Basis the success of our intervention in skill development intervention at Barmer, Cairn established a centre of excellence in Jodhpur (CCoE). This centre has been known for delivering both basis and advance training in courses of renewable energy, welding, automotive, etc. Currently towards bridging the gap in the farm and non-farm sector, Cairn has signed an MoU with Agriculture University towards training youths as well as running long term (diploma) courses in agriculture sector.

### Project outcome –

- We successfully launched the first batch at the Cairn Centre of Excellence (CCOE) on February 28, 2024. The inaugural batch consists of 75 students enrolled in the AICTE-approved, four-year B-Tech Agriculture Engineering program. Enrolment for the second batch was completed in September.
- The centre has launched an AICTE-approved course and trained many students in short-term farm sector courses, including goat training, millet cultivation, tractor repairing, diesel pump set maintenance, beekeeping, and kharif crop production.
- To date, we have successfully trained over 550 individuals in both farm and non-farm sectors. Additionally, we have engaged more than 780 participants through various

activities such as tree plantation drives, Akshay Urja Diwas, Swachhta Abhiyan, Technology Day, and more.

- At CCoE in collaboration with the Agriculture University, a total of 225 students are enrolled in the B.Tech (Agriculture) program, which is designed to provide a comprehensive learning experience. Through this collaboration, students gain hands-on experience in the field, complementing their academic studies, and preparing them for the challenges of modern agriculture. This holistic approach equips graduates with the skills necessary to innovate and excel in the agricultural sector.

## D. Healthcare

### i. Mobile Health Van

MHV's have been able to effectively provide affordable, accessible, reliable, and quality preventive healthcare services to beneficiaries at their doorstep.

#### Project Outcomes –

- In the reporting period 42,605 OPD's have been conducted through 7 MHV's across 214 villages of Rajasthan and Gujarat.
- 100 Home visits were conducted for patients who were unable to reach the mobile health unit.
- Multi-specialty health camp was organized in partnership with Health department in Rajasthan operational areas, to provide specialists medical (Orthopaedic, skin & VD and general physician) services benefitting 300+ beneficiaries.
- Multiple awareness camps were organized to apprise beneficiaries on measures for maintaining a good health, menstruation hygiene with an outreach of more than 1,700+ community members including adolescent girls. In addition to this project celebrated Anti-Tobacco, menstrual hygiene & Yoga days.

### ii. Support to District Hospital, Barmer

To improve medical facilities in the district hospital, two major interventions have been initiated by the company – 'Green Barmer, Clean Barmer' campaign to create awareness on health and hygiene; and strengthening the health services offered at the government district hospital by providing medical specialists. These specialists include an ENT specialist, a general surgeon, and a dentist to the CHC at Baitu.

#### Project Outcomes –

- In the reporting quarter, 14,596 OPDs were conducted by Cairn supported doctors in District hospital.
- Under the "Clean Barmer Green Barmer Intervention" 62 staff have been diligently working towards ensuring the hospital premises and facilities are clean.
- To celebrate the hard work and achievements of our 62 Housekeeping staff working relentlessly at District hospital, team organized a felicitation ceremony on the occasion

of Labors Day. The workers were appreciated for ensuring cleanliness & hygiene at the district hospital by Principal Medical Officer of Barmer district.

#### **E. IEC & Microlevel Interventions**

- OALP Team inaugurated a new 50-liter RO filter unit equipped with a water cooler in Shree Guru Kripa Vedic School. This will benefit 80 students and staff members.
- Pakshi Amrit – Parinde Campaign Launch - The campaign was launched at the District Collectorate in the presence of the Collector, ADM, Joint Director of the Animal Husbandry Department, Barmer, and Brigadier B.S. Shekhawat. A total of 1,000 water and grain feeders for birds were handed over to the Animal Husbandry Department.
- Solar System installation – 2kw solar system was installed at Cheche ka Kher school in Khariya Tala. This is done in convergence with the school management where they have installed the electricity connection and fan in all the rooms post solar system installation.
- The International Yoga Day celebration took place on June 20th and 21st, 2024. Awareness rally was held on June 20th, followed by a Yoga session on June 21st at Adarsh Stadium in Barmer. District Collector and all government officials participated in the event. Over 800 beneficiaries participated. in the Yoga session.
- World Earth Day event was organized at Amguri LP School, Christan Basti, Chungajan. Plantation drive was organized in the school wherein 160 students & teachers participated.
- A seven-day training session was organized at Borchapori Handloom centre, Golaghat. The training was organized in collaboration with the District Handloom department. 28 SHGs with 283 members participated.
- A Medical camp was organized for the rural communities in Amguri LP School Golaghat. Total 60 people benefited from the camp.
- World Malaria Day was celebrated by organizing awareness sessions across project sites in Rajasthan, Gujarat, and Ravva. This was undertaken in collaboration with government health departments. The theme of the session was to "Accelerate the fight against malaria for a more equitable world". In Gujarat, mosquito kits consisting of repellents and nets were distributed to 500+ beneficiaries for the community.
- World No Tobacco Day was celebrated across the project locations to draw necessary attention to the tobacco epidemic and the preventable death and disease it causes. Around 150 community members along with students were sensitized about the negative health impact due to tobacco and deliberated on their role in curbing the epidemic.
- To promote culture of sports among youth, a cricket tournament was organized across locations in Gujarat collaboration with PRI members.
- National Fire Safety week was celebrated from 14th April to 20th April 2024 in Barmer and Ravva. During this week awareness sessions were conducted in Government schools, colleges, and Cairn Enterprise Centre. Through this session 1,300+ members from school and colleges were benefitted. This was done in collaboration with the fire safety team from Cairn.
- A desk kit distribution program was held on July 2, 2024, in Amliyala village, Barmer, following a request from the school and the community. A total of 300 desk kits were distributed to students from 1st to 5th grade.
- A desk kit distribution program was held on 23 August 2024, in Government Upper Primary School, Khariya Bagoliya Barmer, following a request from the school and the community.
- A total of 75 desk kits were distributed to students from 1st to 5th grade. 165 Participants were present during this event including the community members.
- In collaboration with Cairn's Road Safety team, reflective tape rolls were provided to the District Transport Office, Barmer, as part of the Road Safety & Health Awareness Program. A

total of 3 rolls, each 100 meters long, were handed over, and a small event was organized with the traffic police in Barmer.

#### **F. Passion to serve :**

310 employees have volunteered to contribute 580 hours towards engagement activities like Fire safety training, Plantation drives, awareness sessions etc. engaging with community members benefiting around 10,000 of community members.

## **II. Special Events and Stakeholders engagement events:**

### **1. Pakshi Amrit – Parinde Campaign**

To provide relief birds from the summer heat, the Pakshi Amrit – Parinde Campaign was inaugurated at the District Collectorate with the presence of the key govt officials, and Brig. B.S. Shekhawat – Director, RJ Assets. As part of the campaign, 1,000 water and grain feeders for birds were handed over to the Animal Husbandry Department to be distributed in and around Barmer city. The campaign also extended to Gujarat, where over 100 water and grain feeders were distributed.

### **2. World health day**

World health day was celebrated across projects sites with a focus on the theme 'My Health, My Right'. Health camps and awareness sessions were organized reaching over 400 beneficiaries. Selected grassroot level health workers were felicitated for their dedication and service to the community.

### **3. Investors Meet**

During a three-day visit to Vedanta sites, we welcomed representatives from leading global and Indian financial institutions and analysts to our Mangala site in Barmer, the largest onshore crude oil production field in India. They also visited the Cairn Enterprise Centre, where they observed the Cairn CSR women empowerment projects, Jiji Bai and Drone Didi. Additionally, they interacted with CEC alumni and changemakers in the community who are working towards sustainable menstrual hygiene.

### **4. MoU between Anil Agarwal Foundation (AAF) and The Animal Care Organization (TACO) collaborated with Kaziranga National Park and Tiger reserves, Assam**

Anil Agarwal Foundation (AAF) and The Animal Care Organization (TACO) collaborated with Kaziranga National Park and Tiger reserves, Govt. of Assam to develop surveillance centre and dwelling units for frontline workers of the park for wildlife protection. This initiative aims to strengthen the protection efforts to preserve of endangered species of Greater One-Horned Rhinos and Bengal Tigers. On 17th September 2024, a Memorandum of Understanding (MoU) was signed between the Jambeshwar Environment and Wildlife Society and the Anil Agarwal Foundation (AAF) dedicated to wildlife conservation in Dewda, Sanchore.

### **5. World Youth Skills Day**

Cairn Enterprise Centre organized the "Koushal Ke Rang Yuvaon Ke Sang" on the occasion of World Youth Skills Day. The guest including Additional District Collector Rajendra Chandrawati and Brig. BS Shekhawat, emphasized the importance of skills in today's world. Highlights included talks on effective communication, AI technology, and cyber vigilance. The event honored over 75 former trainees,

launched a new batch of 30 beauticians, and unveiled a commemorative coffee table book on journey of CEC so far.

#### **6. Nand Ghar CEO visit to Barmer**

Mr. Shashi Arora, CEO of Nand Ghar, visited Barmer. During his visit he observed the impact of CSR initiatives in the community, interacted with children and Anganwadi workers, learned about the efforts under Barmer Unnati project. He also toured the MPT plant and interacted with Nand Ghar CEO visited across Barmer key stakeholders.

#### **7. Anil Agarwal Foundation (AAF) & The Animal Care Organization (TACO) signed MoU with the Jambeshwar Environment & Wildlife Society**

Anil Agarwal Foundation (AAF) & The Animal Care Organization (TACO) signed a Memorandum of Understanding (MoU) with the Jambeshwar Environment & Wildlife Society at Cairn Enterprise Center for supporting with water facilities and animal care ambulance, the initiative aims to promote the local wildlife conservation in Dewda, Sanchore

#### **8. Empowering Women through Skill Development: Beautician Assistance Course Launched in Nokhra**

The Beautician Assistance course at the CEC spoke center in Nokhra village has successfully concluded, marking a significant milestone in empowering women in the South Field. Launched on World Youth Skills Day, this initiative selected 30 young girls for a two-month training program aimed at equipping them with essential skills for the beauty industry. Participants engaged in hands-on learning, including an exposure visit to the Cairn Enterprise Center and Makeover Salon, where they observed professional techniques in action. This program not only fosters economic independence but also enhances self-reliance, contributing to the financial stability of their families and communities.

#### **9. Tree Plantation**

As part of our ongoing commitment to Corporate Social Responsibility (CSR) and environmental sustainability, our Cairn Enterprise Center (CEC) student actively participated in the Chief Minister's Intensive Tree Plantation Campaign in Van Khand, Bandra. Supporting the "Ek Ped Maa Ke Nam" initiative, the student, along with 120 other participants, planted 200 saplings, significantly enhancing the greenery of Barmer. This initiative aligns with our vision of "Badalta Barmer" and our dedication to fostering strong stakeholder relationships with the district administration. By empowering our students to make sustainable lifestyle choices, we are contributing to a healthier planet and a brighter future for our communities.

#### **10. Enhancing Road Safety with Reflector Tape**

As part of Cairn's road safety awareness program, we provided the District Transport Office with reflector tape rolls, which were applied to various vehicles to enhance visibility and safety on the roads. Cairn's Road Safety team actively contributed to this initiative, reinforcing our commitment to promoting safer driving practices in the community. This effort aims to reduce accidents and ensure safer roads for both drivers and pedestrians.

#### **11. Engaging Stakeholders for the Meals for Miles Campaign**

Through our CSR initiatives, we have successfully engaged over 600+ stakeholders in the "Meals for All" #RunForZeroHunger campaign to combat hunger. This collaborative effort unites community members, including CEC, NCC, Polytechnique, ITI, farmers, security guards, girls' colleges, schools, and SHGs, to address malnutrition among children and animals. By fostering strong relationships and mobilizing support, we are making a significant impact in providing nutritious meals to those in need. Together, we are committed to creating a healthier and more sustainable future for our communities.

### III. Awards and Recognition:

S No	Month	Award Name	Presenting Organisation	Project Awarded for
1	August	Second prize in Jhanki representation of "Dharohar," which was showcased during the Independence Day celebrations, Barmer	District Administration, Rajasthan	On the occasion of 78th Independence Day, a tableau was showcased at Adarsh Stadium on the theme of 'Project Dharohar – Paryatan ka Naya Sitara, Barmer Humara.' This tableau also secured second position among other 16 tableaus represented by the government departments of Barmer.
2	September	28th State Level Bhamashah Awards	Department of Education Rajasthan	Cairn receives recognition at the 28th State Level Bhamashah Awards, organized by the Department of Education Rajasthan, for its ongoing efforts to improve education infrastructure in various schools for holistic development of children.
3	September	Best CSR Award	The member of the Gujarat Legislative assembly MLA	The award recognizes the work carried out by Cairn CSR in various sectors across the Viramgam region.

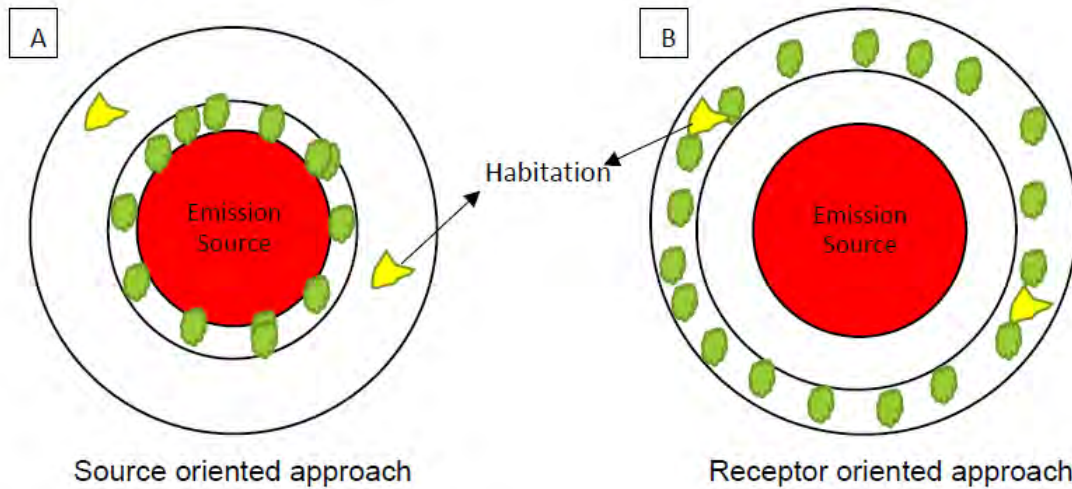
# **ANNEXURE NO. 04**

Greenbelt Development in RJON Block Area



### Greenbelt Development in RJON Block Area

Cairn oil and gas division is part of Vedanta Limited Group in joint venture with ONGC is operating an onshore oil & gas block RJ-ON-90/1 in Barmer and Jalore districts of Western Rajasthan. The block is spread in more than 3111 sq. km. Cairn has developed two central processing terminals for crude oil and gas in Mangala and Raageshwari respectively and has also developed several associated well pads for production of hydrocarbon. As per Environmental Clearance conditions, Cairn has developed greenbelt as an integral part of development of its permanent facilities. Peripheral greenbelt is being developed in a phase-wise manner by undertaking Source & Receptor Approach based plantation around the facilities to mitigate the impact of fugitive emission.



Green belt development approach A) Source Oriented Approach B) Receptor Oriented approach. (Source as per CPCB, 2000)

Greenbelt development is summarized as below:

<b>Part-A</b>	
Operational Area of Existing Sites	<b>626.03 Ha</b>
Greenbelt Area Requirement (33% as per norms)	<b>206.58 Ha</b>
Greenbelt area developed inside facilities (source locations) – (A)	152.73 Ha
Greenbelt area developed outside facilities (receptor locations) – (B)	133.02 Ha
Greenbelt area developed outside facilities (receptor locations) – excluding 32 Ha compensatory afforestation – (C= B-32 ha)	101.02 Ha
Total Greenbelt area developed – (A+C) i.e. 40.30% of operational areas	<b>253.75 Ha</b>
<b>Part-B</b>	
MoU with Forest Department, Barmer for 3.5 lakh plantation in Forest Land for Carbon Sink development	<b>700 ha</b>

Details of greenbelts developed onsite and offsite are provided below:

#### A) Greenbelt Development & Management Methodology:

**Greenbelt Development:** Cairn's RJ-ON-90/1 block is situated in the Thar Desert, characterized among other things by extremes of temperature, low rainfall and sparse drought resistant vegetation. Cairn as per its policy commitment has developed greenbelt as an integral part of its operating facilities. Cairn has engaged different agencies like School of Desert Sciences, Arid Forest Research Institute, M/s. Terracon, M/s. IORA Ecological Solution Pvt. Ltd. to carryout detailed studies on greenbelt and biodiversity of RJON block area and develop plan for greenbelt development. Cairn has also engaged M/s. Geo Climate Risk Solutions Pvt. Ltd. for GPRS Survey and Enumeration of Plantations developed within RJ-ON-90/1 hydrocarbon block area.

Cairn in discussion with local forest department has developed around **253.75 Ha** as greenbelt at site as well as surrounding community land. The company has planted more than **1.70 lakhs** saplings within & community areas (with survival rate ~85%) in phase wise manner. Apart from that Cairn has done MoU with Forest Department, GoR for **3.5 lakhs plantation in 700 ha area**. Cairn is committed to develop greenbelt cover beyond the legal compliance requirement. The company has selected around 50 local plant species to develop its greenbelt area. The selection of species and plantation are carried out based on CPCB guidelines and the recommendations of the School of Desert Sciences, Jodhpur. Most common species are *Prosopis cineraria*, *Salvadora oleoides*, *Acacia Senegal*, *Tecomella Undulata*, *Accacia nilotica*, *Azardirachta indica*, *Pongamia pinnata*, *Ziziphus nimmularia*, *Punica granatum* *Parkinsonia aculeata*, *Phoenix sylvestris*, *Tamarix aphylla* *Prosopis cineraria*, *Capparis decidua*, and *Ziziphus jujuba* etc. Cairn has developed a Desert Park at MPT containing most of the plant species used for greenbelt development in the entire RJON area. Desert Park also contains fruit plants like Date, Pomegranate, Chikoo, Mulberry etc. The dense plantation at Desert Park is house for many bird species.

Cairn has also taken initiative for sand dune stabilization in and around its facility with the help of planting local plant species. The company has developed a nursery at MPT having beds to store around 10,000 saplings at a time. Nursery is developed to acclimatize the saplings to local weather condition as well as to develop new in-house saplings. Our greenbelt at facility area is connected with drip irrigation network, which helps us to save irrigation water requirement.

### Glimpses of GB Developed Onsite



**MPT Desert Park**



**Plant Saplings developed in inhouse nursery**



New developed Plantation at RDG



Plantation at Mangla 3/6



Plantation at MPT



Plantation at RGT



Plantation at MPT

**Plantation at different sites in RJON block area**

**Irrigation Arrangements:** Water is a very scarce resource and necessary for survival of plantations. With a commitment to optimize freshwater use, arrangements are made to reuse STP treated water, rainwater and DM plant reject water (having TDS <2000 ppm) for irrigation in greenbelt areas. To further optimize water requirement, drip irrigation networks are provided in terminals and operation base areas. Surface evaporation contribute significant amount of water loss that has reduced by using unique method of drip irrigation by putting half cut pet bottles at the end of drip pipe for direct irrigation in plant root zone. Surface mulching with locally available under-shrubs or grasses is also used in greenbelts, where flood irrigation is being used to reduce evaporation losses as well as to enhance productivity. Mulching is known to reduce evaporative loss of soil moisture, moderate root zone temperature and improve microbial activities and nutrient availability.



Mulching – to minimize irrigation water requirement



Drip Irrigation Network



Drip Irrigation Network

### **Greenbelt Maintenance:**

The development and maintenance of green belt in desert region requires care and maintenance manpower. The unique feature of the greenbelt program is to synergize local farming knowledge and use the opportunity to develop green belt program as a means of alternative livelihood generation activity for local community. We have mobilized the local people and entrust them with the green development nurturing of plants and regular maintenance. It is intended that the project affected families (especially land losers) associated with this project would have a sustainable source of income. Dedicated greenbelt maintenance contracts are being awarded to local contractors for maintaining the existing greenbelt areas in and around the facilities as well as development of new greenbelt areas.

### Plantation at Receptor Locations (Offsite Greenbelts)

Cairn in discussion with local forest department and panchayats has identified suitable community land within our block area to develop offsite greenbelts. These offsite greenbelts are developed in association with local panchayats. Cairn has developed **community plantation in 133 Ha.** of community land including compensatory afforestation.

Initially, Cairn carried out plantation in 85 Ha at Sanchore, Goliya Jetmal, Batadoo and Chokla sites during 2013-14 with average plant density of ~950 plants/hectare. Further, during 2017, Cairn planted around ~18000 trees in 36 Ha. community land at three location namely Khariya Tala (10 Ha), Kudla (16 Ha) and Nagar (10 Ha) with plant density of 500 plants per hectare.

In 2019, plant mortality is observed in old community plantation area at Goliya Jetmal, Batadoo and Chokla sites (developed in 2013-14). The possible reasons of this mortality are high plant density (~950 plants/Ha.), damage to plants by stray animal grazing, cutting of trees for fuel wood and termite attack. During FY21-22, Cairn initiated greenbelt restoration activities and **as on Aug'24, there are total 61047 plants** available at all community sites, this includes newly planted sapling as part of restoration of community greenbelt. Also, during winter season of Dec'21 -Jan'22, plantation damage (mainly Neem trees) was observed at Kudla site (developed in 2017) due to extreme weather condition (winter frost), which is currently replaced with native plant species such as khejri, kumat and jaal. Cairn consulted with expert from Krishi Vigyan Kendra (KVK) Barmer to carry out remedial measures and as per suggestion from KVK scientist, remedial measures (cutting of damage portion to avoid further damage to stem and roots, application of farmyard manure and flood irrigation) were carried out. Now all the trees damaged plants are alive back. Regular watering and manure application are being ensured through dedicated contracts at all these sites except Sanchor, which is handed over to panchayat for further taken care.



Community Plantation Site - Kurla (Damage plantation in Feb'21 due to winter frost and Current Status after GB restoration activities



Kurla



Goliya Jethmal





Khariya tala



Nagar

**Greenbelt Restoration in Community Land:** Cairn has carried out following actions to carryout greenbelt restoration at community area

**Securing Plantation Sites & Mechanized method for pit preparation:** The plantation areas at community sites is secured through dual fencing (barbed wire & chain link) to avoid entry of stray animals, which cause damage to the plantation. Auger boring (tractor mounted) is used to make deeper pits for better survival rate of new saplings.

**Optimizing Plant Density:** Earlier plantation at community area was carried out at very high density (~950 plants/ha), but as per soil health condition the plant density of ~400-450 plants/ha need to be maintained for optimum growth of plants. So, the restoration of plantation is being carried out considering above density.

**Selection of native species:** Community plantation was carried out initially with Neem as major species along with few other species for faster growth. However, as part of restoration activities only native plant species like Khejri, Kumta, Desi babool, Rohida, Jal etc. are planted. The growth of these species is slow and may take 5-7 years to develop into a fully grown tree, but chances of survival are high because of less impact of extreme weather condition on these species.

**Glimpses of GB area Restoration Activities at Community Sites**



Dual Fencing at Community plantation Site - Batadoo



Dual Fencing at Goliya Jetmal



Use of Auger Boring, Supply & application of Manure, Termite Control Powder, flood irrigation, newly planted local saplings – Community Plantation Sites

### Glimpses of Plantation at Community Sites



### B) Plantation Status:



Details of Greenbelt developed at each of these sites are as below:

#### Plantation at Source Locations

S. No.	Facility Name	Facility Area Ha	Plant Count as on Sept-2024	Greenbelt Area coverage (Ha)
1	MPT	189.2	32456	51.0108
2	OB Camp	10.2	3844	5.5414
3	SRP, RWP	9.9	4704	7.5264
4	Mangla well pads and other locations i.e. CPF, MS01, Kawas etc.	97.17	10157	15.8214
5	Bhagyam LQ, Well pads and corridor	90.4	7087	10.1247
6	Aishwariya well pads NR01, PSY	53.2	4278	8.77
7	RGT & WPs, Guda, & Saraswati fields	175.96	33713	53.9384
	<b>Total</b>	<b>626.03</b>	<b>96239</b>	<b>152.7331</b>

#### Plantation at Receptor Locations

S. No.	Village	Area in Ha	No. of Plants	Greenbelt area current
1	Sanchore	13	4355	13
2	Goliya Jethmal	25	9442	25
3	Chokhla	15	7301	15
4	Batadoo -1	20	9328	20
5	Batadoo -2	12	13794	12
6	Khariya Tala	10	5028	10
7	Kudla	16	8000	16
8	Nagar	10	5000	10
9	Chitter ka par	12.02	3799	12.02
	<b>Grand Total</b>	<b>133.02</b>	<b>66047</b>	<b>133.02</b>

#### Compensatory Plantation details

Till date, total 5496 plants (including small shrubs plants) are cut for development of various facilities within RJON block area. Cairn has planted 36800 tree saplings in 32 Ha. as compensatory plantation in Batadoo (Village), Baytoo (Tehsil), Barmer District. The location for compensatory plantation was identified in consultation with local bodies. As per the latest plant count report, the number of live plants was 20622 at compensatory plantation site. This high mortality was observed at this site mainly due to termite attack and cuttings by locals for use as animal feed and fuel wood. Cairn has conducted site assessment and taken measures to restore the plantation area. The site is secured using dual fencing (barbed wire and chain-link fencing) and carrying out re-plantation work along with other suitable measures (like planting native plant saplings) to restore the greenbelt.

Overall greenbelt area developed is **253.75 Ha** (includes **152.73 Ha** at source location & **101.02 Ha** at receptor location excluding **32 Ha** of compensatory afforestation), the cumulative greenbelt cover is **40.53 % of current operational facilities areas**.

**Plantation details as part of MoU signed with State Forest Development Agency, Rajasthan**



In 2023, a Memorandum of Understanding (MoU) was signed between Cairn Oil & Gas, Vedanta Limited and State Forest Development Agency, Rajasthan to develop carbon sink by plantation of 3.5 lakh tree over 700 Ha Forest land to achieve Net Zero Carbon. The plantation of 350,000 trees over 700 Ha land identified parcels is being carried out at multiple locations in association with the State Forest Development Agency with native floral species at Barmer district in Rajasthan.

**Completed: Site-wise breakup of plantation completed in 400 Ha in FY 23-24**

S. No.	Site	Area in Ha	No. of Plants
1	Gangli	100	50,000
2	Goyana Mahadev	100	50,000
3	Dhamarli	100	50,000
4	Awadi Manjhi	100	50,000
<b>Grand Total</b>		<b>400</b>	<b>200,000</b>

In FY 23-24, **2 lakh trees plantation over an area of 400 Ha area** has been completed. Plantation in the remaining 300 Ha has been carried out in consultation with the Forest Department as per the details mentioned below.

**Completed: Site-wise breakup of plantation completed in 300 Ha in FY 24-25**

S. No.	Site	Area in Ha	No. of Plants
1	Juna Patrasar	100	50,000
2	Itada	50	25,000
3	Beejrad	50	25,000
4	Khakarlai	50	25,000
5	Bandra	50	25,000
<b>Grand Total</b>		<b>300</b>	<b>150,000</b>

Plantation carried as part of this MoU will not only offset the Carbon emission but would also entail improvement of quality of forests, providing better habitat for the wildlife, protect and enhance biodiversity and create carbon sequestration throughout the project lifecycle and help Vedanta in achieving “No Net Loss” / “Net Positive Impact” on local biodiversity and ecosystem.

**Involvement of Communities and Stakeholders in Mass Plantation Drive:**

As part of the mass plantation drive by the Forest Department “Trees Outside the Forest Area”, Govt. of Rajasthan, in FY 23-24, Cairn purchased **2,66,667 saplings** for distribution to defense installations, institutes, schools and local farmers etc. as part of Van Mahotsav celebrations.

In FY 24-25, as part of Govt. of India & Govt. of Rajasthan initiative “Ek Ped Maa K Naam” & Van Mahotsav celebrations, Cairn distributed **54400 saplings** for the plantation as below:

- 40000+ saplings planted by BSF all along the Border check-post and camp sites.
- 1400 sapling planted by Indian Army at Jalipa Cantt.
- 5000 saplings to government schools.
- 8000 saplings to local farmers/ villagers.

**Plantation as per pollinator species**

At our site, we are committed to maximizing the ecological benefits of our plantation efforts. For this, we have developed a comprehensive pollination and blooming chart for native species, and our plantation practices at the MPT flood channel and greenbelt areas are meticulously aligned with this chart. This has ensured effective reproduction of plants through the support of key pollinators and helped in preserving pollinator species and optimizing their interactions with native plants and safeguarding overall environmental health. By adhering to this scientifically backed approach, we are not only advancing our ecological goals but also ensuring that our plantation efforts are both effective and sustainable.

**Last but not the least**

We, at Vedanta Limited- Cairn Oil & Gas, reiterate our firm commitment to align with our Environmental, Social, and Governance (ESG) commitments.

Office of the Pr. Chief Conservator of Forests & Chief Wildlife Warden  
Rajasthan :Jaipur

No.F() Mis c/CWLW/2005-06/ 7705

Dated 23.11.06

To,

Director Stakeholder Management,  
Cairn Energy India Pvt. limited,  
Wellington Plaza, 2nd Floor, 90] Anna Salai,  
Chennai - 600 002, India.

Sub:- Hydrocarbon development in RJ-ON-90/1 block in  
Barmer,Rajasthan ( Mangala, Aishwariya, Saraswati &  
Raagshwari fields) by M/s Cairn Energy India Pty.Limited.

Ref:- Director Stakeholder Management Cairn Energy India  
Pty. limited letter No. 6-2-2006, Ministry of Environment &  
Forests I.A. Division Govt. of India letter F.No.J-11011/38/2005-  
IA II (1)dated 30-12-2005 and letter dated 21-3-2006.

Sir,

The Government of India has awarded Petroleum Exploration license under the production sharing contract for RJ-ON-90/1 block in Barmer District of Rajasthan to Cairn Energy India Limited (CEIL). CEIL has been conducting exploration activities within the block for the past five years and discovered several commercially viable hydrocarbon reserves in the block . The project proposal involves development of five fields namely, Mangala, Aishwariya, Saraswati, Raageshwari oil and gas fields. The project envisages to produce 1,28,000 Barrels Oil Per Day (BOPD) and 50 Million Metric Standard Cubic Feet Per Day (MMSCFD) natural gas from the above five fields. The natural gas produced from Raageshwari and other fields will be used for internal use such as captive power generation and heating purposes . The project also involves development of multiple well pads, group gathering stations, central processing facility and crude tank farm. Total 538 wells including 303 hydrocarbon production wells and 235 injection wells besides, 24 shallow saline water bore wells for the abstraction of saline water and 6 deep injection wells ( < 1000 m. depth ) will be drilled. A300 km in-field pipeline network connecting various facilities will be developed for carrying well fluid, water, and gas from Raageshwari field to Mangala process terminal. A Captive Power Plant (CPP) of 50 MW capacity will also be installed at Mangala Process terminal to meet the energy requirements of Mangala & Aishwariya fields. The

Captive Power Plant (CPP) will be based on oil and/or natural gas depending upon the availability of fuel. The project also envisages setting up of integrated landfill site for disposal of drilling and process wastes at the Mangala terminal. It is also noted that the Public Hearing panel has recommended the project in its meeting held on 13th April 2005. NOC has been accorded by the RSPCB on 27th May, 2005. Environmental clearance has been accorded by the Ministry of Environment & Forests , Govt. of India on 21-3-2006 . Cost of the project is up to Rs. 3825 crores .

The total area required for the proposed development is about 614 ha. which is spread over various parcels of land in several locations in Barmer district only. The land required is for the installation of various facilities such as well -pads, hydrocarbon processing terminals, captive power plant, interconnecting pipeline and roads, etc . The total land being acquired is not one contiguous piece of land but several land parcels spread over the northern and southern portion of the block. The largest area required at one location ( Mangala Terminal ) is about 170 ha. The majority of the land impacted is those in the road/pipeline corridor which constitutes small pieces of land.

Though the actual requirement of land is only 614 ha. but due to the scattered nature of activities the impact zone will extend to a very large area ( 160 sq. kms. approx.) . The nature of activities proposed will be such that they certainly have an adverse impact on the floral and faunal bio-diversity of the area. The area proposed to be used has neither forest area nor a part of National park or Sanctuary . The area is inhabited by large number of important fauna including the schedule I species like Chinkara, Monitor lizard, Desert fox, Yellow monitor lizard and vultures. Reports were obtained from Conservator of Forests Wildlife Jodhpur, Conservator of Forests Jodhpur, concerned Deputy Conservator of Forests and Scientist. Desert Regional Station, Zoological Survey of India Jodhpur in this regard and all the reports envisage that the activities proposed to be undertaken by Cairn Energy India limited will adversely affect the flora and fauna of the area.

Since the proposed area does not involve any forest area or protected area and looking to the importance of the project the Chief Wildlife Warden's permission is hereby accorded subject to strict compliance of the following conditions:-

- 1- Strict compliance of the conditions imposed in environmental clearance dated 21-3-2006 by Ministry of Environment & Forests,



Rajasthan State Pollution control Board's clearance dated 27-5-2005 and Central Ground water Department's clearance dated 6-1-2006.

2- The disposal of waste shall be in such a manner that it does not adversely affect the flora & fauna of the area.

3- The project proponents shall take measures to minimize the noise and flaring effect.

4- The company shall create shelterbelts of appropriate width around all structures / establishments. All the common lands in the impact zone should be planted with appropriate tree species along with grass suitable to habitat so that wild animals can find a shelter in the area. The project proponents shall prepare and submit a project in this regard in consultation with Deputy Conservator of Forests Barmer and shall allocate funds for this purpose.

5- Facilities for drinking water to wild animals shall be created in sufficient number at appropriate locations in consultation with Dy.C.F.Barmer.

6- Deputy Conservator of Forests, Barmer & Conservator of Forest Wildlife Jodhpur will monitor the compliance of stipulated conditions . A six monthly compliance report shall be submitted by the company to them.

7- The project authorities shall take eco-friendly measures so that minimum harm is caused to this fragile eco- system.


8- While constructing roads, underpasses shall be provided in consultation with Dy. Conservator of Forests , Barmer at appropriate places in order to avoid crushing of reptiles.

9- The project proponents shall strictly observe the provisions of wildlife protection Act , 1972.

10- Project proponents shall engage scientific institutes like AFRI and CAZRI for studying (on yearly basis ) the impact of Project on flora and fauna of the area. A report in this regard shall be submitted to Deputy .Conservator of Forests , Barmer and Conservator of Forest (Wildlife) , Jodhpur every year .

11- Deputy Conservator of Forests Barmer will assess the impact of the project on the basis of the reports and verify the impact at field level. On the basis of his assessment, he may prescribe additional measures for the well being of wild animals which shall be binding on the company . <sup>from time to time</sup>

Yours Sincerely,


  
Pr. Chief Conservator of Forests &  
Chief Wildlife Warden,  
Rajasthan, Jaipur

No.F() Mis c/CWLW/2005-06/

Dated

Copy forwarded to the following for information & necessary action.

- 1- Secretary Forest, Govt. of Rajasthan, Jaipur
- 2- Director, I.A.Division , Ministry of Environment & Forests Govt. of India, New Delhi - 110 003.
- 3- Conservator of Forest, Wild life , Jodhpur
- 4- Dy.Conservator of Forest, Barmer

  
Pr. Chief Conservator of Forests &  
Chief Wildlife Warden,  
Rajasthan, Jaipur

## कार्यालय उप वन संरक्षक, बाड़मेर

फोन/फैक्स नं.-02982-220442

क्रमांक: एफ ( )तकनीकी/उवसं/2022/ 5361

निमित्त

E-mail :dcf.bmr.forest@rajasthan.gov.in

दिनांक : 21.07.2022

**Dr. B.R. jat**

**Chief Environment Manager- Onshore**

**Rajasthan operations**

विषय : कैयर्न वैदांता ब्लॉक नम्बर 90/01 के खनन क्षेत्र का 10 कि.मी.की परिधी में कोई भी वाईल्ड लाईफ सेंचुरी/नेशनल पार्क/कन्जर्वेशन रिजर्व क्षेत्र स्थित नही होने का प्रमाण-पत्र देने बाबत्। (FMDSS ID No.OTH-0071242)

संदर्भ : कैयर्न वेदांता कम्पनी लिमिटेड बाड़मेर का पत्र दिनांक 28.04.2022

उपर्युक्त विषयान्तर्गत संदर्भित पत्र के क्रम में लेख है कि उक्त प्रकरण में क्षेत्रीय वन अधिकारी बायतु से रिपोर्ट चाही गयी थी, तदानुसार इस बाबत् क्षेत्रीय वन अधिकारी बायतु के पत्र क्रमांक 160 दिनांक 21.07.2022 द्वारा अवगत कराया कि आवेदित क्षेत्र ग्राम नागाणा तहसील बायतु जिला बाड़मेर ब्लॉक नम्बर 90/01 के 35.2 कि.मी. में आवेदित क्षेत्र 10 कि.मी. की परिधी में कोई भी वाईल्ड लाईफ सेंचुरी/नेशनल पार्क/कन्जर्वेशन रिजर्व क्षेत्र स्थित नही है। अतः रिपोर्ट सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित है।

(संजय प्रकाश भादू)  
उप वन संरक्षक  
बाड़मेर

**Point wise response to action taken on concerns/suggestions raised during various Public Hearings conducting for exploration and production of hydrocarbons from RJON 90/1 block area in Barmer and Jalore Districts, Rajasthan**

**i. Public Hearing carried out at Sanchore, Jalore district on 22<sup>nd</sup> January 2007 for Guda Hydrocarbon Development Project in RJ-ON-90/01 Block**

S. No.	Issue raised	Status of actions (as of September 2024)
1.	Employment and transport contract to local people	<p>As per the local content policy in the past, preference was given to locals for their engagement either in terms of employment or vehicle/equipment engagement. We had the process in which we registered the local population and their vehicles/Equipment's (RC) and based on the demands from vendors, we gave priority to land contributors till 2017. Now employment opportunities are given to locals by the vendors directly.</p> <p>Other than this, Scholarships to meritorious students from the local community are disbursed for higher studies in medicine and engineering. This year FY21-22, Cairn contributed INR 8 lac towards supporting 4 students of engineering and medical batch studying in government collage.</p> <p>CAIRN runs 3 Skill training centres in Rajasthan - Barmer, Sanchore and Jodhpur. Till date more than 15,000 Approximately 70% trainees have been placed in various industries. For FY21-22, we have operationalised only 1 centre. Due to COVID 19 pandemic globally and precautionary guidelines issued by Government of India (GoI), we have this year reduced the training targets in line with the guidelines of MHA. Training has been imparted from one centre, Cairn Enterprise Centre, Barmer. So far this year we have trained 400+ students through online and offline mode in courses like electrician, mobile repair, computers, GST, DRA. In addition, basis the need of the hour and demand from local stakeholders we have launched a certified course on training health professional and others on Basic and advanced life support skill training. 88 students benefited from this initiative. Over 75% placement record continues to be achieved from this training institute CEC, Barmer. Furthermore, the Cairn Centre of Excellence (CCoE), Jodhpur continued to be treated as quarantine unit by Jodhpur authorities.</p> <p>As per the compliances of partnering with any agency, the contract for implementing our skill initiative was to be renewed. The tender process was initiated and carried out in H1. We as on Oct'22 have a partner on-boarded for running the vocational skill development courses from our CEC, Barmer.</p> <p>Under the new contract issued to learnt skills, we have enrolled 254 students till March'23. In addition to the trades of Data Entry Operator, Electrician, Mobile handset repair, Assistant Mason, for the first time we have successfully</p>

S. No.	Issue raised	Status of actions (as of September 2024)
		<p>launched all girls batch on Beautician Assistant. The 30 girls inducted in this program have been first ever intervention in Baitu region. The students have been currently undergoing On-job-training and will be placed by next month end.</p> <p>Till September'23, A total 329 of students are undergoing classroom training at CEC across trades like basic computers, mobile handset engineer and basic electrician with 89% placement record. Over the H2 of FY23-24, we further trained 360+ with placement record reaching 92%. Through CEC new courses like BCBF, DRA, MIS Analyst and all girls batch for beauty assistant was introduced. Students continue to pursue trainings in courses NSDC certified vocational trainings. In addition, we also re-instated our Cairn Centre of Excellence, Jodhpur in partnership with Agriculture university. The program intends to offer degree &amp; short-term courses in farm and non-farm sector. Close to 175+ students have been engaged under this project. Under the on-going project of skill development, Cairn continues to train rural youths in various vocational trades like data entry operator, electrician, mobile handset repair, business correspondence and business facilitator, MIS analyst, etc. So far during the reporting period we have trained more than 300+ students with 89% placement record. In addition, we launched a Beautician Assistance Course empowering 30 women with skills to run or work in beauty parlours, enhancing their self-reliance and financial stability. In parallel to this, we have also been focusing on various allied activities to increase awareness of this project as well as help students develop holistically. While this has been Cairn's approach in Barmer district, through another skill centre CCoE at Jodhpur, we have trained close to 600 students in farm and non-farm sector skills.</p>
2.	Compensation to landowners whose land was taken on temporary basis	Land acquisition has been done in compliance to regulatory requirements and the compensation amount was decided by the Land Acquisition Officer. Payment has been disbursed through the LAO.
3.	What are the measures taken to control water pollution, air emission and hazardous wastes	Adequate pollution control measures are being taken during carrying out any activity. Wastewater generated at well pads is being treated and solar evaporated or disposed through deep dump well of depth >1000 meters. The sewage is being treated in STP and treated water is used for greenbelt development. Zero discharge is being maintained. DGs sets are provided with adequate stack height as per regulatory norms. The oily and any other solid wastes are being disposed as per the hazardous waste management rules. More focus towards disposing non-recyclable hazardous waste to the cement industries towards co-processing.
4.	Pay Royalty and local panchayats and districts and provide subsidy on diesel for the local people	Company informed that payment of Royalty and provision of subsidy in beyond the purview of company, to be decided by state and central governments.
5.	Apprehension that pollution may lead to health effects	Best industrial practices are followed, and all regulatory norms are complied with. The Impact assessment study and regular monitoring of ambient environmental quality indicates no major impact on local environment due to project activities.

S. No.	Issue raised	Status of actions (as of September 2024)
		<p>Besides this, Cairn has implemented various health related projects in Barmer &amp; Jalore districts to strengthen the healthcare delivery in the areas and created awareness on various health aspects in the last one decade.</p> <p><b>Mobile Health Vans (MHVs)</b></p> <p>4 Mobile Health Vans (MHVs) are providing primary and affordable medical services to 149 far flung villages in Rajasthan benefiting approx. 60 thousand community members annually. Villages in our operational area are sparsely populated and lack optimum methods of transportation and mobility. Thus, the MHV services providing health care facilities at the doorstep of the community is highly appreciated by the community. Regular awareness sessions and multi-specialty health camps are conducted for the masses. Services of Gynecologist, Orthopedic, Pediatric, ENT specialist, Dentist, and General Practitioner are provided under these health camps.</p> <p>During the H2 of FY 2020-21, 28,800 OPDs were conducted by our 04 MHVs.</p> <p>So far in FY21-22, 6,406 OPD's have been conducted through 4 MHV's across 149 villages of Rajasthan.</p> <p>In FY22-23, we have close to 60,644 OPD's conducted through MHV projects.</p> <p>During H1 of FY 2023-24, 17,736 OPD's have been conducted across 4 MHVs.</p> <p>In FY 2015-2017, <b>Project RACHNA</b> created awareness in Barmer villages in reproductive, maternal, child health and nutrition. 2 Sanitary pad units were also developed and provided to the women SHGs. Over ~14,000 adolescent girls and rural women were engaged in regular awareness sessions in order to sensitize them about menstrual hygiene and reproductive health. A student health-connect activity called 'Swastha Pathshala Abhiyan' was introduced in 54 government schools in Barmer under the Mobile Health Van Project, impacting ~14,000 students in 2019-20 FY. This programme focused on behavioral modules on health and hygiene. Health camps were conducted regularly, and parents were also appraised about the medical needs of their children. This served as a comprehensive guiding tool to improve the health of students and parents.</p> <p><b>Support to District Hospital, Barmer</b></p> <p>In order to better the medical facilities available in the district hospital, two major interventions have been initiated by the company – first: 'Green Barmer, Clean Barmer' campaign focusing on creating awareness among citizens of Barmer</p>

S. No.	Issue raised	Status of actions (as of September 2024)
		<p>on health and hygiene; and second: strengthening the health services offered at government district hospital by providing three medical specialists.</p> <p>During the H2 of FY 2020-21, these specialists include a female gynaecologist, an ENT specialist and a general surgeon which has impact around 19000 people. In FY 21-22, 28,147 OPDs were conducted by Cairn supported doctors in District hospital. In addition to this, through the cleanliness facilities supported at District hospital, 10,96,060 people have benefited. These medical services and sanitation facilities has not only helped thousands of patients but has also improved the overall ranking of this district hospital across the state. The hospital has been rewarded 1st position twice in row over the last two years on cleanliness and patient satisfaction. 8 housekeeping staff deployed under our Clean Barmer Green Barmer project were felicitated for their service by District Hospital on 73rd Republic Day.</p> <p>In the reporting period, 22,934 OPDs were conducted by Cairn supported 3 specialist doctors in District hospital. Under the “Clean Barmer Green Barmer Intervention” 62 staff have been diligently working towards ensuring the hospital premises and facilities are clean. More than 5.12 lac people visited District hospital and availed the hospital facilities.</p> <p>A three-day free mega camp for disabled was organized where more than 1,100 disabled people benefitted. The intent was to provide medical support and motivate the community through personal interaction. In addition, on Gandhi Jayanti, the Swachhta Pakhwada was initiated between 2nd and 16th October, all stakeholders pledged to keep the hospital and its surrounding areas clean and raise awareness regarding the importance of cleanliness. as a part of the Swachhta Pakhwada being organized at the Govt. District Hospital, Barmer, a special workshop on 5S was conducted for the sanitation workers, nursing students, medical staff and hospital administration.</p> <p>With the aim of transforming public health systems and achieving greater adoption of safe, timely and effective practices of handling pregnancy and newborn complications, Cairn, in partnership with National Health Mission and Department of Medical, Health and Family Welfare (Rajasthan), has initiated an intervention to operationalize all dysfunctional First Referral Units (FRUs) in the District of Barmer.</p> <p><b>COVID related support -</b></p> <p>With the outbreak of pandemic COVID 19, Cairn Oil &amp; Gas took various steps to create awareness about this deadly virus as well as equip &amp; strengthen local administration to combat COVID 19 by launching Project Sanjeevani in which we created awareness, provided more than 60000 masks, 20 BIPAP ventilators, 5000 liters/ 30000 bottles of sanitizers, 10000 liters disinfectant, 1550 PPEs, 2250 N-95 masks, and reached out to more than 4 lakh people in around 1200 villages around our operational assets. With the onset of winter in Oct 2020, we launched a mega campaign on COVID</p>

S. No.	Issue raised	Status of actions (as of September 2024)
		<p>19 awareness on theme “No Mask No Entry” through IEC, virtual marathon, etc. Besides this, Cairn also provided one ambulance and handed over to Barmer District Hospital for carrying COVID patients. We continues supported three COVID Care Centres in Barmer in collaboration with health department where we provided meals to more than 2000 patients till March 2021.</p> <p>Under the phase 2 of COVID 19, Cairn continued to support government in addressing the national crises of beds, oxygen cylinders, medical facilities, and other related interventions to support patients in their treatments. Some of the key highlights of the same are –</p> <ul style="list-style-type: none"> <li>• A 100 bed Vedanta COVID field hospital has been inaugurated by Mr. Ashok Gehlot, CM Government of Rajasthan. Considering this hospital, a total of 610 bed facility has been supported by Cairn over this quarter.</li> <li>• ~3.5 lac community members have been touched through COVID initiatives like – community awareness drives and supply of food packets to COVID patients and health workers.</li> <li>• Arranged transportation of ~94K litres of O2 to District hospital.</li> <li>• 2 MHV's provided to DA Barmer - to be engaged in COVID awareness and transportation of patients.</li> <li>• First of kind, Community Vaccination Drive conducted at Ravva, for people in the age group of 18-45 years. A total of 1906 community members have been covered, through multiple vaccination camps.</li> <li>• Supported District Administration with thousands of medical and surgical consumable items. This includes VTM kit, COVID kit, Para monitor, medicines, masks, and sanitizers, are few such items.</li> </ul> <p>In addition to the above, for FY22-23 we have covered close to 10,000 OPD’s across 149 villages of Rajasthan through 4 MHV’s. While through MHV we continue to reach to the far-flung communities, we have also conducted 20,508 OPDs at District Hospital, through Cairn support doctors and extended cleanliness support to 4,14,888 community members. For the second half of the year (FY22-23) i.e., from Oct – March ’23 close to 25,563 community members of the remotest villages were impacted. Through our Vaccination drive (supporting government in their endeavor to provide COVID vaccination to all), we have covered more than 6800 people across Barmer and Sanchore district of Rajasthan.</p> <p>Furthermore, some new initiatives have been undertaken to improve the nutritional and health status of women and children, in partnership with district administration. 1,50,000 hemoglobin strips have been handed over to district administration as well as 22,680 laddus handed over to ICDS department for dietary support to 542 malnourished children. As a result, 166 have moved from SAM (severely malnourished) to MAM (moderately malnourished) and 155 have completed recovered over the last 3 months of Cairn nutritional support.</p> <p>For this Financial year, in addition to the regular interventions like support to district hospital, MHV, etc. we initiated new projects like – developing general ward at CHC Kawas, providing equipment’s like Xray, sonography, etc. to CHC Kawas and Gudamalani. Moreover, this year we launched a unique project “Harit Dhara” towards empowering rural women by offering sustainable menstrual hygiene solutions. The project has reached 5000 women. As a next step the women are now taking order for stitching cloth pads which is supporting towards additional income generation. Cairn’s multi-tier approach towards improving the healthcare facilities and services in the region, has helped reach out to more</p>



S. No.	Issue raised	Status of actions (as of September 2024)
		<p>than 11.68 lac people in the reporting period. We continue to reach out to the interiors of villagers through our MHV (Mobile Health Van) services on a weekly basis. In addition, our round-the-clock support on health &amp; hygiene as well as medical services has been a major support in addressing the load of Barmer District Hospital.</p>
6.	<p>Whether the Environmental baseline study was conducted to assess the future impacts</p>	<p>Baseline environmental status of region on various environmental attributes such as air and water quality, noise levels, soil characteristics, socio-economic parameters were studied, and environmental impacts assessment report has been prepared. During the project and operational stage, regular monitoring is also being carried out to access the post project changes in environmental quality and reports are being submitted to RSPCB.</p>
7.	<p>What will land acquisition process</p>	<p>Land acquisition has been done in compliance to regulatory requirements and the compensation amount was decided by the Land Acquisition Officer. Payment has been disbursed through the LAO.</p>
8.	<p>Preference in employment for technically qualified people in the area</p>	<p>Engagement Cells were setup where local community members, including land losers, can register themselves for job and their vehicles and equipment for contractual hire. The process of course gives priority to the land contributors but also gives opportunity to the non-land contributors. The local content policy was developed in which preference was given to locals for their engagement either in terms of employment or vehicle/equipment engagement. We had the process in which we registered the local population and their vehicles/Equipment's (RC) and based on the demands from vendors we gave priority to land contributors till 2017. Now employment opportunities are given to locals by the vendors directly.</p>
9.	<p>Training to local people be imparted to create job opportunities</p>	<p>Refer question no 1 for CSR initiative related to skill trainings.</p>
10.	<p>Development of the small and cottage industries</p>	<p>Action may be taken at district administration level; however, Cairn provides technical skill training towards development of entrepreneurship.</p>
11.	<p>Social welfare in the areas of Education, Dairy, health care, aids control, Animals Husbandry etc.</p>	<p>Cairn has implemented many community development initiatives in Barmer &amp; Jalore districts in Rajasthan over the last one decade in various thematic areas like Healthcare, Education, Dairy Development, Agriculture and Animal Husbandry, etc.</p> <ul style="list-style-type: none"> <li>• Education:</li> <li>• CAIRN has developed infrastructure for the school in Baitu, including refurbishment of library and setting up science and computer labs in FY 2012 and Cairn had also launched project -Chirag in 2014 in which schools in Sanchore block was adopted to provide education in English, Science, Mathematics and Computers. In 2018,</li> </ul>

S. No.	Issue raised	Status of actions (as of September 2024)
		<p>Cairn also adopted one school in Tantada and upgraded its infrastructure. In FY 21-22 a new initiative has been taken up in partnership with the Education Department to set up ITC labs in 151 schools around our operational area. These schools will then be able to benefit from the digital learning opportunities made available by the government and Cairn.</p> <ul style="list-style-type: none"> <li>• A new initiative has been also launched this year to support schools which lack proper seating facilities in primary section. A proper infrastructure support is instrumental in bridging the gap and focusing on improving learning outcomes. Cairn has till date distributed 1181 Desk bag kits to students in government schools. We intend to distribute 4000 such bags in total.</li> <li>• Besides this, In FY 2019-2020, Cairn has partnered with Chetna Foundation to implement Nandghar project – an initiative to focus on health and education of children in the age group 3-6 years. Across 49 Nandghars established in Barmer, close to 1,200 students benefit each day through interactive learning under the ECCE (Early childhood care and education). In H1 FY 2020-21, Cairn planned to expand the Nand Ghar project in Barmer and Jalore districts with 75 more Nandghars viz-a-viz 25 in Sanchore (Jalore) and 50 in Barmer district. In FY 21-22, A total of 17,772 community members have been benefited through Nandghar projects.</li> <li>• In addition, Cairn also initiative a new project in partnership with Bodh Siksha Sanstha, to implement the education initiative “Ujjwal” for improving access to and quality of education in 60 government schools in Barmer district in Rajasthan. In this year, various interventions (infrastructure, digital as well as academic) have been undertaken to improve learning outcomes in 20 government schools, benefiting more than 7,600 students. In addition to the school activities, components of bridge classes and remedial classes has been carried out to mainstream school dropouts 1,400 students benefit from these initiatives. However, due to COVID 19, all schools were closed as per the guidelines of the Government of India. In May 2020, Cairn launched a unique education initiate “e-Kaksha” for providing quality education by developing e-library of syllabus of Rajasthan state Board for class 6th to 12th in partnership with Department of Education (Government of Rajasthan) across all 33 districts of Rajasthan. The project will be re-launched by Hon’ble CM of Rajasthan in October 2020. In FY 21-22, the project has reached 11,74,18,392CR people through its views and subscriptions recorded on YouTube. The project has been widely appreciated by all stakeholders and has bagged multiple external recognitions. For FY22-23, our E-Kaksha project continues to benefit the students at a large. The Till date the project has recorded 139,413,534 views having 837,000 subscribers. 1000+ videos have been made accessible for viewers as a part of the digital library created under this initiative. In the reporting period of FY22-23, more</li> </ul>

S. No.	Issue raised	Status of actions (as of September 2024)
		<p>than 85,000 new subscriptions have been registered for this project. As on March'23, the project has reached 3.81 cr.</p> <ul style="list-style-type: none"> <li>• In addition, we have also launched two new projects benefiting the students towards having access to digital education as well as bridging the infrastructure gap in primary section of government schools. In 2021, Cairn partnered with Government Education department in a 25:75 financial scheme wherein 25% of the funds are being contributed by Cairn Vedanta to establish 151 ICT labs in secondary and senior secondary schools of Barmer, paving way to 100% digitalization of Barmer schools. The project intends to benefit 5000+ students from Barmer district. As on date government has initiated the process of tender for partner on-boarding of its implementing.</li> <li>• The second project is Desk Kit - These innovative desk kits are light weighted bags with attached portable table which can be easily carried to school as well as used at home to study. These bags are intended to address the gap in furniture availability in primary schools of Barmer and to encourage children to sit and study in the right posture from an early age. A total of 4000 desk kits will be distributed in Barmer. For FY22-23, 1981 desk kits have been distributed across schools of Barmer region.</li> <li>• Cairn also launched Swasthya Vidyalaya” program i.e., School Sanitation Program in 2017, across 28 govt. schools in Barmer in Partnership with an NGO – Yuva Unstoppable. The project not only focuses on improving the water and sanitation facilities in these schools, but through structured monthly interventions focuses on bringing a sustainable change in the behavior of students. More than 7200 students were impacted.</li> <li>• Dairy Development</li> <li>• Cairn’s Dairy Development Program was launched in 2008. Almost a decade after its inception, the revenue generated for the dairy farmers has crossed ~ INR 90 crore witnessing a production of over 2.82 crore liters of milk from across 46 villages. The dairy cooperatives are producing over to ~17,500 liters of milk daily. 46 milk cooperatives have been registered, consisting of ~4600 dairy members. In addition to the regular activities of milk collection, capacity building sessions, this year two new initiatives have been launched under this program. The MVV (Mobile Veterinary Van) and One stop solution shop have benefited more than 1520 cattle by providing medical and fodder services.</li> <li>• In FY21-22, 5,683 cooperative member farmers over 61 villages have been positively impacted out of which 621 were onboarded this year. Every month, more than 6 lac litres of milk has been sold by 61 dairy federations generating a revenue of INR 2.6 Cr, through 5,683 farmers in cooperatives. Total 31 women Self Help Groups and 363 Members saved Rs. 14.16 lakhs under the Dairy Development Program. In addition, Mobile Veterinary Van positively provided veterinary services to around 630 beneficiaries. The one stop solution shop benefited 597 farmers through supply of micronutrient and supplementary food for improving overall cattle health. Milk</li> </ul>

S. No.	Issue raised	Status of actions (as of September 2024)
		<p>producer group’s annual meet was organized in presence of Scientists from CAZRI, officials and sarpanch with 250 community members in February.</p> <ul style="list-style-type: none"> <li>• Despite COVID 19, Cairn has been able to continue to provide dairy services to the livestock of dairy producers ensuring social distancing and all precautions while milking and collecting milk at the milk collection centres. In FY21-22, H1 data represented total 24.21 lac litres of milk have been sold by 117 dairy federations generating a total revenue of INR 10.31 Crore and benefiting more than 5,000 farmers.</li> <li>• Mobile Veterinary Van has organized 237 Cattle Health and counselling camps and 3 Mega health camps, which benefitted more than 564 families and ~approx. 5,706 cattle.</li> <li>• For FY22-23, 19.61 lac litres of milk have been sold by 62 dairy federations generating a revenue of ~ INR 8.42 Cr.</li> <li>• Total 33 women Self Help Groups and 387 Members saved INR 1.95 under the Dairy Development Programme in the reporting quarter.</li> <li>• Cairn took the initiative to address the issue of ‘Lumpy Skin Disease’ which was widespread amongst cattle. To enhance awareness about LSD, team engaged with District Administration including Animal Husbandry department and organized multiple Cattle Health Camps. The collaborative effort resulted in reaching out to 1100 cattle from 525 households.</li> <li>• Mobile Veterinary Van conducted 217 cattle health camps reaching out to 845 families &amp; ~ 9442 Cattle.</li> <li>• The veterinary solution shop benefited 585 farmers and 3360 cattle through supply of micronutrient and supplementary food for increasing milk production and improving overall cattle health.</li> <li>• Stitching Training Program organized for members of SHG group benefitting 20 women each month.</li> <li>• An Annual Convention Meet of the farmers and dairy members associated with our project organized. About 450 dairy farmers participated.</li> </ul> <ul style="list-style-type: none"> <li>• Healthcare <i>(Refer Page no 2, question no 5 for CSR initiatives related to health support)</i></li> </ul> <p>The following social welfare initiatives were taken up under various thematic areas during April’23 – Sept’23:</p> <ul style="list-style-type: none"> <li>• Dairy</li> <li>• 43.03 lac litres of milk have been sold by 62 dairy federations generating a revenue of ~ INR 9.32 Cr.</li> </ul>

S. No.	Issue raised	Status of actions (as of September 2024)
		<ul style="list-style-type: none"> <li>• 387 Members of 33 SHG's saved INR 42,520 under the Dairy Development Programme in the reporting quarter.</li> <li>• Mobile Veterinary Van conducted 222 cattle health camps reaching out to 816 families &amp; 8,952 cattle.</li> <li>• The veterinary solution shop benefited 462 farmers and 2379 cattle through supply of micronutrient and supplementary food for increasing milk production and improving overall cattle health.</li>   <li>• Agriculture</li> <li>• Introducing Hi-Tech vegetable cultivation (Chilli, Cauliflower, Cabbage) we established 5 nursery demonstration, provided them with Mulching sheets and drip irrigation facility.</li> <li>• Around 30 Farmer Field School (FFS) Training sessions conducted to disseminate information and educate farmers about establishment of new wadis and ways to generate income from it benefitting more than 800 beneficiaries.</li> <li>• 16 Training and awareness sessions were conducted on Pest and disease management, climate smart agriculture during which they were taught about minimizing and mitigating climatic risks.</li> <li>• 170 soil samples have been sent to KVK for diagnosis and lab testing. They will generate a soil health card this will give an overview of soil health to the farmers. This would help farmer can take right decisions to add right nutrition in the soil.</li> <li>• A total of 1 hectare of barren land out of a 5-hectare area is being developed as a pastureland. As part of the initiative, 250 forestry plants of neem, sesame, gulmohar, and karanja have been planted to provide a valuable food source for domestic and wild animals. Additionally, grass seeding of sevan and dhawan has been done on 0.6 acres of land to promote soil conservation.</li>   <li>• Education</li> <li>• To ensure proper mental and physical development of children in the age group of 3-years regular ECCE activities are ongoing. In reporting period, 3843 children were covered across 124 Nand Ghars.</li> <li>• Around 100 adolescent girls at Nandghars demonstrated their creativity and resourcefulness by producing handicraft materials such as wall hangings, flower vases by applying the principle of Best out of waste to transform trash into treasure.</li> <li>• Health Camps organized in 46 Nand Ghars reaching out to 1456 beneficiaries including children, adolescent girls, pregnant and lactating mothers. In convergence with ongoing Nirogi Rajasthan campaign, sensitive issues like mental health were also touched upon in these health camps.</li> <li>• Created a digital education library consisting of 11,000+ videos catering to students from class 6th to 12th. Till date the project YouTube channel has recorded 16.97 Cr. views. 1,17,000 new subscribers have been onboarded in the reporting quarter.</li> </ul>

S. No.	Issue raised	Status of actions (as of September 2024)
		<ul style="list-style-type: none"> <li>• 200+ desk bags have been distributed to support primary school students. These function as both a bag and a portable desk which in turn bridges the infrastructural gap in schools in rural areas.</li> </ul> <p>For the period of Oct'23 – March'24, following significant work has been carried out -</p> <p>Dairy project –</p> <ul style="list-style-type: none"> <li>• 129.13 lac litres of milk have been sold by 62 dairy federations generating a revenue of ~ INR 9.66 Cr.</li> <li>• 387 Members of 33 SHG's saved INR 40,620 under the Dairy Development Programme in the reporting quarter.</li> <li>• Mobile Veterinary Van conducted 214 cattle health camps reaching out to 848 families &amp; 9,155 cattle.</li> <li>• The veterinary solution shop benefited 425 farmers and 2150 cattle through supply of micronutrient and supplementary food for increasing milk production and improving overall cattle health.</li> <li>• 1501 farmers from 37 villages were given training on various dairy related awareness, training, and workshop activities in this quarter.</li> <li>• . 323 farmers participated in in the convention, wherein they were oriented about new farming techniques to enhance their crop production.</li> <li>• Extending medical care under project “Maru Sagar”, a Cattle Health and Counselling camp was organized in Gudamalani region in collaboration with TACO and Department of Animal Husbandry. 80+ cattle were vaccinated and treated.</li> </ul> <p>Barmer Unnati project -</p> <ul style="list-style-type: none"> <li>• A team of 50 progressive farmers from Barmer district visited the Central Arid Zone Research Institute (CAZRI). They learnt about CAZRI's efforts to develop crops that can withstand drought and sustainable, environmentally friendly farming practices sustainable farming practices.</li> <li>• In Barmer &amp; Gudamalani cluster 42 compost pits have been prepared for organic farming practice. Compost pit enriches the soil by retaining moisture and suppressing diseases and pests</li> <li>• 4 Rainwater Harvesting structures have been completed in school in Gudamalani cluster of Barmer district. The interventions ensure round the year water availability to more than 800 children.</li> <li>• Barmer's Dayal Self Help Group of women were given the opportunity to showcase their products of organic millets produce (cookies, laddos) at the Vedanta Pink City Half Marathon Exhibition in Jaipur. This event opened doors to a wider audience which facilitated SHG selling all their produce.</li> </ul>

S. No.	Issue raised	Status of actions (as of September 2024)
		<ul style="list-style-type: none"> <li>• 10 training sessions were organized to provide information on establishing a new wadi for creating channels of multiple income sources. 190 farmers benefited from these sessions.</li> <li>• To ensure sustainability &amp; enhance the fruit yield of the farmers, after care services have been provided to the orchids developed under Barmer Unnati project. The training and nutrients provided have ensured 90% survival rate of orchids.</li> <li>• As part of a novel initiative, two farmers clubs were formed to harness market linkage opportunities for Cumin seeds and Ber fruits among the farmers. The</li> <li>• initiative aims to enhance the income and livelihood of the farmers by connecting them with potential buyers and traders.</li> <li>• A workshop was conducted in collaboration with officials from Agriculture department for farmers on topics related to Agro forestry, organic farming, cumin market linkages and government schemes for agriculture. The aim was to educate the farmers and help them improve their productivity and income.</li> </ul> <p>Education -</p> <ul style="list-style-type: none"> <li>• For this financial year, a new intervention of supporting 151 schools has been implemented across Barmer district. This project is a collaboration with the Education department towards ensuring 100% of secondary schools have digital education (ICT labs). Close to 10k students benefit from this project. In addition, 400+ desk kit has been distributed.</li> <li>• To ensure proper mental and physical development of children in the age group of 3 years regular ECCE activities are ongoing. In the reporting period, 6,187 children were covered across 124 Nand Ghars.</li> <li>• 3800 pregnant and lactating mothers availing the benefit of Nand Ghar education, nutrition, and healthcare services.</li> <li>• To mark the millet year, Recipe training was given to AWW, mothers wherein they were taught about preparation of Bajra (millet) biscuits, laddus and namkeen. More than 80 women participated.</li> <li>• Khejri plantation drive was organized and 100 Khejri saplings were planted across 10 Nandghars.</li> <li>• More than 100 adolescent girls at Nandghar demonstrated their creativity and resourcefulness by learning diya painting and selling, beautician skill &amp; Aplic stitching.</li> </ul> <p>For the period of April'24 – Sep'24, following significant work has been carried out -</p> <p>Dairy Development project -</p> <ul style="list-style-type: none"> <li>• In the reporting period we have impacted 42,576 famers across 62 villages have been impacted under this project.</li> </ul>

S. No.	Issue raised	Status of actions (as of September 2024)
		<ul style="list-style-type: none"> <li>• Two days demonstration on dairy, livestock management along with best practices was organized in presence of District Collector Balotra at Mallinath Animal fair tilwara. The demonstration was organized in collaboration with Animal Husbandry department.</li> <li>• Around 414 milk containers, in sizes of 15 Liters, 10 Liters, 7.5 Liters, and 5 Liters, were distributed to milk producer committee members as part of the incentives generated by them during 2022-23</li> <li>• 41,625 rootstocks of Super Napier grass were given to 1274 dairy members.</li> <li>• Through 2 Vet Solution Shops 4,348 cattle of 927 family members were benefitted.</li> <li>• 30 days stitching training was organized in which total 169 females participated and benefitted from the sessions.</li> <li>• The annual convention meet was conducted in Narinadi, Hariyali Gram Panchayat, under this project. The event was a gathering of over 350 farmers from 63 villages, united in their dedication to dairy farming. Experts shared invaluable insights on government and non-government schemes, agriculture, and finance, enriching our collective knowledge.</li> </ul> <p>Barmer Unnati -</p> <ul style="list-style-type: none"> <li>• 6000+ farmers have been engaged in this period in provisions of income enhancement activities like wadi development, bio-gas, compost development, etc.</li> <li>• 161 new waadis (fruit orchards) would be established during the year in Barmer and Gudamalani clusters in order to help farmers generate additional income.</li> <li>• Total 6,800 Kg of cumin seeds were produced by farmers of Barmer &amp; Gudamalani. The total cultivated area was 23 hectares</li> <li>• 15 youth was selected under Cairn Agri fellow program. The youth were trained on tractor repair and maintenance at Agriculture university Jodhpur.</li> <li>• 2 Biogas plant have been established under the project which will produce gas equivalent to ~12-14 LPG annually</li> </ul> <p>Education initiatives -</p> <p>For this financial year, we have continued to focus on building the right building blocks for the children undergoing pre-education at Nandghars. In partnership with ICDS department 124 Nandghars are operational across Cairn business villages in Barmer district. 300+ desk bags have been distributed to</p>



S. No.	Issue raised	Status of actions (as of September 2024)
		support primary school students. These function as both a bag and a portable desk which in turn bridges the infrastructural gap in schools in rural areas

ii. **Public Hearing carried out at Guda Malani, Barmer district on 20<sup>th</sup> January, 2007 for Guda Hydrocarbon Development Project in RJ-ON-90/01 Block**

S. No.	Issue raised	Status of actions (as of September 2024)
1.	Employment to local people whose land has been acquired	<p>As per the local content policy in the past, preference was given to locals for their engagement either in terms of employment or vehicle/equipment engagement. We had the process in which we registered the local population and their vehicles/Equipment's (RC) and based on the demands from vendors, we gave priority to land contributors till 2017. Now employment opportunities are given to locals by the vendors directly.</p> <p>Other than this, Scholarships to meritorious students from the local community are disbursed for higher studies in medicine and engineering. This year FY21-22, Cairn contributed INR 8 lac towards supporting 4 students of engineering and medical batch studying in government collage.</p> <p>CAIRN runs 3 Skill training centres in Rajasthan - Barmer, Sanchore and Jodhpur. Till date more than 15,000 Approximately 70% trainees have been placed in various industries. For FY21-22, we have operationalized only 1 centre</p> <p>Due to COVID 19 pandemic globally and precautionary guidelines issued by Government of India (GoI), we have this year reduced the training targets in line with the guidelines of MHA. Training has been imparted from one centre, Cairn Enterprise Centre, Barmer. So far in this year we have trained 400+ students through online and offline mode in courses like electrician, mobile repair, computers, GST, DRA. In addition, basis the need of the hour and demand from local stakeholders we have launched a certified course on training health professional and others on Basic and advanced life support skill training. 88 students benefited from this initiative. Over 75% placement record continues to be achieved from this training institute CEC, Barmer. Furthermore, the Cairn Centre of Excellence (CCoE), Jodhpur continued to be treated as quarantine unit by Jodhpur authorities.</p> <p>As per the compliances of partnering with any agency, the contract for implementing our skill initiative was to be renewed. The tender process was initiated and carried out in H1. We as on Oct'22 have a partner on-boarded for running the vocational skill development courses from our CEC, Barmer. Under the new contract issued to learnt skills, we have enrolled 254 students till March'23. In addition to the trades of Data Entry Operator, Electrician, Mobile handset repair, Assistant Mason, for the first time we have successfully launched all girls batch on Beautician</p>

S. No.	Issue raised	Status of actions (as of September 2024)
		<p>Assistant. The 30 girls inducted in this program has been first ever intervention in Baitu zone. The students have been currently undergoing On-job-training and will be placed by next month end.</p> <p>Till September'23, A total 329 of students are undergoing classroom training at CEC across trades like basic computers, mobile handset engineer and basic electrician with 89% placement record.</p> <p>Over the H2 of FY23-24, we further trained 360+ with placement record reaching 92%. Through CEC new courses like BCBF, DRA, MIS Analyst and all girls batch for beauty assistant was introduced. Students continue to pursue trainings in courses NSDC certified vocational trainings. In addition, we also re-instated our Cairn Centre of Excellence, Jodhpur in partnership with Agriculture university. The program intends to offer degree &amp; short-term courses in farm and non-farm sector. Close to 175+ students have been engaged under this project. Under the on-going project of skill development, Cairn continues to train rural youths in various vocational trades like data entry operator, electrician, mobile handset repair, business correspondence and business facilitator, MIS analyst, etc. So far during the reporting period we have trained more than 300+ students with 89% placement record. In addition, we launched a Beautician Assistance Course empowering 30 women with skills to run or work in beauty parlours, enhancing their self-reliance and financial stability. In parallel to this, we have also been focusing on various allied activities to increase awareness of this project as well as help students develop holistically. While this has been Cairn's approach in Barmer district, through another skill centre CCoE at Jodhpur, we have trained close to 600 students in farm and non-farm sector skills.</p>
2.	Compensation be given in proportion to status of land use	Land acquisition has been done in compliance to regulatory requirements and the compensation amount was decided by the Land Acquisition Officer. Payment has been disbursed through the LAO.
3.	Action for fluoride removal in drinking water	<p>Cairn has implemented Safe Drinking Water project in partnership with PHED and Govt. of Rajasthan, to provide safe drinking water to communities. Based on the success of the pilot initiative in 2013 the project has been scaled up in the entire Barmer district.</p> <p>Under the tripartite MoU with PHED department to establish RO units across Barmer district, 124 RO units have been installed and commissioned across 124 villages till date in Barmer &amp; Jalore districts, benefiting more than one lac community members annually.</p> <p>In FY 21-22, so far 1,43,180 beneficiaries were impacted through supply of safe drinking water through Community run RO units. While the 124 RO units are functional and community is taking water from the same, efforts have been put in place to help strengthen the exit strategy and project sustainability. Focused intervention on IEC activities, water committee formation and handholding support on business plan has been extended to the communities at large,</p>

S. No.	Issue raised	Status of actions (as of September 2024)
		<p>which has resulted in a positive response from the community. The community for the first time has come forward to undertake the responsibility of plant O&amp;M. At many places the water committee has already collected money as revolving fund for its operations as well as planning to set up chiller at few locations. 70+ RO plants have been successful handed over to the community as per their demand to carry out regular operations. Efforts are on-going to create stronger community acceptance and ownership across all RO plants.</p> <p>Besides RO project, Cairn has also constructed &amp; commissioned 10 bore wells in water constraint regions of Barmer district benefitting 2000 households on monthly basis In FY 21-22, additional 5 community borewells have been taken up in partnership with PHED. So far, through the 10 community borewells developed in phase 1 by Cairn were reported functional, benefiting more than 18,000 community members and 3000 livestock.</p> <p>During H1 FY 2020-21, Cairn has revived more than 70 RO plants which were non-functional based on the stakeholder requests and in the next half, H2 FY 2020-21, 48 RO plants were revived which adds total functional 118 RO plants. So far 86 village committees have been formed and responsibility of RO operations have been handed over to these committees. An NGO has been onboarded to create awareness and sensitize local community members to accept RO water as safe drinking water compared to longtime stored rainwater or canal water of fluoride water and also ensure sustainability.</p> <p>Basis the success of the project seen so far, Cairn intends to extend AMC and basis handholding support to 124 RO plants installed and operationalized in Barmer district. For the same, a new partner agency has been on-boarded through the standard tender process. While the 124 RO units are functional and community is taking water from the same, efforts have been put in place to help strengthen the exit strategy and project sustainability. 86 RO plants have been successfully handed over to the community as per their demand to carry out regular operations. Efforts are on-going to create stronger community acceptance and ownership across all RO plants. Regular meetings are being held with PHED officials at District and block level for RO handover process to PHED. More than 43 Lakh Liters Clean and safe drinking water is sold from 82 RO plants benefitting 9241 families and generating a revenue of 10.84 lakh. For FY 22-23, we have ensured 1.10 lac people benefit from safe drink water initiative.</p> <p>In addition, under our Community Borewell project, for FY22-23, 2 Borewell Sites drilling, and water testing work has been Completed in Daulotpra &amp; Nimbalkot Villages. Two borewell drilling has been initiated in Kau Ka Kheda and Bandra Gram Panchayat. In addition to 10 borewells constructed in Phase 1, a total of 5 borewells will be added</p>

S. No.	Issue raised	Status of actions (as of September 2024)
		<p>in phase 2 of Borewell Project, out of which 4 have been operationalized benefiting 4000+ community members on monthly basis.</p> <p>During H1 FY 23-24, Regular meetings are being held with PHED officials at District and block level for RO handover process to PHED. More than 69 Lakh Litres Clean and safe drinking water is sold from 124 RO plants benefitting 11,429 families and generating a revenue of ~approx. 17.32 lakh.</p> <p>Moving towards Sustainability, 92 out of 124 RO plants have been successfully hand overed to PHED dept after providing seven years of operation, maintenance &amp; handholding services. 32 out of 124 Community based RO plants have been successful handed over to the community as per their demand to carry out regular operations. Efforts are on-going to create stronger community acceptance and ownership across all RO plants.</p> <p>In H2 of FY23-24, the community water project (Jevan Amrit) was successfully handed over to the communities and PHED. In addition to this, we continued our efforts towards providing water to the interior of villages through community borewell intervention. In partnership with PHED, ground level resource work has been completed in 4 out 5 Borewell plants. These 4 borewells are operational in 4 villages Bandra, Kau ka Kheda, Nimbalkot and Dholatpura benefiting 800 households.</p> <p>Furthermore, In Rajasthan, water scarcity has been a persistent issue, particularly in remote areas. The team in collaboration with the Public Health &amp; Engineering department-initiated drilling of a borewell at Rohidi village. The village is at the Indo-Pak border. The initiative will provide immediate relief by ensuring perennial water supply but will contribute towards sustainable development of the communities.</p> <p>Cairn in the last financial year successfully handed over 92 plants to the village water committee and PHED for operation and maintenance. Thus, in the community an investment of establishing and operationalizing 124 RO plants have been taken by Cairn in the past years. In addition, the 15 community borewells development across the interior villages have been helping communities with safe drinking water at their doorsteps. Basis the community request received from Rohidi village (close to Indo-Pak border), we have also successfully commissioned the community borewell and supporting 100+ villagers.</p>
4.	Agriculture fields should be least disturbed during pipeline survey.	Pipelines are fitted with SCADA system and required minimum patrolling. However proper care is being given to avoid any damage to crops.

S. No.	Issue raised	Status of actions (as of September 2024)
5.	Involvement of locals during pipeline survey	Engagement Cells were setup where local community members, including land losers, can register themselves for job and their vehicles and equipment for contractual hire. The process of course gives priority to the land contributors but also gives opportunity to the non-land contributors. The local content policy was developed in which preference was given to locals for their engagement either in terms of employment or vehicle/equipment engagement. We had the process in which we registered the local population and their vehicles/Equipment's (RC) and based on the demands from vendors we gave priority to land contributors till 2017. Now employment opportunities are given to locals by the vendors directly.
6.	Installation of desalination plant for company's water requirement	Company has permission to source 53500 KLD of saline water from deep aquifer and RO/desalination plants are being installed at Cairn facilities (MPT & RGT) to meets its operational water requirement. No fresh water is drawn for Cairns operational requirements.
7.	Organization of the monthly meeting with district Administration for redressal of land related issue	Land acquisition has been done in compliance to regulatory requirements and the compensation amount was decided by the Land Acquisition Officer. Payment has been disbursed through the LAO. Further, Cairn has grievance redressal system in place to record and track community grievances. Regular meetings are also being carried out with different stakeholders including land losers, community, village head, government officials and district administrator.
8.	Preference in employment for technically qualified people in the area	Engagement Cells were setup where local community members, including land losers, can register themselves for job and their vehicles and equipment for contractual hire. The process of course gives priority to the land contributors but also gives opportunity to the non-land contributors. The local content policy was developed in which preference was given to locals for their engagement either in terms of employment or vehicle/equipment engagement. We had the process in which we registered the local population and their vehicles/Equipment's (RC) and based on the demands from vendors we gave priority to land contributors till 2017. Now employment opportunities are given to locals by the vendors directly.
9.	Training to local people be imparted to create job opportunities	Refer question no 1 for CSR initiative related to skill trainings.
10.	Development of small and cottage industries	Action may be taken at district administration level; however, Cairn provides technical skill training towards development of entrepreneurship.

S. No.	Issue raised	Status of actions (as of September 2024)
11.	Social welfare in the areas of Education, Dairy, health care, aids control, Animals Husbandry, etc.	Refer question no 11 of page no 5
12.	Study of flood situation in the area	Company have installed flood warning systems in upstream of locations prone to flood. Cairn has been actively extending support every year to all community members affected directly or indirectly by flood in the area. Measures like, rescue mission, providing food to flood trapped people, medical assistance, conducting awareness cum health camps, etc. are some of the many interventions.
13.	Fellowship to at least five students for higher education	Scholarships to meritorious students from the local community are disbursed for higher studies in medicine and engineering. Additionally, encouragement to students to pursue higher education for careers in engineering and medicine. In FY 2018-19, 8 students were given scholarships whereas in FY 2019-20, 5 students are given scholarships. The selection of students for scholarship for FY2020-21 is under process. This year in H1, Cairn provided INR 1 lac each to two engineering students and INR 2 lac each to two medical students studying in government collage. In FY21-22, a total of INR 8 lac has been provided to 4 students of medical and engineering field studying in the government collage. The project has been successfully closed.  While the support on the educational front has been provided in the past, Cairn also has been supporting youths towards pursuing quality training in the field of sports, building academic excellence and as well as supporting an overall holistic development.

**iii. Public Hearing carried out in Barmer district on 10th October 2007 (Bhagyam EIA)**

S. No.	Concerns/suggestions	Status of actions (as of September 2024)
1.	Support for establishing Residential School in Baytu.	CAIRN has developed infrastructure for the school in Baytu, including refurbishment of library and setting up science and computer labs in FY 2012 and Cairn had also launched project -Chirag in 2014 in which schools in Sanchore block was adopted to provide education in English, Science, Mathematics and Computers. In 2018, Cairn also adopted one school in Tantada and upgraded its infrastructure. In FY 21-22 a new initiative has been taken up in partnership with Education Department to set up ITC labs in 151 schools around our operational area. These schools will then be able to benefit from the digital learning opportunities made available by the government.  A new initiative has been also launched this year to support schools which lack proper seating facilities in primary section. Proper infrastructure support is instrumental in bridging the gap and focusing on improving learning

S. No.	Concerns/suggestions	Status of actions (as of September 2024)
		<p>outcomes. Cairn has till date distributed 1181 Desk bag kits to students in government schools. We intend to distribute 4000 such bags in total.</p> <p>Besides this, In FY 2019-2020, Cairn has partnered with Chetna Foundation to implement Nandghar project – an initiative to focus on health and education of children in the age group 3-6 years. Across 49 Nandghars established in Barmer, close to 1,200 students benefit each day through interactive learning under the ECCE (Early childhood care and education). In H1 FY 2020-21, Cairn planned to expand the Nand Ghar project in Barmer and Jalore districts with 75 more Nandghars viz-a-viz 25 in Sanchores (Jalore) and 50 in Barmer district. In FY 21-22, A total of 17,772 community members have been benefited through Nandghar projects.</p> <p>For FY22-23, This year we have impacted 3270 children through 124 Nandghars from Nov’22 onwards post on-boarding of new partner.</p> <ul style="list-style-type: none"> <li>• In convergence with Mobile Health Van Initiative, Mega Health Camps have been organized at 4 locations. Through these health camps communities residing in far way villages were able to avail specialist doctor’s facilities. Other than mega camps,122 Health Camps were organized Nand Ghars.</li> <li>• Under nutrition, 25 Nutri-Gardens revived, and 163 malnourished children catered.</li> <li>• A new component of skilling has been introduced into Nand Ghar. Under this, 5-day stitching training organized in 36 locations, enhancing skill set of 230 adolescents’ girls and women.</li> <li>• Taking a step forward towards sustainability, we have focused on gathering support from community. We have established 2 toilets,1 electricity connection, 3 net and drip water facility in Nutri-Gardens and 2 Wi-Fi connection with entire financial assistance from community and Gram Panchayat. Saving a total of Rs. 192500</li> <li>• To improve health and hygiene of Adolescent Girls, Hygiene Kits distributed in all 125 NGs to 1092 Adolescent Girls.</li> <li>• Supporting State Government Scheme called Project Udaan, 628 sanitary napkins distributed to adolescent girls in 50 NGs.</li> </ul> <p>In addition, Cairn also initiative a new project in partnership with Bodh Siksha Sanstha, to implement the education initiative “Ujjwal” for improving access to and quality of education in 60 government schools in Barmer district in Rajasthan. In this year, various interventions (infrastructure, digital as well as academic) have been undertaken to improve learning outcomes in 20 government schools, benefiting more than 7,600 students. In addition to the school activities, components of bridge classes and remedial classes has been carried out to mainstream school dropouts 1,400 students benefit from these initiatives. However, due to COVID 19, all schools were closed as per the guidelines of the Government of India. In May 2020, Cairn launched a unique education initiate “e-Kaksha”</p>

S. No.	Concerns/suggestions	Status of actions (as of September 2024)
		<p>for providing quality education by developing e-library of syllabus of Rajasthan state Board for class 6<sup>th</sup> to 12<sup>th</sup> in partnership with Department of Education (Government of Rajasthan) across all 33 districts of Rajasthan. The project will be re-launched by Hon’ble CM of Rajasthan in October 2020. In FY 21-22, the project has reached 11,74,18,392 CR people through its views and subscriptions recorded on youtube. The project has been widely appreciated by all stakeholders and has bagged external recognitions.</p> <p>For FY22-23, our E-Kaksha project continues to benefit the students at a large. The Till date the project has recorded 139,413,534 views having 837,000 subscribers. 1000+ videos have been made accessible for viewers as a part of the digital library created under this initiative. In the reporting period of FY22-23, more than 85,000 new subscriptions have been registered for this project. As on March’23, the project has reached 3.81 cr.</p> <ul style="list-style-type: none"> <li>○ In addition, we have also launched two new projects benefiting the students towards having access to digital education as well as bridging the infrastructure gap in primary section of government schools. In 2021, Cairn partnered with Government Education department in a 25:75 financial scheme wherein 25% of the funds are being contributed by Cairn Vedanta to establish 151 ICT labs in secondary and senior secondary schools of Barmer, paving way to 100% digitalization of Barmer schools. The project intends to benefit 5000+ students from Barmer district. As on date government has initiated the process of tender for partner on-boarding of its implementing.</li> <li>○ The second project is of Desk Kit - These innovative desk kits are light weighted bags with attached portable table which can be easily carried to school as well as used at home to study. These bags intent to address the gap in furniture availability in primary schools of Barmer and to encourage children to sit and study in right posture from an early age. A total 4000 desk kits will be distributed in Barmer. For FY22-23, 1981 desk kits have been distributed across schools of Barmer region.</li> <li>○ Furthermore, we have also undertaken a dedicated intervention in Baitu school in FY22-23, where the school infrastructure has been developed to support conducive learning environment as well as included digital learning through establishing Google classroom.</li> <li>○ Cairn also launched Swasthya Vidyalaya” program i.e. School Sanitation Program in 2017, across 28 govt. schools in Barmer in Partnership with an NGO – Yuva Unstoppable. The project not only focuses on improving the water and sanitation facilities in these schools, but through structured monthly interventions focuses on bringing a sustainable change in the behavior of students. More than 7200 students were impacted.</li> <li>● For this financial year, a new intervention of supporting 151 schools has been implemented across Barmer district. This project is a joint collaboration with the Education department towards ensuring 100% of secondary schools have digital education (ICT labs). Close to 10k students benefit from this project. In addition, 400+ desk kit has been distributed.</li> </ul>



S. No.	Concerns/suggestions	Status of actions (as of September 2024)
		<ul style="list-style-type: none"> <li>To ensure proper mental and physical development of children in the age group of 3-years regular ECCE activities are ongoing. In the reporting period, 6,187 children were covered across 124 Nand Ghars.</li> </ul> <p>Cairn has been taking multiple initiatives towards supporting both education interventions as well as infrastructure to provide a conducive learning environment. For this reporting period we have continued to focus on building the right building blocks for the children undergoing pre-education at Nandghars. In partnership with ICDS department 124 Nandghars are operational across Cairn business villages in Barmer district. In addition, 300+ desk bags have been distributed to support primary school students. These function as both a bag and a portable desk which in turn bridges the infrastructural gap in schools in rural areas</p>
2.	Self-Support Groups should be linked with Enterprise Centre.	<p>As a part of encouraging women entrepreneurship, 1600 women were provided training on business model through Nandghar project in FY18-19.</p> <p>In addition to this, various social enterprise support in areas like tailoring, dairy work, fancy store, etc., are been provided through various CSR projects.</p> <ul style="list-style-type: none"> <li>The Dairy Development program in Barmer in partnership with local NGO -Society to Uplift Rural Economy, till date (Sept' FY 21-22) has formed a total of 31 women Self Help Groups, comprising of 363 Members who have saved ~ INR 13.35lac under Dairy Development Program. For FY21-22, 363 women have been engaged across 31 Self-Help Groups (SHGs) and have ensured savings of INR 14,61,630 to date. These women are trained in allied activities and linked with financial institutions for soft loans. These women are linked women with dairy initiatives as well as been trained on various other allied activities for livelihood enhancement. Till FY22-23, 33 SHG have been formed comprising of 387 members who have saved INR 1.95 under the Dairy Development Programme in the reporting quarter.</li> </ul> <p>In FY 2019-20, Cairn has partnered with an agency, CHETNA Foundation to undertake Operation &amp; Maintenance of 49 Nandghars in Barmer district and provide skill-based livelihood opportunities to women around these Nandghars. While the nutrition, health and education for children, women and adolescent girls are undertaken, the livelihood initiative shall be rolled out in FY 2020- 21 subject to baseline and need assessment outcome. This has now been proposed to scale up as a separate program.</p> <p>In H1 FY 2020-21, Cairn planned to expand the Nand Ghar project in Barmer and Jalore districts with 75 more Nandghars viz-a-viz 25 in Sanchore (Jalore) and 50 in Barmer district. These new 75 and existing 50 nandghars will be a part of the next business plan for FY22-23. Under the Nandghar project, efforts have been made to develop SHG members/groups who are now engaged in cooking and managing the delivery of hot meals services</p>

S. No.	Concerns/suggestions	Status of actions (as of September 2024)
		<p>at Nandghars. These women are being empowered to coordinate with government department (ICDS) to continue the initiative even after Cairn exit.</p> <p>In addition to the above, many women are being trained across various vocational trades and linked to the available job opportunities. Some of the courses in which female participation was witnessed this year are – GST, computers and ACLS and BLS trainings. For FY22-23 we have implemented a new course on beautician assistant towards encouraging livelihood and entrepreneurship in the region.</p> <p>Extending our support further to women members, we have introduced dedicated sessions with them to engage them in our Agriculture and Animal Husbandry projects. The skill trainings in field of agriculture, crop productivity enhancement, etc. has helped them move beyond boundaries and take ownership of the income enhancement activities. Furthermore, the adolescent girls community formed under project Nandghar are been used to establish them as a change makers towards bridging the knowledge gap on health, education and income activities awareness.</p> <p>During H1 of FY 23-24, The Barmer Unnati project (Agri NRM) empowered self-help groups (SHGs) in the rural areas of Barmer district, Rajasthan, by providing them with skills and opportunities for income generation. One of the activities under this project is the millet cookie making training, which teaches the SHGs how to produce nutritious and delicious cookies from bajra, a local millet crop. The SHGs women can then sell these cookies in the market or consume them at home, creating a sustainable and profitable model of small-scale entrepreneurship.</p> <p>In addition to this, we also offer regular training sessions on skill enhancement to more than 300 SHG women under our dairy development program. These sessions cover topics such as stitching, pickle making, etc. Some of these women have already started their own small-scale enterprises and are selling their products to nearby villages or relatives.</p> <p>During H2 of FY23-24, efforts to further strengthen the SHG were put in place. In addition to supporting 30 SHG women in handholding support. Barmer’s Dayal Self Help Group of women were given the opportunity to showcase their products of organic millets produce (cookies, laddos) at the Vedanta Pink City Half Marathon Exhibition in Jaipur. This event opened doors to a wider audience which facilitated SHG selling all their produce. In addition, 30 women have also started to sell products locally (ghee, pickles, etc.) and we look forward to expanding the reach further through advance technical trainings, brand certification and market support.</p>

S. No.	Concerns/suggestions	Status of actions (as of September 2024)
		<p>Empowering women across our social interventions is one of the key factors. In line with our vision of impacting women and children, Cairn continues to support women through both skill development training as well as income enhancement activities. In this financial year, Cairn has supported 60 women in beautician assistant training who have started their own enterprise or are working at individual capacities towards income generation activities. In addition, we have also imparted 30 days stitching training in which total 169 females participated and benefitted from the sessions. During the reporting period we have launched a new SHG of 10 members who has been working on millet-based cookies (in line with promoting International Millet year) under the banner of JJI bai cookies. So far, the group has undergone training and has sold 80kg of cookies through various platforms.</p>
3.	Work should be done in the field of solar and wind energy.	<p>Cairn has installed individual household solar panels across 500 households. This is in addition to establishing a 27kW solar micro-grid plant which supports another 500 households of a village. Furthermore, in order to address the issue of electricity supply in rural schools, Cairn implemented a solar electrification project across 100 Adarsh schools in Barmer impacting ~ 12,000 students in partnership with Renewable department of Govt, of Rajasthan – Rajasthan Renewable Energy Corporation. The project provides several benefits including provision of increased infrastructural facilities in rural Barmer schools providing a conducive academic environment and therefore reducing absenteeism among students. Furthermore, these schools were also used as village quarantine centres during the COVID pandemic as the basic facility of fan and lights were resorted due to Cairn solar intervention.</p> <p>In addition, Cairn has provided the capex cost towards the supply, installation and commissioning of a solar power for the existing RO plant in Kawas, which is operated and maintained by the village water committee and benefitting to ~500 families.</p> <p>We have also encouraged renewable energy sources in our project like Dairy Development, where the electricity requirements of BMC (Bulk Milk Collection centres) can be fed through this. Solar cookers are being distributed under this project as well to promote green cooking.</p> <p>In line with our efforts to encourage renewable energy across projects, in the reporting period we have supported a school with solar panel and electrification work benefiting close to 50 students on monthly basis.</p>
4.	Breed improvement and veterinary training programs should be organised.	<p>Cairn has implemented Dairy Development Program in 2008 to enhance livelihood generation opportunities and provide an avenue for convergence of various stakeholders for the development of dairy and related activities. Almost a decade after its inception, the revenue generated for the dairy farmers has crossed ~ INR 90 crore</p>

S. No.	Concerns/suggestions	Status of actions (as of September 2024)
		<p>witnessing a production of over 3 crore litres of milk from across 46 villages. The dairy cooperatives are producing close to ~17,500 litres of milk daily. 46 milk cooperatives have been registered, consisting of ~4408 dairy members. In FY 2019-20,</p> <ul style="list-style-type: none"> <li>• The cooperatives generated revenue of ~INR 90 CR and collected with sale of ~3 crore litre milk.</li> <li>• 363 SHG members have been registered in dairy cooperatives and more than 5000 cattle were treated in the current FY21</li> <li>• A mobile veterinary van has been launched to provide doorstep veterinary services in Barmer &amp; Jalore districts</li> <li>• Regular trainings are conducted in livestock management for dairy farmers.</li> <li>• 2 veterinary shops are being developed in the local communities which will provide access to veterinary care services to the livestock of rural communities in Barmer &amp; Jalore districts.</li> </ul> <p>Despite COVID 19, Cairn has been able to continue to provide dairy services to the livestock of dairy producers ensuring social distancing and all precautions while milking and collecting milk at the milk collection centres.</p> <p>In FY 2020-21, 56 MCC(Milk Collection Centre) and 02 Vet solution shop and 31 SHG supported by 331 women. Total saving for these SGH groups is around 13.33 lakhThe project continues to appreciated by the communities as it has not only helped address the issue of milk adulteration but has also provided farmers with enhanced knowledge about the well-being of their livestock, overall dairy management, increase market rate for their produce, supported with facilities of MVV (Mobile Vet Van), One shop solution shop to purchase high quality nurtitients, green fodder, etc. In FY 21-22, so far the project has reached –</p> <ul style="list-style-type: none"> <li>• Till date close to 5,683 cooperative member farmers over 61 villages have been positively impacted out of which 621 were onboarded this year</li> <li>• 363 women have been engaged across 31 Self-Help Groups (SHGs) and have ensured savings of INR 14,61,630 to date. These women are trained in allied activities and linked with financial institutions for soft loans.</li> <li>• To enhance the milk productivity, more than 2,024 farmers have been provided fodder, 2,129 have been provided Napier grass and 308 have been given sugar beet inputs</li> <li>• Through innovative initiatives like Mobile Veterinary Vans and one-stop solution shops more than 2,526 Families have benefitted.</li> <li>• A 45-day long training workshop on stitching was held around seismic camp and pipeline area Sanchore &amp; Chittalwana. 18 women participated in this training, accounting for a total of 361 women SHG members benefitted through livelihood initiatives. The trainings were provided by Master trainer Mrs. Sita Devi from the same village who has been an alumnus of Cairn past training on livelihood.</li> </ul>

S. No.	Concerns/suggestions	Status of actions (as of September 2024)
		<p>For FY22-23, Since its inception, the project has had a significant impact by engaging more than 6000 farmers across 62 villages.</p> <ul style="list-style-type: none"> <li>• 19.61 lac litres of milk have been sold by 62 dairy federations generating a revenue of ~ INR 8.42 Cr.</li> <li>• Total 33 women Self Help Groups and 387 Members saved INR 1.95 under the Dairy Development Programme in the reporting quarter.</li> <li>• Cairn took the initiative to address the issue of ‘Lumpy Skin Disease’ which was widespread amongst cattle. To enhance awareness about LSD, team engaged with District Administration including Animal Husbandry department and organized multiple Cattle Health Camps. The collaborative effort resulted in reaching out to 1100 cattle from 525 households.</li> <li>• Mobile Veterinary Van conducted 217 cattle health camps reaching out to 845 families &amp; ~ 9442 Cattle.</li> <li>• The veterinary solution shop benefited 585 farmers and 3360 cattle through supply of micronutrient and supplementary food for increasing milk production and improving overall cattle health.</li> <li>• Stitching Training Program organized for members of SHG group benefitting 20 women each month.</li> <li>• An Annual Convention Meet of the farmers and dairy members associated with our project organized. About 450 dairy farmers participated.</li> </ul> <p>During H1 FY 23-24, the project has had a significant impact by engaging more than 6000 farmers across 62 villages.</p> <ul style="list-style-type: none"> <li>• One our implementing part SURE has been catalyst and played an important role in recognizing sanchori buffalo breed at national level through ICAR.</li> <li>• We offer various training to dairy farmers on topics such as clean milk production, Dala treatment at the village level, azola and napier grass cultivation, fodder making, shobha kalmi kejri, dairy and animal management. These training courses are conducted throughout the year and reach more than 3000 farmers.</li> </ul>

S. No.	Concerns/suggestions	Status of actions (as of September 2024)
		<ul style="list-style-type: none"> <li>• 539.9 lac litres of milk have been sold by 62 dairy federations generating a revenue of ~ INR 19.26 Cr.</li> <li>• 387 Members of 33 SHG's saved INR 17.23 Lac under the Dairy Development Programme in the reporting quarter.</li> <li>• Mobile Veterinary Van conducted 435 cattle health camps reaching out to 1468 families &amp; 15,605 cattle.</li> <li>• The veterinary solution shop benefited 1017 farmers and 5164 cattle through supply of micronutrient and supplementary food for increasing milk production and improving overall cattle health.</li> <li>• As part of the dairy development project, 50+ camel rearer from Dhandhali village participated in an animal care training. They learned about the best practices for camel health and the advantages of camel milk production.</li> <li>• As part of women SHG development, new income generation activities of training on pickle making were imparted. Post the training, 30 women have successful started selling their product at individual capacity.</li> <li>• In order increase milk production and enhance its quality new farmers were provided with Napier grass and Azola grass.</li> </ul> <p>During H2, we have yet again made a significant progress as below -</p> <ul style="list-style-type: none"> <li>• 129.13 lac litres of milk have been sold by 62 dairy federations generating a revenue of ~ INR 9.66 Cr.</li> <li>• 387 Members of 33 SHG's saved INR 40,620 under the Dairy Development Programme in the reporting quarter.</li> <li>• Mobile Veterinary Van conducted 214 cattle health camps reaching out to 848 families &amp; 9,155 cattle.</li> <li>• The veterinary solution shop benefited 425 farmers and 2150 cattle through supply of micronutrient and supplementary food for increasing milk production and improving overall cattle health.</li> <li>• 1501 farmers from 37 villages were given training on various dairy related awareness, training, and workshop activities in this quarter.</li> <li>• . 323 farmers participated in in the convention, wherein they were oriented about new farming techniques to enhance their crop production.</li> </ul>

S. No.	Concerns/suggestions	Status of actions (as of September 2024)
		<ul style="list-style-type: none"> <li>• Extending medical care under project “Maru Sagar”, a Cattle Health and Counselling camp was organized in Gudamalani region in collaboration with TACO and Department of Animal Husbandry. 80+ cattle were vaccinated and treated.</li> </ul> <p>Under the dairy development initiative Cairn continues to provide regular trainings and engagement sessions with farmers towards quipping them with both technical knowledge as well as services at the door step. These are focused on improving the overall milk production and sustainable cattle care. Some of the key activities in this regard are –</p> <ul style="list-style-type: none"> <li>➤ Two days demonstration on dairy, livestock management along with best practices was organized in presence of District Collector Balotra at Mallinath Animal fair tilwara. The demonstration was organized in collaboration with Animal Husbandry department.</li> <li>➤ On the occasion of Camel Day, a Camel Health and Counseling Camp was held on June 22, 2024, in Sanchole. Approximately 115 camels were vaccinated for dermatitis diseases.</li> <li>➤ In collaboration with The Animal Care Organization (TACO),we have successfully conducted a Cattle Health and Counselling Camp at Paddrdi, Gram Panchayat Sindhaswas, Gudamalani, Barmer District on 19th July 2024. The camp aimed to address the seasonal diseases affecting cattle in the area. Doctors provided treatment to a total of 417 animals, including 65 camels and 352 other animals such as cows, buffaloes, sheep, and goats. The camp benefited 23 families in the region.</li> <li>➤ A two-day training and awareness program on spice farming (masala cultivation) was held at Bhadrana Gram Panchayat on 2nd and 3rd September 2024. This session aimed to equip farmers with the knowledge and techniques needed to cultivate spices on their farms.</li> </ul>
5.	Social work should be carried out with public support on a long term basis	<p>All CSR programs are conceptualized on the basis of the baseline and needs assessment and implemented in consultation with local beneficiaries and administration. Majority of our projects have been running for over 5-6 yrs. Community and government partnership are the key pillar to design and implement any CSR programs. As per our standard operating policy, every three years Cairn conducts a baseline and impact assessment study which analysis the impact created from the perspective of stakeholders including beneficiaries.</p> <p>The core principle of designing CSR projects are focused on pillars of impact, community inculsion and government partnership towards a long term sustainable intervention.</p>

S. No.	Concerns/suggestions	Status of actions (as of September 2024)
6.	Support in the expansion of medical facilities in Barmer District	<p>Cairn has implemented various health related projects in Barmer &amp; Jalore districts to strengthen healthcare delivery in the areas and created awareness on various health aspects in the last one decade.</p> <p>As on date 4 Mobile Health Vans (MHVs) are providing primary and affordable medical services to 149 far flung villages in Rajasthan benefitting approx. 1.14 lac community members annually. Villages in our operational area are sparsely populated and lack optimum methods of transportation and mobility. Thus, the MHV services providing health care facilities at the doorstep of the community is highly appreciated by the community. Regular awareness sessions and multi-specialty health camps are conducted for the masses. Services of Gynecologist, Orthopedic, Pediatric, ENT specialist, Dentist, and General Practitioner are provided under these health camps. In FY21-22, we have close to 60,644 OPD's conducted through MHV projects. For FY22-23 we have touched more than 40,000 people through OPD services.</p> <p>In FY 2015-2017, Project RACHNA created awareness in Barmer villages in reproductive, maternal, child health and nutrition. 2 Sanitary pad units were also developed and provided to the women SHGs. Over ~14,000 adolescent girls and rural women were engaged in regular awareness sessions in order to sensitize them about menstrual hygiene and reproductive health.</p> <p>In order to better the medical facilities available in the district hospital, two major interventions have been initiated by the company – first: 'Green Barmer, Clean Barmer' campaign focusing on creating awareness among citizens of Barmer on health and hygiene; and second: strengthening the health services offered at government district hospital by providing three medical specialists. These specialists include a female gynecologist, an ENT specialist and a general surgeon which has impact more than 48,800 people in this Financial year 19-20. And 39,6,36 in Financial year 20-21. In FY 21-22, so far 28,147OPDs were conducted by Cairn supported doctors in District hospital. In addition to this, through the cleanliness facilities supported at District hospital, 10,96,060 people have benefited. These medical services and sanitation facilities has not only helped thousands of patients but has also improved the overall ranking of this district hospital across the state. The hospital has been rewarded 1st position twice in row over the last two years on cleanliness and patient satisfaction. 8 housekeeping staff deployed under our Clean Barmer Green Barmer project were felicitated for their service by District Hospital on 73rd Republic Day. For FY22-23 we continue to impact the larger population of Barmer visiting District Hospital which is 17.84 lac benefiting from</p> <p>A three-day free mega camp for disabled was organized where more than 1,100 disabled people benefitted. The intent was to provide medical support and motivate the community through personal interaction. In addition, on</p>



S. No.	Concerns/suggestions	Status of actions (as of September 2024)
		<p>Gandhi Jayanti, the Swachhta Pakhwada was initiated between 2nd and 16th October, all stakeholders pledged to keep the hospital and its surrounding areas clean and raise awareness regarding the importance of cleanliness. as a part of the Swachhta Pakhwada being organized at the Govt. District Hospital, Barmer, a special workshop on 5S was conducted for the sanitation workers, nursing students, medical staff and hospital administration. A student health-connect activity called ‘Swastha Pathshala Abhiyan’ was introduced in 2018 in 54 government schools in Barmer under the Mobile Health Van Project, impacting ~14,000 students. This programme focuses on behavioral modules on health and hygiene. Health camps are conducted regularly, and parents are also appraised about the medical needs of their children. This serves as a comprehensive guiding tool to improve the health of students and parents.</p> <p>With the aim of transforming public health systems and achieving greater adoption of safe, timely and effective practices of handling pregnancy and newborn complications, Cairn, in partnership with National Health Mission and Department of Medical, Health and Family Welfare (Rajasthan), initiated an intervention to operationalize all dysfunctional First Referral Units (FRUs) in the District of Barmer. In FY 2019-20 (Apr – March), 8,586 treatments have been conducted by 2 FRUs.</p> <p>Based on all above health interventions, Cairn has impacted around 14.77 lac community in FY21-22 and 21.29 lac.</p> <p>With the outbreak of pandemic COVID 19, Cairn Oil &amp; Gas has taken various steps to create awareness about this deadly virus as well as equip &amp; strengthen local administration to combat COVID 19 by launching Project Sanjeevani in which we created awareness, provided more than 60000 masks, 20 BIPAP ventilators, 5000 litres/ 30000 bottles of sanitizers, 10000 litres disinfectant, 1550 PPEs, 2250 N-95 masks, and reached out to more than 4 lakh people in around 1200 villages around our operational assets.</p> <p>With the onset of winter in Oct 2020, we planned to launch a mega campaign on COVID 19 awareness on theme “No Mask No Entry” through IEC, virtual marathon, etc.</p> <p>Besides this, Cairn has also launched one ambulance and handed over to Barmer District Hospital for carrying COVID patients. We have set up three COVID Care Centres in Barmer in collaboration with health department where we provided meals to more than 2000 patients till March 2021.</p> <p>Following are the appreciation / accolades received for the health initiatives in Barmer, Rajasthan.</p>

S. No.	Concerns/suggestions	Status of actions (as of September 2024)
		<p>Recognition from District Medical Officer, District Health Department, Barmer (Govt. of Rajasthan) on September 27, 2019 for providing and maintaining quality healthcare services in Barmer District Hospital as well as for the best area of the district through various initiatives and helping district achieve top three position in the state by leading the nationwide vaccination campaign on “Measles &amp; rubella (MR)” launched on July 22, 2019</p> <p>Received appreciation letter from District health Department, Barmer Govt. of Rajasthan on 14<sup>th</sup> May 2019 for healthcare services in Barmer district hospital that resulted the hospital being ranked #1 among district hospitals in Rajasthan.</p> <p>Recommendation letter was given to Vedanta Cairn Oil and Gas by Government Medical College Barmer on Republic Day, January 2020 for their remarkable services/ support offered on improving health facilities in district hospital.</p> <p>Received Business National CSR Leadership Award 2019 for category Concern for Health on Wednesday on September 18, 2019 in Bangalore by World CSR Congress</p> <p>Received R Health Impact Award 2019 on June 27, 2019, for the health programs under the thematic category “Swastha Initiative” as well as a Certificate of Nomination under category “Rural Health Initiative” for the impactful CSR activities.</p> <p>Under the phase 2 of COVID 19, Cairn continued to support government in addressing the national crises of beds, oxygen cylinders, medical facilities and other related interventions to support patients in their treatments. Some of the key highlights of the same are –</p> <ul style="list-style-type: none"> <li>• A 100 bed Vedanta COVID field hospital has been inaugurated by Mr. Ashok Gehlot, CM Government of Rajasthan. Considering this hospital, a total of 610 bed facility has been supported by Cairn over this quarter.</li> <li>• ~3.5 lac community members have been touched through COVID initiatives like – community awareness drives and supply of food packets to COVID patients and health workers.</li> <li>• Arranged transportation of ~94K litres of O2 to District hospital.</li> <li>• 2 MHV's provided to DA Barmer - to be engaged in COVID awareness and transportation of patients.</li> <li>• First of kind, Community Vaccination Drive conducted at Ravva, for people in the age group of 18-45 years. A total of 1906 community members have been covered, through multiple vaccination camps.</li> <li>• Supported District Administration with thousands of medical and surgical consumable items. This includes VTM kit, COVID kit, Para monitor, medicines, masks, and sanitizers, are few such items.</li> </ul> <p>In addition to the above, In the reporting year more than 43,000 OPD's have been conducted through 4 MHV's across 149 villages of Rajasthan</p> <ul style="list-style-type: none"> <li>• Throughout the year, multiple awareness sessions/health camps were organized to apprise beneficiaries of measures to maintain good health and brought onward specialist doctor services (Gynaecologist, paediatrician, dermatologist, etc.), cumulatively reaching out to 7355 people.</li> <li>• With continuous support of Cairn, District Hospital continues to Rank 1st across Rajasthan in terms of facilities and hygiene standards for the last four years.</li> </ul>

S. No.	Concerns/suggestions	Status of actions (as of September 2024)
		<ul style="list-style-type: none"> <li>• With support of 2 specialist doctors deployed in District Hospital, 40,620 OPDs were conducted.</li> <li>• Close to 8.92 lakhs footfall recorded in District Hospital in the past year.</li> <li>• World Health Day, International Nurses Day, etc. were celebrated with great fervour within Hospital premises.</li> </ul> <p>Furthermore, some new initiatives have been undertaken to improve the nutritional and health status of women and children, in partnership with district administration. 1,50,000 hemoglobin strips have been handed over to district administration as well as 22,680 laddus handed over to ICDS department for dietary support to 542 malnourished children. As a result, 166 have moved from SAM (severely malnourished) to MAM (moderately malnourished) and 155 have completed recovered over the last 3 months of Cairn nutritional support. Through our Vaccination drive (supporting government in their endeavor to provide COVID vaccination to all), we have covered more than 6800 people across Barmer and Sanchore district of Rajasthan.</p> <p>Apart from continuous operation of MHV and regular support to district hospital</p> <p>During the period of April'23 – September'23 (H1), We inaugurated a general ward at the Community Health Centre (CHC) Kawas, with the presence and support of Mr. Mewaram Jain, Brig. BS Shekhawat and other important stakeholders. This ward will provide better medical services to the CHC Kawas and serve around 35,000 people in the nearby areas.</p> <p>We are also working on developing a super specialty wing at the Government Medical College, which will be an extension of the District Hospital Barmer.</p> <p>During the period of H2 (Oct'23 – March'24), in addition to the regular health initiatives, we launched a unique project “Harit Dhara” towards empowering rural women by offering sustainable menstrual hygiene solutions. The project has reached 5000 women. As a next step the women are now taking order for stitching cloth pads which is supporting towards additional income generation. In District Hospital, the efforts continued towards improving the medical facilities and services. 47,457 OPDs were conducted by Cairn supported doctors in District hospital. Under the “Clean Barmer Green Barmer Intervention” 62 staff have been diligently working towards ensuring the hospital premises and facilities are clean. More than 3.72 lac visited District hospital in this quarter and availed the hospital facilities.</p> <p>Furthermore, District Hospital was felicitated at the State level for FY 21-22 and 22-23 for doing good work under “Kaya Kalp” a Government of India Initiative under National Health Mission. The District Hospital expressed gratitude to Cairn for supporting them in their efforts.</p>

S. No.	Concerns/suggestions	Status of actions (as of September 2024)
		<p>Cairn's multi-tier approach towards improving the healthcare facilities and services in the region has helped reach out to more than 11.68 lac people in the reporting period. We continue to reach out to the interiors of villagers through our MHV (Mobile Health Van) services on a weekly basis. In addition, our round-the-clock support on health &amp; hygiene as well as medical services has been a major support in addressing the load of Barmer District Hospital. Furthermore, we also focus on creating mass awareness drives in communities on seasonal diseases as well as holding multi-specialty camps towards addressing various ailments. Our efforts further gets strengthen by the interventions carries out in functionalizing the CHC and PHC's</p>
7.	<p>Need creative initiatives to bring environmental awareness among the youth</p>	<p>Environmental awareness is being created through various CSR projects and exclusive awareness dives like Maru Samvad in which awareness generating activities were carried out in 20 critical villages in Barmer district. Awareness drives are also organized in schools and at various water distribution points. World Environment Day is also celebrated across all schools and skill centres which includes sessions from esteem and renowned facilitators and encouraging participation from local youths through completion and recitation. In addition, in FY21-22, two-month long plantation drive was carried out covering more than 25 GP, planting 2000+ sapling and creating awareness among communities on environment sustainability. A community-based monitoring &amp; maintenance mechanism has been developed in partnership with the community/ key stakeholders for project sustainability.</p> <p>As a part of Microlevel Intervention initiative Cairn has been continuously engaging community on plantation initiatives. In addition, there are various other CSR interventions which focuses on promoting greener action, like solar electrification in 100 adarsh schools, renovation of 28 community ponds (Nadi) towards water conservation, Roof water structures in schools, promoting solar cooker in Dairy project, etc.</p> <p>This year various other interventions like environment day celebration, plantation drive as well as overall behavioural change session with students have been organized in Barmer district.</p> <p>As an organization, we continue to deploy the best and leading environmental practices across our operations. Commemorating the occasion of World Environment Day 2023, our environment and CSR teams conducted various events and activities with the aim of further building awareness on the theme of 'Beat Plastic Pollution'. Zero food waste challenge, poster making, essay writing, and photography competitions were organised across our operational areas with enthusiastic participation from our employees, their families, and our business partners and contract workers. Other activities included a Nature Walk in Gaangli forest in Rajasthan, 5 km fun run at RJ</p>

S. No.	Concerns/suggestions	Status of actions (as of September 2024)
		<p>North, distribution of jute bags to RJ North workforce, and mass tree plantation executed by ~500 community members across Rajasthan and Gujarat, and awareness sessions with community members and stakeholders.</p> <p>In addition to the above endeavor, we hold mass plantation drives along with the communities and students. This creates not only awareness on environment but also creates a sense of responsibility among youths towards ensuring plant survival. We engaged more than 500+ students annually.</p> <p>Supporting a green cover and its related awareness is a major initiative at Cairn. We have been dedicatedly taking up initiatives of mass awareness and plantation across Barmer district. In this context, we have planted more than 5,000 saplings in the reporting period. The engagement with schools, students and community at large has towards increasing the greenbelt area in the region.</p>
8.	To organize environment related competitions	Various competitions and rallies are also being organized during World Environment Day among locals to spread awareness through CSR program and employee volunteering activities by Cairn employees.
9.	Company shall provide maximum opportunities of direct and indirect employment	<p>As per the local content policy in the past, preference was given to locals for their engagement either in terms of employment or vehicle/equipment engagement. We had the process in which we registered the local population and their vehicles/Equipment's (RC) and based on the demands from vendors we gave priority to land contributors. Now employment opportunities are given to locals by the vendors directly.</p> <p>Other than this, Scholarships to meritorious students from the local community are disbursed for higher studies in medicine and engineering. This year FY21-22, Cairn contributed INR 8 lac towards supporting 4 students of engineering and medical batch studying in government collage.</p> <p>CAIRN runs 3 Skill training centres in Rajasthan - Barmer, Sanchore and Jodhpur. Till date more than 15,000 Approximately 70% trainees have been placed in various industries. For FY21-22, we have operationalised only 1 centre</p> <p>Due to COVID 19 pandemic globally and precautionary guidelines issued by Government of India (GoI), we have this year reduced the training targets in line with the guidelines of MHA. Training has been imparted from one centre, Cairn Enterprise Centre, Barmer. So far in this year we have trained 400+ students through online and offline mode in courses like electrician, mobile repair, computers, GST, DRA. In addition, basis the need of the hour and demand from local stakeholders we have launched a certified course on training health professional and others on Basic and advance life support skill training. 88 students benefited from this initiative. Over 75% placemnet record continues to be achieved from this training institute CEC, Barmer. Furthermore, the Cairn Centre or Excellence (CCoE), Jodhpur continued to be treated as quarantine unit by Jodhpur authorities.</p>

S. No.	Concerns/suggestions	Status of actions (as of September 2024)
		<p>As per the compliances of partnering with any agency, the contract for implementing our skill initiative was to be renewed. The tender process was initiated and carried out in H1. We as on Oct'22 have a partner on-boarded for running the vocational skill development courses from our CEC, Barmer. Under the new contract issued to learnt skills, we have enrolled 254 students till March'23. In addition to the trades of Data Entry Operator, Electrician, Mobile handset repair, Assistant Mason, for the first time we have successfully launched all girls batch on Beautician Assistant. The 30 girls inducted in this program have been first ever intervention in Baitu zone. The students have been currently undergoing On-job-training and will be placed by next month end.</p> <p>Over the H2 of FY23-24, we further trained 360+ with placement record reaching 92%. Through CEC new courses like BCBF, DRA, MIS Analyst. Students continue to pursue trainings in courses NSDC certified vocational trainings. In addition, we also re-instated our Cairn Centre of Excellence, Jodhpur in partnership with Agriculture university. The program intends to offer degree &amp; short-term courses in farm and non-farm sector. Close to 175+ students have been engaged under this project. This initiative is a further extension of our efforts to promote entrepreneurs in the region along with supporting advancement of skills. The degree course offered further promotes agriculture as a stream to pursue for future career path. Under the on-going project of skill development, Cairn continues to train rural youths in various vocational trades like data entry operator, electrician, mobile handset repair, business correspondence and business facilitator, MIS analyst, etc. So far during the reporting period we have trained more than 300+ students with 89% placement record. In addition, we launched a Beautician Assistance Course empowering 30 women with skills to run or work in beauty parlours, enhancing their self-reliance and financial stability. In parallel to this, we have also been focusing on various allied activities to increase awareness of this project as well as help students develop holistically. While this has been Cairn's approach in Barmer district, through another skill centre CCoE at Jodhpur, we have trained close to 600 students in farm and non-farm sector skills.</p>

S. No.	Concerns/suggestions	Status of actions (as of September 2024)
10.	Need to focus on animal husbandry activities, exotic Babool (Prosopis Juliflora) control for pasture development and rainwater harvesting and recharge	<p>Animal husbandry is a part of Cairn’s Dairy Development Program which was launched in 2008. Almost a decade after its inception, the revenue generated for the dairy farmers has crossed ~ INR 90 crore witnessing a production of over 3 crore litres of milk from across 46 villages. The dairy cooperatives are producing close to ~17,500 litres of milk daily. 46 milk cooperatives have been registered, consisting of ~4600 dairy members.</p> <ul style="list-style-type: none"> <li>• The cooperatives generated revenue of ~INR 90 CR and collected with sale of ~3 crore litre milk.</li> <li>• 289 SHG members have been registered in dairy cooperatives and more than 5000 cattle were treated in the current FY 21</li> <li>• the MoU with SURE has been renewed till 2021 and a provision of new veterinary van has been introduced to provide doorstep veterinary services in Barmer &amp; Jalore districts.</li> <li>• Regular training is conducted in livestock management for dairy farmers. A mobile Veterinary Van has also been launched to provide veterinary care services at the doorstep in 46 villages in Barmer &amp; Jalore districts.</li> <li>• 2 veterinary shops are being developed in the local communities which will provide access to veterinary care services to the livestock of rural communities in Barmer &amp; Jalore districts.</li> <li>• Despite COVID 19, Cairn has been able to continue to provide dairy services to the livestock of dairy producers ensuring social distancing and all precautions while milking and collecting milk at the milk collection centres.</li> </ul> <p>The project continues to appreciated by the communities as it has not only helped address the issue of milk adulteration but has also provided farmers with enhanced knowledge about the well-being of their livestock, overall dairy management, increase market rate for their produce, supported with facilities of MVV (Mobile Vet Van), One shop solution shop to purchase high quality nutrients, green fodder, etc. In FY 21-22, so far the project has reached –</p> <ul style="list-style-type: none"> <li>• Till date close to 5,683 cooperative member farmers over 61 villages have been positively impacted out of which 621 were onboarded this year</li> <li>• 363 women have been engaged across 31 Self-Help Groups (SHGs) and have ensured savings of INR 14,61,630 to date. These women are trained in allied activities and linked with financial institutions for soft loans.</li> <li>• To enhance the milk productivity, more than 2,024 farmers have been provided fodder, 2,129 have been provided Napier grass and 308 have been given sugar beet inputs</li> <li>• Through innovative initiatives like Mobile Veterinary Vans and one-stop solution shops more than 2,526 Families have benefitted.</li> </ul>

S. No.	Concerns/suggestions	Status of actions (as of September 2024)
		<ul style="list-style-type: none"> <li>• 918 women were apprised under an awareness drive about the 2nd wave of COVID 19 for smooth functioning of Dairy operations</li> <li>• A 45-day long training workshop on stitching was held around seismic camp and pipeline area Sanchore &amp; Chittalwana. 18 women participated in this training, accounting for a total of 361 women SHG members benefited through livelihood initiatives. The trainings were provided by Master trainer Mrs. Sita Devi from the same village who has been an alumnus of Cairn past training on livelihood.               <ul style="list-style-type: none"> <li>• For FY22-23, 19.61 lac litres of milk have been sold by 62 dairy federations generating a revenue of ~ INR 8.42 Cr.</li> <li>• Total 33 women Self Help Groups and 387 Members saved INR 1.95 under the Dairy Development Programme in the reporting quarter.</li> <li>• Cairn took the initiative to address the issue of ‘Lumpy Skin Disease’ which was widespread amongst cattle. To enhance awareness about LSD, team engaged with District Administration including Animal Husbandry department and organized multiple Cattle Health Camps. The collaborative effort resulted in reaching out to 1100 cattle from 525 households.</li> <li>• Mobile Veterinary Van conducted 217 cattle health camps reaching out to 845 families &amp; ~ 9442 Cattle.</li> <li>• The veterinary solution shop benefited 585 farmers and 3360 cattle through supply of micronutrient and supplementary food for increasing milk production and improving overall cattle health.</li> <li>• Stitching Training Program organized for members of SHG group benefitting 20 women each month.</li> <li>• An Annual Convention Meet of the farmers and dairy members associated with our project organized. About 450 dairy farmers participated.</li> </ul> </li> </ul> <p>Towards natural resource management, CAIRN has constructed of 1056 khadins and renovated of 28 traditional water harvesting structures (nadi) till date developing the harvesting capacity of the area by ~18 lakh cu m water every year. Cairn is also instrumental in tapping roof top water through proper harvesting facilities in 95 schools, benefitting 8,000+ students and developing rainwater harvesting capacity of 5 lac cubic meter.</p> <p>Cairn has also developed many grazing lands in Barmer, Gudamalani and Sanchore blocks in Jalore., which has been successfully handed over to the community for operation and maintenance, post necessary capacity building training.</p>



S. No.	Concerns/suggestions	Status of actions (as of September 2024)
		<p>In FY 21-22 a 5HA land has been developed in Chittar ka Par GP as grazing land in partnership with community. In this 5 ha pastureland (250 trees planted &amp; grass seeding done for green fodder. The ownership of the community has helped ensure that the trees have started fruiting.</p> <p>During H1 FY 23-24, the project has had a significant impact by engaging more than 6000 farmers across 62 villages.</p> <ul style="list-style-type: none"> <li>• One our implementing part SURE has been catalyst and played an important role in recognizing sanchoi buffalo breed at national level through ICAR.</li> <li>• We offer various training to dairy farmers on topics such as clean milk production, Dala treatment at the village level, azola and napier grass cultivation, fodder making, shobha kalmi kejri, dairy and animal management. These training courses are conducted throughout the year and reach more than 3000 farmers.</li> <li>• 539.9 lac litres of milk have been sold by 62 dairy federations generating a revenue of ~ INR 19.26 Cr.</li> <li>• 387 Members of 33 SHG's saved INR 17.23 Lac under the Dairy Development Programme in the reporting quarter.</li> <li>• Mobile Veterinary Van conducted 435 cattle health camps reaching out to 1468 families &amp; 15,605 cattle.</li> <li>• The veterinary solution shop benefited 1017 farmers and 5164 cattle through supply of micronutrient and supplementary food for increasing milk production and improving overall cattle health.</li> <li>• As part of the dairy development project, 50+ camel rearer from Dhandhali village participated in an animal care training. They learned about the best practices for camel health and the advantages of camel milk production.</li> <li>• As part of women SHG development, new income generation activities of training on pickle making were imparted. Post the training, 30 women have successful started selling their product at individual capacity.</li> </ul> <p>In order to increase milk production and enhance its quality new farmers were provided with Napier grass and Azola grass.</p> <p>As part of the Barmer Unnati project, our goal is to improve the quality of pastureland in the region from April to September 2023. We have adopted the Miyawaki technique of plantation, which involves planting native species</p>

S. No.	Concerns/suggestions	Status of actions (as of September 2024)
		<p>in dense clusters to create mini forests. We have also built 69 Khadin, which are traditional rainwater harvesting structures, and 5 naadis, which are small ponds for storing water.</p> <p>During H2 of FY23-24, following engagements have been conducted –</p> <ul style="list-style-type: none"> <li>• 129.13 lac litres of milk have been sold by 62 dairy federations generating a revenue of ~ INR 9.66 Cr.</li> <li>• 387 Members of 33 SHG’s saved INR 40,620 under the Dairy Development Programme in the reporting quarter.</li> <li>• Mobile Veterinary Van conducted 214 cattle health camps reaching out to 848 families &amp; 9,155 cattle.</li> <li>• The veterinary solution shop benefited 425 farmers and 2150 cattle through supply of micronutrient and supplementary food for increasing milk production and improving overall cattle health.</li> <li>• 1501 farmers from 37 villages were given training on various dairy related awareness, training, and workshop activities in this quarter.</li> <li>• . 323 farmers participated in in the convention, wherein they were oriented about new farming techniques to enhance their crop production.</li> <li>• Extending medical care under project “Maru Sagar”, a Cattle Health and Counselling camp was organized in Gudamalani region in collaboration with TACO and Department of Animal Husbandry. 80+ cattle were vaccinated and treated.</li> </ul> <p>In addition, through our Barmer Unnati project (implemented in 145 villages of Barmer), we have focused on promoting Hi-tech vegetable farming, kitchen garden and move towards organic farming. In this regard,</p> <ul style="list-style-type: none"> <li>• A team of 50 progressive farmers from Barmer district visited the Central Arid Zone Research Institute (CAZRI). They learnt about CAZRI's efforts to develop crops that can withstand drought and sustainable, environmentally friendly farming practices sustainable farming practices.</li> <li>• In Barmer &amp; Gudamalani cluster 42 compost pits have been prepared for organic farming practice. Compost pit enriches the soil by retaining moisture and suppressing diseases and pests</li> </ul>

S. No.	Concerns/suggestions	Status of actions (as of September 2024)
		<ul style="list-style-type: none"> <li>• 4 Rainwater Harvesting structures have been completed in school in Gudamalani cluster of Barmer district. The interventions ensure round the year water availability to more than 800 children.</li> <li>• 10 training sessions were organized to provide information on establishing a new wadi for creating channels of multiple income sources. 190 farmers benefited from these sessions.</li> <li>• To ensure sustainability &amp; enhance the fruit yield of the farmers, after care services have been provided to the orchids developed under Barmer Unnati project. The training and nutrients provided have ensured 90% survival rate of orchids.</li> <li>• As part of a novel initiative, two farmers clubs were formed to harness market linkage opportunities for Cumin seeds and Ber fruits among the farmers. The initiative aims to enhance the income and livelihood of the farmers by connecting them with potential buyers and traders.</li> <li>• A workshop was conducted in collaboration with officials from Agriculture department for farmers on topics related to Agro forestry, organic farming, cumin market linkages and government schemes for agriculture. The aim was to educate the farmers and help them improve their productivity and income.</li> </ul> <p>For the reporting period, Cairn continues to focus on initiatives supporting water conservation, farm productivity as well as farm and animal husbandry linked income generation activities. Some of the key initiatives carried out are –</p> <ol style="list-style-type: none"> <li>1. Dairy Development project -           <ul style="list-style-type: none"> <li>• In the reporting period we have impacted 42,576 famers across 62 villages have been impacted under this project.</li> <li>• Two days demonstration on dairy, livestock management along with best practices was organized in presence of District Collector Balotra at Mallinath Animal fair tilwara. The demonstration was organized in collaboration with Animal Husbandry department.</li> <li>• Around 414 milk containers, in sizes of 15 Liters, 10 Liters, 7.5 Liters, and 5 Liters, were distributed to milk producer committee members as part of the incentives generated by them during 2022-23</li> <li>• 41,625 rootstocks of Super Napier grass were given to 1274 dairy members.</li> <li>• Through 2 Vet Solution Shops 4,348 cattle of 927 family members were benefitted.</li> <li>• 30 days stitching training was organized in which total 169 females participated and benefitted from the sessions.</li> </ul> </li> </ol>

S. No.	Concerns/suggestions	Status of actions (as of September 2024)
		<ul style="list-style-type: none"> <li>• The annual convention meet was conducted in Narinadi, Hariyali Gram Panchayat, under this project. The event was a gathering of over 350 farmers from 63 villages, united in their dedication to dairy farming. Experts shared invaluable insights on government and non-government schemes, agriculture, and finance, enriching our collective knowledge.</li> </ul> <p>2. Barmer Unnati project –</p> <ul style="list-style-type: none"> <li>• 6000+ farmers have been engaged in this period in provisions of income enhancement activities like wadi development, biogas, compost development, etc.</li> <li>• 36 community Nadi and 90 RHW structures has helped Cairn conserve more than 18 lakh cubic meter water till date.</li> <li>• 161 new waadis (fruit orchards) would be established during the year in Barmer and Gudamalani clusters in order to help farmers generate additional income.</li> <li>• Total 6,800 Kg of cumin seeds were produced by farmers of Barmer &amp; Gudamalani. The total cultivated area was 23 hectares</li> <li>• 15 youth was selected under Cairn Agri fellow program. The youth were trained on tractor repair and maintenance at Agriculture university Jodhpur.</li> <li>• 2 Biogas plant have been established under the project which will produce gas equivalent to ~12-14 LPG annually</li> </ul>
11.	Handicraft shall be encouraged	<p>In the past, Cairn has engaged women in tailoring project. More than 500 women have been trained and benefited from this intervention. In addition, Cairn supported the Rajasthan Heritage Week Event in 2017 and 2018 – encouraging local artists and artisans to display and showcase their products. The event witnessed 10,000 attendees and was widely covered in local and national print media. The event provides market linkage platform to the rural artisans and weavers. The recent publicity of Ms. Ruma Devi from Barmer, who was supported by Cairn in the past, is a good example of how corporates can engage with rural communities and strengthen their endeavors. Under the dairy development project, women are being trained on various allied livelihood activities as well, encouraging them to be more empowered.</p> <p>In addition, from time to time various training programs are been implemented under long term projects to promote local handicraft by supporting women through training and handholding support. A 45-day long training workshop on stitching was held around seismic camp and pipeline area Sanchore &amp; Chittalwana. 18 women participated in this training, accounting for a total of 361 women SHG members benefited through livelihood initiatives. The</p>

S. No.	Concerns/suggestions	Status of actions (as of September 2024)
		<p>trainings were provided by Master trainer Mrs. Sita Devi from the same village who has been an alumnus of Cairn past training on livelihood.</p> <p>As on date, under the Dairy development project 33 SHG are being formed where 387 women have been carrying out regular saving and alternate income generation activities. In addition, regular training of 30 days is provided to women and tailoring and stitching under Dairy project.</p> <p>Under our dairy development initiative, we conduct training sessions on stitching and handicraft development with interested women groups. So far, during this reporting period we have imparted 30 days stitching training was wherein 169 females participated and benefitted from the sessions. As on date we are engaged with 400+ women across SHG under this project.</p>
12.	Need to encourage tree plantation with public participation	<p>To encourage tree plantation, Cairn supports the distribution of tree sapling to the community. For all our CSR initiatives, community participation is imperative. Tree plantation drive was carried out at 49 Nandghars.</p> <p>Under the Barmer Unnati Project more than 1 lakh fruit and tree samplings have been planted since 2013.</p> <p>Furthermore, under the Barmer Smart Project, four conspicuous locations have been developed as greenbelt. More than 2500 plants have been planted and maintained across these locations.</p> <p>In addition in FY21-22, two month long plantation drive was carried out covering more than 25 GP, planting 2000+ sapling and creating awareness among communities on environment sustainability. A community-based monitoring &amp; maintenance mechanism has been developed in partnership with the community/ key stakeholders for project sustainability.</p> <p>As a part of Microlevel Intervention initiative Cairn has been continuously engaging community on plantation initiatives. In addition, there are various other CSR interventions which focuses on promoting greener action, like solar electrification in 100 adarsh schools, renovation of 28 community ponds (Nadi) towards water conservation, Roof water structures in schools, promoting solar cooker in Dairy project, etc.</p> <p>H1 – Apr’23 – sept’23, We have taken steps to ensure the safety and sustainability of our environment by planting 300+ saplings in various locations in Gujarat and Rajasthan. The children were actively involved in plantation drive and pledged to take care of them to ensure 100% survival of plants.</p> <p>In addition to the above endeavor, we hold mass plantation drives along with the communities and students. This creates not only awareness of the environment but also creates a sense of responsibility among youths towards ensuring plant survival. We engage more than 500+ students annually.</p>

S. No.	Concerns/suggestions	Status of actions (as of September 2024)
		<p>This financial year, Cairn in partnership with district administration's supported "Ek Ped Apni Maa Ke Naam Abhiyan" wherein we supported mass plantation with the help of students and community at large. This not only foster strong stakeholder relations with stakeholders but also helps create awareness in the society towards a greener environment. Supporting a green cover and its related awareness is a major initiative at Cairn. We have been dedicatedly taking up initiatives of mass awareness and plantation across Barmer district. In this context, we have planted more than 5,000 saplings in the reporting period. The engagement with schools, students and community at large has towards increasing the greenbelt area in the region.</p>

**iv. Public Hearing conducted on 26th August 2013 at Rajeev Gandhi Sewa Kendra, Village Bhakar Pura, Tehsil Guda Malani, Barmer, Rajasthan (EIA for 300 exploratory wells)**

S. No.	Issue raised	Status of actions (as of September 2024)
1.	<p>The Sarpanch of Beriwala Tala has thanked CIL for their active participation in the Nirmal Bharat Abhiyan Scheme. He had stressed the role of Panchayats in purposeful implementation of various development activities of CIL. He suggested that every village shall form a committee under the president ship of Sarpanch who shall facilitate the awareness building and Execution of various programs in each village.</p>	<p>Cairn has proactively taken up the initiative to support the Swachh Bharat Mission and Nirmal Bharat Abhiyan and constructed more than 20,500 household toilets.</p> <p>With the change in implementation strategy from construction to utilization led approach, role of community members and especially Sarpanch/ PRI members have a significant increase in ensuring total sanitation for villagers.</p> <p>Based on the success of the household sanitation project and its community acceptability, the intervention was further scaled up in 28 government schools of Barmer, benefiting more than 7200 students across water and sanitation resource development and usage.</p>
2.	<p>Most common concern which emerged during the public hearing was regarding job opportunities and work contracts in the CIL activities. It was suggested that local people should be given preference based on their skillset and education. Also, priority should be given to locals for contract jobs and for vehicle hire.</p>	<p>Engagement Cells were setup where local community members, including land losers, can register themselves for job and their vehicles and equipment for contractual hire. The process of course gives priority to the land contributors but also gives opportunity to the non-land contributors. The local content policy was developed in which preference was given to locals for their engagement either in terms of employment or vehicle/equipment engagement. We had the process in which we registered the local population and their</p>

S. No.	Issue raised	Status of actions (as of September 2024)
		<p>vehicles/Equipment's (RC) and based on the demands from vendors we gave priority to land contributors till 2017. Now employment opportunities are given to locals by the vendors directly.</p> <p>CAIRN runs 3 Skill training centres in Rajasthan - Barmer, Sanchore and Jodhpur. In the year 2018-19, Cairn Enterprise Centre (CEC), Barmer and Jalore, trained more than 1000 youth in mobile repairing, masonry, domestic electric repairing, etc. whereas ~250 students in Jodhpur. Approximately 70% trainees have been placed in various industries.</p> <p>In FY 2019-20 (Apr – March), 728 students have been enrolled and trained, and in In FY 2020-21 (Apr – March), 629 student have been enrolled and trained with 80% placement record. In addition to this, the current contract for implementing the skill training project with SEEDS have been renewed for another year (till March'22) to ensure continuity of project to provide sustainable and gainful employment opportunities to the local youths.</p> <p>Cairn's CSR implementing partners have also provided local employment opportunities by engaging ~88% of its agency staffs from local communities.</p> <p>Due to COVID 19 pandemic globally and precautionary guidelines issued by Government of India (GoI), we have not implemented any skill training programs. However, we planned to initiate the training programs from Oct 2020 by maintaining social distancing and other precautionary measures including some diverse courses like animal husbandry assistant, security guard, masonry, etc. Also considering need of the hour and new normal we have planned to implement online training programs on GST certification for commerce graduate, Debt Recovery Assistants for 12th pass with total target of over 2000 youths</p> <p>In FY 21-22, Post relaxation in lockdown from government in second phase of COVID-19 pandemic, Skill trainings have been resumed in CEC. As per the MHA guidelines of running centres with 50% capacity, we have so far trained 132 students and currently three batches are running in CEC. For FY21-22, we have trained more than 400+ students from CEC Barmer with 75% placement record on online and offline mode in courses ranging from GST, DRA, Computers, Electrician etc. As pe the compliances of partnering with any agency, the contract for implementing our skill initiative was to be renewed. The tender process was initiated and carried out in H1. We as on Oct'22 have a partner on-boarded for running the vocational skill development courses from our CEC, Barmer. Under the new contract issued to learnt skills, we have enrolled 254 students till March'23. In addition to the trades of Data Entry Operator, Electrician, Mobile handset repair, Assistant Mason, for the first time we have successfully launched all girls batch on Beautician Assistant. The 30 girls inducted in this program have been first ever intervention in Baitu zone. The students have been currently undergoing On-job-training and will be placed by next month end.</p>

S. No.	Issue raised	Status of actions (as of September 2024)
		<p>Over the H2 of FY23-24, we further trained 360+ with placement record reaching 92%. Through CEC new courses like BCBF, DRA, MIS Analyst and all girls batch for beauty assistant was introduced. Students continue to pursue trainings in courses NSDC certified vocational trainings. In addition, we also re-instated our Cairn Centre of Excellence, Jodhpur in partnership with Agriculture university. The program intends to offer degree &amp; short-term courses in farm and non-farm sector. Close to 175+ students have been engaged under this project. This initiative is a further extension of our efforts to promote entrepreneurs in the region along with supporting advancement of skills. The degree course offered further promotes agriculture as a stream to pursue for future career path.</p> <p>While at Cairn we have a local content policy which supports employment of local residents and engagement of vehicle/ business with local resident, through CSR initiative we also focus on empowering rural youths in possibilities of various vocational trades linked with employment opportunities. Under the on-going project of skill development, Cairn continues to train rural youths in various vocational trades like data entry operator, electrician, mobile handset repair, business correspondence and business facilitator, MIS analyst, etc. So far during the reporting period we have trained more than 300+ students with 89% placement record. In addition, we launched a Beautician Assistance Course empowering 30 women with skills to run or work in beauty parlours, enhancing their self-reliance and financial stability. In parallel to this, we have also been focusing on various allied activities to increase awareness of this project as well as help students develop holistically. While this has been Cairn's approach in Barmer district, through another skill centre CCoE at Jodhpur, we have trained close to 600 students in farm and non-farm sector skills.</p>
3.	<p>The water scarcity in the region is also identified as a concern and villagers requested CIL to assist the community in water resource management. One of the attendees from village Nengal requested CIL to assess the possibilities of bringing water from Narmada Canal from Sachore to Sindhri for provision of water to the nearby villages.</p>	<p>CAIRN has constructed of 1056 khadins and renovated of 28 traditional water harvesting structures (nadi) till date developing the harvesting capacity of the area by ~18 lakh cu m water every year. Cairn is also instrumental in tapping roof top water through proper harvesting facilities in 95 schools, benefiting 8,000 students and developing rainwater harvesting capacity of 5 lac cubic meter.</p> <p>Basis the success of the project seen so far, Cairn intents to extend AMC and basis handholding support to 124 RO plants installed and operationalized in Barmer district. For the same, a new partner agency has been on-boarded through the standard tender process. While the 124 RO units are functional and community is taking water from the same, efforts have been put in place to help strengthen the exit strategy and project sustainability. 86 RO plants have been successful handed over to the community as per their demand to carry out regular operations. Efforts are on-going to create stronger community acceptance and ownership across</p>



S. No.	Issue raised	Status of actions (as of September 2024)
		<p>all RO plants. Regular meetings are being held with PHED official at District and block level for RO handover process to PHED. More than 43 Lakh Liters Clean and safe drinking water is sold from 82 RO plants benefitting 9241 families and generating a revenue of 10.84 lakh. For FY 22-23, we have ensured 1.10 lac people benefit from safe drink water initiative.</p> <p>In addition, under our Community Borewell project, for FY22-23, 2 Borewell Sites drilling, and water testing work has been Completed in Daulotpra &amp; Nimbalkot Villages. Two borewell drilling has been initiated in Kau Ka Kheda and Bandra Gram Panchayat. In addition to 10 borewells constructed in Phase 1, a total of 5 borewells will be added in phase 2 of Borewell Project, out of which 4 have been operationalized benefitting 4000+ community members on monthly basis.</p> <p>In addition to the initiatives on Water conservation, we also have rolled out two major initiatives on providing safe drinking water to rural communities at their door step under the Jeevan Amrit Project, which focuses on 124 RO and 10 community borewells. Close to 1.55 lac community member benefit annually from this project.</p> <p>In H2 of FY23-24, the community water project (Jevan Amrit) was successfully handed over to the communities and PHED, where in 124 RO plants were installed across 11 blocks. In addition to this, we continued our efforts towards providing water to the interior of villages through community borewell intervention. In partnership with PHED, ground level resource work has been completed in 4 out of 5 Borewell plants. These 4 borewells are operational in 4 villages Bandra, Kau ka Kheda, Nimbalkot and Dholatpura benefiting 800 households.</p> <p>Furthermore, In Rajasthan, water scarcity has been a persistent issue, particularly in remote areas. The team in collaboration with the Public Health &amp; Engineering department-initiated drilling of a borewell at Rohidi village. The village is at the Indo-Pak border. The initiative will provide immediate relief by ensuring perennial water supply but will contribute towards sustainable development of the communities.</p> <p>Cairn in the last financial year successfully handed over 92 plants to the village water committee and PHED for operation and maintenance. Thus, in the community an investment of establishing and operationalizing 124 RO plants have been taken by Cairn in the past years. In addition, the 15 community borewells development across the interior villages have been helping communities with safe drinking water at their doorsteps. Basis the community request received from Rohidi village (close to Indo-Pak border), we have also successfully commissioned the community borewell and supporting 100+ villagers. Furthermore, we have also installed RO units in convergence models in 2</p>

S. No.	Issue raised	Status of actions (as of September 2024)
		schools this reporting period towards providing safe drinking water to school children and nearby communities.
4.	<p>Sarpanch of Bhakharpura has highlighted that many CSR activities are being carried out in several villages including Bhakarpura.</p> <p>He also stated that water in the village has high fluoride content and requested CIL to provide good quality water in the village.</p> <p>He requested CIL for extending its CSR activities in his village for improving education facilities especially for girls and jobs for un-employed youth.</p>	<p>Cairn has implemented Safe Drinking Water project in partnership with PHED and Govt. of Rajasthan, to provide safe drinking water to communities. Based on the success of the pilot initiative in 2013 the project has been scaled up in the entire Barmer district.</p> <p>Under the tripartite MoU with PHED department to establish RO units across Barmer district, 124 RO units have been installed and commissioned across 124 villages till date in Barmer &amp; Jalore districts, benefiting more than one lac community members.</p> <p>During H1 FY 2020-21, Cairn has revived more than 70 RO plants which were non-functional based on the stakeholder requests and in the next half, H2 FY 2020-21, 48 RO plants were revived which adds total functional 118 RO plants. So far 86 village committees have been formed and responsibility of RO operations have been handed over to these committees. In FY 21-22, so far 22,363+ families impacted through supply of safe drinking water through Community run RO units.</p> <p>While the 124 RO units are functional and community is taking water from the same, efforts have been put in place to help strengthen the exit strategy and project sustainability. Focused intervention on IEC activities, water committee formation and handholding support on business plan has been extended to the communities at large, which has resulted in a positive response from the community. The community for the first time has come forward to undertake the responsibility of plant O&amp;M. At many places the water committee has already collected money as revolving fund for its operations as well as planning to set up chiller at few locations. 70+ RO plants have been successful handed over to the community as per their demand to carry out regular operations. Efforts are on-going to create stronger community acceptance and ownership across all RO plants.</p> <p>Besides RO project, Cairn has also constructed &amp; commissioned 10 bore wells in water constraint regions of Barmer district benefitting 2000 households on monthly basis In FY 21-22, additional 5 community borewells have been taken up in partnership with PHED. So far, through the 10 community borewells developed in phase 1 by Cairn were reported functional, benefiting more than 18,000 community members and 3000 livestock.</p>

S. No.	Issue raised	Status of actions (as of September 2024)
		<p>Basis the success of the project seen so far, Cairn intents to extend AMC and basis handholding support to 124 RO plants installed and operationalized in Barmer district. For the same, a new partner agency has been on-boarded through the standard tender process. While the 124 RO units are functional and community is taking water from the same, efforts have been put in place to help strengthen the exit strategy and project sustainability. 86 RO plants have been successful handed over to the community as per their demand to carry out regular operations. Efforts are on-going to create stronger community acceptance and ownership across all RO plants. Regular meetings are being held with PHED official at District and block level for RO handover process to PHED. More than 43 Lakh Litres Clean and safe drinking water is sold from 82 RO plants benefitting 9241 families and generating a revenue of 10.84 lakh. For FY 22-23, we have ensured 1.10 lac people benefit from safe drink water initiative.</p> <p>In addition, under our Community Borewell project, for FY22-23, 2 Borewell Sites drilling, and water testing work has been Completed in Daulotpra &amp; Nimbalkot Villages. Two borewell drilling has been initiated in Kau Ka Kheda and Bandra Gram Panchayat. In addition to 10 borewells constructed in Phase 1, a total of 5 borewells will be added in phase 2 of Borewell Project, out of which 4 have been operationalized benefitting 4000+ community members on monthly basis.</p> <p>In H2 of FY23-24, the community water project (Jevan Amrit) was successfully handed over to the communities and PHED. In addition to this, we continued our efforts towards providing water to the interior of villages through community borewell intervention. In partnership with PHED, ground level resource work has been completed in 4 out 5 Borewell plants. These 4 borewells are operational in 4 villages Bandra, Kau ka Kheda, Nimbalkot and Dholatpura benefitting 800 households.</p> <p>Furthermore, In Rajasthan, water scarcity has been a persistent issue, particularly in remote areas. The team in collaboration with the Public Health &amp; Engineering department-initiated drilling of a borewell at Rohidi village. The village is at the Indo-Pak border. The initiative will provide immediate relief by ensuring perennial water supply but will contribute towards sustainable development of the communities.</p> <p>Cairn in the last financial year successfully handed over 92 plants to the village water committee and PHED for operation and maintenance. Thus, in the community an investment of establishing and operationalizing 124 RO plants have been taken by Cairn in the past years. In addition, the 15 community borewells development across the interior villages have been helping communities with safe drinking water at their doorsteps. Basis the community request received from Rohidi village (close to Indo-Pak border), we have also successfully</p>

S. No.	Issue raised	Status of actions (as of September 2024)
		<p>commissioned the community borewell and supporting 100+ villagers. Furthermore, we have also installed RO units in convergence model in 2 schools this reporting period towards providing safe drinking water to school children and nearby communities.</p> <p>Cairn has initiated Graduate Employability Program for the benefit of the college students. Herein the Graduate students are imparted with Computer training, Personality development and other courses for the overall development of the students. More than 1200 students have benefited from this employment enhancement training</p> <p>CAIRN runs 3 Skill training centres in Rajasthan - Barmer, Sanchore and Jodhpur. In the year 2018-19, Cairn Enterprise Centre (CEC), Barmer and Jalore, have trained more than 1000 youth in mobile repairing, masonry, domestic electric repairing, etc. whereas ~250 students in Jodhpur. Approximately 70% trainees have been placed in various industries.</p> <p>In FY 2019-20 (Apr – March), 728 students have been enrolled and trained, and in In FY 2020-21 (Apr – March), 629 student were enrolled and trained with 80% placement record. In addition to this, the current contract for implementing the skill training project with SEEDS have been renewed for another year (till March'22) to ensure continuity of project to provide sustainable and gainful employment opportunities to the local youths.</p> <p>Cairn's CSR implementing partners have also provided local employment opportunities by engaging ~88% of its agency staffs from local communities.</p> <p>While at Cairn we have a local content policy which supports employment of local residents and engagement of vehicle/ business with local resident, through CSR initiative we also focus on empowering rural youths in possibilities of various vocational trades linked with employment opportunities.</p> <p>Under the on-going project of skill development, Cairn continues to train rural youths in various vocational trades like data entry operator, electrician, mobile handset repair, business correspondence and business facilitator, MIS analyst, etc. So far during the reporting period we have trained more than 300+ students with 89% placement record. In addition, we launched a Beautician Assistance Course empowering 30 women with skills to run or work in beauty parlours, enhancing their self-reliance and financial stability. In parallel to this, we have also been focusing on various allied activities to increase awareness of this project as well as help students develop holistically. While this has been Cairn's approach in Barmer district, through another skill centre CCoE at Jodhpur, we have trained close to 600 students in farm and non-farm sector skills.</p>

S. No.	Issue raised	Status of actions (as of September 2024)
		<p>Due to COVID 19 pandemic globally and precautionary guidelines issued by Government of India (GoI), we have not implemented any skill training programs. However, we planned to initiate the training programs from Oct 2020 by maintaining social distancing and other precautionary measures including some diverse courses like animal husbandry assistant, security guard, masonry, etc. Also considering need of the hour and new normal we have planned to implement online training programs on GST certification for commerce graduate, Debt Recovery Assistants for 12th pass with total target of over 2000 youths. In FY 21-22, Post relaxation in lockdown from government in second phase of COVID-19 pandemic, Skill trainings have been resumed in CEC. As per the MHA guidelines of running centres with 50% capacity. In FY 21-22, we have trained more than 400+ students with 70% placement record across trades like GST, DRA, Computers, Electrician, ACLS and BLS, etc. through online and offline mode of training. As per the compliances of partnering with any agency, the contract for implementing our skill initiative was to be renewed. The tender process was initiated and carried out in H1. We as on Oct'22 have a partner on-boarded for running the vocational skill development courses from our CEC, Barmer. Under the new contract issued to learnt skills, we have enrolled 254 students till March'23. In addition to the trades of Data Entry Operator, Electrician, Mobile handset repair, Assistant Mason, for the first time we have successfully launched all girls batch on Beautician Assistant. The 30 girls inducted in this program have been first ever intervention in Baitu zone. The students have been currently undergoing On-job-training and will be placed by next month end.</p> <p>CAIRN has developed infrastructure for the school in Baytu, including refurbishment of library and setting up science and computer labs in FY 2012 and Cairn had also launched project -Chirag in 2014 in which schools in Sanchore block was adopted to provide education in English, Science, Mathematics and Computers. In 2018, Cairn also adopted one school in Tantada and upgraded its infrastructure. In FY 21-22 a new initiative has been taken up in partnership with Education Department to set up ITC labs in 151 schools around our operational area. These schools will then be able to benefit from the digital learning opportunities made available by government and Cairn.</p> <p>A new initiative has been also launched this year to support schools which lack proper seating facilities in primary section. A proper infrastructure support is instrumental in bridging the gap and focusing on improving learning outcomes. Cairn has till date distributed 1181 Desk bag kits to students in government schools. We intend to distribute 4000 such bags in total. For FY22-23, 1981 desk kits have been distributed across schools of Barmer region. Besides this, In FY 2019-2020, Cairn has partnered with Chetna Foundation to implement Nandghar project – an initiative to focus on health and education of children in the age group 3-6 years. Across 49 Nandghars established in Barmer, close to 1,200 students benefit each day through interactive learning under the ECCE (Early childhood care and education). In H1 FY 2020-21, Cairn planned to expand the Nand Ghar project in Barmer and Jalore districts with 75 more Nandghars viz-a-viz 25 in Sanchore (Jalore) and 50</p>

S. No.	Issue raised	Status of actions (as of September 2024)
		<p>in Barmer district.. In FY 21-22, A total of 17,772 children and women through 49 Greenfield Nandghars. • This year we have impacted 3270 children through 124 Nandghars from Nov'22 onwards post on-boarding of new partner.</p> <p>In addition, Cairn also initiative a new project in partnership with Bodh Siksha Sanstha, to implement the education initiative “Ujjwal” for improving access to and quality of education in 60 government schools in Barmer district in Rajasthan. In this year, various interventions (infrastructure, digital as well as academic) has been undertaken to improve learning outcomes in 20 government schools, benefiting more than 7,600 students. In addition to the school activities, components of bridge classes and remedial classes has been carried out to mainstream school dropouts 1,400 students benefit from these initiatives. However, due to COVID 19, all schools were closed as per the guidelines of the Government of India. In May 2020, Cairn launched a unique education initiate “e-Kaksha” for providing quality education by developing e-library of syllabus of Rajasthan state Board for class 6th to 12th in partnership with Department of Education (Government of Rajasthan) across all 33 districts of Rajasthan. The project will be re-launched by Hon’ble CM of Rajasthan in October 2020. In FY 21-22, the project has reached 11.74CR people through its views and subscriptions recorded on youtube. The project has been widely appreciated by all stakeholders and recognized external recognitions.</p> <p>For FY22-23, our E-Kaksha project continues to benefit the students at a large. The Till date the project has recorded 139,413,534 views having 837,000 subscribers. 1000+ videos have been made accessible for viewers as a part of the digital library created under this initiative. In the reporting period of FY22-23, more than 85,000 new subscriptions have been registered for this project. As on March’23, the project has reached 3.81 cr.</p> <p>In addition, we have also launched two new projects benefiting the students towards having access to digital education as well as bridging the infrastructure gap in primary section of government schools. In 2021, Cairn partnered with Government Education department in a 25:75 financial scheme wherein 25% of the funds are being contributed by Cairn Vedanta to establish 151 ICT labs in secondary and senior secondary schools of Barmer, paving way to 100% digitalization of Barmer schools. The project intends to benefit 5000+ students from Barmer district. As on date government has initiated the process of tender for partner on-boarding of its implementing.</p> <p>The second project is of Desk Kit - These innovative desk kits are light weighted bags with attached portable table which can be easily carried to school as well as used at home to study. These bags intent to address the gap in furniture availability in primary schools of Barmer and to encourage children to sit and study in right posture from an early age. A total 4000 desk kits will be distributed in Barmer. For FY22-23, 1981 desk kits have been distributed across schools of Barmer region. Cairn also launched Swasthya Vidyalaya” program i.e. School Sanitation Program in 2017, across 28 govt. schools in Barmer in Partnership with an NGO – Yuva Unstoppable. The project not only focuses on improving the water and sanitation facilities in these schools, but</p>

S. No.	Issue raised	Status of actions (as of September 2024)
		<p>through structured monthly interventions focuses on bringing a sustainable change in the behavior of students. More than 7200 students were impacted.</p> <p>For this financial year, a new intervention of supporting 151 schools has been implemented across Barmer district. This project is a collaboration with the Education department towards ensuring 100% of secondary schools have digital education (ICT labs). Close to 10k students benefit from this project. In addition, 400+ desk kits have been distributed.</p> <p>To ensure proper mental and physical development of children in the age group of 3-years, regular ECCE activities are ongoing. In reporting period, 6,187 children were covered across 124 Nand Ghars.</p> <p>Cairn has been taking multiple initiatives towards supporting both education interventions as well as infrastructure to provide a conducive learning environment. For this reporting period we have continued to focus on building the right building blocks for the children undergoing pre-education at Nandghars. In partnership with ICDS department 124 Nandghars are operational across Cairn business villages in Barmer district. In addition, 300+ desk bags have been distributed to support primary school students. These function as both a bag and a portable desk which in turn bridges the infrastructural gap in schools in rural areas.</p>
5.	<p>A representative of Dhanswal village has stated that village school does not have adequate teaching staff. He requested CIL to extend its support for this cause and also asked CIL to provide financial assistance to children of families who have contributed their land for CIL's operations.</p>	<p>CAIRN has developed infrastructure for the school in Baytu, including refurbishment of library and setting up science and computer labs in FY 2012 and Cairn had also launched project -Chirag in 2014 in which schools in Sanchore block was adopted to provide education in English, Science, Mathematics and Computers. In 2018, Cairn also adopted one school in Tantada and upgraded its infrastructure. In FY 21-22 a new initiative has been taken up in partnership with Education Department to set up ITC labs in 151 schools around our operational area. These schools will then be able to benefit from the digital learning opportunities made available by government and Cairn.</p> <p>A new initiative has been also launched this year to support schools which lack proper seating facilities in primary section. A proper infrastructure support is instrumental in bridging the gap and focusing on improving learning outcomes. Cairn has till date distributed 1181 Desk bag kits to students in government schools. We intent to distribute 4000 such bags in total. For FY22-23, 1981 desk kits have been distributed across schools of Barmer region.</p> <p>Besides this, In FY 2019-2020, Cairn has partnered with Chetna Foundation to implement Nandghar project – an initiative to focus on health and education of children in the age group 3-6 years. Across 49 Nandghars established in Barmer, close to 1,200 students benefit each day through interactive learning under the ECCE (Early childhood care and education). In H1 FY 2020-21, Cairn planned to expand the Nand Ghar project in Barmer and Jalore districts with 75 more Nandghars viz-a-viz 25 in Sanchore (Jalore) and 50 in Barmer district. During the H2, FY20-21, these 75 sites were refurbished under brown field development program including all critical areas like Chittar ka Par, Jogasar Kua, Rawalinadi, Nagar, Guda field, Dedawas, Bhadka, Madpura</p>

S. No.	Issue raised	Status of actions (as of September 2024)
		<p>barwala, etc. In FY 21-22, A total of 17,772 community members (children and women) have benefited from 49 Nandghars. For FY22-23 we have impacted 3270 children through 124 Nandghars from Nov'22 onwards post on-boarding of new partner.</p> <p>In addition, Cairn also initiative a new project in partnership with Both Siksha Sanstha, to implement the education initiative “Ujjwal” for improving access to and quality of education in 60 government schools in Barmer district in Rajasthan. In this year, various interventions (infrastructure, digital as well as academic) has been undertaken to improve learning outcomes in 20 government schools, benefiting more than 7,600 students. In addition to the school activities, components of bridge classes and remedial classes has been carried out to mainstream school dropouts 1,400 students benefit from these initiatives. However, due to COVID 19, all schools were closed as per the guidelines of the Government of India. In May 2020, Cairn launched a unique education initiative “e-Kaksha” for providing quality education by developing e-library of syllabus of Rajasthan state Board for class 6<sup>th</sup> to 12<sup>th</sup> in partnership with Department of Education (Government of Rajasthan) across all 33 districts of Rajasthan. The project will be re-launched by Hon’ble CM of Rajasthan in October 2020. In FY 21-22, the project has reached 11.74 Crpeople through its views and subscriptions recorded on youtube. The project has been widely appreciated by all stakeholders as well as received external recognitions.</p> <p>Cairn also launched Swasthya Vidyalaya” program i.e. School Sanitation Program in 2017, across 28 govt. schools in Barmer in Partnership with an NGO – Yuva Unstoppable. The project not only focuses on improving the water and sanitation facilities in these schools, but through structured monthly interventions focuses on bringing a sustainable change in the behavior of students. More than 8300 students were impacted this year across these 33 schools.</p> <p>For FY22-23, our E-Kaksha project continues to benefit the students at a large. The Till date the project has recorded 139,413,534 views having 837,000 subscribers. 1000+ videos have been made accessible for viewers as a part of the digital library created under this initiative. In the reporting period of FY22-23, more than 85,000 new subscriptions have been registered for this project. As on March’23, the project has reached 3.81 cr.</p> <p>In addition, we have also launched two new projects benefiting the students towards having access to digital education as well as bridging the infrastructure gap in primary section of government schools. In 2021, Cairn partnered with Government Education department in a 25:75 financial scheme wherein 25% of the funds are being contributed by Cairn Vedanta to establish 151 ICT labs in secondary and senior secondary schools of Barmer, paving way to 100% digitalization of Barmer schools. The project intends to benefit 5000+ students from Barmer district. As on date government has initiated the process of tender for partner on-boarding of its implementing.</p> <p>The second project is of Desk Kit - These innovative desk kits are light weighted bags with attached portable table which can be easily carried to school as well as used at home to study. These bags intent to address the gap in furniture availability in primary schools of Barmer and to encourage children to sit and study in right</p>



S. No.	Issue raised	Status of actions (as of September 2024)
		<p>posture from an early age. A total 4000 desk kits will be distributed in Barmer. For FY22-23, 1981 desk kits have been distributed across schools of Barmer region.</p> <p>For this financial year, a new intervention of supporting 151 schools has been implemented across Barmer district. This project is a joint collaboration with the Education department towards ensuring 100% of secondary schools have digital education (ICT labs). Close to 10k students benefit from this project. In addition, 400+ desk kit have been distributed. To further ensure proper mental and physical development of children in the age group of 3-years regular ECCE activities are ongoing. In reporting period, 6,187 children were covered across 124 Nand Ghars. Cairn has been taking multiple initiatives towards supporting both education interventions as well as infrastructure to provide a conducive learning environment. For this reporting period we have continued to focus on building the right building blocks for the children undergoing pre-education at Nandghars. In partnership with ICDS department 124 Nandghars are operational across Cairn business villages in Barmer district. In addition, 300+ desk bags have been distributed to support primary school students. These function as both a bag and a portable desk which in turn bridges the infrastructural gap in schools in rural areas</p>
6.	<p>One villager complained that the contractors engaged by CIL do not take necessary steps for restoration of sites. He suggested that proper lighting arrangement, plantation and provision of guard shall be made at every site.</p>	<p>Cairn has developed site restoration procedure and same is being implemented at site. After completion of restoration, joint site inspections are being carried out with landowners and photographic evidence of same being maintained. NOC on non-judicial stamp paper is also obtained for site handed over back to landowner. Adequate lighting arrangements are provided at all sites and guards are deputed. Plantation is also being carried out at all permanently acquired sites.</p>
7.	<p>Some of the villagers expressed that CIL should provide assistance for developing school infrastructure such as classrooms and toilets. CIL should also provide scholarships to students and facilitate ITI training to local students particularly from the land lenders.</p>	<p>Cairn had launched project -Chirag in 2014 in which schools in Sanchore block was adopted to provide education in English, Science, Mathematics and Computers. In 2018, Cairn also adopted one school in Tantada and upgraded its infrastructure.</p> <p>Scholarships to meritorious students from the local community are disbursed for higher studies in medicine and engineering. In FY 2018-19, 8 students and in FY2019-20, 5 students have been provided scholarships. The selection of students for scholarship for FY2020-21 is under process. This year in FY21-22, Cairn provided INR 8 lac in total to 4 students of medical and engineering field studying in government collage.</p> <p>CAIRN has developed infrastructure for the school in Baytu, including refurbishment of library and setting up science and computer labs in FY 2012 and Cairn had also launched project -Chirag in 2014 in which schools in Sanchore block was adopted to provide education in English, Science, Mathematics and Computers. In 2018, Cairn also adopted one school in Tantada and upgraded its infrastructure. In FY 21-22 a new initiative has been taken up in partnership with Education Department to set up ITC labs in 151 schools around our operational area. These schools will then be able to benefit from the digital learning opportunities made available by governemnet and Cairn.</p>

S. No.	Issue raised	Status of actions (as of September 2024)
		<p>A new initiative has been also launched this year to support schools which lack proper seating facilities in primary section. A proper infrastructure support is instrumental in bridging the gap and focusing on improving learning outcomes. Cairn has till date distributed 1181 Desk bag kits to students in government schools. We intend to distribute 4000 such bags in total.</p> <p>Besides this, In FY 2019-2020, Cairn partnered with Chetna Foundation to implement Nandghar project – an initiative to focus on health and education of children in the age group 3-6 years. Across 49 Nandghars established in Barmer, close to 1200 students benefit each day through interactive learning under the ECCE (Early childhood care and education). In FY 21-22, A total of 17,772 community members (children and women) benefited from 49 Nandghar. In FY22-23 we have impacted 3270 children through 124 Nandghars from Nov'22 onwards post on-boarding of new partner.</p> <p>In addition, Cairn also initiative a new project in partnership with Bodh Siksha Sanstha, to implement the education initiative “Ujjwal” for improving access to and quality of education in 60 government schools in Barmer district in Rajasthan. In this year, various interventions (infrastructure, digital as well as academic) has been undertaken to improve learning outcomes in 20 government schools, benefiting more than 7,600 students. In addition to the school activities, components of bridge classes and remedial classes has been carried out to mainstream school dropouts 1400 students benefit from these initiatives.</p> <p>Cairn also launched Swasthya Vidyalaya” program i.e. School Sanitation Program in 2017, across 28 govt. schools in Barmer in Partnership with an NGO – Yuva Unstoppable. The project not only focuses on improving the water and sanitation facilities in these schools, but through structured monthly interventions focuses on bringing a sustainable change in the behavior of students. More than 7200 students are impacted this year across these 28 schools.</p> <p>However, due to COVID 19, all schools were closed as per the guidelines of the Government of India. In May 2020, Cairn launched a unique education initiative “e-Kaksha” for providing quality education by developing e-library of syllabus of Rajasthan state Board for class 6th to 12th in partnership with Department of Education (Government of Rajasthan) across all 33 district of Rajasthan. In FY 21-22, the project has reached 11.74CR people through its views and subscriptions recorded on youtube. The project has been widely appreciated by all stakeholders. FY22-23 more than 85,000 new subscriptions have been registered for this project. As on March'23, the project has reached 3.81 cr.</p>

S. No.	Issue raised	Status of actions (as of September 2024)
		<p>CAIRN runs 3 Skill training centres in Rajasthan - Barmer, Sanchore and Jodhpur. In the year 2018-19, Cairn Enterprise Centre (CEC), Barmer and Jalore, have trained more than 1000 youth in mobile repairing, masonry, domestic electric repairing, etc. whereas ~250 students in Jodhpur. Approximately 70% trainees have been placed in various industries.</p> <p>In FY 2019-20 (Apr – March), 728 students were enrolled and trained, and in In FY 2020-21 (Apr – March), 629 student were enrolled and trained with 80% placement record. Cairn has initiated the process to identify and onboard a new skill implementing partner to conduct short, medium term and long-term vocational training programs to provide sustainable and gainful employment opportunities to the local youths.</p> <p>Cairn’s CSR implementing partners have also provided local employment opportunities by engaging ~88% of its agency staffs from local communities.</p> <p>Due to COVID 19 pandemic globally and precautionary guidelines issued by Government of India (GoI), we implemented any skill training programs. However, we have planned to initiate the training programs from Oct 2020 by maintaining social distancing and other precautionary measures including some diverse courses like animal husbandry assistant, security guard, masonry, etc. Also considering need of the hour and new normal we have planned to implement online training programs on GST certification for commerce graduate, Debt Recovery Assistants for 12th pass with total target of over 2000 youths. In FY21-22, we have trained 400+ students with 70% placement records, across trades like GST, DRA, Electrician, computers, etc. through online and offline medium.</p> <p>As pe the compliances of partnering with any agency, the contract for implementing our skill initiative was to be renewed. The tender process was initiated and carried out in H1. We as on Oct’22 have a partner on-boarded for running the vocational skill development courses from our CEC, Barmer. Under the new contract issued to learnt skills for FY22-23, we have enrolled 254 students till March’23. In addition to the trades of Data Entry Operator, Electrician, Mobile handset repair, Assistant Mason, for the first time we have successfully launched all girls batch on Beautician Assistant. The 30 girls inducted in this program has been first ever intervention in Baitu zone. The students have been currently undergoing On-job-training and will be placed by next month end.</p> <p>CEC focuses on mobilising and enrolling students from Cairn operational areas, where there is a need for skill development and employment opportunities. Till September’23, A total 329 of students are undergoing classroom training at CEC across trades like basic computers, mobile handset engineer and basic electrician with 89% placement record.</p>

S. No.	Issue raised	Status of actions (as of September 2024)
		<p>Over the H2 of FY23-24, we further trained 360+ with placement record reaching 92%. Through CEC new courses like BCBF, DRA, MIS Analyst and all girls batch for beauty assistant was introduced. Students continue to pursue trainings in courses NSDC certified vocational trainings. In addition, we also re-instated our Cairn Centre of Excellence, Jodhpur in partnership with Agriculture university. The program intends to offer degree &amp; short-term courses in farm and non-farm sector. Close to 175+ students have been engaged under this project. This initiative is a further extension of our efforts to promote entrepreneurs in the region along with supporting advancement of skills. The degree course offered further promotes agriculture as a stream to pursue for future career path.</p> <p>While at Cairn we have a local content policy which supports employment of local residents and engagement of vehicle/ business with local resident, through CSR initiative we also focus on empowering rural youths in possibilities of various vocational trades linked with employment opportunities.</p> <p>Under the on-going project of skill development, Cairn continues to train rural youths in various vocational trades like data entry operator, electrician, mobile handset repair, business correspondence and business facilitator, MIS analyst, etc. So far during the reporting period we have trained more than 300+ students with 89% placement record. In addition, we launched a Beautician Assistance Course empowering 30 women with skills to run or work in beauty parlours, enhancing their self-reliance and financial stability. In parallel to this, we have also been focusing on various allied activities to increase awareness of this project as well as help students develop holistically. While this has been Cairn's approach in Barmer district, through another skill centre CCoE at Jodhpur, we have trained close to 600 students in farm and non-farm sector skills.</p>
8.	One of the villagers from Balotra has submitted a written complaint with reference to the Public Hearing notice in the local newspaper. His concern is pertaining to drilling of 300 wells at a time. And suggested not to drill more than 15 wells in a year.	Cairn intends to carry out the drilling of 300 wells in a time frame of about 5 years in the entire block area of 3,111 km <sup>2</sup> . The EIA study has assessed the impacts of the proposed Project in details and has suggested appropriate mitigation measure to minimize the probable impact. No exploratory well is drilled in reporting period.
9.	A written representation from the Gram Panchayat of Bhakarpura has raised the following concerns:	Engagement Cells were setup where local community members, including land losers, can register themselves for job and their vehicles and equipment for contractual hire. The process of course gives priority to the land contributors but also gives opportunity to the non-land contributors. The local content policy was developed

S. No.	Issue raised	Status of actions (as of September 2024)
	<ul style="list-style-type: none"> <li>• Preference to hire local vehicles during seismic survey at Guda Field</li> <li>• Preference may be given to hire local security guards at the new well pads</li> <li>• Preference to be given to local villagers for contractual jobs</li> <li>• Social development activities such as girl child education, health &amp; hygiene, afforestation and dairy farms to be actively pursued.</li> <li>• Compensatory package with respect to crops, trees, water tanks, pipelines, borewells due to seismic surveys shall be made available to the farmers</li> </ul>	<p>in which preference was given to locals for their engagement either in terms of employment or vehicle/equipment engagement. We had the process in which we registered the local population and their vehicles/Equipment's (RC) and based on the demands from vendors we gave priority to land contributors till 2017. Now employment opportunities are given to locals by the vendors directly.</p> <p>All the social activities as suggested are being undertaken by CSR team and refer <b>Annexure 03</b> CSR Activities for further details.</p> <p>Compensatory package is always decided with the regulatory and statutory framework in consultation with local administration and same are being paid to landowners.</p>

v. **Public Hearing conducted on 22nd August 2013 at Bharat Nirmaan Rajeev Gandhi Sewa Kendra, Village Jhab, Panchyat Samiti Chitalvana, District Jalore, Rajasthan (EIA for 300 exploratory wells)**

S. No.	Concern/Suggestions	Status of actions (as of September 2024)
1.	A villager expressed that the Mobile Health Van facility being provided by CIL should be extended to all the villages of the Gram Panchayat through which the pipeline is passing. It was also expressed that Palav village is not covered under the program.	<p>There are 4 MHV currently which are providing basic health care services to villages around Cairn operational area. Through this service around 95% of the population residing around Cairn villages were benefiting through these services on weekly basis. CAIRN provides basic health care services to 149 villages of Barmer and Jalore district (22 villages in Sanchore &amp; Chittalwana blocks) through Mobile Health Vans (MHVs) which provide ~1.4lakh treatments annually in Rajasthan. In addition to the MHV's Cairn has further taken up the initiative to functionalize 4 FRUs out of which 2 of them have been functionalized which catered more than 8000 patients in FY 2019-20. In FY21-22 close to 71,965 community members have benefited through various MHV services.</p> <p>In FY 2015-2017, Project RACHNA created awareness in Barmer villages in reproductive, maternal, child health and nutrition. 2 Sanitary pad units were also developed and provided to the women SHGs. Over</p>

S. No.	Concern/Suggestions	Status of actions (as of September 2024)
		<p>~14,000 adolescent girls and rural women were engaged in regular awareness sessions in order to sensitize them about menstrual hygiene and reproductive health.</p> <p>In FY 21-22, so far 28,147OPDs were conducted by Cairn supported doctors in District hospital. In addition to this, through the cleanliness facilities supported at District hospital, 10.96 lac people have benefited. These medical services and sanitation facilities has not only helped thousands of patients but has also improved the overall ranking of this district hospital across the state. The hospital has been rewarded 1st position twice in row over the last two years on cleanliness and patient satisfaction. 8 housekeeping staff deployed under our Clean Barmer Green Barmer project were felicitated for their service by District Hospital on 73rd Republic Day.</p> <p>In addition, on Gandhi Jayanti, the Swachhta Pakhwada was initiated between 2nd and 16th October, all stakeholders pledged to keep the hospital and its surrounding areas clean and raise awareness regarding the importance of cleanliness. as a part of the Swachhta Pakhwada being organized at the Govt. District Hospital, Barmer, a special workshop on 5S was conducted for the sanitation workers, nursing students, medical staff and hospital administration.</p> <p>A three-day free mega camp for disabled was organized where more than 1,100 disabled people benefitted. The intent was to provide medical support and motivate the community through personal interaction.</p> <p>Besides Mobile Health Van, Cairn has also launched one ambulance and handed over to Barmer District Hospital for carrying COVID patients. With the outbreak of pandemic COVID 19, Cairn Oil &amp; Gas has taken various steps to create awareness about this deadly virus as well as equip &amp; strengthen local administration to combat COVID 19 by launching Project Sanjeevani in which we created awareness, provided more than 60000 masks, 20 BIPAP ventilators, 5000 litres/ 30000 bottles of sanitizers, 10000 litres disinfectant, 1550 PPEs, 2250 N-95 masks, and reached out to more than 4 lakh people in around 1200 villages around our operational assets.</p> <p>With the onset of winter in Oct 2020, we planned to launch a mega campaign on COVID 19 awareness on theme “No Mask No Entry” through IEC, virtual marathon, etc.</p>

S. No.	Concern/Suggestions	Status of actions (as of September 2024)
		<p>Besides this, We continuously supported the three COVID Care Centres in Barmer in collaboration with health department where we provided meals to more than 3000 patients till Mar 2021.</p> <p>Under the phase 2 of COVID 19, Cairn continued to support government in addressing the national crises of beds, oxygen cylinders, medical facilities and other related interventions to support patients in their treatments. Some of the key highlights of the same are –</p> <ul style="list-style-type: none"> <li>• A 100 bed Vedanta COVID field hospital has been inaugurated by Mr. Ashok Gehlot, CM Government of Rajasthan. Considering this hospital, a total of 610 bed facility has been supported by Cairn over this quarter.</li> <li>• ~3.5 lac community members have been touched through COVID initiatives like – community awareness drives and supply of food packets to COVID patients and health workers.</li> <li>• Arranged transportation of ~94K litres of O2 to District hospital.</li> <li>• 2 MHV's provided to DA Barmer - to be engaged in COVID awareness and transportation of patients.</li> <li>• First of kind, Community Vaccination Drive conducted at Ravva, for people in the age group of 18-45 years. A total of 1906 community members have been covered, through multiple vaccination camps.</li> <li>• Supported District Administration with thousands of medical and surgical consumable items. This includes VTM kit, COVID kit, Para monitor, medicines, masks, and sanitizers, are few such items.</li> </ul> <p>In addition to the above, for FY22-23 we have covered close to 40,000 OPD's across 149 villages of Rajasthan through 4 MHV's. While through MHV we continue to reach to the far-flung communities, we have also conducted 40,620 OPDs at District Hospital, through Cairn support doctors and extended cleanliness support to 17,84,980 community members. Furthermore, some new initiatives have been undertaken to improve the nutritional and health status of women and children, in partnership with district administration. 1,50,000 hemoglobin strips have been handed over to district administration as well as 22,680 laddus handed over to ICDS department for dietary support to 542 malnourished children. As a result, 166 have moved from SAM (severely malnourished) to MAM (moderately malnourished) and 155 have</p>

S. No.	Concern/Suggestions	Status of actions (as of September 2024)
		<p>completed recovered over the last 3 months of Cairn nutritional support. Through our Vaccination drive (supporting government in their endeavor to provide COVID vaccination to all), we have covered more than 6800 people across Barmer and Sanchore district of Rajasthan.</p> <p>MHV's have been able to effectively provide affordable, accessible, reliable, and quality preventive healthcare services to beneficiaries at their doorstep.</p> <ul style="list-style-type: none"> <li>• In the reporting quarter 24,440 OPD's have been conducted through 7 MHV's across 214 villages of Rajasthan and Gujarat.</li> <li>• Multiple awareness camps were organized to apprise beneficiaries on measures for maintaining a good health, menstruation hygiene with an outreach of more than 1,500 community members including adolescent girls.</li> <li>• ~130 Home visits were conducted for patients who were unable to reach the mobile health unit.</li> <li>• Several multi-specialty health camps organized in partnership with Health department across Gujarat and Rajasthan operational areas, to provide specialists medical (Orthopaedic, skin &amp; VD and general physician) services at doorstep of community benefitting 1800 community members.</li> </ul> <p>MHV has been working hard to operate at full capacity without affecting any villages in or near our operational areas. We have chosen the best possible routes. To ensure the sustainability of our activities we are working towards improving the health infrastructure and the capacity of PHC and CHC to provide the necessary health services to the community members at their doorstep.</p> <p>Cairn has been working diligently towards improving the overall health facilities in the district. For this Financial year, in addition to the regular interventions like support to district hospital, MHV, etc. we initiated new projects like – developing general ward at CHC Kawas, providing equipment's like Xray, sonography, etc. to CHC Kawas and Gudamalani. Moreover, this year we launched a unique project “Harit Dhara” towards empowering rural women by offering sustainable menstrual hygiene solutions. The project has reached 5000 women. As a next step the women are now taking order for stitching cloth pads which is supporting towards additional income generation. Close to 23 lac people have been impacted.</p> <p>Cairn's multi-tier approach towards improving the healthcare facilities and services in the region has helped reach out to more than 11.68 lac people in the reporting period. We continue to reach out to the interiors of</p>



S. No.	Concern/Suggestions	Status of actions (as of September 2024)
		<p>villagers through our MHV (Mobile Health Van) services on a weekly basis. In addition, our round-the-clock support on health &amp; hygiene as well as medical services has been a major support in addressing the load of Barmer District Hospital. Furthermore, we also focus on creating mass awareness drives in communities on seasonal diseases as well as holding multi-specialty camps towards addressing various ailments. Our efforts further gets strengthen by the interventions carries out in functionalizing the CHC and PHC's.</p>
2	<p>He also expressed that there is a need to develop protected area for wild animals such as Deer, Antelopes, fox etc.</p>	<p>Developing protected areas is the responsibility of State Forest Department. Cairn will extend all possible cooperation for the same.</p> <p>Cairn has taken several initiatives to protect wildlife like display of road safety sign boards in road corridors, provision of underpasses for wildlife in corridor roads, MLVC &amp; MLCC for electrical lines to prevent electrocution of birds. Cairn has also handed over a wildlife rescue van to local forest department for transportation of injured wild animals. Cairn has also developed a drinking water facility (bore well fitted with solar pump) and Gajlar in Gaangli forest area. We have also carried out plantation in 121 ha. area in community land, which provide shelter belt to wild animals.</p>
3	<p>The villager also stated that the Panchayat Chitwara, is backward and there is shortage of classrooms, toilets and water storage facilities 'tankas' in the school.</p>	<p>Cairn had launched project -Chirag in 2014 in which schools in Sanchore block was adopted to provide education in English, Science, Mathematics and Computers. In 2018, Cairn also adopted one school in Tantada and upgraded its infrastructure.</p> <p>Scholarships to meritorious students from the local community are disbursed for higher studies in medicine and engineering. In FY 2018-19, 8 students and in FY2019-20, 5 students have been provided scholarships. The selection of students for scholarship for FY2020-21 is under process. This FY 21-22, Cairn has provided INR 8 lac in total towards 4 students of engineering and medical field studying in government college.</p> <p>Besides this, Cairn has also initiated the process to identify new partnership to implement short, medium and long-term vocational training programs to provide sustainable and gainful employment opportunities to the local youths.</p> <p>Besides this, in FY 2020, Cairn has partnered with Bodh Shiksha Samiti to implement the education initiative "Ujjwal" for improving access to and quality of education in 60 government schools in Barmer district in Rajasthan. This include infrastructure refurbishment / upgrade, setting up of digital and learning labs, capacity building of teachers and students, remedial classes for school dropouts etc. In FY2019-20 the project was implemented in 20 schools, benefiting more than 7800 students. . In FY 21-22 a new initiative has been taken up in partnership with Education Department to set up ITC labs in 151 schools around our</p>

S. No.	Concern/Suggestions	Status of actions (as of September 2024)
		<p>operational area. These schools will then be able to benefit from the digital learning opportunities made available by government and Cairn. Besides this, In FY 2019-2020, Cairn partnered with Chetna Foundation to implement Nandghar project – an initiative to focus on health and education of children in the age group 3-6 years. Across 49 Nandghars established in Barmer, close to 1200 students benefit each day through interactive learning under the ECCE (Early childhood care and education). In FY 21-22, A total of 17,774 community members (student and women) benefited from the 49 Greenfield Nandghars. For FY22-23 we have impacted 3270 children through 124 Nandghars from Nov’22 onwards post on-boarding of new partner.Cairn also launched Swasthya Vidyalaya” program i.e. School Sanitation Program in 2017, across 28 govt. schools in Barmer in Partnership with an NGO – Yuva Unstoppable. The project not only focuses on improving the water and sanitation facilities in these schools, but through structured monthly interventions focuses on bringing a sustainable change in the behavior of students. More than 7200 students are impacted this year across these 28 schools.</p> <p>The project “Ujjwal” was formally launched by Hon’ble Chief Minister of Rajasthan, Shri Ashok Gehlot during the 10th Anniversary of First Oil or Mangala Day celebrations in Barmer, Rajasthan on 29th August 2019 and is likely to benefit ~15,000 children in Barmer district over the period of 3 years.</p> <p>However, due to COVID 19, all schools were closed as per the guidelines of the Government of India. In May 2020, Cairn launched a unique education initiate “e-Kaksha” for providing quality education by developing e-library of syllabus of Rajasthan state Board for class 6th to 12th in partnership with Department of Education (Government of Rajasthan) across all 33 district of Rajasthan. The programme is continue benefitting students in FY20-21. In FY 21-22, the project has reached 11.74CR people through its views and subscriptions recorded on youtube. The project has been widely appreciated by all stakeholders.</p> <p>For FY22-23, our E-Kaksha project continues to benefit the students at a large. The Till date the project has recorded 139,413,534 views having 837,000 subscribers. 1000+ videos have been made accessible for viewers as a part of the digital library created under this initiative. In the reporting period of FY22-23, more than 85,000 new subscriptions have been registered for this project. As on March’23, the project has reached 3.81 cr.</p> <p>In addition, we have also launched two new projects benefiting the students towards having access to digital education as well as bridging the infrastructure gap in primary section of government schools. In 2021, Cairn partnered with Government Education department in a 25:75 financial scheme wherein 25% of the funds are being contributed by Cairn Vedanta to establish 151 ICT labs in secondary and senior secondary schools of Barmer, paving way to 100% digitalization of Barmer schools. The project intends to benefit 5000+ students</p>

S. No.	Concern/Suggestions	Status of actions (as of September 2024)
		<p>from Barmer district. As on date government has initiated the process of tender for partner on-boarding of its implementing.</p> <p>The second project is of Desk Kit - These innovative desk kits are light weighted bags with attached portable table which can be easily carried to school as well as used at home to study. These bags intent to address the gap in furniture availability in primary schools of Barmer and to encourage children to sit and study in right posture from an early age. A total 4000 desk kits will be distributed in Barmer. For FY22-23, 1981 desk kits have been distributed across schools of Barmer region.</p> <p>For this financial year, a new intervention of supporting 151 schools has been implemented across Barmer district. This project is a collaboration with the Education department towards ensuring 100% of secondary schools have digital education (ICT labs). Close to 10k students benefit from this project. In addition, 400+ desk kit has been distributed. To ensure proper mental and physical development of children in the age group of 3-years, regular ECCE activities are ongoing. In reporting period, 6,187 children were covered across 124 Nand Ghars.</p> <p>Cairn has been taking multiple initiatives towards supporting both education interventions as well as infrastructure to provide a conducive learning environment. For this reporting period we have continued to focus on building the right building blocks for the children undergoing pre-education at Nandghars. In partnership with ICDS department 124 Nandghars are operational across Cairn business villages in Barmer district. In addition, 300+ desk bags have been distributed to support primary school students. These function as both a bag and a portable desk which in turn bridges the infrastructural gap in schools in rural areas. In addition, Cairn has also undertaken development of roof water harvesting structures in schools. More than 90 schools have been covered so far across Cairn operational areas.</p>
4	Villagers from Jhab, Belwa and Barmer expressed that the site selection should consider minimum number of tree cuttings and plantation of native species.	As per Cairn's site selection criteria, sites like agricultural land, forest area, area having water body, dense plantation and human settlements are avoided to the extent possible Further, Cairn in discussion with local forest department has identified community areas to carryout plantation. Till date, cairn has carried out plantation in 121 Ha community land in different areas of Barmer and Jalore districts.
5	Higher Secondary School, Headmaster Jhab, suggested that the existing village roads should be strengthen prior to movement of heavy vehicles for proposed drilling activities.	Cairn carryout detailed route survey before mobilizing any heavy machineries and carryout required strengthening of roads as per requirements. Cairn has also developed road corridors in its operational areas within block area. If Cairn would use the local road/kutchra road, then necessary repairs would be carried out before start-up of the activity.

S. No.	Concern/Suggestions	Status of actions (as of September 2024)
	<p>He also expressed his concern that although he has heard about the Scholarship scheme, however he has not witnessed its implementation in his village.</p>	<p>Scholarships to meritorious students from the local community are disbursed for higher studies in medicine and engineering. Additionally, encouragement to students to pursue higher education for careers in engineering and medicine. This FY 21-22, Cairn has provided INR 8 lac in total towards 4 students of engineering and medical field studying in government college.</p>
6	<p>Few villagers from Rampura and Jhab submitted written applications for availing employment opportunities generated by CIL.</p>	<p>The villagers of Rampura and Jhab were given employment opportunities during the exploration, however due to fall in crude price internationally in 2015, activities couldn't sustain for longer period. Locals were demobilized. However, land contributors have been given opportunities in nearby well pads like Guda S1/S3, Guda-2, Guda 7, etc.</p> <p>As per the local content policy in the past, preference was given to locals for their engagement either in terms of employment or vehicle/equipment engagement. We had the process in which we registered the local population and their vehicles/Equipment's (RC) and based on the demands from vendors we gave priority to land contributors. Now employment opportunities are given to locals by the vendors directly.</p> <p>CAIRN runs 3 Skill training centres in Rajasthan - Barmer, Sanchore and Jodhpur. In the year 2018-19, Cairn Enterprise Centre (CEC), Barmer and Jalore, had trained more than 1000 youth in mobile repairing, masonry, domestic electric repairing, etc. whereas ~250 students in Jodhpur. Approximately 70% trainees had been placed in various industries. In the FY2020-21, 629 students were trained.</p> <p>In FY 2019-20 (Apr – March), 728 students have been enrolled and trained, and in In FY 2020-21 (Apr – March), 629 student have been enrolled and trained with 80% placement record. Cairn has further extended the contract with the current implementation partner to ensure continuity of project to provide sustainable and gainful employment opportunities to the local youths.</p> <p>Cairn's CSR implementing partners have also provided local employment opportunities by engaging ~88% of its agency staffs from local communities.</p> <p>Due to COVID 19 pandemic globally and precautionary guidelines issued by Government of India (GoI), we have not implemented any skill training programs. However, we planned to initiate the training programs from Oct 2020 by maintaining social distancing and other precautionary measures including some diverse courses like animal husbandry assistant, security guard, masonry, etc. Also considering need of the hour and new normal we planned to implement online training programs on GST certification for commerce graduate, Debt Recovery Assistants for 12<sup>th</sup> pass with total target of over 2000 youths</p>

S. No.	Concern/Suggestions	Status of actions (as of September 2024)
		<p>In addition to this, the current contract for implementing the skill training project with SEEDS have been further renewed till March'22 to ensure continuity of project to provide sustainable and gainful employment opportunities to the local youths. Post relaxation in lockdown from governemnt in second phase of COVID-19 pandemic, Skill trainings have been resumed in CEC. As per the MHA guidelines of running centres with 50% capacity. In FY21-22, we have trained more than 400+ students from CEC Barmer in trades ranging from electrician, computers, mobile repair, GST, DRA, ACLS and BLS, etc. through offline and online mode. As pe the compliances of partnering with any agency, the contract for implementing our skill initiative was to be renewed. The tender process was initiated and carried out in H1. We as on Oct'22 have a partner on-boarded for running the vocational skill development courses from our CEC, Barmer. Under the new contract issued to learnt skills, we have enrolled 254 students till March'23. In addition to the trades of Data Entry Operator, Electrician, Mobile handset repair, Assistant Mason, for the first time we have successfully launched all girls batch on Beautician Assistant. The 30 girls inducted in this program has been first ever intervention in Baitu zone. The students have been currently undergoing On-job-training and will be placed by next month end.</p> <p>Over the H2 of FY23-24, we further trained 360+ with placement record reaching 92%. Through CEC new courses like BCBF, DRA, MIS Analyst and all girls batch for beauty assistant was introduced. Students continue to pursue trainings in courses NSDC certified vocational trainings. In addition, we also re-instated our Cairn Centre of Excellence, Jodhpur in partnership with Agriculture university. The program intends to offer degree &amp; short-term courses in farm and non-farm sector. Close to 175+ students have been engaged under this project. This initiative is a further extension of our efforts to promote entrepreneurs in the region along with supporting advancement of skills. The degree course offered further promotes agriculture as a stream to pursue for future career path.</p> <p>While at Cairn we have a local content policy which supports employment of local residents and engagement of vehicle/ business with local resident, through CSR initiative we also focus on empowering rural youths in possibilities of various vocational trades linked with employment opportunities. Under the on-going project of skill development, Cairn continues to train rural youths in various vocational trades like data entry operator, electrician, mobile handset repair, business correspondence and business facilitator, MIS analyst, etc. So far during the reporting period we have trained more than 300+ students with 89% placement record. In addition, we launched a Beautician Assistance Course empowering 30 women with skills to run or work in beauty parlours, enhancing their self-reliance and financial stability. In parallel to this, we have also been focusing on various allied activities to increase</p>

S. No.	Concern/Suggestions	Status of actions (as of September 2024)
		<p>awareness of this project as well as help students develop holistically. While this has been Cairn's approach in Barmer district, through another skill centre CCoE at Jodhpur, we have trained close to 600 students in farm and non-farm sector skills.</p>
7	<p>The Sarpanch of Belva informed that CIL has been actively involved in CSR activities in the Block. He informed that CIL has been promoting education in schools. CIL has also provided assistance for development of toilets in the village in association with the Nirmal Bharat Abhiyan Scheme. CIL has also provided RO plants and also helps in spreading awareness about water treatment. CIL's MHV programme has also benefitted the villagers.</p>	<p>Refer <b>Annexure 03</b> to six monthly EC compliance report for the impact created by our Major CSR initiatives.</p>
8	<p>Some of the villagers discussed about support in education sector that can be extended by CIL. Villagers expressed that CIL should provide assistance for developing school infrastructure such as classrooms and toilets. CIL should also provide scholarships to students.</p>	<p>Cairn CSR team has a progressive agenda to provide support facilities for health and education sectors in the villages within the block and is continuously working towards achieving these targets. As a part of school sanitation project Cairn had construction of sanitation facilities in 188 schools in partnership with Bhoruka Charitable Trust. In 2017, 28 schools were taken up for the improvement of sanitation and drinking water facilities in partnership with Yuva Unstoppable, benefiting more than 7200 students.</p> <p>Scholarships to meritorious students from the local community are disbursed for higher studies in medicine and engineering. In FY 2018-19, 8 students and in FY2019-20, 5 students have been provided scholarships. The selection of students for scholarship for FY2020-21 is under process. This FY 21-22, Cairn has provided INR 8 lac in total towards 4 students of engineering and medical field studying in government college.</p> <p>Besides this, Cairn has also initiated the process to identify new partnership to implement short, medium and long-term vocational training programs to provide sustainable and gainful employment opportunities to the local youths. IN FY 2015, Cairn had initiated Graduate Employability Program for the benefit of the college students. Herein the Graduate students are imparted with Computer training, Personality development and other courses for the overall development of the students. This is with the focus that they are better equipped for job and get good openings, benefiting close to 1200 students of two government graduate colleges in Barmer.</p> <p>In FY 21-22 a new initiative has been taken up in partnership with Education Department to set up ITC labs in 151 schools around our operational area. These schools will then be able to benefit from the digital learning opportunities made available by government and Cairn. Besides this, In FY 2019-2020, Cairn</p>

S. No.	Concern/Suggestions	Status of actions (as of September 2024)
		<p>partnered with Chetna Foundation to implement Nandghar project – an initiative to focus on health and education of children in the age group 3-6 years. Across 49 Nandghars established in Barmer, close to 1200 students benefit each day through interactive learning under the ECCE (Early childhood care and education). In FY 21-22, A total of 17,774 community members (children and women) benefited from 49 greenfield Nandghars. In FY22-23 we have impacted 3270 children through 124 Nandghars from Nov’22 onwards post on-boarding of new partner.</p> <p>in FY 2020, Cairn s partnered with Bodh Shiksha Samiti to implement the education initiative “Ujjwal” for improving access to and quality of education in 60 government schools in Barmer district in Rajasthan. This include infrastructure refurbishment / upgrade, setting up of digital and learning labs, capacity building of teachers and students, remedial classes for school dropouts etc.</p> <p>The project “Ujjwal” was formally launched by Hon’ble Chief Minister of Rajasthan, Shri Ashok Gehlot during the 10th Anniversary of First Oil or Mangala Day celebrations in Barmer, Rajasthan on 29th August 2019. The project benefited more than 7800 students in FY19-20 across 20 government schools.</p> <p>However, due to COVID 19, all schools were closed as per the guidelines of the Government of India. In May 2020, Cairn launched a unique education initiate “e-Kaksha” for providing quality education by developing e-library of syllabus of Rajasthan state Board for class 6th to 12th in partnership with Department of Education (Government of Rajasthan) across all 33 district of Rajasthan. The programme is continue benefitting students in FY20-21. In FY 21-22, the project has reached 11.74 Crpeople through its views and subscriptions recorded on youtube. The project has been widely appreciated by all stakeholders.</p> <p>For FY22-23, our E-Kaksha project continues to benefit the students at a large. The Till date the project has recorded 139,413,534 views having 837,000 subscribers. 1000+ videos have been made accessible for viewers as a part of the digital library created under this initiative. In the reporting period of FY22-23, more than 85,000 new subscriptions have been registered for this project. As on March’23, the project has reached 3.81 cr.</p> <p>In addition, we have also launched two new projects benefiting the students towards having access to digital education as well as bridging the infrastructure gap in primary section of government schools. In 2021, Cairn partnered with Government Education department in a 25:75 financial scheme wherein 25% of the funds are being contributed by Cairn Vedanta to establish 151 ICT labs in secondary and senior secondary schools of Barmer, paving way to 100% digitalization of Barmer schools. The project intends to benefit 5000+ students</p>

S. No.	Concern/Suggestions	Status of actions (as of September 2024)
		<p>from Barmer district. As on date government has initiated the process of tender for partner on-boarding of its implementing.</p> <p>The second project is of Desk Kit - These innovative desk kits are light weighted bags with attached portable table which can be easily carried to school as well as used at home to study. These bags intent to address the gap in furniture availability in primary schools of Barmer and to encourage children to sit and study in right posture from an early age. A total 4000 desk kits will be distributed in Barmer. For FY22-23, 1981 desk kits have been distributed across schools of Barmer region.</p> <p>Our team is committed to improving education by upgrading the infrastructure and conducting BCC activities. In September'23, we delivered 465 benches to 8 govt schools under the guidance of Brig. B S Shekhawat and the major stakeholders of the villages. This has enabled a seating arrangement for nearly 1000 students and enhanced the learning environment for them and their teachers.</p> <p>For this financial year, a new intervention of supporting 151 schools has been implemented across Barmer district. This project is a joint collaboration with the Education department towards ensuring 100% of secondary schools have digital education (ICT labs). Close to 10k students benefit from this project. In addition, 400+ desk kit has been distributed. To ensure proper mental and physical development of children in the age group of 3-years regular ECCE activities are ongoing. In reporting period, 6,187 children were covered across 124 Nand Ghars.</p> <p>Cairn has been taking multiple initiatives towards supporting both education interventions as well as infrastructure to provide a conducive learning environment. For this reporting period we have continued to focus on building the right building blocks for the children undergoing pre-education at Nandghars. In partnership with ICDS department 124 Nandghars are operational across Cairn business villages in Barmer district. In addition, 300+ desk bags have been distributed to support primary school students. These function as both a bag and a portable desk which in turn bridges the infrastructural gap in schools in rural areas.</p>
9	<p>One villager from Harsani village, Shiv tehsil conveyed that CIL has planted 35,000 trees in 65 Ha of land in Sanchore and has carried out plantations in 25 Ha of land in Chokhala village. CIL has also adopted 25- 30 schools and is</p>	<p>Cairn has carried out community planation in 121 Ha land in discussion with local forest department and local bodies to carry out further planation.</p> <p>In addition to this Cairn CSR department is also planting fruit plants under its wadi project. We have provided over 1 lakh fruit and tree saplings to the local communities and developed around 1500+</p>



S. No.	Concern/Suggestions	Status of actions (as of September 2024)
	<p>extending its support in development of plantations in these schools.</p>	<p>horticulture farms over the last 6 years leading to increase in salaries of farmers between INR 40,000 to 100,000 annually.</p> <p>Furthermore, under the Barmer Smart Project, four conspicuous locations have been developed as greenbelt. More than 2500 plants have been planted and maintained across these locations.</p> <p>In H1 FY 2020-21, Cairn planned to expand the Nand Ghar project in Barmer and Jalore districts with 75 more Nandghars viz-a-viz 25 in Sanchore (Jalore) and 50 in Barmer district. In FY 21-22, A total of 17,774 community members, children &amp; women included benefited from 49 nandghars. In FY 22-23 we have impacted 3270 children through 124 Nandghars from Nov'22 onwards post on-boarding of new partner. In addition to the above endeavor, we hold mass plantation drives along with the communities and students. This creates not only awareness on environment but also creates a sense of responsibility among youths towards ensuring plant survival. We engaged more than 500+ students annually.</p> <p>This financial year, Cairn in partnership with district administration's supported "Ek Ped Apni Maa Ke Naam Abhiyan" wherein we supported mass plantation with the help of students and community at large. This not only fosters strong stakeholder relations with stakeholders but also helps create awareness in the society towards a greener environment. Supporting a green cover and its related awareness is a major initiative at Cairn.</p>
10	<p>The BDO, Chitawana Panchayat Samiti has suggested to protect local species like Jhal, Khejri and Ker. He also thanked CIL for adopting a Middle School at Sakda.</p>	<p>Cairn has consciously designed and is implementing the green belt development in the surrounding area as per the recommendation of School of Desert Sciences, to protect and promote the local flora. Local species like Khejri, Jaal, desi babool are being planted in different greenbelt areas. We promote local species only across all our plantation drives carried out in schools and communities. More than 500+ community members are involved in mass plantation drives conducted annually.</p> <p>In this financial year, we have planted more than 5,000 saplings in the reporting period. The engagement with schools, students and community at large has towards increasing the greenbelt area in the region.</p>
11	<p>Sarpanch of village Rampura raised the following written concerns:</p> <ul style="list-style-type: none"> <li>• Completion of boundary wall of school</li> <li>• Improvement of road between Gudamalani to Rampura</li> </ul>	<p>Cairn has been running 4 mobile health vans in Barmer &amp; Jalore district for over a decade in which 149 villages are covered every week to provide primary health care services. Approximately ~ 1.4 lacs community members are impacted annually. These vans are fitted with VTS, which helps ensure their regular movement as per the specified agreed route plan. Villages in our operational area are sparsely populated and lack optimum methods of transportation and mobility. Thus, the MHV services providing</p>

S. No.	Concern/Suggestions	Status of actions (as of September 2024)
	<ul style="list-style-type: none"> <li>• Irregular service of Mobile Health Van at the designated locations in the village</li> <li>• Compensation towards tree cutting not received</li> <li>• Employment for local villagers</li> </ul>	<p>health care facilities at the doorstep of the community is highly appreciated by the community. Regular awareness sessions and multi-specialty health camps are conducted for the masses. Services of Gynecologist, Orthopedic, Pediatric, ENT specialist, Dentist, and General Practitioner are provided under these health camps. With the outbreak of pandemic COVID 19, Cairn Oil &amp; Gas has taken various steps to create awareness about this deadly virus as well as equip &amp; strengthen local administration to combat COVID 19 by launching Project Sanjeevani in which we created awareness, provided more than 60000 masks, 20 BIPAP ventilators, 5000 litres/ 30000 bottles of sanitizers, 10000 litres disinfectant, 1550 PPEs, 2250 N-95 masks, and reached out to more than 4 lakh people in around 1200 villages around our operational assets.</p> <p>In Oct 2020, we launched a mega campaign on COVID 19 awareness on theme “No Mask No Entry” through IEC, virtual marathon, etc. Besides this, We have set up three COVID Care Centres in Barmer in collaboration with health department where we provided meals to more than 3000 patients till March 2021. Besides Mobile Health Van, Cairn has also launched one ambulance and handed over to Barmer District Hospital for carrying COVID patients.</p> <p>Under the phase 2 of COVID 19, Cairn continued to support government in addressing the national crises of beds, oxygen cylinders, medical facilities and other related interventions to support patients in their treatments. Some of the key highlights of the same are –</p> <ul style="list-style-type: none"> <li>• A 100 bed Vedanta COVID field hospital has been inaugurated by Mr. Ashok Gehlot, CM Government of Rajasthan. Considering this hospital, a total of 610 bed facility has been supported by Cairn over this quarter.</li> <li>• ~3.5 lac community members have been touched through COVID initiatives like – community awareness drives and supply of food packets to COVID patients and health workers.</li> <li>• Arranged transportation of ~94K litres of O2 to District hospital.</li> <li>• 2 MHV's provided to DA Barmer - to be engaged in COVID awareness and transportation of patients.</li> <li>• First of kind, Community Vaccination Drive conducted at Ravva, for people in the age group of 18-45 years. A total of 1906 community members have been covered, through multiple vaccination camps.</li> </ul> <p>Supported District Administration with thousands of medical and surgical consumable items. This includes VTM kit, COVID kit, Para monitor, medicines, masks, and sanitizers, are few such items.</p> <p>For FY22-23 on health front, we have covered close to 40,000 OPD's across 149 villages of Rajasthan through 4 MHV's. While through MHV we continue to reach to the far-flung communities, we have also</p>

S. No.	Concern/Suggestions	Status of actions (as of September 2024)
		<p>conducted 40,620 OPDs at District Hospital, through Cairn support doctors and extended cleanliness support to 17,84,908 community members. Furthermore, some new initiatives have been undertaken to improve the nutritional and health status of women and children, in partnership with district administration. 1,50,000 hemoglobin strips have been handed over to district administration as well as 22,680 laddus handed over to ICDS department for dietary support to 542 malnourished children. As a result, 166 have moved from SAM (severely malnourished) to MAM (moderately malnourished) and 155 have completed recovered over the last 3 months of Cairn nutritional support. Through our Vaccination drive (supporting government in their endeavor to provide COVID vaccination to all), we have covered more than 6800 people across Barmer and Sanchore district of Rajasthan.</p> <p>For this Financial year, in addition to the regular interventions like support to district hospital, MHV, etc. we initiated new projects like – developing general ward at CHC Kawas, providing equipment’s like Xray, sonography, etc. to CHC Kawas and Gudamalani. Moreover, this year we launched a unique project “Harit Dhara” towards empowering rural women by offering sustainable menstrual hygiene solutions. The project has reached 5000 women. As a next step the women are now taking order for stitching cloth pads which is supporting towards additional income generation.</p> <p>To ensure regularity of services of MHV GPS tracking system is installed across all our MHVs. Detailed route plan is also shared with the CSR team on weekly basis, further to which regular surprise visits are made by the team to ensure smooth services in terms of timings and treatment. Moreover, proper branding and visibility at MHV hault location is done so that villagers are well versed with MHV time, day and hault location.</p> <p>In addition, on health front following are the achievements in H2 for FY23-24 –</p> <p>MHV -</p> <ul style="list-style-type: none"> <li>➤ 93,014 OPD’s have been conducted through 7 MHV’s</li> <li>➤ Multiple awareness camps were organized to apprise beneficiaries on measures for maintaining a good health, menstruation hygiene with an outreach of more than 6,178 community members including adolescent girls.</li> <li>➤ 339 Home visits were conducted for patients who were unable to reach the mobile health unit.</li> </ul>

S. No.	Concern/Suggestions	Status of actions (as of September 2024)
		<ul style="list-style-type: none"> <li>➤ Multi-specialty health camp was organized in partnership with Health department in Gujarat and Rajasthan operational areas, to provide specialists medical (Orthopaedic, skin &amp; VD and general physician) services benefitting 100+ beneficiaries.</li> </ul> <p>Support to District Hospital –</p> <ul style="list-style-type: none"> <li>➤ 47,457 OPDs were conducted by Cairn supported doctors in District hospital.</li> <li>➤ Under the “Clean Barmer Green Barmer Intervention” 62 staff have been diligently working towards ensuring the hospital premises and facilities are clean.</li> <li>➤ More than 3.72 lac visited District hospital in this quarter and availed the hospital facilities.</li> <li>➤ District Hospital was felicitated at the State level for FY 21-22 and 22-23 for doing good work under “Kaya Kalp” a Government of India Initiative under National Health Mission. The District Hospital expressed gratitude to Cairn for supporting them in their efforts.</li> </ul> <p>Cairn’s multi-tier approach towards improving the healthcare facilities and services in the region has helped reach out to more than 11.68 lac people in the reporting period. We continue to reach out to the interiors of villagers through our MHV (Mobile Health Van) services on a weekly basis. In addition, our round-the-clock support on health &amp; hygiene as well as medical services has been a major support in addressing the load of Barmer District Hospital. Furthermore, we also focus on creating mass awareness drives in communities on seasonal diseases as well as holding multi-specialty camps towards addressing various ailments. Our efforts further gets strengthen by the interventions carries out in functionalizing the CHC and PHC’s.</p> <p>Cairn has grievance redressal application to record and track all community related issues and actions are being taken all such grievances. Engagement cell used to facilitate local employment to local communities through under various contracts. Noe employment are directly given to locals by contractors.</p> <p>CAIRN runs 3 Skill training centres in Rajasthan - Barmer, Sanchore and Jodhpur. In FY 2020-21 (Apr – March), 629 students have been enrolled and trained with 80% placement record. Cairn has further extended the contract with the current implementation partner to ensure continuity of project to provide sustainable and gainful employment opportunities to the local youths. Cairn’s CSR implementing partners have also provided local employment opportunities by engaging ~88% of its agency staffs from local communities. Due to COVID 19 pandemic globally and precautionary guidelines issued by Government of India (GoI),</p>

S. No.	Concern/Suggestions	Status of actions (as of September 2024)
		<p>we have not implemented any skill training programs. However, we planned to initiate the training programs from Oct 2020 by maintaining social distancing and other precautionary measures including some diverse courses like animal husbandry assistant, security guard, masonry, etc. Also considering need of the hour and new normal we planned to implement online training programs on GST certification for commerce graduate, Debt Recovery Assistants for 12th pass with total target of over 2000 youths.</p> <p>In addition to this, the current contract for implementing the skill training project with SEEDS have been further renewed till March'22 to ensure continuity of project to provide sustainable and gainful employment opportunities to the local youths. Post relaxation in lockdown from governemnt in second phase of COVID-19 pandemic, Skill trainings have been resumed in CEC. As per the MHA guidelines of running centres with 50% capacity. In FY21-22 we have trained 400+ students across various vocational trades with 80% placement record. As pe the compliances of partnering with any agency, the contract for implementing our skill initiative was to be renewed. The tender process was initiated and carried out in H1. We as on Oct'22 have a partner on-boarded for running the vocational skill development courses from our CEC, Barmer. Under the new contract issued to learnt skills, we have enrolled 254 students till March'23. In addition to the trades of Data Entry Operator, Electrician, Mobile handset repair, Assistant Mason, for the first time we have successfully launched all girls batch on Beautician Assistant. The 30 girls inducted in this program has been first ever intervention in Baitu zone. The students have been currently undergoing On-job-training and will be placed by next month end.</p> <p>Furthermore, CAIRN has developed infrastructure for the school in Baytu, including refurbishment of library and setting up science and computer labs in FY 2012 and Cairn had also launched project -Chirag in 2014 in which schools in Sanchore block was adopted to provide education in English, Science, Mathematics and Computers. In 2018, Cairn also adopted one school in Tantada and upgraded its infrastructure. FY 21-22 a new initiative has been taken up in partnership with Education Department to set up ITC labs in 151 schools around our operational area. These schools will then be able to benefit from the digital learning opportunities made available by government and Cairn.</p> <p>Besides this, In FY 2019-2020, Cairn has partnered with Chetna Foundation to implement Nandghar project – an initiative to focus on health and education of children in the age group 3-6 years. Across 49 Nandghars established in Barmer, close to 1200 students benefit each day through interactive learning under the ECCE (Early childhood care and education). In H1 FY 2020-21, Cairn planned to expand the Nand Ghar project in Barmer and Jalore districts with 75 more Nandghars viz-a-viz 25 in Sanchore (Jalore) and 50 in Barmer district. In FY 21-22, A total of 17,774 community members including women and children through 49 Nandghar established in Barmer. For FY22-23, we have impacted 3270 children through 124 Nandghars from Nov'22 onwards post on-boarding of new partner.</p>

S. No.	Concern/Suggestions	Status of actions (as of September 2024)
		<p>Over the H2 of FY23-24, we further trained 360+ with placement record reaching 92%. Through CEC new courses like BCBF, DRA, MIS Analyst and all girls batch for beauty assistant was introduced. Students continue to pursue trainings in courses NSDC certified vocational trainings. In addition, we also re-instated our Cairn Centre of Excellence, Jodhpur in partnership with Agriculture university. The program intends to offer degree &amp; short-term courses in farm and non-farm sector. Close to 175+ students have been engaged under this project. This initiative is a further extension of our efforts to promote entrepreneurs in the region along with supporting advancement of skills. The degree course offered further promotes agriculture as a stream to pursue for future career path. Under the on-going project of skill development, Cairn continues to train rural youths in various vocational trades like data entry operator, electrician, mobile handset repair, business correspondence and business facilitator, MIS analyst, etc. So far during the reporting period we have trained more than 300+ students with 89% placement record. In addition, we launched a Beautician Assistance Course empowering 30 women with skills to run or work in beauty parlours, enhancing their self-reliance and financial stability. In parallel to this, we have also been focusing on various allied activities to increase awareness of this project as well as help students develop holistically. While this has been Cairn's approach in Barmer district, through another skill centre CCoE at Jodhpur, we have trained close to 600 students in farm and non-farm sector skills. In addition, Cairn also initiative a new project in partnership with Bodh Siksha Sanstha, to implement the education initiative "Ujjwal" for improving access to and quality of education in 60 government schools in Barmer district in Rajasthan. In this year, various interventions (infrastructure, digital as well as academic) has been undertaken to improve learning outcomes in 20 government schools, benefiting more than 7,600 students. In addition to the school activities, components of bridge classes and remedial classes has been carried out to mainstream school dropouts 1400 students benefit from these initiatives.</p> <p>Cairn also launched Swasthya Vidyalaya" program i.e. School Sanitation Program in 2017, across 28 govt. schools in Barmer in Partnership with an NGO – Yuva Unstoppable. The project not only focuses on improving the water and sanitation facilities in these schools, but through structured monthly interventions focuses on bringing a sustainable change in the behavior of students. More than 7200 students are impacted this year across these 28 schools.</p> <p>However, due to COVID 19, all schools were closed as per the guidelines of the Government of India. In May 2020, Cairn launched a unique education initiate "e-Kaksha" for providing quality education by developing e-library of syllabus of Rajasthan state Board for class 6th to 12th in partnership with Department of Education (Government of Rajasthan) across all 33 districts of Rajasthan. The project will be re-launched by Hon'ble CM of Rajasthan in October 2020. In FY 21-22, the project has reached 11.74 Cr people through its views and subscriptions recorded on youtube. The project has been widely appreciated by all stakeholders</p>

S. No.	Concern/Suggestions	Status of actions (as of September 2024)
		<p>and has achieved some external recognition. For FY22-23, our E-Kaksha project continues to benefit the students at a large. The Till date the project has recorded 139,413,534 views having 837,000 subscribers. 1000+ videos have been made accessible for viewers as a part of the digital library created under this initiative. In the reporting period of FY22-23, more than 85,000 new subscriptions have been registered for this project. As on March'23, the project has reached 3.81 cr.</p> <p>In addition, we have also launched two new projects benefiting the students towards having access to digital education as well as bridging the infrastructure gap in primary section of government schools. In 2021, Cairn partnered with Government Education department in a 25:75 financial scheme wherein 25% of the funds are being contributed by Cairn Vedanta to establish 151 ICT labs in secondary and senior secondary schools of Barmer, paving way to 100% digitalization of Barmer schools. The project intends to benefit 5000+ students from Barmer district. As on date government has initiated the process of tender for partner on-boarding of its implementing.</p> <p>The second project is of Desk Kit - These innovative desk kits are light weighted bags with attached portable table which can be easily carried to school as well as used at home to study. These bags intent to address the gap in furniture availability in primary schools of Barmer and to encourage children to sit and study in right posture from an early age. A total 4000 desk kits will be distributed in Barmer. For FY22-23, 1981 desk kits have been distributed across schools of Barmer region.</p> <p>For this financial year, a new intervention of supporting 151 schools has been implemented across Barmer district. This project is a joint collaboration with the Education department towards ensuring 100% of secondary schools have digital education (ICT labs). Close to 10k students benefit from this project. In addition, 400+ desk kit have been distributed. To ensure proper mental and physical development of children in the age group of 3-years regular ECCE activities are ongoing. In reporting period, 6,187 children were covered across 124 Nand Ghars.</p> <p>Cairn has been taking multiple initiatives towards supporting both education interventions as well as infrastructure to provide a conducive learning environment. For this reporting period we have continued to focus on building the right building blocks for the children undergoing pre-education at Nandghars. In partnership with ICDS department 124 Nandghars are operational across Cairn business villages in Barmer district. In addition, 300+ desk bags have been distributed to support primary school students. These function as both a bag and a portable desk which in turn bridges the infrastructural gap in schools in rural areas.</p>

vi. Public Hearing carried out in Barmer district on 22nd October 2013 (300k bopd production augmentation EIA)

S. No.	Concern/Suggestions	Status of actions (as of September 2024)
1.	<p>The Sarpanch, Beriwala Tala, has suggested that the information about Cairn’s CSR initiatives shall be provided to the Panchayats who in turn shall share the information with the community to make them aware of the available facilities.</p> <p>CAIRN has also provided assistance for development of toilets in the village in association with the Nirmal Bharat Abhiyan Scheme and suggested that the scheme be extended to other villages in the Project area.</p>	<p>All Cairn CSR program MOUs with implementing partner have an inherent clause to create awareness among the community including PRI members in order to mobilize their support for the programs. Cairn keeps the sarpanch updated about the ongoing CSR initiatives in his panchayat and surrounding areas. Cairn has also initiated a unique initiative (Maru Samvad) through the use the community theatre, to create awareness about the community development initiatives being undertaken in Barmer district in partnership with a local grass root level organization – BNKVS Group of Theatre Society in 30 critical villages in Barmer.</p> <p>Cairn has proactively taken up the initiative to support the Swachh Bharat Mission and Nirmal Bharat Abhiyan. Since inception ~20500 toilets have been constructed under the NBA and SBM program. Since entire Barmer district has been declared Open Defecation Free in June 2018 by Govt. of Rajasthan, Cairn has not taken up any new initiative for household sanitation, however “Swasthya Vidyalaya” program i.e. School Sanitation Program which was launched in 2017, is still ongoing in 28 govt. schools in Barmer in Partnership with an NGO – Yuva Unstoppable, benefiting more than 7200 students.</p>
2	<p>A villager from Village Chadi voiced his concern that the rate of land was much less when CAIRN had started its operations in the region as compared to the current prevailing land rates.</p> <p>He demanded that the people who have contributed their land in the initial stages should be given preference in jobs and contracts.</p> <p>He also requested to provide jobs to the meritorious students.</p>	<p>Land acquisition has been done in compliance to regulatory requirements and the compensation amount was decided by the Land Acquisition Officer. Payment has been disbursed through the LAO (Land Acquisition Officer).</p> <p>As per the local content policy in the past, preference was given to locals for their engagement either in terms of employment or vehicle/equipment engagement. We had the process in which we registered the local population and their vehicles/Equipment’s (RC) and based on the demands from vendors we gave priority to land contributors. Now employment opportunities are given to locals by the vendors directly.</p> <p>Scholarships to meritorious students from the local community are disbursed for higher studies in medicine and engineering. In FY 2018-19, 8 students and in FY19-20, 5 students have been provided scholarships. For FY21-22 a total of INR 8 lac has been provided to 4 students of medical and engineering field studying in Government college.</p> <p>In addition, CAIRN runs 3 Skill training centres in Rajasthan - Barmer, Sanchore and Jodhpur. In the year 2018-19, Cairn Enterprise Centre (CEC), Barmer and Jalore, have trained more than 1000 youth in mobile repairing, masonry, domestic electric repairing, etc. whereas ~250 students in Jodhpur. Approximately 70% placement has been given to the local youths via these programs.</p>



S. No.	Concern/Suggestions	Status of actions (as of September 2024)
		<p>In FY 2019-20 (Apr – March), 728 students have been enrolled and trained, and in FY 2020-21 (Apr – March), 629 students have been enrolled and trained with 80% placement record. Cairn has further extended the current contract with the implementing agency to ensure project continuity to provide sustainable and gainful employment opportunities to the local youths.</p> <p>Cairn’s CSR implementing partners have also provided local employment opportunities by engaging ~88% of its agency staffs from local communities.</p> <p>Due to COVID 19 pandemic globally and precautionary guidelines issued by Government of India (GoI), we have not implemented any skill training programs. However, we planned to initiate the training programs from Oct 2020 by maintaining social distancing and other precautionary measures including some diverse courses like animal husbandry assistant, security guard, masonry, etc. Also considering need of the hour and new normal we planned to implement online training programs on GST certification for commerce graduate, Debt Recovery Assistants for 12th pass with total target of over 2000 youths.</p> <p>In addition to this, the current contract for implementing the skill training project with SEEDS have been further renewed till March’22 to ensure continuity of project to provide sustainable and gainful employment opportunities to the local youths. Post relaxation in lockdown from governemnt in second phase of COVID-19 pandemic, Skill trainings have been resumed in CEC. As per the MHA guidelines of running centres with 50% capacity. In FY21-22 we have trained 400+ students across various trades with 75%+ placement record through online and offline mode of training. As pe the compliances of partnering with any agency, the contract for implementing our skill initiative was to be renewed. The tender process was initiated and carried out in H1. We as on Oct’22 have a partner on-boarded for running the vocational skill development courses from our CEC, Barmer. Under the new contract issued to learnt skills, we have enrolled 254 students till March’23. In addition to the trades of Data Entry Operator, Electrician, Mobile handset repair, Assistant Mason, for the first time we have successfully launched all girls batch on Beautician Assistant. The 30 girls inducted in this program has been first ever intervention in Baitu zone. The students have been currently undergoing On-job-training and will be placed by next month end.</p> <p>Over the H2 of FY23-24, we further trained 360+ with placement record reaching 92%. Through CEC new courses like BCBF, DRA, MIS Analyst and all girls batch for beauty assistant was introduced. Students continue to pursue trainings in courses NSDC certified vocational trainings. In addition, we also re-instated our Cairn Centre of Excellence, Jodhpur in partnership with Agriculture university. The program intends to offer degree &amp; short-term courses in farm and non-farm sector. Close to 175+ students have been engaged under this project. This initiative is a further extension of our efforts to promote entrepreneurs in the region along with supporting</p>

S. No.	Concern/Suggestions	Status of actions (as of September 2024)
		<p>advancement of skills. The degree course offered further promotes agriculture as a stream to pursue for future career path.</p> <p>While at Cairn we have a local content policy which supports employment of local residents and engagement of vehicle/ business with local resident, through CSR initiative we also focus on empowering rural youths in possibilities of various vocational trades linked with employment opportunities.</p> <p>Under the on-going project of skill development, Cairn continues to train rural youths in various vocational trades like data entry operator, electrician, mobile handset repair, business correspondence and business facilitator, MIS analyst, etc. So far during the reporting period we have trained more than 300+ students with 89% placement record. In addition, we launched a Beautician Assistance Course empowering 30 women with skills to run or work in beauty parlours, enhancing their self-reliance and financial stability. In parallel to this, we have also been focusing on various allied activities to increase awareness of this project as well as help students develop holistically. While this has been Cairn's approach in Barmer district, through another skill centre CCoE at Jodhpur, we have trained close to 600 students in farm and non-farm sector skills.</p>
3	<p>A villager has thanked CAIRN for conducting public hearing and sharing project information. He suggested that plantation drive shall be encouraged in the area.</p>	<p>Cairn developed ~1500+ horticulture farms and converted 200 ha of land into cultivatable land. From these farms ~40 tons of leaf biomass and ~50 tons of fuel wood is produced. More than 1 lac saplings of BER, GUNDA and ANAR, vegetable farming and forestry saplings have been planted in the last 6 years since the inception of this project in 2013.</p> <p>Cairn has also planted ~75000 saplings in 121Ha of community land as part of its compensatory plantation and offsite greenbelt development (receptor based).</p> <p>Furthermore, under the Barmer Smart Project, four conspicuous locations have been developed as greenbelt. More than 2500 plants have been planted and maintained across these locations.</p> <p>In addition, in FY21-22, two-month long plantation drive was carried out covering more than 25 GP, planting 2000+ sapling and creating awareness among communities on environment sustainability. A community-based monitoring &amp; maintenance mechanism has been developed in partnership with the community/ key stakeholders for project sustainability. Cairn has under its ESG commitment further taken a target to focus on ensuing green plantation across locations towards a better environment. In addition, regular community engagement session under Microlevel intervention program on this front continued for this year as well.</p>

S. No.	Concern/Suggestions	Status of actions (as of September 2024)
		<p>The CSR team conducts regular plantation drives at various project sites throughout the year. We plant trees in community spaces, schools and other areas. Additionally, we are also working on developing a pastureland at Chittar ka par, which will provide fodder for livestock and improve the soil quality.</p> <p>In addition to the above endeavor, we hold mass plantation drives along with the communities and students. This creates not only awareness on environment but also creates a sense of responsibility among youths towards ensuring plant survival. We engaged more than 500+ students annually.</p> <p>Supporting a green cover and its related awareness is a major initiative at Cairn. We have been dedicatedly taking up initiatives of mass awareness and plantation across Barmer district. In this context, we have planted more than 5,000 saplings in the reporting period. The engagement with schools, students and community at large has towards increasing the greenbelt area in the region. Furthermore, this financial year, Cairn in partnership with district administration's supported "Ek Ped Apni Maa Ke Naam Abhiyan" wherein we supported mass plantation with the help of students and community at large. This not only fosters strong stakeholder relations with stakeholders but also helps create awareness in the society towards a greener environment. Supporting a green cover and its related awareness is a major initiative at Cairn.</p>
4	<p>A villager from Village Jhataka, has voiced his concern regarding the un-employment of locals.</p> <p>He suggested that CAIRN must take initiatives to provide placement to the students passing out from ITI and Polytechnics.</p> <p>He also asked to focus on education and CAIRN shall encourage students who have participated in various games at National level.</p>	<p>The community engagement representatives facilitate opportunities for locals to interact with various service providing firms and large integrated oilfield service companies. This is an enabling process through which, local stakeholders including land contributors can proactively participate in development of RJ-ON-90/1 field. Based on requirement and mutual acceptance, employment and occupational opportunities can be leveraged.</p> <p>In FY 2015 - 2017 - Under the ITI adoption program, CAIRN supported the Learning of the students for their employability in the industry at two centres ITI Barmer and Balotra. In addition to the regular classes to improve employability, a placement drive is also been organized every year for ITI students.</p> <p>CAIRN has been promoting sports &amp; games since 2013 by supporting Indian National Hockey team, Airtel Marathon, Cairn Pink City Half Marathon and 10 para athletes of India who have represented India nationally &amp; internationally and won medals. In the reporting period, Cairn has supported the coaching of 4 aspiring footballers (children) from Barmer and sent them for advanced training to Vedanta's Sesa Football Academy in Goa. In addition to this Cairn is also exploring opportunities to create a sports academy in Barmer. For FY21-22 we have achieved a record breaking awareness drive launched between 19th December and 26th December. Participants from 22 countries ran marathon to raise awareness. Kick Start Drive launched by Chairman, Mr. Anil Agarwal,</p>

S. No.	Concern/Suggestions	Status of actions (as of September 2024)
		<p>Mrs. Kiran Agarwal and senior management. Governor of Rajasthan, Chief Minister and other important authorities supported the mass awareness drive. 47,849 people registered in this event to create the awareness on vaccination in our fight against COVID-19. An entry was made to the UK World Book of Records for organizing the largest virtual run.</p> <p>Support to 10 para-athletes include Physiotherapy, Monthly Grant, Supplementary Nutrients Allowance, International Exposure, Equipment, Medical Insurance, etc. Ms. Bhawana Sharma as per weightlifter won gold Medal in 18th Para Power lifting championship at National Level. In FY21-22, Cairn supported para-athletes have performed outstanding to won Bronze and silver medal for India in Tokyo 2020 Olympics. Cairn has further extended the support now to 12 para-athlete in FY22-23. For FY22-23 some of the key highlights of this intervention has been –</p> <ul style="list-style-type: none"> <li>• Cairn supported para-athletes secured 12 Gold Medals, 1 Silver and 5 Bronze Medals in total across 4 championships.</li> <li>• Giving momentum to Para-athletics movement at state level, Chief Minister, Mr. Ashok Gehlot distributed sports equipment to 9 of our para-athlete.</li> <li>• Supported para-athletes displayed great performance at various international and national level competitions.</li> </ul> <p>At 21st National Para-Athletic championships-2023, three of our para-athletes bagged 2 gold medals and one silver in discus and javelin throw competitions.</p> <p>In FY 2019-20, Cairn partnered with GT Health Care, an NGO responsible for implementing the Cairn Pink City Half Marathon project in 2019 focusing on increasing awareness on health, fitness and general well- being. The 6-month project outreach activities are being expanded to include customized fitness, coaching &amp; health programs in 20 government schools in Barmer while continuing to support national social campaigns like Organ Donation, Save the Girl Child and Swachh Bharat Abhiyaan.</p> <p>The activities include customized fitness, coaching &amp; health programs were carried out in in 20 government schools in Barmer including sports coaching while continuing to support national social campaigns like Organ Donation, Save the Girl Child and Swachh Bharat Abhiyaan. These activities have benefited more than 20,600 students and community members across various sports &amp; fitness activities. The 5th edition of Cairn Pink City Virtual Half Marathon was one of the record-breaking events which has witnessed the registration of more than 40,000 participants from across 23 countries. The event was centered around the theme ‘Mask Hi Vaccine Hain’ and bagged an entry in UK World book of records for largest virtual marathon.</p>

S. No.	Concern/Suggestions	Status of actions (as of September 2024)
		<p>Besides this, in FY 2020, Cairn has partnered with Bodh Shiksha Samiti to implement the education initiative “Ujjwal” for improving access to and quality of education in 60 government schools in Barmer district in Rajasthan. This include infrastructure refurbishment / upgrade, setting up of digital and learning labs, capacity building of teachers and students, remedial classes for school dropouts etc.</p> <p>The project “Ujjwal” was formally launched by Hon’ble Chief Minister of Rajasthan, Shri Ashok Gehlot during the 10th Anniversary of First Oil or Mangala Day celebrations in Barmer, Rajasthan on 29th August 2019 and has benefited more than 7800 students across 20 schools.</p> <p>However, due to COVID 19, all schools were closed as per the guidelines of the Government of India. In May 2020, Cairn launched a unique education initiate “e-Kaksha” for providing quality education by developing e-library of syllabus of Rajasthan state Board for class 6<sup>th</sup> to 12<sup>th</sup> in partnership with Department of Education (Government of Rajasthan) across all 33 districts of Rajasthan. The project will be re-launched by Hon’ble CM of Rajasthan in October 2020. In FY 21-22, the project has reached 11.74CR people through its views and subscriptions recorded on youtube. The project has been widely appreciated by all stakeholders.</p> <p>For FY22-23, our E-Kaksha project continues to benefit the students at a large. The Till date the project has recorded 139,413,534 views having 837,000 subscribers. 1000+ videos have been made accessible for viewers as a part of the digital library created under this initiative. In the reporting period of FY22-23, more than 85,000 new subscriptions have been registered for this project. As on March’23, the project has reached 3.81 cr.</p> <p>In addition, we have also launched two new projects benefiting the students towards having access to digital education as well as bridging the infrastructure gap in primary section of government schools. In 2021, Cairn partnered with Government Education department in a 25:75 financial scheme wherein 25% of the funds are being contributed by Cairn Vedanta to establish 151 ICT labs in secondary and senior secondary schools of Barmer, paving way to 100% digitalization of Barmer schools. The project intends to benefit 5000+ students from Barmer district. As on date government has initiated the process of tender for partner on-boarding of its implementing.</p> <p>The second project is of Desk Kit - These innovative desk kits are light weighted bags with attached portable table which can be easily carried to school as well as used at home to study. These bags intent to address the gap in furniture availability in primary schools of Barmer and to encourage children to sit and study in right posture from an early age. A total 4000 desk kits will be distributed in Barmer. For FY22-23, 1981 desk kits have been distributed across schools of Barmer region.</p>

S. No.	Concern/Suggestions	Status of actions (as of September 2024)
		<p>The CSR team is committed to enhancing the skills and employability of the youth in Barmer therefore, skill training at CEC is provided to the youth of Barmer with a 90% placement record.</p> <p>In addition, the team is also fostering a sports culture in the region by building various sports facilities such as football fields, basketball courts, and running tracks at government schools. These facilities will serve the future generations and motivate the young athletes. The team has also distributed sports kits to 37 schools, reaching more than 10,000 children.</p> <p>In order to promote the kabaddi players, kabaddi mat was provided to Chittar ka par govt senior secondary school.</p> <p>Over the H2 of FY23-24, we further trained 360+ with placement record reaching 92%. Through CEC new courses like BCBF, DRA, MIS Analyst and all girls batch for beauty assistant was introduced. Students continue to pursue trainings in courses NSDC certified vocational trainings. In addition, we also re-instated our Cairn Centre of Excellence, Jodhpur in partnership with Agriculture university. The program intends to offer degree &amp; short-term courses in farm and non-farm sector. Close to 175+ students have been engaged under this project. This initiative is a further extension of our efforts to promote entrepreneurs in the region along with supporting advancement of skills. The degree course offered further promotes agriculture as a stream to pursue for future career path.</p> <p>For this financial year, a new intervention of supporting 151 schools has been implemented across Barmer district. This project is a joint collaboration with the Education department towards ensuring 100% of secondary schools have digital education (ICT labs). Close to 10k students benefit from this project. In addition, 400+ desk kit has been distributed.</p> <p>To ensure proper mental and physical development of children in the age group of 3-years regular ECCE activities are ongoing. In the reporting period, 6,187 children were covered across 124 Nand Ghars.</p> <p>While at Cairn we have a local content policy which supports employment of local residents and engagement of vehicle/ business with local resident, through CSR initiative we also focus on empowering rural youths in possibilities of various vocational trades linked with employment opportunities. Under the on-going project of skill development, Cairn continues to train rural youths in various vocational trades like data entry operator, electrician, mobile handset repair, business correspondence and business facilitator, MIS analyst, etc. So far during the reporting period we have trained more than 300+ students with 89% placement record. In addition, we launched a Beautician Assistance Course empowering 30 women with skills to run or work in beauty parlours, enhancing their self-reliance and financial stability. In parallel to this, we have also been focusing on</p>

S. No.	Concern/Suggestions	Status of actions (as of September 2024)
		<p>various allied activities to increase awareness of this project as well as help students develop holistically. While this has been Cairn’s approach in Barmer district, through another skill centre CCoE at Jodhpur, we have trained close to 600 students in farm and non-farm sector skills.</p> <p>Furthermore, Cairn has been taking multiple initiatives towards supporting both education interventions as well as infrastructure to provide a conducive learning environment. For this reporting period we have continued to focus on building the right building blocks for the children undergoing pre-education at Nandghars. In partnership with ICDS department 124 Nandghars are operational across Cairn business villages in Barmer district. In addition, 300+ desk bags have been distributed to support primary school students. These function as both a bag and a portable desk which in turn bridges the infrastructural gap in schools in rural areas</p>
5	<p>A shopkeeper from Khoslu expressed that the people have not got benefits as mentioned in the project briefing and very few households have toilets.</p> <p>The report submitted by Cairn suggest that environment will not be disturbed by the project, however it is not so and he feels that environment has been affected.</p> <p>He also mentioned about an incident where a girl student was injured during a road accident. The villagers requested the Cairn Ambulance to take her to Sindhari Hospital. However, it was refused. He urged to take note of such behavior.</p>	<p>In FY 2015, Cairn has proactively taken up the initiative to support the Swachh Bharat Mission and Nirmal Bharat Abhiyan in partnership with Rural Development Organization Trust and Zila Parishad, Barmer. The program model is based on Public Private Partnership wherein Cairn contributes to the available govt. funds for the construction of individual household’s (HH) toilets. Till date, Cairn has constructed 20,500 HH toilets in partnership with the Government of Rajasthan (GoR). Barmer district has been declared Open Defecation Free by the GoR in June 2019.</p> <p>In addition, “Swasthya Vidyalaya” program i.e. School Sanitation Program which was launched in FY 2017, is still ongoing in 28 govt. schools in Barmer in partnership with an NGO – Yuva Unstoppable. Under this project, separate toilets for girls and boys along hand washing area have been constructed across 28 government schools impacting ~ 7200 students and teachers. In addition, coaching and behavioral sessions on health &amp; hygiene are also imparted to the students under this project.</p> <p>During COVID 19, all schools were closed as per the guidelines of the Government of India. In May 2020, Cairn launched a unique education initiative “e-Kaksha” for providing quality education by developing e-library of syllabus of Rajasthan state Board for class 6th to 12th in partnership with Department of Education (Government of Rajasthan). across all 33 districts of Rajasthan. The project will be re-launched by Hon’ble CM of Rajasthan in October 2020. In FY 21-22, the project has reached 11.74CR people through its views and subscriptions recorded on youtube. The project has been widely appreciated by all stakeholders. For FY22-23, our E-Kaksha project continues to benefit the students at a large. The Till date the project has recorded 139,413,534 views having 837,000 subscribers. 1000+ videos have been made accessible for viewers as a part of the digital library</p>

S. No.	Concern/Suggestions	Status of actions (as of September 2024)
		<p>created under this initiative. In the reporting period of FY22-23, more than 85,000 new subscriptions have been registered for this project. As on March'23, the project has reached 3.81 cr.</p> <p>In addition, we have also launched two new projects benefiting the students towards having access to digital education as well as bridging the infrastructure gap in primary section of government schools. In 2021, Cairn partnered with Government Education department in a 25:75 financial scheme wherein 25% of the funds are being contributed by Cairn Vedanta to establish 151 ICT labs in secondary and senior secondary schools of Barmer, paving way to 100% digitalization of Barmer schools. The project intends to benefit 5000+ students from Barmer district. As on date government has initiated the process of tender for partner on-boarding of its implementing.</p> <p>The second project is Desk Kit - These innovative desk kits are light weighted bags with attached portable table which can be easily carried to school as well as used at home to study. These bags are intended to address the gap in furniture availability in primary schools of Barmer and to encourage children to sit and study in the right posture from an early age. A total of 4000 desk kits will be distributed in Barmer. For FY22-23, 1981 desk kits have been distributed across schools of Barmer region.</p> <p>For this financial year, a new intervention of supporting 151 schools has been implemented across Barmer district. This project is a joint collaboration with the Education department towards ensuring 100% of secondary schools have digital education (ICT labs). Close to 10k students benefit from this project. In addition, 400+ desk kit has been distributed. To ensure proper mental and physical development of children in the age group of 3-years regular ECCE activities are ongoing. In reporting period, 6,187 children were covered across 124 Nand Ghars. Regarding extending CAIRN support in case of emergencies, CAIRN has taken note of the concern and being extending full support upon request. In addition, Cairn has been providing fire tender from Raageshwari Gas Terminal (RGT) to the villages in Gudamalani block in Barmer district in case of any fire incident. Also, Cairn has been running 4 mobile health vans in Barmer &amp; Jalore district for over a decade in which 149 villages are covered every week to provide primary health care services. Approximately ~ 1.4 lacs community members are impacted annually. In addition to the above, for FY22-23 we have covered close to 40,500 OPD's across 149 villages of Rajasthan through 4 MHV's. While through MHV we continue to reach to the far-flung communities, we have also conducted 40,620 OPDs at District Hospital, through Cairn support doctors and extended cleanliness support to 17,84,908 community members. Furthermore, some new initiatives have been undertaken to improve the nutritional and health status of women and children, in partnership with district administration. 1,50,000 hemoglobin strips have been handed over to district administration as well as 22,680 laddus handed over to ICDS department for dietary support to 542 malnourished children. As a result, 166 have moved from SAM (severely malnourished) to MAM (moderately malnourished) and 155 have completed recovered over the last 3 months of</p>



S. No.	Concern/Suggestions	Status of actions (as of September 2024)
		<p>Cairn nutritional support. Through our Vaccination drive (supporting government in their endeavor to provide COVID vaccination to all), we have covered more than 6800 people across Barmer and Sanchore district of Rajasthan.</p> <p>For this Financial year, in addition to the regular interventions like support to district hospital, MHV, etc. we initiated new projects like – developing general ward at CHC Kawas, providing equipment’s like Xray, sonography, etc. to CHC Kawas and Gudamalani. Moreover, this year we launched a unique project “Harit Dhara” towards empowering rural women by offering sustainable menstrual hygiene solutions. The project has reached 5000 women. As a next step the women are now taking order for stitching cloth pads which is supporting towards additional income generation.</p> <p>Cairn’s multi-tier approach towards improving the healthcare facilities and services in the region has helped reach out to more than 11.68 lac people in the reporting period. We continue to reach out to the interiors of villagers through our MHV (Mobile Health Van) services on a weekly basis. In addition, our round-the-clock support on health &amp; hygiene as well as medical services has been a major support in addressing the load of Barmer District Hospital. Furthermore, we also focus on creating mass awareness drives in communities on seasonal diseases as well as holding multi-specialty camps towards addressing various ailments. Our efforts further gets strengthened by the interventions carries out in functionalizing the CHC and PHC’s.</p> <p>Cairn is carrying out its operation in environmentally responsible manner. No major impact on local environment observed in our recent EIA studies conducted for expansion activities. Furthermore, to support environment Cairn has taken various initiatives which includes but not limit itself to regular plantation drives in schools and communities, restoration of ground water through renovation of community Nadi (38 Nadi conserving 18 lakh cubic meter water), Construction of Rainwater harvesting structures in 95 schools, benefiting 8000+ students, carrying out solar electrification in 100 Adarsh schools, etc. are some of the many interventions done towards environment sustainability.</p> <p>As an organization, we continue to deploy the best and leading environmental practices across our operations. Commemorating the occasion of World Environment Day 2023, our environment and CSR teams conducted various events and activities with the aim of further building awareness on the theme of ‘Beat Plastic Pollution’. Zero food waste challenge, poster making, essay writing, and photography competitions were organised across our operational areas with enthusiastic participation from our employees, their families, and our business partners</p>

S. No.	Concern/Suggestions	Status of actions (as of September 2024)
		<p>and contract workers. Other activities included a Nature Walk in Gaangli forest in Rajasthan, 5 km fun run at RJ North, distribution of jute bags to RJ North workforce, and mass tree plantation executed by ~500 community members across Rajasthan and Gujarat, and awareness sessions with community members and stakeholders.</p> <p>Supporting a green cover and its related awareness is a major initiative at Cairn. We have been dedicatedly taking up initiatives of mass awareness and plantation across Barmer district. In this context, we have planted more than 5,000 saplings in the reporting period. The engagement with schools, students and community at large has towards increasing the greenbelt area in the region.</p> <p>This financial year, Cairn in partnership with district administration's supported "Ek Ped Apni Maa Ke Naam Abhiyan" wherein we supported mass plantation with the help of students and community at large. This not only fosters strong stakeholder relations with stakeholders but also helps create awareness in the society towards a greener environment. Supporting a green cover and its related awareness is a major initiative at Cairn.</p>
6	<p>A female participant had informed that the area has a significant number of handicapped persons. She suggested that these people shall be given special attention and schemes to empower these physically challenged people shall be taken up.</p> <p>She also requested to develop skill sets among women so that they can be self-sufficient and earn a decent living</p>	<p>Under its Project Divyang in partnership with Para Olympic Committee of India (PCI), Cairn has been supporting 3 Indian Para athletes from Rajasthan since FY 2017 who have given various medal winning performances at international and world level Para- Athletic events bringing laurels to the State and the Country. In FY 2019-20, Cairn renewed the partnership with PCI and increased the support from 3 para athletes to 9 Indian para athletes from Rajasthan, of which one is woman athletes. Support includes Physiotherapy, Monthly Grant, Supplementary Nutrients Allowance, International Exposure, Equipment, Medical Insurance, etc. Ms. Bhawana Sharma as per weightlifter won gold Medal in 18th Para Power lifting championship at National Level. In FY21-22, Cairn supported para-athletes have performed outstanding to won bronze and silver medal for India in Tokyo 2020 Olympics. In FY22-23, Cairn further extended the support to promote para-athletes by supporting 12 para-athletes from Rajasthan &amp; Gujarat State. The support extended ranges from nutritional supplements, training, sports equipment, and regular physiotherapy. Some of the key highlights are –</p> <ul style="list-style-type: none"> <li>• Cairn supported para-athletes secured 12 Gold Medals, 1 Silver and 5 Bronze Medals in total across 4 championships.</li> <li>• Giving momentum to Para-athletics movement at state level, Chief Minister, Mr. Ashok Gehlot distributed sports equipment to 9 of our para-athlete.</li> <li>• Supported para-athletes displayed great performance at various international and national level competitions.</li> <li>• At 21st National Para-Athletic championships-2023, three of our para-athletes bagged 2 gold medals and one silver in discus and javelin throw competitions.</li> </ul>

S. No.	Concern/Suggestions	Status of actions (as of September 2024)
		<p>Through its skill training centre at Barmer, trainings have been given to ~1015 women depending on their qualifications. The trainings assist in ensuring women empowerment.</p> <p>Moreover, Cairn supported the district department in providing artificial aids, limbs, etc. to the physically challenged people and will continue to explore opportunities to provide support to differently abled people in Barmer district in partnership with government. Besides this Cairn has been supporting 20 differently abled children from Delhi since 2017.</p> <p>In addition, under our Dairy program, a total 33 women Self Help Groups and 387 Members saved INR 1.95 under the Dairy Development Programme. These women are trained and running their SHGs successfully which assisted in increasing their annual income.</p> <p>During H2 of FY23-24, efforts to further strengthen the SHG were put in place. In addition to supporting 30 SHG women in handholding support. Barmer's Dayal Self Help Group of women were given the opportunity to showcase their products of organic millets produce (cookies, laddos) at the Vedanta Pink City Half Marathon Exhibition in Jaipur. This event opened doors to a wider audience which facilitated SHG selling all their produce. In addition, 30 women have also started to sell products locally (ghee, pickles, etc.) and we look forward to expanding the reach further through advance technical trainings, brand certification and market support.</p> <p>Empowering women across our social interventions is one of the key factors. In line with our vision of impacting women and children, Cairn continues to support women through both skill development training as well as income enhancement activities. In this financial year, Cairn has supported 60 women in beautician assistant training who have started their own enterprise or are working at individual capacities towards income generation activities. In addition, we have also imparted 30 days stitching training in which total 169 females participated and benefitted from the sessions. During the reporting period we have launched a new SHG of 10 members who has been working on millet-based cookies (in line with promoting International Millet year) under the banner of JIJI bai cookies. So far, the group has undergone training and has sold 80kg of cookies through various platforms.</p>
7	<p>A villager from Khoslu expressed his unhappiness and voiced that it is not land loser alone who are affected but all villagers are affected due to air water and noise pollution from the project.</p> <p>He expressed that voice of people is generally unheard and land of villagers was taken at low cost and there</p>	<p>(Land acquisition has been done in compliance to regulatory requirements and the compensation amount was decided by the Land Acquisition Officer. Payment has been disbursed through the LAO.)</p> <p>Cairn operates in a manner which avoid air or water pollution and tries to adopt sustainable approach in all its operations in order to minimize the operational impact on environment. Cairn has planted lacs of trees to contribute towards environment up gradation.</p>

S. No.	Concern/Suggestions	Status of actions (as of September 2024)
	<p>has been no benefit in terms of vehicle engagement and employment with Cairn.</p> <p>Thus, he has asked for priority to land losers in jobs and other contract works like vehicle hire.</p>	<p>As per the local content policy in the past preference was given to locals for their engagement either in terms of employment or vehicle/equipment engagement. We had the process in which we register the local population and their vehicles/Equipment's (RC) and based on the demands from vendors we gave priority to land contributors. Now employment opportunities are given to locals by the vendors directly.</p> <p>Scholarships to meritorious students from the local community are disbursed for higher studies in medicine and engineering. In FY 2018-19, 8 students and in FY19-20, 5 students have been provided scholarships. The selection of students for scholarship for FY2020-21 is under process. This year in H1, Cairn provided INR 1 lac each to two engineering students and INR 2 lac each to two medical students studying in government collage.</p> <p>In addition, CAIRN runs 3 Skill training centres in Rajasthan - Barmer, Sanchore and Jodhpur. In the year 2018-19, Cairn Enterprise Centre (CEC), Barmer and Jalore, had trained more than 1000 youth in mobile repairing, masonry, domestic electric repairing, etc. whereas ~250 students in Jodhpur. Approximately 70% placement has been given to the local youths via these programs.</p> <p>In FY 2019-20 (Apr – March), 728 students have been enrolled and trained, and in FY 2020-21 (Apr – March), 629 student have been enrolled and trained with 80% placement record. Cairn has further extended the current contract with the implementing agency to ensure project continuity to provide sustainable and gainful employment opportunities to the local youths.</p> <p>Cairn's CSR implementing partners have also provided local employment opportunities by engaging ~88% of its agency staffs from local communities.</p> <p>Due to COVID 19 pandemic globally and precautionary guidelines issued by Government of India (GoI), we have not implemented any skill training programs. However, we initiated the training programs from Oct 2020 by maintaining social distancing and other precautionary measures including some diverse courses like animal husbandry assistant, security guard, masonry, etc. Also considering need of the hour and new normal we planned to implement online training programs on GST certification for commerce graduate, Debt Recovery Assistants for 12<sup>th</sup> pass with total target of over 2000 youths. In addition to this, the current contract for implementing the skill training project with SEEDS have been further renewed till March'22 to ensure continuity of project to provide sustainable and gainful employment opportunities to the local youths. Post relaxation in lockdown from government in second phase of COVID-19 pandemic, Skill trainings have been resumed in CEC. As per the MHA guidelines of running centres with 50% capacity. In FY21-22 we have trained more than 400+ students across various vocational trades through online and offline mode of training. As pe the compliances of partnering with any agency, the contract for implementing our skill initiative was to be renewed. The tender process was initiated and carried out in H1. We as on Oct'22 have a partner on-boarded for running the vocational skill development</p>

S. No.	Concern/Suggestions	Status of actions (as of September 2024)
		<p>courses from our CEC, Barmer. Under the new contract issued to learnt skills, we have enrolled 254 students till March'23. In addition to the trades of Data Entry Operator, Electrician, Mobile handset repair, Assistant Mason, for the first time we have successfully launched all girls batch on Beautician Assistant. The 30 girls inducted in this program has been first ever intervention in Baitu zone. The students have been currently undergoing On-job-training and will be placed by next month end.</p> <p>Over the H2 of FY23-24, we further trained 360+ with placement record reaching 92%. Through CEC new courses like BCBF, DRA, MIS Analyst and all girls batch for beauty assistant was introduced. Students continue to pursue trainings in courses NSDC certified vocational trainings. In addition, we also re-instated our Cairn Centre of Excellence, Jodhpur in partnership with Agriculture university. The program intends to offer degree &amp; short-term courses in farm and non-farm sector. Close to 175+ students have been engaged under this project. This initiative is a further extension of our efforts to promote entrepreneurs in the region along with supporting advancement of skills. The degree course offered further promotes agriculture as a stream to pursue for future career path.</p> <p>While at Cairn we have a local content policy which supports employment of local residents and engagement of vehicle/ business with local resident, through CSR initiative we also focus on empowering rural youths in possibilities of various vocational trades linked with employment opportunities.</p> <p>Under the on-going project of skill development, Cairn continues to train rural youths in various vocational trades like data entry operator, electrician, mobile handset repair, business correspondence and business facilitator, MIS analyst, etc. So far during the reporting period we have trained more than 300+ students with 89% placement record. In addition, we launched a Beautician Assistance Course empowering 30 women with skills to run or work in beauty parlours, enhancing their self-reliance and financial stability. In parallel to this, we have also been focusing on various allied activities to increase awareness of this project as well as help students develop holistically. While this has been Cairn's approach in Barmer district, through another skill centre CCoE at Jodhpur, we have trained close to 600 students in farm and non-farm sector skills.</p>

**vii. Public Hearing carried out in Jalore district on 25th October 2013 (300k bopd production augmentation EIA)**

S. No.	Concerns/suggestions	Status of actions (as of September 2024)
1.	<p>A villager emphasized the importance of education and requested CAIRN to provide ITIs and IIT for the students and also requested for establishing coaching centres for the students. He also suggested that CAIRN should adopt higher secondary schools in Sanchore to develop the basic infrastructure.</p>	<p>To support the youth, Cairn has set up CEC in Barmer for the training of youths in vocational trades. Based on the request Cairn has also set up a skill centre in Sanchore block in Jalore district. Cairn had also launched project - Chirag in 2014 in which schools in Sanchore block was adopted to provide education in English, Science, Mathematics and Computers. In 2018, Cairn also adopted one school in Tantada and upgraded its infrastructure.</p> <p>In FY 2015 - 2017 - Under the ITI adoption program, CAIRN had supported the Learning of the students for their employability in the industry at two centres ITI Barmer and Balotra. In addition to the regular classes to improve employability, a placement drive is also been organized every year for ITI students.</p> <p>In FY 2019-20 (Apr – March), 728 students have been enrolled and trained, and in In FY 2020-21 (Apr – March), 229 student have been enrolled and trained with 80% placement record. Cairn has extended the current contract for skill training project to ensure project continuity to provide sustainable and gainful employment opportunities to the local youths. Cairn’s CSR implementing partners have also provided local employment opportunities by engaging ~88% of its agency staffs from local communities.</p> <p>Due to COVID 19 pandemic globally and precautionary guidelines issued by Government of India (GoI), we have not implemented any skill training programs. However, we planned to initiate the training programs from Oct 2020 by maintaining social distancing and other precautionary measures including some diverse courses like animal husbandry assistant, security guard, masonry, etc. Also considering need of the hour and new normal we planned to implement online training programs on GST certification for commerce graduate, Debt Recovery Assistants for 12th pass with total target of over 2000 youths. . In addition to this, the current contract for implementing the skill training project with SEEDS have been further renewed till March’22 to ensure continuity of project to provide sustainable and gainful employment opportunities to the local youths. Post relaxation in lockdown from government in second phase of COVID-19 pandemic, Skill trainings have been resumed in CEC. As per the MHA guidelines of running centres with 50% capacity. In FY21-22 we have trained more than 400 students across various trades including but not limiting itself to electrician, GST, DRA, computers etc. through online and offline mode of training. As pe the compliances of partnering with any agency, the contract for implementing our skill initiative was to be renewed. The tender process was initiated and carried out in H1. We as on Oct’22 have a partner on-boarded for running the vocational skill development courses from our CEC, Barmer. Under the new contract issued to learnt skills, we have enrolled 254 students till March’23. In addition to the trades of Data Entry Operator, Electrician, Mobile handset repair, Assistant Mason, for the first time we have successfully launched all girls batch on Beautician Assistant. The 30 girls inducted in this program has been first ever intervention in Baitu zone. The students have been currently undergoing On-job-training and will be placed by next month end.</p>

S. No.	Concerns/suggestions	Status of actions (as of September 2024)
		<p>Till September'23, A total 329 of students are undergoing classroom training at CEC across trades like basic computers, mobile handset engineer and basic electrician with 89% placement record.</p> <p>Over the H2 of FY23-24, we further trained 360+ with placement record reaching 92%. Through CEC new courses like BCBF, DRA, MIS Analyst and all girls batch for beauty assistant was introduced. Students continue to pursue trainings in courses NSDC certified vocational trainings. In addition, we also re-instated our Cairn Centre of Excellence, Jodhpur in partnership with Agriculture university. The program intends to offer degree &amp; short-term courses in farm and non-farm sector. Close to 175+ students have been engaged under this project. This initiative is a further extension of our efforts to promote entrepreneurs in the region along with supporting advancement of skills. The degree course offered further promotes agriculture as a stream to pursue for future career path.</p> <p>Under the on-going project of skill development, Cairn continues to train rural youths in various vocational trades like data entry operator, electrician, mobile handset repair, business correspondence and business facilitator, MIS analyst, etc. So far during the reporting period we have trained more than 300+ students with 89% placement record. In addition, we launched a Beautician Assistance Course empowering 30 women with skills to run or work in beauty parlours, enhancing their self-reliance and financial stability. In parallel to this, we have also been focusing on various allied activities to increase awareness of this project as well as help students develop holistically. While this has been Cairn's approach in Barmer district, through another skill centre CCoE at Jodhpur, we have trained close to 600 students in farm and non-farm sector skills.</p> <p>FY 21-22 a new initiative has been taken up in partnership with Education Department to set up ITC labs in 151 schools around our operational area. These schools will then be able to benefit from the digital learning opportunities made available by government and Cairn.</p> <p>A new initiative has been also launched this year to support schools which lack proper seating facilities in primary section. A proper infrastructure support is instrumental in bridging the gap and focusing on improving learning outcomes. Cairn has till date distributed 1181 Desk bag kits to students in government schools. We intent to distribute 4000 such bags in total.</p> <p>Besides this, In FY 2019-2020, Cairn has partnered with Chetna Foundation to implement Nandghar project – an initiative to focus on health and education of children in the age group 3-6 years. Across 49 Nandghars established in Barmer, close to 1,200 students benefit each day through interactive learning under the ECCE (Early childhood care and education). In H1 FY 2020-21, Cairn planned to expand the Nand Ghar project in Barmer and Jalore districts with 75 more Nandghars viz-a-viz 25 in Sanchore (Jalore) and 50 in Barmer district. In FY 21-22, A total of 17,774 community members including women and children have benefited from Nandghar project.</p>

S. No.	Concerns/suggestions	Status of actions (as of September 2024)
		<p>Besides this, In FY 2020, Cairn had partnered with Bodh Siksha Sanstha to implement the education initiative “Ujjwal” for improving access to and quality of education in 60 government schools in Barmer district in Rajasthan.</p> <p>The project “Ujjwal” was formally launched by Hon’ble Chief Minister of Rajasthan, Shri Ashok Gehlot during the 10<sup>th</sup> Anniversary of First Oil or Mangala Day celebrations in Barmer, Rajasthan on 29th August 2019 and has benefited more than 7800 students across 20 government schools.</p> <p>However, due to COVID 19, all schools were closed as per the guidelines of the Government of India. In May 2020, Cairn launched a unique education initiative “e-Kaksha” for providing quality education by developing e-library of syllabus of Rajasthan state Board for class 6th to 12th in partnership with Department of Education (Government of Rajasthan) across all 33 districts of Rajasthan. The project will be re-launched by Hon’ble CM of Rajasthan in October 2020. In FY 21-22, the project has reached 11.74 Cr people through its views and subscriptions recorded on youtube. The project has been widely appreciated by all stakeholders.</p> <p>For FY22-23, our E-Kaksha project continues to benefit the students at a large. Till date the project has recorded 139,413,534 views having 837,000 subscribers. 1000+ videos have been made accessible for viewers as a part of the digital library created under this initiative. In the reporting period of FY22-23, more than 85,000 new subscriptions have been registered for this project. As on March’23, the project has reached 3.81 cr.</p> <p>In addition, we have also launched two new projects benefiting the students towards having access to digital education as well as bridging the infrastructure gap in primary section of government schools. In 2021, Cairn partnered with Government Education department in a 25:75 financial scheme wherein 25% of the funds are being contributed by Cairn Vedanta to establish 151 ICT labs in secondary and senior secondary schools of Barmer, paving way to 100% digitalization of Barmer schools. The project intends to benefit 5000+ students from Barmer district. As on date government has initiated the process of tender for partner on-boarding of its implementing.</p> <p>The second project is of Desk Kit - These innovative desk kits are light weighted bags with attached portable table which can be easily carried to school as well as used at home to study. These bags intent to address the gap in furniture availability in primary schools of Barmer and to encourage children to sit and study in right posture from an early age. A total 4000 desk kits will be distributed in Barmer. For FY22-23, 1981 desk kits have been distributed across schools of Barmer region.</p> <p>For this financial year, a new intervention of supporting 151 schools has been implemented across Barmer district. This project is a joint collaboration with the Education department towards ensuring 100% of secondary schools have digital education (ICT labs). Close to 10k students benefit from this project. In addition, 400+ desk kit has been distributed. To ensure proper mental and physical development of children in the age group of 3-years</p>



S. No.	Concerns/suggestions	Status of actions (as of September 2024)
		<p>regular ECCE activities are ongoing. In reporting period, 6,187 children were covered across 124 Nand Ghars.</p> <p>Cairn has been taking multiple initiatives towards supporting both education interventions as well as infrastructure to provide a conducive learning environment. For this reporting period we have continued to focus on building the right building blocks for the children undergoing pre-education at Nandghars. In partnership with ICDS department 124 Nandghars are operational across Cairn business villages in Barmer district. In addition, 300+ desk bags have been distributed to support primary school students. These function as both a bag and a portable desk which in turn bridges the infrastructural gap in schools in rural areas</p>
2.	<p>A villager from Bhadrana, expressed that the Mobile Health Van facility being provided by CAIRN should be extended to other villages.</p> <p>He also requested that saplings to be provided to his village also.</p>	<p>Currently, CAIRN provides basic health care services to 149 villages of Barmer and Jalore district through Mobile Health Vans (MHVs). In Sanchore, 22 villages along the pipeline route are covered by the MHV which provide healthcare services every week.</p> <p>For FY22-23 we have covered close to 40,4500 OPD's across 149 villages of Rajasthan through 4 MHV's. While through MHV we continue to reach to the far-flung communities, we have also conducted 40,620 OPDs at District Hospital, through Cairn support doctors and extended cleanliness support to 17,84,908 community members. Furthermore, some new initiatives have been undertaken to improve the nutritional and health status of women and children, in partnership with district administration. 1,50,000 hemoglobin strips have been handed over to district administration as well as 22,680 laddus handed over to ICDS department for dietary support to 542 malnourished children. As a result, 166 have moved from SAM (severely malnourished) to MAM (moderately malnourished) and 155 have completed recovered over the last 3 months of Cairn nutritional support. Through our Vaccination drive (supporting government in their endeavor to provide COVID vaccination to all), we have covered more than 6800 people across Barmer and Sanchore district of Rajasthan.</p> <p>From time to time, saplings are distributed in schools in Sanchore in the pipeline villages. All villagers are encouraged to collect saplings. Under, Barmer Unnati, more than 1 lac fruit and tree saplings have been distributed in Barmer from inception of the project in FY2013.</p>

S. No.	Concerns/suggestions	Status of actions (as of September 2024)
		<p>MHVs have been able to effectively provide affordable, accessible, reliable, and quality preventive healthcare services to beneficiaries at their doorstep.</p> <ul style="list-style-type: none"> <li>• In the reporting quarter 24,440 OPD's have been conducted through 7 MHV's across 214 villages of Rajasthan and Gujarat.</li> <li>• Multiple awareness camps were organized to apprise beneficiaries on measures for maintaining a good health, menstruation hygiene with an outreach of more than 1,500 community members including adolescent girls.</li> <li>• ~130 Home visits were conducted for patients who were unable to reach the mobile health unit.</li> <li>• Several multi-specialty health camps organized in partnership with Health department across Gujarat and Rajasthan operational areas, to provide specialists medical (Orthopaedic, skin &amp; VD and general physician) services at doorstep of community benefitting 1800 community members.</li> </ul> <p>MHV has been working hard to operate at full capacity without affecting any villages in or near our operational areas. We have chosen the best possible routes. To ensure the sustainability of our activities we are working towards improving the health infrastructure and the capacity of PHC and CHC to provide the necessary health services to the community members at their doorstep.</p> <p>For this Financial year, in addition to the regular interventions like support to district hospital, MHV, etc. we initiated new projects like – developing general ward at CHC Kawas, providing equipment's like Xray, sonography, etc. to CHC Kawas and Gudamalani. Moreover, this year we launched a unique project “Harit Dhara” towards empowering rural women by offering sustainable menstrual hygiene solutions. The project has reached 5000 women. As a next step the women are now taking order for stitching cloth pads which is supporting towards additional income generation.</p> <p>Through MHV project, in the reporting period following has been reached -</p> <ul style="list-style-type: none"> <li>➤ 93,014 OPD's have been conducted through 7 MHV's across 214 villages of Rajasthan and Gujarat.</li> <li>➤ Multiple awareness camps were organized to apprise beneficiaries on measures for maintaining a good health, menstruation hygiene with an outreach of more than 6,178 community members including adolescent girls.</li> <li>➤ 339 Home visits were conducted for patients who were unable to reach the mobile health unit.</li> </ul> <p>Multi-specialty health camp was organized in partnership with Health department in Gujarat and Rajasthan operational areas, to provide specialists medical (Orthopaedic, skin &amp; VD and general physician) services benefitting 100+ beneficiaries.</p>

S. No.	Concerns/suggestions	Status of actions (as of September 2024)
		<p>Cairn’s multi-tier approach towards improving the healthcare facilities and services in the region has helped reach out to more than 11.68 lac people in the reporting period. We continue to reach out to the interiors of villagers through our MHV (Mobile Health Van) services on a weekly basis. In addition, our round-the-clock support on health &amp; hygiene as well as medical services has been a major support in addressing the load of Barmer District Hospital. Furthermore, we also focus on creating mass awareness drives in communities on seasonal diseases as well as holding multi-specialty camps towards addressing various ailments. Our efforts further gets strengthen by the interventions carries out in functionalizing the CHC and PHC’s.</p> <p>Some of the key highlights of MHV project for the reporting period are –</p> <ul style="list-style-type: none"> <li>➤ In the reporting period 42,605 OPD’s have been conducted through 7 MHV’s</li> <li>➤ 100 Home visits were conducted for patients who were unable to reach the mobile health unit.</li> <li>➤ Multi-specialty health camp was organized in partnership with Health department in Rajasthan operational areas, to provide specialists medical (Orthopaedic, skin &amp; VD and general physician) services benefitting 300+ beneficiaries.</li> <li>➤ Multiple awareness camps were organized to apprise beneficiaries on measures for maintaining a good health, menstruation hygiene with an outreach of more than 1,700+ community members including adolescent girls. In addition to this project celebrated Anti-Tobacco, menstrual hygiene &amp; Yoga days.</li> </ul> <p>The CSR team conducts regular plantation drives at various project sites throughout the year. We plant trees in community spaces, schools and other areas. Additionally, we are also working on developing a pastureland at Chittar ka par, which will provide fodder for livestock and improve the soil quality. In addition to the above endeavor, we hold mass plantation drives along with the communities and students. This creates not only awareness on environment but also creates a sense of responsibility among youths towards ensuring plant survival. We engaged more than 500+ students annually, wherein the saplings are provided by us.</p>

S. No.	Concerns/suggestions	Status of actions (as of September 2024)
		<p>This financial year, Cairn in partnership with district administration's supported "Ek Ped Apni Maa Ke Naam Abhiyan" wherein we supported mass plantation with the help of students and community at large. This not only foster strong stakeholder relations with stakeholders but also helps create awareness in the society towards a greener environment. Supporting a green cover and its related awareness is a major initiative at Cairn. We have planted more than 5,000 saplings in the reporting period. The engagement with schools, students and community at large has towards increasing the greenbelt area in the region.</p>
3.	<p>Sevaram, President, Indian Farmers Association, Sanchore informed that most of the villages in Sanchore have been provided by canal water. He requested CAIRN to assess the possibilities of bringing water from Narmada to the remaining villages.</p> <p>He also requested that fruit bearing trees be provided to the villagers and clean drinking water to the villages.</p>	<p>Extension of Narmada Canal is in the scope of the Government. However, CAIRN has undertaken initiatives for providing safe drinking water to villagers.</p> <p>We are covering most of the villages near to our pipeline through 6 RO water plants in Sanchore basin, benefitting approx. 6 villages and 24,000 community members. There is less opportunity on drinking water sector due to Narmada canal.</p> <p>Cairn has implemented Safe Drinking Water project in partnership with PHED and Govt. of Rajasthan, to provide safe drinking water to communities. Based on the success of the pilot initiative in 2013 the project has been scaled up in the entire Barmer district.</p> <p>Under the tripartite MoU with PHED department to establish RO units across Barmer district, 124 RO units have been installed and commissioned across 124 villages till date in Barmer &amp; Jalore districts, benefitting more than one lac community members annually. In FY 21-22, 1.34 lac beneficiaries were impacted through supply of safe drinking water through Community run RO units. While the 124 RO units are functional and community is taking water from the same, efforts have been put in place to help strengthen the exit strategy and project sustainability. Focused intervention on IEC activities, water committee formation and handholding support on business plan has been extended to the communities at large, which has resulted in a positive response from the community. The community for the first time has come forward to undertake the responsibility of plant O&amp;M. At many places the water committee has already collected money as revolving fund for its operations as well as planning to set up chiller at few locations. 70+ RO plants have been successful handed over to the community as per their demand to carry out regular operations. Efforts are on-going to create stronger community acceptance and ownership across all RO plants.</p>

S. No.	Concerns/suggestions	Status of actions (as of September 2024)
		<p>During H1 FY 2020-21, Cairn has revived more than 70 RO plants which were non-functional based on the stakeholder requests and in the next half, H2 FY 2020-21, 48 RO plants were revived which adds total functional 118 RO plants. So far 86 village committees have been formed and responsibility of RO operations have been handed over to these committees.</p> <p>Basis the success of the project seen so far, Cairn intends to extend AMC and basis handholding support to 124 RO plants installed and operationalized in Barmer district. For the same, a new partner agency has been on-boarded through the standard tender process. While the 124 RO units are functional and community is taking water from the same, efforts have been put in place to help strengthen the exit strategy and project sustainability. 86 RO plants have been successfully handed over to the community as per their demand to carry out regular operations. Efforts are on-going to create stronger community acceptance and ownership across all RO plants. Regular meetings are being held with PHED officials at District and block level for RO handover process to PHED. More than 43 Lakh Litres Clean and safe drinking water is sold from 82 RO plants benefitting 9241 families and generating a revenue of 10.84 lakh. For FY 22-23, we have ensured 1.10 lac people benefit from safe drink water initiative.</p> <p>In addition, under our Community Borewell project, for FY22-23, 2 Borewell Sites drilling, and water testing work has been Completed in Daulotpra &amp; Nimbalkot Villages. Two borewell drillings have been initiated in Kau Ka Kheda and Bandra Gram Panchayat. In addition to 10 borewells constructed in Phase 1, a total of 5 borewells will be added in phase 2 of Borewell Project, out of which 4 have been operationalized benefiting 4000+ community members on monthly basis.</p> <p>In H2 of FY23-24, the community water project (Jevan Amrit) was successfully handed over to the community and PHED. In addition to this, we continued our efforts towards providing water to the interior of villages through community borewell intervention. In partnership with PHED, ground level resource work has been completed in 4 out of 5 Borewell plants. These 4 borewells are operational in 4 villages Bandra, Kau ka Kheda, Nimbalkot and Dholatpura benefiting 800 households.</p> <p>Furthermore, In Rajasthan, water scarcity has been a persistent issue, particularly in remote areas. The team in collaboration with the Public Health &amp; Engineering department-initiated drilling of a borewell at Rohidi village. The village is at the Indo-Pak border. The initiative will provide immediate relief by ensuring perennial water supply but will contribute towards sustainable development of the communities.</p> <p>Cairn in the last financial year successfully handed over 92 plants to the village water committee and PHED for operation and maintenance. Thus, in the community an investment of establishing and operationalizing 124 RO</p>

S. No.	Concerns/suggestions	Status of actions (as of September 2024)
		<p>plants have been taken by Cairn in the past years. In addition, the 15 community borewells development across the interior villages have been helping communities with safe drinking water at their doorsteps. Basis the community request received from Rohidi village (close to Indo-Pak border), we have also successfully commissioned the community borewell and supporting 100+ villagers. Furthermore, we have also installed RO units in convergence model in 2 schools this reporting period towards providing safe drinking water to school children and nearby communities. Towards natural resource management, till date CAIRN has constructed 1506 khadins and renovated 28 traditional water harvesting structures (nadi) till date developing the harvesting capacity of the area by ~17lakh cu m water every year. Cairn is also instrumental in tapping roof top water through proper harvesting facilities in 95 schools, benefitting 9,000 students and developing rainwater harvesting capacity of 5 lac cubic meter.</p> <p>CAIRN has extended its Horticulture (Wadi) project to Sanchore where 100,000 fruit bearing saplings (of improved variety of Lemon and Ber arranged from Jodhpur) have been planted. In this case, CAIRN has provided training, technical knowledge and good-quality saplings to farmers. The team provides technical input to the beneficiaries for better development of the wadis. The project continued till March 2020 and launched new long-term agriculture NRM program with additional activities in FY 2021. Cairn has onboarded another credible partner agency – SM Sehgal Foundation to take up the watershed management &amp; NRM activities for another 3 years in the next phase of Barmer Unnati Project. Some of the key updates for FY21-22 are – 100 compost pits constructed; 19 technical demos completed this year in collaboration with Rajasthan Seed Corporation to supplement crop production. Further, 20 ha seed demonstrations undertaken. Pastureland in 5 ha area under development in Chittar ka Par and a total of 300 kg sewan grass seeding undertaken, 5000 Sehjan Trees Planted, 5 demo biogas plant of 1 cubic metre each constructed.</p> <p>For FY22-23, baseline survey of Wadi’s (to promote alternate livelihood opportunities) has been initiated by the new partner on-boarded through standard tender process. Farmers training was organized at village level for farm-based livelihood promotion through Wadi management. Under the awareness program cover 04 village namely Bhadkha, Bothiya, Dhadhlawas and Nagar village. 243 farmers benefited in which 126 were male farmers and 117 female farmers. With an objective to enhance farmer capacity on Wadi management and Sustainable Agriculture practices was organized at Central Arid Zone Research Institute (CAZRI) in which 25 farmers participated.</p> <p>Some of the key highlights for FY22-23 are –</p>

S. No.	Concerns/suggestions	Status of actions (as of September 2024)
		<p>This year, support has been extended to approx. 38,000 beneficiaries through sustainable agriculture and allied activities as well as natural resource management.</p> <ul style="list-style-type: none"> <li>• 50 SHG groups have been identified for need based trainings focusing on the economic upliftment of the farmers, through sustainable agriculture, social empowerment, improvement in quality of life including health and women empowerment.</li> <li>• To enrich soil health, retain moisture and suppress plant diseases and pests, 50 termite free compost pit developed.</li> <li>• Setting up Pastureland in 5 hectares land in Chittar ka Par.</li> <li>• 100 new Wadis, 50 new Khadin, 28 Nadis, 7School Roof Water Harvesting (RWH) units established under the project with ~ 18 lakh cubic metres of water being saved.</li> <li>• 1000 soil samples have been sent to KVK for diagnosis and lab testing to generate soil health card.</li> <li>• Introducing Hi-Tech vegetable cultivation (Chilli, Cauliflower, Cabbage) we established 5 nursery demonstration, provided them with Mulching sheets and drip irrigation facility.</li> <li>• Several Training and awareness sessions were conducted on climate smart agriculture during which they were taught about minimizing and mitigating climatic risks, in which more than 300 farmers participated.</li> <li>• With the support of Central Sheep &amp; Wool Research Institute (CSWRI) Avikanagar &amp; Bikaner organized a 3-day training session for 150 marginalized farmers on goat breeding.</li> <li>• 21 Farmer Field School (FFS) Training sessions conducted to disseminate information and educate farmers about establishment of new wadis and ways to generate income from it.</li> </ul> <p>Under our Barmer Unnati project, we are continuously working on establishing wadi wherein Ber, Gunda and pomegranate saplings are provided to the farmers. In the period of April'23 to september'23, 250 waadis have been established in addition to more than 1300 already established waadis to which after care is being provided on regular basis.</p> <p>For the period of H2, following has been the major achievements under Barmer Unnati project –</p> <ul style="list-style-type: none"> <li>• A team of 50 progressive farmers from Barmer district visited the Central Arid Zone Research Institute (CAZRI). They learnt about CAZRI's efforts to develop crops that can withstand drought and sustainable, environmentally friendly farming practices sustainable farming practices.</li> </ul>

S. No.	Concerns/suggestions	Status of actions (as of September 2024)
		<ul style="list-style-type: none"> <li>• In Barmer &amp; Gudamalani cluster 42 compost pits have been prepared for organic farming practice. Compost pit enriches the soil by retaining moisture and suppressing diseases and pests</li> <li>• 4 Rainwater Harvesting structures have been completed in school in Gudamalani cluster of Barmer district. The interventions ensure round the year water availability to more than 800 children.</li> <li>• Barmer's Dayal Self Help Group of women were given the opportunity to showcase their products of organic millets produce (cookies, laddos) at the Vedanta Pink City Half Marathon Exhibition in Jaipur. This event opened doors to a wider audience which facilitated SHG selling all their produce.</li> <li>• 10 training sessions were organized to provide information on establishing a new wadi for creating channels of multiple income sources. 190 farmers benefited from these sessions.</li> <li>• To ensure sustainability &amp; enhance the fruit yield of the farmers, after care services have been provided to the orchids developed under Barmer Unnati project. The training and nutrients provided have ensured 90% survival rate of orchids.</li> <li>• As part of a novel initiative, two farmers clubs were formed to harness market linkage opportunities for Cumin seeds and Ber fruits among the farmers. The initiative aims to enhance the income and livelihood of the farmers by connecting them with potential buyers and traders.</li> <li>• A workshop was conducted in collaboration with officials from Agriculture department for farmers on topics related to Agro forestry, organic farming, cumin market linkages and government schemes for agriculture. The aim was to educate the farmers and help them improve their productivity and income.</li> </ul> <p>Given that Cairn conceptualizes and implement long term projects towards bringing a sustainable impact in the community, we under our Barmer Unnati project continue to focus on improving the overall farm productivity and income enhancement of the villagers. Some of the key highlights for this reporting period is –</p> <ul style="list-style-type: none"> <li>• 6000+ farmers have been engaged in this period in provisions of income enhancement activities like wadi development, biogas, compost development, etc.</li> <li>• 36 community nadi and 90 RHW structures have been created till date towards conserving more than 18 lakh cubic meter water in communities.</li> </ul>



S. No.	Concerns/suggestions	Status of actions (as of September 2024)
		<ul style="list-style-type: none"> <li>• 161 new wadis (fruit orchards) would be established during the year in Barmer and Gudamalani clusters in order to help farmers generate additional income.</li> <li>• Total 6,800 Kg of cumin seeds were produced by farmers of Barmer &amp; Gudamalani. The total cultivated area was 23 hectares</li> <li>• 15 youth was selected under Cairn Agri fellow program. The youth were trained on tractor repair and maintenance at Agriculture university Jodhpur.</li> <li>• 2 Biogas plant have been established under the project which will produce gas equivalent to ~12-14 LPG annually</li> </ul>
4.	<p>Mr. Piraram Dayar, Vice president, Indian Farmers Association, Jodhpur requested that CAIRN should provide assistance for planting trees in the grazing land, providing water supply for the maintenance of the trees and depute security guards.</p> <p>He also expressed that there is a need to develop protected area for wild animals such as Deer, Antelopes; fox etc. Similar concern has been raised by a teacher from Sanchore village.</p> <p>He also suggested that CAIRN should provide compost to farmers for villagers interested in organic farming.</p>	<p>Developing protected areas is the responsibility of the State Forest Department. CAIRN will extend all possible cooperation for the same. Cairn has already developed a dedicated drinking water facility for wild animals in protected forest area at Gaangli village. The facility is equipped with a borewell, solar pump and a gajlar (pond). The facility is already handed over to State Forest Department for operation.</p> <p>CAIRN through its CSR initiatives has renovated 28 community ponds (Nadi) as on date, which not only provides community a source of drinking water &amp; irrigation but has significantly added in improving the biodiversity in the area.</p> <p>Cairn has also developed many grazing lands in Gudamalani &amp; Barmer. However, Cairn has been providing training to farmers of Barmer &amp; Jalore district in advanced technologies and organic farming with the help of Jodhpur based research institute -Central Arid Zone Research Institute, Jodhpur. Approximately, more than 11000 farmers have been benefitted under training and capacity building programs since the inception of Barmer Unnati Project in 2013.</p> <p>The Barmer Unnati project aims to promote sustainable agriculture and energy in the barmer and gudamalani cluster. As part of this initiative, vermicompost units have been distributed to more than 50 farmers to enhance soil fertility and crop productivity. Additionally, bio gas plants have been installed for some farmers to provide them with clean and renewable fuel for cooking and lighting.</p>
5.	<p>Mr. Shivnaran Chaudhary expressed that CAIRN should provide assistance in developing boundary walls for the grazing areas.</p>	<p>Silvipasture units (SPU) have been developed by CAIRN with boundary fencing. Cairn has also developed many grazing lands in Barmer, Gudamalani and Sanchore blocks in Jalore., which has been successfully handed over to the community for operation and maintenance, post necessary capacity building training. In FY 21-22 a 5HA land has been developed in Chittar ka Par GP as grazing land in partnership with community. In this 5 ha pastureland</p>

S. No.	Concerns/suggestions	Status of actions (as of September 2024)
	<p>He also requested that the Government should develop toilets and bathrooms for the villagers.</p>	<p>(250 trees planted &amp; grass seeding done for green fodder. The ownership of the community has helped ensure that the trees have started fruiting.</p> <p>Besides government’s standalone efforts towards creating toilets, Cairn has partnered with local govt. body and helped construct ~20,500 household toilets in the last 5 years.</p> <p>“Swasthya Vidyalaya” program i.e. School Sanitation Program which was launched in 2017, is still ongoing in 28 govt. schools in Barmer &amp; Jalore district in partnership with an NGO – Yuva Unstoppable in which school sanitation and drinking water facilities are renovated and upgraded to address the health &amp; hygiene issues in schools especially for girls. A total of 7200 students benefit from this project annually.</p> <p>Cairn has developed a 5ha grazing land through the use of Miyawaki model of forest creation. This land is currently maintained and managed by Cairn and shall be handed over to the community by next financial year. As on date the community has been benefited through the green fodder production on this land. The intend towards creating a sustainable impact is to develop a village committee who would be taking care of the O&amp;M post Cairn’s exit from this intervention.</p>
6.	<p>Mr. Lalit Singh requested that the RO plant scheme being offered by CAIRN should be extended to other villages.</p>	<p>In partnership with PHED and Govt. of Rajasthan, CAIRN had initiated a Jeevan Amrit project in FY 2015 – to provide safe drinking water to communities.</p> <p>Under the tripartite MoU with PHED department to establish RO units across Barmer district, 124 RO units have been installed and commissioned across 124 villages till date in Barmer &amp; Jalore districts, benefiting more than one lac community members.</p> <p>During H1 FY 2020-21, Cairn has revived more than 70 RO plants which were non-functional based on the stakeholder requests and in the next half, H2 FY 2020-21, 48 RO plants were revived which adds total functional 118 RO plants. So far 86 village committees have been formed and responsibility of RO operations have been handed over to these committees.</p> <p>In FY 21-22, so far 1.34 lacbeneficiaries were impacted through supply of safe drinking water through Community run RO units. While the 124 RO units are functional and community is taking water from the same, efforts have been put in place to help strengthen the exit strategy and project sustainability. Focused intervention on IEC activities, water committee formation and handholding support on business plan has been extended to the communities at large, which has resulted in a positive response from the community. The community for the first time has come forward to undertake the responsibility of plant O&amp;M. At many places the water committee has</p>

S. No.	Concerns/suggestions	Status of actions (as of September 2024)
		<p>already collected money as revolving fund for its operations as well as planning to set up chiller at few locations. 70+ RO plants have been successful handed over to the community as per their demand to carry out regular operations. Efforts are on-going to create stronger community acceptance and ownership across all RO plants.</p> <p>Besides RO project, Cairn has also constructed &amp; commissioned 10 bore wells in water constraint regions of Barmer district benefitting 12,000 community members across 10-gram panchayats. In FY 21-22, additional 5 community borewells have been taken up in partnership with PHED. So far, through the 10 community borewells developed in phase 1 by Cairn were reported functional, benefiting more than 18,000 community members and 3000 livestock.</p> <p>Basis the success of the project seen so far, Cairn intents to extend AMC and basis handholding support to 124 RO plants installed and operationalized in Barmer district. For the same, a new partner agency has been on-boarded through the standard tender process. While the 124 RO units are functional and community is taking water from the same, efforts have been put in place to help strengthen the exit strategy and project sustainability. 86 RO plants have been successful handed over to the community as per their demand to carry out regular operations. Efforts are on-going to create stronger community acceptance and ownership across all RO plants. Regular meetings are being held with PHED official at District and block level for RO handover process to PHED. More than 43 Lakh Litres Clean and safe drinking water is sold from 82 RO plants benefitting 9241 families and generating a revenue of 10.84 lakh. For FY 22-23, we have ensured 1.10 lac people benefit from safe drink water initiative.</p> <p>In addition, under our Community Borewell project, for FY22-23, 2 Borewell Sites drilling, and water testing work has been Completed in Daulotpra &amp; Nimbalkot Villages. Two borewell drillings have been initiated in Kau Ka Kheda and Bandra Gram Panchayat. In addition to 10 borewells constructed in Phase 1, a total of 5 borewells will be added in phase 2 of Borewell Project, out of which 4 have been operationalized benefitting 4000+ community members on monthly basis.</p> <p>124 RO's have been established across Barmer and Jalore in collaboration with govt. of Rajasthan. Moving towards Sustainability, 92 out of 124 RO plants have been successfully hand overed to PHED dept after providing seven years of operation, maintenance &amp; handholding services. 32 out of 124 Community based RO plants have</p>

S. No.	Concerns/suggestions	Status of actions (as of September 2024)
		<p>been successfully handed over to the community as per their demand to carry out regular operations. Efforts are on-going to create stronger community acceptance and ownership across all RO plants.</p> <p>In H2 of FY23-24, the community water project (Jevan Amrit) was successfully handed over to the community and PHED. In addition to this, we continued our efforts towards providing water to the interior of villages through community borewell intervention. In partnership with PHED, ground level resource work has been completed in 4 out of 5 Borewell plants. These 4 borewells are operational in 4 villages Bandra, Kau ka Kheda, Nimbalkot and Dholatpura benefiting 800 households.</p> <p>Furthermore, In Rajasthan, water scarcity has been a persistent issue, particularly in remote areas. The team in collaboration with the Public Health &amp; Engineering department-initiated drilling of a borewell at Rohidi village. The village is at the Indo-Pak border. The initiative will provide immediate relief by ensuring perennial water supply but will contribute towards sustainable development of the communities.</p> <p>Cairn in the last financial year successfully handed over 92 plants to the village water committee and PHED for operation and maintenance. Thus, in the community an investment of establishing and operationalizing 124 RO plants have been taken by Cairn in the past years. In addition, the 15 community borewells development across the interior villages have been helping communities with safe drinking water at their doorsteps. Basis the community request received from Rohidi village (close to Indo-Pak border), we have also successfully commissioned the community borewell and supporting 100+ villagers. Furthermore, we have also installed RO units in convergence model in 2 schools this reporting period towards providing safe drinking water to school children and nearby communities.</p>
7.	A villager from Barmer expressed his opinion that CAIRN should carry out plantations along roadsides and in schools in the region.	<p>Cairn has recently implemented a project for development of Green belt in and around the city as well as roadside. Under the Barmer Smart city project, more than 2500 saplings have been planted this year and has been regularly maintained. In addition to this regular tree plantation activities are being supported as per the demand from the school and farmers. Through CSR Barmer Unnati Project, Cairn has planted more than 1 lac fruit and tree saplings. In addition, in FY21-22, two-month long plantation drive was carried out covering more than 25 GP, planting 2000+ sapling and creating awareness among communities on environment sustainability. A community-based monitoring &amp; maintenance mechanism has been developed in partnership with the community/ key stakeholders for project sustainability. Plantation drive across schools and community is an on-going initiative carried out from time to time through our Micro level Intervention initiatives. In addition to the</p>

S. No.	Concerns/suggestions	Status of actions (as of September 2024)
		<p>above endeavor, we hold mass plantation drives along with the communities and students. This creates not only awareness on environment but also creates a sense of responsibility among youths towards ensuring plant survival. We engaged more than 500+ students annually.</p> <p>This financial year, Cairn in partnership with district administration's supported "Ek Ped Apni Maa Ke Naam Abhiyan" wherein we supported mass plantation with the help of students and community at large. we have planted more than 5,000 saplings in the reporting period. The engagement with schools, students and community at large has towards increasing the greenbelt area in the region.</p>
8.	<p>A villager, Mr. Vishnu has raised the following concerns:</p> <ol style="list-style-type: none"> <li>i. Extension of Mobile Health Van to all panchayats</li> <li>ii. Establishing more RO plants</li> <li>iii. Encourage plantations and provide funds to panchayats for maintenance of these.</li> <li>iv. Grazing lands should be converted to protected areas and development of animal shelters</li> </ol>	<p>Currently, CAIRN provides primary health care services to 149 villages of Barmer and Jalore district (22 villages in Sanchore &amp; Chittalwana blocks) through 6 Mobile Health Vans (MHVs) which provide ~1.14 lakh treatments annually in Rajasthan. In addition to the MHV's Cairn has further taken up the initiative to develop functionalize 4 FRUs out of which 2 of them have been functionalized which have benefitted more than 8000 patients in FY 2019-20. Since, FY 2015, Cairn has provided 3 specialist doctors in Barmer district hospital who have undertaken more than 39631 OPDs in FY 2020-21. In FY 21-22, so far 28,147OPDs were conducted by Cairn supported doctors in District hospital. In addition to this, through the cleanliness facilities supported at District hospital, 10.96 lac people have benefited. These medical services and sanitation facilities has not only helped thousands of patients but has also improved the overall ranking of this district hospital across the state. 8 housekeeping staff deployed under our Clean Barmer Green Barmer project were felicitated for their service by District Hospital on 73rd Republic Day.</p> <p>In addition to the above, for FY22-23 we have covered close to 44,500 OPD's across 149 villages of Rajasthan through 4 MHV's. While through MHV we continue to reach to the far-flung communities, we have also conducted 40,620 OPDs at District Hospital, through Cairn support doctors and extended cleanliness support to 17,84,908 community members. Furthermore, some new initiatives have been undertaken to improve the nutritional and health status of women and children, in partnership with district administration. 1,50,000 hemoglobin strips have been handed over to district administration as well as 22,680 laddus handed over to ICDS department for dietary support to 542 malnourished children. As a result, 166 have moved from SAM (severely malnourished) to MAM (moderately malnourished) and 155 have completed recovered over the last 3 months of Cairn nutritional support. Through our Vaccination drive (supporting government in their endeavor to provide COVID vaccination to all), we have covered more than 6800 people across Barmer and Sanchore district of Rajasthan.</p> <p>For this Financial year, in addition to the regular interventions like support to district hospital, MHV, etc. we initiated new projects like – developing general ward at CHC Kawas, providing equipment's like Xray, sonography, etc. to CHC Kawas and Gudamalani. Moreover, this year we launched a unique project “Harit Dhara”</p>

S. No.	Concerns/suggestions	Status of actions (as of September 2024)
		<p>towards empowering rural women by offering sustainable menstrual hygiene solutions. The project has reached 5000 women. As a next step the women are now taking order for stitching cloth pads which is supporting towards additional income generation.</p> <p>MHV has been working hard to operate at full capacity without affecting any villages in or near our operational areas. We have chosen the best possible routes. To ensure the sustainability of our activities we are working towards improving the health infrastructure and the capacity of PHC and CHC to provide the necessary health services to the community members at their doorstep.</p> <p>Through MHV, in the reporting period following were they key achievements –</p> <ul style="list-style-type: none"> <li>➤ 93,014 OPD’s have been conducted through 7 MHV’s across 214 villages of Rajasthan and Gujarat.</li> <li>➤ Multiple awareness camps were organized to apprise beneficiaries on measures for maintaining a good health, menstruation hygiene with an outreach of more than 6,178 community members including adolescent girls.</li> <li>➤ 339 Home visits were conducted for patients who were unable to reach the mobile health unit.</li> <li>➤ Multi-specialty health camp was organized in partnership with Health department in Gujarat and Rajasthan operational areas, to provide specialists medical (Orthopaedic, skin &amp; VD and general physician) services benefitting 100+ beneficiaries.</li> </ul> <p>For this financial year, following has been the key highlights against MHV project –</p> <ul style="list-style-type: none"> <li>➤ In the reporting period 42,605 OPD’s have been conducted through 7 MHV’s</li> <li>➤ 100 Home visits were conducted for patients who were unable to reach the mobile health unit.</li> <li>➤ Multi-specialty health camp was organized in partnership with Health department in Rajasthan operational areas, to provide specialists medical (Orthopaedic, skin &amp; VD and general physician) services benefitting 300+ beneficiaries.</li> <li>➤ Multiple awareness camps were organized to apprise beneficiaries on measures for maintaining a good health, menstruation hygiene with an outreach of more than 1,700+ community members including adolescent girls. In addition to this project celebrated Anti-Tobacco, menstrual hygiene &amp; Yoga days.</li> </ul>

S. No.	Concerns/suggestions	Status of actions (as of September 2024)
		<p>In addition, on Gandhi Jayanti, the Swachhta Pakhwada was initiated between 2nd and 16th October, all stakeholders pledged to keep the hospital and its surrounding areas clean and raise awareness regarding the importance of cleanliness. as a part of the Swachhta Pakhwada being organized at the Govt. District Hospital, Barmer, a special workshop on 5S was conducted for the sanitation workers, nursing students, medical staff and hospital administration. A three-day free mega camp for disabled was organized where more than 1,100 disabled people benefitted. The intent was to provide medical support and motivate the community through personal interaction. In FY 2015-2017, Project RACHNA created awareness in Barmer villages in reproductive, maternal, child health and nutrition. 2 Sanitary pad units were also developed and provided to the women SHGs. Over ~14,000 adolescent girls and rural women were engaged in regular awareness sessions in order to sensitize them about menstrual hygiene and reproductive health. In partnership with PHED and Govt. of Rajasthan, CAIRN has installed and commissioned 124 RO plants across 124 villages in Rajasthan, with an aim to increase the penetration into the remotest of the villages in Barmer. Since the RO plants are facing challenges due to lack of ownership from community, continuous thefts and vandalism, and support from PHED via supply of electricity, land and raw water, the focus in FY 2019-20 has been to increase the penetration of existing RO plants before taking up any new RO plants in Barmer &amp; Jalore districts. In FY 2020-21, AMC services has been extended for 32 community run RO plants installed in FY2013-14, ensuring better penetration and project continuity. During H1 FY 2020-21, Cairn has revived more than 70 RO plants which were non-functional based on the stakeholder requests and in the next half, H2 FY 2020-21, 48 RO plants were revived which adds total functional 118 RO plants. So far 86 village committees have been formed and responsibility of RO operations have been handed over to these committees. In FY 21-22, so far 1.34 lac beneficiaries were impacted through supply of safe drinking water through Community run RO units.</p> <p>While the 124 RO units are functional and community is taking water from the same, efforts have been put in place to help strengthen the exit strategy and project sustainability. Focused intervention on IEC activities, water committee formation and handholding support on business plan has been extended to the communities at large, which has resulted in a positive response from the community. The community for the first time has come forward to undertake the responsibility of plant O&amp;M. At many places the water committee has already collected money as revolving fund for its operations as well as planning to set up chiller at few locations. 70+ RO plants have been successful handed over to the community as per their demand to carry out regular operations. Efforts are on-going to create stronger community acceptance and ownership across all RO plants. Besides RO project, Cairn has also constructed &amp; commissioned 10 bore wells in water constraint regions of Barmer district benefitting 2000 households on monthly basis In FY 21-22, additional 5 community borewells have been taken up in partnership with PHED. So far, through the 10 community borewells developed in phase 1 by Cairn were reported functional, benefiting more than 18,000 community members and 3000 livestock.</p>

S. No.	Concerns/suggestions	Status of actions (as of September 2024)
		<p>Basis the success of the project seen so far, Cairn intents to extend AMC and basis handholding support to 124 RO plants installed and operationalized in Barmer district. For the same, a new partner agency has been on-boarded through the standard tender process in FY22-23. While the 124 RO units are functional and community is taking water from the same, efforts have been put in place to help strengthen the exit strategy and project sustainability. 86 RO plants have been successful handed over to the community as per their demand to carry out regular operations. Efforts are on-going to create stronger community acceptance and ownership across all RO plants. Regular meetings are being held with PHED official at District and block level for RO handover process to PHED. More than 43 Lakh Litres Clean and safe drinking water is sold from 82 RO plants benefitting 9241 families and generating a revenue of 10.84 lakh. For FY 22-23, we have ensured 1.10 lac people benefit from safe drink water initiative. For FY 22-23, we have ensured 1.10 lac people benefit from safe drink water initiative.</p> <p>In addition, under our Community Borewell project, for FY22-23, 2 Borewell Sites drilling, and water testing work has been Completed in Daulotpra &amp; Nimbalkot Villages. Two borewell drilling has been initiated in Kau Kheda and Bandra Gram Panchayat. In addition to 10 borewells constructed in Phase 1, a total of 5 borewells will be added in phase 2 of Borewell Project, out of which 4 have been operationalized benefitting 4000+ community members on monthly basis.</p> <p>In H2 of FY23-24, the community water project (Jevan Amrit) was successfully handed over to the communities and PHED. In addition to this, we continued our efforts towards providing water to the interior of villages through community borewell intervention. In partnership with PHED, ground level resource work has been completed in 4 out 5 Borewell plants. These 4 borewells are operational in 4 villages Bandra, Kau ka Kheda, Nimbalkot and Dholatpura benefitting 800 households.</p> <p>Furthermore, In Rajasthan, water scarcity has been a persistent issue, particularly in remote areas. The team in collaboration with the Public Health &amp; Engineering department-initiated drilling of a borewell at Rohidi village. The village is at the Indo-Pak border. The initiative will provide immediate relief by ensuring perennial water supply but will contribute towards sustainable development of the communities.</p> <p>Cairn in the last financial year successfully handed over 92 plants to the village water committee and PHED for operation and maintenance. Thus, in the community an investment of establishing and operationalizing 124 RO plants have been taken by Cairn in the past years. In addition, the 15 community borewells development across the interior villages have been helping communities with safe drinking water at their doorsteps. Basis the</p>



S. No.	Concerns/suggestions	Status of actions (as of September 2024)
		<p>community request received from Rohidi village (close to Indo-Pak border), we have also successfully commissioned the community borewell and supporting 100+ villagers. Furthermore, we have also installed RO units in convergence model in 2 schools this reporting period towards providing safe drinking water to school children and nearby communities.</p> <p>CAIRN has developed plantation through wadis (kitchen garden) across the block which included cultivation of mushroom, vegetables, fruits and other cash crops. In addition, approx. 1lac trees have been planted on community land and schools in Sanchore area. Developing protected areas is the responsibility of the State Govt. CAIRN shall support as requested. In addition in FY21-22, two month long plantation drive was carried out covering more than 25 GP, planting 2000+ sapling and creating awareness among communities on environment sustainability. A community based monitoring &amp; maintenance mechansim has been developed in partnership with the community/ key stakeholders for project sustainability.</p> <p>This financial year, Cairn in partnership with district administration's supported "Ek Ped Apni Maa Ke Naam Abhiyan" wherein we supported mass plantation with the help of students and community at large. we have planted more than 5,000 saplings in the reporting period. The engagement with schools, students and community at large has towards increasing the greenbelt area in the region.Cairn has also developed many grazing lands in Barmer, Gudamalani and Sanchore blocks in Jalore., which has been successfully handed over to the community for operation and maintenance, post necessary capacity building training. In FY 21-22 a 5HA land has been developed in Chittar ka Par GP as grazing land in partnership with community. In this 5 ha pastureland (250 trees planted &amp; grass seeding done for green fodder. The ownership of the community has helped ensure that the trees have started fruiting. Cairn has used the Miyawaki model of forest creation. This land is currently maintained and managed by Cairn and shall be handed over to the community by next financial year. As on date the community has been benefited through the green fodder production on this land. The intend towards creating a sustainable impact is to develop a village committee who would be taking care of the O&amp;M post Cairn's exit from this intervention.</p> <p>124 RO's have been established across Barmer and Jalore in collaboration with govt. of Rajasthan. Moving towards Sustainability, 92 out of 124 RO plants have been successfully hand overed to PHED dept after providing seven years of operation, maintenance &amp; handholding services. 32 out of 124 Community based RO plants have been successfully handed over to the community as per their demand to carry out regular operations. Efforts are on-going to create stronger community acceptance and ownership across all RO plants.</p> <p>As part of the Barmer Unnati project, our goal is to improve the quality of pastureland in the region from April to September 2023. We have adopted the Miyawaki technique of plantation, which involves planting native species in dense clusters to create mini forests.</p>

S. No.	Concerns/suggestions	Status of actions (as of September 2024)
9.	Mr. Ramesh Kumar, requested that CAIRN should take up initiatives for development of community parks	<p>CAIRN has developed a community park at Sanchore in approx. 0.5 Ha land and developed a children’s park and handed it over to the community. Initiative of developing similar community parks in Barmer city is also been undertaken. Under the Barmer Smart city project, community spaces/parks have been developed. Cairn Oil &amp; Gas has undertaken these infrastructure development projects to bring Barmer from the state of backwardness to mainstream in tandem with the smart city initiative. Many conspicuous places in Barmer district have been upgraded of the level of a city with objectives –</p> <ul style="list-style-type: none"> <li>• To create and upgrade the public infrastructure and make Barmer a preferred place to live.</li> <li>• To develop amenities for community in Barmer city.</li> </ul> <p>Developed community places in Barmer like Saras Parlor public park, Plantation and upgradation of Collectorate Circle, Green belt development along Border Security Force (BSF) Road, Upgradation of Mallinath Circle, Development of Slope Garden, Renovation of Under flyover public park and Renovation of Pavilions in Balotra Stadium. Regular maintenance activities continued at project locations ensuring 80% survival rate for more than 2,000 plants . As an outcome to the meeting held with Municipal council for maintenance of areas developed under this project 43 manpower have been deployed by the department to ensure proper cleanliness on fortnightly basis. The project has been successful handed over to the Barmer administration. ~12,100 community members have benefitted till second quarter.</p>
10.	Mr. Sanjayram from Dadusar village has complained that during the construction of the pipeline, his land was affected and no adequate measures have been taken for leveling of land.	Restoration of pipeline ROU has been successfully carried out all locations. There are no pending issues from this PH.

**viii. Public Hearing conducted on 28th September 2018 at Government Upper Primary School, Village Sar Ka Par, Village Panchayat – Kawas Dhoonda, Tehsil & District Barmer, Rajasthan (EIA for enhancement of production from 3,00,000 BOPD to 4,00,000 BOPD of Crude Oil and 165 MMSCFD to 750 MMSCFD of Natural Gas from RJON-90/1 block)**

Out of total 87 points raised by local public during the public hearing, 50 points were responded and closed during and immediately after the public hearing and status was submitted to Expert Appraisal Committee as part of Final EIA Report. Progress on the remaining 37 public hearing points is provided in table below.

S. No.	Concerns/Suggestions	Status of actions (as of September 2024)
1	<p>Health issues due to pollution in Mangala, Aishwariya, Bhagyam, Raageshwari, Shakthi fields. People having problem in breathing, sleeping, skin disease, burning of eyes, children having vomiting, loose motion etc.</p>	<p>In order to minimize pollution and thereby impact on surrounding, adequate pollution control equipment's have been provided and all the environmental parameters are regularly analyzed, and reports depicts that all are well within the stipulated norms. However, to address the concern raised during the PH an external agency (NRM Consulting India Pvt. Ltd.) engaged to undertake a community health assessment covering approx. 426 households and 159 villages across the Barmer district. The study confirmed that, overall, there were no signs of change in diseases pattern in the region as revealed through the findings of the household survey, government health records available at CHCs, and discussions with health officials in the district. Overall, the community stated, specifically from the northern part of Barmer, that availability of specialist doctors at district hospital has helped them in getting treatment within the district, while earlier they were required to travel to the surrounding districts like Jodhpur or even to Jaipur in certain cases. It must be noted that Cairn has placed three specialized doctors at the district hospital since 2015.</p> <p>The report suggested some short as well as long term actions to be taken like enhancing interaction with locals, enhancing awareness about Cairn's interventions, improvement in drinking water supply, facilitating for enrolment in health schemes, management of waste pits at well pads.</p> <p>Cairn is disposing its drilling waste in real time to cement industry for co-processing, hence avoiding storage of waste in pits at wellpads. Further, we are also evacuating wastewater from these pits for treatment and further use for injection purpose. Solid waste is also being removed regularly from these pits.</p> <p>Following are the initiatives and impact created through health initiatives –</p> <p>Cairn has implemented various health related projects in Barmer &amp; Jalore districts to strengthen the healthcare delivery in the areas and created awareness on various health aspects in the last one decade. 1) 4 Mobile Health Vans (MHVs) are providing primary and affordable medical services to 149 far flung villages in Rajasthan benefitting approx. 1.4 lac community members annually. Villages in our operational area are sparsely populated and lack optimum methods of transportation and mobility. Thus, the MHV services providing health care facilities at the doorstep of the community is highly appreciated by the community. Regular awareness sessions and multi-specialty health camps are conducted for the masses. Services of Gynecologist, Orthopedic, Pediatric, ENT specialist, Dentist, and General Practitioner are provided under these health camps. In FY 21-22, 71,965 people have been benefited from MHV services.</p> <p>Multi-specialty camps are organized once in every quarter by each mobile health van running in Barmer district and number of OPDs ranges between 150 - 300 in every health camps.</p>

S. No.	Concerns/Suggestions	Status of actions (as of September 2024)
		<p>2) In FY 2015-2017, Project RACHNA created awareness in Barmer villages in reproductive, maternal, child health and nutrition. 2 Sanitary pad units were also developed and provided to the women SHGs. Over ~14,000 adolescent girls and rural women were engaged in regular awareness sessions in order to sensitize them about menstrual hygiene and reproductive health.</p> <p>3) In order to better the medical facilities available in the district hospital, two major interventions have been initiated by the company – first: ‘Green Barmer, Clean Barmer’ campaign focusing on creating awareness among citizens of Barmer on health and hygiene; and second: strengthening the health services offered at government district hospital by providing three medical specialists. These specialists include a female gynaecologist, an ENT specialist and a general surgeon which has impact more than 48,800 people in Financial year 19-20 and 39,631 people in Financial year 20-21. During the H2 of FY 2020-21, these specialists include a female gynaecologist, an ENT specialist and a general surgeon which has impact around 19000 people. In FY 21-22, so far 28,147OPDs were conducted by Cairn supported doctors in District hospital. In addition to this, through the cleanliness facilities supported at District hospital, 10.96 lac people have benefited. These medical services and sanitation facilities has not only helped thousands of patients but has also improved the overall ranking of this district hospital across the state. The hospital has been rewarded 1st position twice in row over the last two years on cleanliness and patient satisfaction. 8 housekeeping staff deployed under our Clean Barmer Green Barmer project were felicitated for their service by District Hospital on 73rd Republic Day.</p> <p>In addition, on Gandhi Jayanti, the Swachhta Pakhwada was initiated between 2nd and 16th October, all stakeholders pledged to keep the hospital and its surrounding areas clean and raise awareness regarding the importance of cleanliness. as a part of the Swachhta Pakhwada being organized at the Govt. District Hospital, Barmer, a special workshop on 5S was conducted for the sanitation workers, nursing students, medical staff and hospital administration.</p> <p>A three-day free mega camp for disabled was organized where more than 1,100 disabled people benefitted. The intent was to provide medical support and motivate the community through personal interaction.</p> <p>4) A student health-connect activity called ‘Swastha Pathshala Abhiyan’ was introduced in 2018 in 54 government schools in Barmer under the Mobile Health Van Project, impacting ~14,000 students. This</p>

S. No.	Concerns/Suggestions	Status of actions (as of September 2024)
		<p>programme focuses on behavioral modules on health and hygiene. Health camps are conducted regularly, and parents are also appraised about the medical needs of their children. This serves as a comprehensive guiding tool to improve the health of students and parents.</p> <p>5) With the aim of transforming public health systems and achieving greater adoption of safe, timely and effective practices of handling pregnancy and newborn complications, Cairn, in partnership with National Health Mission and Department of Medical, Health and Family Welfare (Rajasthan), has initiated an intervention to operationalize all dysfunctional First Referral Units (FRUs) in the District of Barmer. In FY 2019-20 (Apr – March), 8,586 treatments have been conducted by 2 FRUs.</p> <p>6) With the outbreak of pandemic COVID 19, Cairn Oil &amp; Gas has taken various steps to create awareness about this deadly virus as well as equip &amp; strengthen local administration to combat COVID 19 by launching Project Sanjeevani in which we created awareness, provided more than 60000 masks, 20 BIPAP ventilators, 5000 litres/ 30000 bottles of sanitizers, 10000 litres disinfectant, 1550 PPEs, 2250 N-95 masks, and reached out to more than 4 lakh people in around 1200 villages around our operational assets.</p> <p>With the onset of winter in Oct 2020, we planned to launch a mega campaign on COVID 19 awareness on theme “No Mask No Entry” through IEC, virtual marathon, etc.</p> <p>Besides this, Cairn has also launched one ambulance and handed over to Barmer District Hospital for carrying COVID patients. We have set up three COVID Care Centres in Barmer in collaboration with health department where we provided meals to more than 3000 patients till March 2021.</p> <p>Under the phase 2 of COVID 19, Cairn continued to support government in addressing the national crises of beds, oxygen cylinders, medical facilities and other related interventions to support patients in their treatments. Some of the key highlights of the same are –</p> <ul style="list-style-type: none"> <li>• A 100 bed Vedanta COVID field hospital has been inaugurated by Mr. Ashok Gehlot, CM Government of Rajasthan. Considering this hospital, a total of 610 bed facility has been supported by Cairn over this quarter.</li> <li>• ~3.5 lac community members have been touched through COVID initiatives like – community awareness drives and supply of food packets to COVID patients and health workers.</li> <li>• Arranged transportation of ~94K litres of O2 to District hospital.</li> <li>• 2 MHV's provided to DA Barmer - to be engaged in COVID awareness and transportation of patients.</li> </ul>

S. No.	Concerns/Suggestions	Status of actions (as of September 2024)
		<ul style="list-style-type: none"> <li>• First of kind, Community Vaccination Drive conducted at Ravva, for people in the age group of 18-45 years. A total of 1906 community members have been covered, through multiple vaccination camps.</li> </ul> <p>Supported District Administration with thousands of medical and surgical consumable items. This includes VTM kit, COVID kit, Para monitor, medicines, masks, and sanitizers, are few such items.</p> <p>In addition to the above, for FY22-23 we have covered close to 40,000 OPD's across 149 villages of Rajasthan through 4 MHV's. While through MHV we continue to reach to the far-flung communities, we have also conducted 40,620 OPDs at District Hospital, through Cairn support doctors and extended cleanliness support to 17,84,908 community members. Furthermore, some new initiatives have been undertaken to improve the nutritional and health status of women and children, in partnership with district administration. 1,50,000 hemoglobin strips have been handed over to district administration as well as 22,680 laddus handed over to ICDS department for dietary support to 542 malnourished children. As a result, 166 have moved from SAM (severely malnourished) to MAM (moderately malnourished) and 155 have completed recovered over the last 3 months of Cairn nutritional support. Through our Vaccination drive (supporting government in their endeavor to provide COVID vaccination to all), we have covered more than 6800 people across Barmer and Sanchore district of Rajasthan. List of Awards &amp; Appreciation Received for Health projects in 2018 &amp; 2019 -</p> <ol style="list-style-type: none"> <li>1) Appreciation from District Medical Officer, District Health Department, Barmer (Govt. of Rajasthan) on September 27, 2019 in Barmer district for providing and maintaining quality healthcare services in Barmer District Hospital as well as remotest area of the district through various initiatives and helping district achieve top three position in the state by supporting the nationwide vaccination campaign on "Measles &amp; rubella (MR)' launched on July 22, 2019.</li> <li>2) Received Appreciation letter from District Health Department, Barmer Govt. of Rajasthan on May 14, 2019 for the health care interventions in Barmer district Hospital that resulted in the Hospital getting ranked #1 amongst all district hospitals in Rajasthan</li> <li>3) A Commendation letter was given to Vedanta Cairn Oil and Gas by Government Medical College Barmer on Republic day 26 January 2020 for their remarkable services/ support offered on improving health facilities in district hospital</li> <li>4) Zee Business National CSR Leadership Award 2019 for community development programs across three categories - Best CSR Impact Initiatives, Best Community Development and Concern for Health on Wednesday on September 18, 2019 in Bangalore by World CSR Congress.</li> </ol>

S. No.	Concerns/Suggestions	Status of actions (as of September 2024)
		<p>5) 3<sup>rd</sup> CSR Health Impact Award 2019 on June 27, 2019, for the health programs under the thematic category “Swastha Bharat Initiative” as well as a Certificate of Nomination under category “Rural Health Initiative” for the impactful CSR initiatives.</p> <p>6) Received Appreciation letter from District Health Department, Barmer Govt. of Rajasthan on May 14, 2019 for the health care interventions in Barmer district Hospital that resulted in the Hospital getting ranked #1 amongst all district hospitals in Rajasthan.</p> <p>7) Recognized by District Collector and Chief Medical Officer for contribution to improve Barmer ranking from 19<sup>th</sup> to 13<sup>th</sup> in cleanliness and hygiene through health initiatives on July 26, 2018.</p> <p>8) ET Now CSR Award 2018 in the category of Health, Water &amp; Water Management on Feb 18, 2018</p> <p>During the period of April’23 – September’23 (H1), MHVs have been able to effectively provide affordable, accessible, reliable, and quality preventive healthcare services to beneficiaries at their doorstep.</p> <p><b>Project Outcomes</b></p> <ul style="list-style-type: none"> <li>• In the reporting quarter 24,440 OPD’s have been conducted through 7 MHV’s across 214 villages of Rajasthan and Gujarat.</li> <li>• Multiple awareness camps were organized to apprise beneficiaries on measures for maintaining a good health, menstruation hygiene with an outreach of more than 1,500 community members including adolescent girls.</li> <li>• ~130 Home visits were conducted for patients who were unable to reach the mobile health unit.</li> <li>• Several multi-specialty health camps organized in partnership with Health department across Gujarat and Rajasthan operational areas, to provide specialists medical (Orthopaedic, skin &amp; VD and general physician) services at doorstep of community benefitting 1800 community members.</li> </ul> <p>In addition to continuous support provided to district hospital, we are also working on developing a super specialty wing at the Government Medical College, which will be an extension of the District Hospital Barmer.</p> <p>We inaugurated a general ward at the Community Health Centre (CHC) Kawas, with the presence and support of Mr. Mewaram Jain, Brig. BS Shekhawat, and other important stakeholders. This ward will provide better medical services to the CHC Kawas and serve around 35,000 people in the nearby areas.</p> <p>For this Financial year, in addition to the regular interventions like support to district hospital, MHV, etc. we initiated new projects like – developing general ward at CHC Kawas, providing equipment’s like Xray,</p>

S. No.	Concerns/Suggestions	Status of actions (as of September 2024)
		<p>sonography, etc. to CHC Kawas and Gudamalani. Moreover, this year we launched a unique project “Harit Dhara” towards empowering rural women by offering sustainable menstrual hygiene solutions. The project has reached 5000 women. As a next step the women are now taking order for stitching cloth pads which is supporting towards additional income generation. Close to 26 lac people have been impacted through health interventions. Cairn’s multi-tier approach towards improving the healthcare facilities and services in the region has helped reach out to more than 11.68 lac people in the reporting period. We continue to reach out to the interiors of villagers through our MHV (Mobile Health Van) services on a weekly basis. In addition, our round-the-clock support on health &amp; hygiene as well as medical services has been a major support in addressing the load of Barmer District Hospital. Furthermore, we also focus on creating mass awareness drives in communities on seasonal diseases as well as holding multi-specialty camps towards addressing various ailments. Our efforts further gets strengthened by the interventions carries out in functionalizing the CHC and PHC’s</p>
2	<p>Village panchayat Chhittar ka par has maximum well pads, from which the maximum revenue goes to Central and State government but there is no effective spend on CSR activities.</p>	<p>Cairn is being implementing multiple CSR initiatives in Chittar Ka par gram panchayat since it falls in our operational area. Following are some of the ongoing CSR programs in Chittar ka Par Gram Panchayat.</p> <ol style="list-style-type: none"> <li>1) Mobile Health Van visits two gram-panchayats of Chittar Ka par GP (Mangnaniyon ki Dhani, Madpura Sani) once in every week i.e on Wednesday and Thursday respectively to provide basic healthcare services at the doorstep of local population.</li> <li>2) Under Jeevan Amrit Project to provide safe drinking water at affordable price, one RO plant has been recently inaugurated in Chittar ka par on 9<sup>th</sup> October 2019, by Ms. Chunni Devi Sarpanch - Chittar Ka Par, Mr. Bankaram Dhatteval, Ex. Jila Parishad Member, Mr. Ashok Meena Ex. Engineer PHED Baitu, Principal Govt. Sr. Secondary School. Chittar ka par.</li> <li>3) Nandghars have been constructed in 3 villages in Chittar ka Par GP - Bandatalar, Bheelon ki Basti and Dhatarwalon ki dhani to provide supplementary nutrition, pre-schooling, and health services to pregnant and lactating mothers along with skill training to local women. In addition, 3 more Nandghars are under construction in Chittar Ka Par panchayat. This panchayat is the most benefited through CSR as well as local employment directly or indirectly through Cairn’s vendors and contractors.</li> <li>4) Under Barmer Unnati Project, horticulture farms (Wadi) have been developed in 40 farmers agriculture land helping them generate additional income from the sale of pomegranate, Ber and Gunda.</li> <li>5) A 50HA land is been developed as grazing land in partnership with community.</li> </ol>



S. No.	Concerns/Suggestions	Status of actions (as of September 2024)
		<p>6) Education initiatives have been carried out in this region, both from the interventions of Desk kit, digital education, school sanitation etc.</p> <p>7) Rural youths from this area are being inducted in the Cairn skill centre towards job linked vocational courses.</p> <p>During the period of April'23-september'23 (H1) a lot of CSR activities and projects have been implemented at chittar ka par. To mention a few with the latest update:</p> <ol style="list-style-type: none"> <li>1. Chittar ka par govt senior secondary school received continuous infrastructure support. In H1 roof top was renovated as part of the work. The school also got sports kits and a cricket tournament sponsorship.</li> <li>2. Under the Chirag project, ICT lab is also established at the school with support of Cairn.</li> <li>3. Under Barmer Unnati project, Naadi and Wadis are also developed during this period at chittar ka par.</li> <li>4. A pastureland is established on 5 Ha land at Chittar ka par. We have adopted the Miyawaki technique of plantation, which involves planting native species in dense clusters to create mini forests.</li> <li>5. In addition to these interventions, MHV visits the village every week and regular activities are conducted at Nandghar with children and adolescent girls</li> </ol> <p>Various social work continued in this region during the H2 of FY23-24. This includes Nandghar project, Agriculture, Skilling, health interventions, plantation, etc.</p> <p>Refer annexure 3 for the various activities done under social intervention.</p>
3	<p>There is no green belt development and the trees that are cut are not being replanted.</p>	<p>Greenbelt is an integral part of field development plan and being developed in phased manner by undertaking the Source &amp; Receptor approach-based plantation around the facilities &amp; receptor location to maintain the local ecological balance. Further, total 5040 plants (including small plants) are cut till date for development of various facilities in RJON block area and total 36800 saplings are planted in 32 Ha. Area as part of compensatory plantation. Cairn is also carrying out restoration of damage plantation in community areas. This plantation is in addition to greenbelt area of ~194 ha developed within facility areas and community lands.</p>
4	<p>Cairn Contribution in government Swacha Bharat Mission and MJSA scheme is negligible.</p>	<p>Cairn has been very focused on providing sanitation facilities to the rural households and has initiated multiple initiatives to address the sanitation issues of local population in Barmer district.</p>

S. No.	Concerns/Suggestions	Status of actions (as of September 2024)
		<p>In FY 2015, Cairn has proactively partnered with Zila Parishad, Barmer to support the Swachh Bharat Mission and Nirmal Bharat Abhiyan in partnership with Rural Development Organization Trust. The program model was based on Public Private Partnership wherein Cairn contributes to the available govt. funds for the construction of individual household's (HH) toilets. Under this initiative, Cairn has constructed 20,500 HH toilets in FY 2018-19 benefitting ~20,500 families across 311 villages. Barmer district has been declared Open Defecation Free by the GoR in June 2018.</p> <p>The project has also won following awards -</p> <ol style="list-style-type: none"> <li>1) 3rd Rajasthan CSR Award under the theme "Water Sanitation and Hygiene, Skill Development and Agriculture, Food &amp; Nutrition" on June 4, 2019 by Ministry of Industries, Government of Rajasthan.</li> <li>2) FINISH Award under theme "Sanitation in the Circular Economy" on May 24, 2019 by The Government of the Netherlands, FINISH Society and WASTE Netherland for the contribution towards achieving the milestone of construction of 1 million toilets.</li> <li>3) 2<sup>nd</sup> Rajasthan CSR Award under "Water Sanitation and Hygiene" category for Jeevan Amrit on February 6, 2018.</li> <li>4) CSR health impact award for sanitation initiative by IHW (India health and Wellness Council).</li> </ol> <p>In addition, "Swasthya Vidyalaya" program i.e. School Sanitation Program which was launched in FY 2017, is still ongoing in 28 govt. schools in Barmer in partnership with an NGO – Yuva Unstoppable. Approximately, 7200 students are benefitted under this program.</p> <p>Under this project, separate toilets for girls and boys along hand washing area have been constructed across 28 government schools impacting ~ 7200 students and teachers. In addition, coaching and behavioral sessions on health &amp; hygiene are also imparted to the students under this project.</p>
5	Employment to Locals in 70:30 ratio and priority to locals in contracts work has not been given	<p>Company is in process of finalizing the policy to encouraging contractors for hiring local manpower. Further, Cairn as part of its CSR activities providing skill development trainings to enhance local employment. Under CSR, CAIRN runs 3 Skill training centres in Rajasthan - Barmer, Sanchore and Jodhpur. In the year 2018-19, Cairn Enterprise Centre (CEC), Barmer and Jalore, had trained more than 1000 youths across various skill trades including mobile repairing, masonry, domestic electric repairing, etc. whereas ~250 students were skilled and trained at its Cairn Centre of Excellence in Jodhpur. Cumulatively these centres have trained more than 15,000 local youths till date. Approximately 70% placement has been given to the local youths via these programs.</p> <p>In FY 2019-20 (Apr – March), 728 students had enrolled and trained and In FY 2020-21 (Apr – March), 629 students enrolled and trained, with 80% placement record. Cairn has even extended the current contract to</p>

S. No.	Concerns/Suggestions	Status of actions (as of September 2024)
		<p>implement skill training at CEC, Barmer and Sanchore to ensure project continuity to provide sustainable and gainful employment opportunities to the local youths. Cairn's CSR implementing partners have also provided local employment opportunities by engaging ~88% of its agency staffs from local communities.</p> <p>Due to COVID 19 pandemic globally and precautionary guidelines issued by Government of India (GoI), we have not implemented any skill training programs. However, we planned to initiate the training programs from Oct 2020 by maintaining social distancing and other precautionary measures including some diverse courses like animal husbandry assistant, security guard, masonry, etc. Also considering need of the hour and new normal we have planned to implement online training programs on GST certification for commerce graduate, Debt Recovery Assistants for 12th pass with total target of over 2000 youths. In addition to this, the current contract for implementing the skill training project with SEEDS have been further renewed till March'22 to ensure continuity of project to provide sustainable and gainful employment opportunities to the local youths. Post relaxation in lockdown from governemnt in second phase of COVID-19 pandemic, Skill trainings have been resumed in CEC. As per the MHA guidelines of running centres with 50% capacity. In FY21-22 we have trained more than 400 students across various trades of GST, DRA, Electrician, computers, etc. through online and offline mode. at CEC, Barmer.</p> <p>As pe the compliances of partnering with any agency, the contract for implementing our skill initiative was to be renewed. The tender process was initiated and carried out in H1. We as on Oct'22 have a partner on-boarded for running the vocational skill development courses from our CEC, Barmer. Under the new contract issued to learnt skills, we have enrolled 254 students till March'23. In addition to the trades of Data Entry Operator, Electrician, Mobile handset repair, Assistant Mason, for the first time we have successfully launched all girls batch on Beautician Assistant. The 30 girls inducted in this program has been first ever intervention in Baitu zone. The students have been currently undergoing On-job-training and will be placed by next month end.</p> <p>Over the H2 of FY23-24, we further trained 360+ with placement record reaching 92%. Through CEC new courses like BCBF, DRA, MIS Analyst and all girls batch for beauty assistant was introduced. Students continue to pursue trainings in courses NSDC certified vocational trainings. In addition, we also re-instated our Cairn Centre of Excellence, Jodhpur in partnership with Agriculture university. The program intends to offer degree &amp; short-term courses in farm and non-farm sector. Close to 175+ students have been engaged under this project. This initiative is a further extension of our efforts to promote entrepreneurs in the region along with supporting advancement of skills. The degree course offered further promotes agriculture as a stream to pursue for future career path. Awards won for Skill projects in Rajasthan -</p> <p>1) 3rd Rajasthan CSR Award under the theme Skill Development on June 4, 2019 by Ministry of Industries, Government of Rajasthan.</p>

S. No.	Concerns/Suggestions	Status of actions (as of September 2024)
		<p>2) Best Youth Icon in 2015 to the students of Cairn Centre of Excellence in Jodhpur by Govt. of Rajasthan. Skill development through Agriculture and Dairy Development Projects</p> <p>While at Cairn we have a local content policy which supports employment of local residents and engagement of vehicle/ business with local resident, through CSR initiative we also focus on empowering rural youths in possibilities of various vocational trades linked with employment opportunities.</p> <p>Under the on-going project of skill development, Cairn continues to train rural youths in various vocational trades like data entry operator, electrician, mobile handset repair, business correspondence and business facilitator, MIS analyst, etc. So far during the reporting period we have trained more than 300+ students with 89% placement record. In addition, we launched a Beautician Assistance Course empowering 30 women with skills to run or work in beauty parlours, enhancing their self-reliance and financial stability. In parallel to this, we have also been focusing on various allied activities to increase awareness of this project as well as help students develop holistically. While this has been Cairn's approach in Barmer district, through another skill centre CCoE at Jodhpur, we have trained close to 600 students in farm and non-farm sector skills.</p> <p>1. -.</p>
6	Payments to vehicle owner not made in timely manner.	Payments are made in timely manner subject to submission of invoice with all supporting evidences
7	Request for increase in limit for vehicle running km's from 2.5 lakh to 3.0 lakh and vehicle de-hiring age limit from 4.5 years to 5 years	Based on road safety study, the de-hiring age limit of LMV is 5 years and running km's limit is 3.0 lakh.
8	Driver remunerations to be increased to Rs. 14,735 and food and accommodation to be provided to drivers. Local vehicles shall be hired in ratio of 80:20	As per the passenger vehicle contract minimum wages of driver are Rs. 14,735 also as per amended contract T&C food and accommodation provided to the drivers by the company. Local vehicles are engaged in ratio of 80:20

S. No.	Concerns/Suggestions	Status of actions (as of September 2024)
9	Promises made during previous public hearing in October, 2013 regarding English Medium School in Baytu and Hospital in Kawas not fulfilled	<p>As a responsible corporate, Cairn has always attempted to deliver on commitments made for the betterment of the society. Company has proactively ensured compliance of commitments made during last PH. CAIRN has implemented various initiatives to improve the quality of education and infrastructure in schools in Barmer district in the last decade. Cairn always believed in strengthening the existing institutions in the region rather creating parallel systems which may not be sustainable post the exit of the company from the region. In this context, Cairn has developed infrastructure for the school in Baytu, including refurbishment of library and setting up science and computer labs in FY 2012. Cairn had also launched project -Chirag in 2014 under which 58 schools were adopted to provide education in English, Science, Mathematics and Computers. In 2018, Cairn also adopted one school in Tantada and upgraded its infrastructure including constructing separate toilet facilities for boys and girls, dish washing area and mid-day meal enclosure, impacting min. 6,000 students. In FY 21-22 a new initiative has been taken up in partnership with Education Department to set up ITC labs in 151 schools around our operational area. These schools will then be able to benefit from the digital learning opportunities made available by government and Cairn.</p> <p>A new initiative has been also launched this year to support schools which lack proper seating facilities in primary section. A proper infrastructure support is instrumental in bridging the gap and focusing on improving learning outcomes. Cairn has till date distributed 1181 Desk bag kits to students in government schools. We intent to distribute 4000 such bags in total. Rather than constructing just one school, Cairn has partnered with Bodh Shiksha Samiti to implement the education initiative “Ujjwal” for improving access to and quality of education in 60 government schools in Barmer district over a period of 3 years. The project was launched on 29<sup>th</sup> August 2019 by Hon'ble Chief Minister of Rajasthan - Shri Ashok Gehlot. Of these 60 schools, 5 are in Baytu. The project will help scale up the education interventions including infrastructure refurbishment/upgrade, setting up of digital and learning labs, capacity building of teachers and students, strengthening the school management committees, remedial classes for school dropouts etc.</p> <p>However, due to COVID 19, all schools were closed as per the guidelines of the Government of India. In May 2020, Cairn launched a unique education initiative “e-Kaksha” for providing quality education by developing e-library of syllabus of Rajasthan state Board for class 6th to 12th in partnership with Department of Education (Government of Rajasthan). The project will be re-launched by Hon’ble CM of Rajasthan in October 2020 across all 33 districts of Rajasthan. The project will be re-launched by Hon’ble CM of Rajasthan in October 2020. In FY 21-22, the project has reached 11.74CR people through its views and subscriptions recorded on youtube. The project has been widely appreciated by all stakeholders.</p>

S. No.	Concerns/Suggestions	Status of actions (as of September 2024)
		<p>For FY22-23, our E-Kaksha project continues to benefit the students at a large. The Till date the project has recorded 139,413,534 views having 837,000 subscribers. 1000+ videos have been made accessible for viewers as a part of the digital library created under this initiative. In the reporting period of FY22-23, more than 85,000 new subscriptions have been registered for this project. As on March'23, the project has reached 3.81 cr.</p> <p>In addition, we have also launched two new projects benefiting the students towards having access to digital education as well as bridging the infrastructure gap in primary section of government schools. In 2021, Cairn partnered with Government Education department in a 25:75 financial scheme wherein 25% of the funds are being contributed by Cairn Vedanta to establish 151 ICT labs in secondary and senior secondary schools of Barmer, paving way to 100% digitalization of Barmer schools. The project intends to benefit 5000+ students from Barmer district. As on date government has initiated the process of tender for partner on-boarding of its implementing.</p> <p>The second project is of Desk Kit - These innovative desk kits are light weighted bags with attached portable table which can be easily carried to school as well as used at home to study. These bags intent to address the gap in furniture availability in primary schools of Barmer and to encourage children to sit and study in right posture from an early age. A total 4000 desk kits will be distributed in Barmer. For FY22-23, 1981 desk kits have been distributed across schools of Barmer region.</p> <p>For this financial year, a new intervention of supporting 151 schools has been implemented across Barmer district. This project is a joint collaboration with the Education department towards ensuring 100% of secondary schools have digital education (ICT labs). Close to 10k students benefit from this project. In addition, 400+ desk kit has been distributed.</p> <p>To ensure proper mental and physical development of children in the age group of 3-years regular ECCE activities are ongoing. In reporting period, 6,187 children were covered across 124 Nand Ghars. Furthermore, Cairn has yet again invested in the higher school of Baitu block towards improving the school infrastructure development for providing conducive learning environment as well as developed Google classroom towards supporting digital education.</p> <p>Approx INR 20.48 crores is being invested under this project over the next 3- 4 yrs. Approx, 15,000 students are likely to get benefitted under this program over the next 3 yrs. The baseline assessment study for 20 schools in Phase 1 has been completed. Our partner agency is working with the respective school principals and management committee to define the timelines for various activities and project interventions as per the needs identified under the study. The project has also been registered under the Government of Rajasthan</p>

S. No.	Concerns/Suggestions	Status of actions (as of September 2024)
		<p>Education portal "Gyan Sankalp" and will be periodically monitored by the government as well. In FY19-20, across these 20 schools, close to 7800 students have been directly benefited, along with 1200 students getting special emphasis through bridge and remedial classes to mitigate the issues of drop out and improving results of weaker students respectively.</p> <p>“Swasthya Vidyalaya” program i.e. School Sanitation Program which was launched in 2017, is still ongoing in 28 govt. schools in Barmer in Partnership with an NGO – Yuva Unstoppable. Approximately, 7200 students are benefitted under this program.</p> <p>Besides this, Cairn also provides scholarships to meritorious students from the local community are disbursed for higher studies in medicine and engineering. In FY 2018-19, Cairn has supported 8 students whereas in FY 2019-20, 5 students have been supported. The selection of students for scholarship for FY2020-21 is under process. This FY21-22, INR 8 lac has been in total contributed as scholarship support towards 4 students of medical and engineering field studying in government collage.</p> <p>Cairn continues to strengthen the available government medical infrastructure keeping in mind the long-term sustainability of the project and services. Over the past 5 years, Cairn has invested INR 41.37 Crores across its health projects in the region impacting over 10 lakhs community members annually. The initiatives under our health program have been recognized consistently by both the district and state government. Details of health programs and list of awards &amp; appreciation received for these projects are provided in <b>response to PH point number 1</b> above.</p> <p>One RO plant of capacity 1KL per hours has been installed in Barmer district hospital to serve the local communities visiting the district hospital to get the healthcare services. The RO plant was inaugurated on 16<sup>th</sup> September 2019 by Hon'ble Mr. Mevaram Jain, MLA Barmer as Chief Guest. Dr. BL Mansooriya PMO Barmer, Dr. Harjinder Singh RCHO Barmer, Mr. Sachin Bhargav DPM NHM Barmer, Mr. Abrar Ahmed Coordinator AIDS Control Society Barmer. In addition, Cairn has also planned to provide an ambulance to equip the Barmer district hospital to cater to the healthcare services in the region in emergencies. In addition, one ambulance has been provided to District hospital to help address critical issues across Barmer. Besides this, supply of medical equipment and infrastructure refurbishment is also being carried out current FY 2020-21.</p> <p>COVID related support -</p> <p>With the outbreak of pandemic COVID 19, Cairn Oil &amp; Gas took various steps to create awareness about this deadly virus as well as equip &amp; strengthen local administration to combat COVID 19 by launching Project Sanjeevani in which we created awareness, provided more than 60000 masks, 20 BIPAP ventilators,</p>

S. No.	Concerns/Suggestions	Status of actions (as of September 2024)
		<p>5000 litres/ 30000 bottles of sanitizers, 10000 litres disinfectant, 1550 PPEs, 2250 N-95 masks, and reached out to more than 4 lakh people in around 1200 villages around our operational assets. With the onset of winter in Oct 2020, we launched a mega campaign on COVID 19 awareness on theme “No Mask No Entry” through IEC, virtual marathon, etc. Besides this, Cairn also provided one ambulance and handed over to Barmer District Hospital for carrying COVID patients. We continues supported three COVID Care Centres in Barmer in collaboration with health department where we provided meals to more than 2000 patients till March 2021.</p> <p>Under the phase 2 of COVID 19, Cairn continued to support government in addressing the national crises of beds, oxygen cylinders, medical facilities and other related interventions to support patients in their treatments. Some of the key highlights of the same are –</p> <ul style="list-style-type: none"> <li>• A 100 bed Vedanta COVID field hospital has been inaugurated by Mr. Ashok Gehlot, CM Government of Rajasthan. Considering this hospital, a total of 610 bed facility has been supported by Cairn over this quarter.</li> <li>• ~3.5 lac community members have been touched through COVID initiatives like – community awareness drives and supply of food packets to COVID patients and health workers.</li> <li>• Arranged transportation of ~94K litres of O2 to District hospital.</li> <li>• 2 MHV's provided to DA Barmer - to be engaged in COVID awareness and transportation of patients.</li> <li>• First of kind, Community Vaccination Drive conducted at Ravva, for people in the age group of 18-45 years. A total of 1906 community members have been covered, through multiple vaccination camps.</li> <li>• Supported District Administration with thousands of medical and surgical consumable items. This includes VTM kit, COVID kit, Para monitor, medicines, masks, and sanitizers, are few such items.</li> </ul> <p>During the period of April'23 – September'23 (H1), Basketball ground and a running track has been developed at Baytu senior secondary school and Google classroom was established at English medium school in Baytu earlier.</p> <p>We inaugurated a general ward at the Community Health Centre (CHC) Kawas, with the presence and support of Mr. Mewaram Jain, Brig. BS Shekhawat and other important stakeholders. This ward will provide better medical services to the CHC Kawas and serve around 35,000 people in the nearby areas.</p>



S. No.	Concerns/Suggestions	Status of actions (as of September 2024)
		<p>Cairn has implemented various initiatives in and around Baitu &amp; kawas. These activities range from intervention in improving the income activities of farmers, creating livelihood opportunities for the rural youths, strengthening the existing education infrastructure, etc. In specific relevance to Health and education initiative, for this financial reporting period –</p> <ul style="list-style-type: none"> <li>a. Healthcare - Cairn’s multi-tier approach towards improving the healthcare facilities and services in the region has helped reach out to more than 11.68 lac people in the reporting period. We continue to reach out to the interiors of villagers through our MHV (Mobile Health Van) services on a weekly basis. In addition, our round-the-clock support on health &amp; hygiene as well as medical services has been a major support in addressing the load of Barmer District Hospital. Furthermore, we also focus on creating mass awareness drives in communities on seasonal diseases as well as holding multi-specialty camps towards addressing various ailments. Our efforts further gets strengthen by the interventions carries out in functionalizing the CHC and PHC’s.</li> <li>b. Education - We have continued to focus on building the right building blocks for the children undergoing pre-education at Nandghars. In partnership with ICDS department 124 Nandghars are operational across Cairn business villages in Barmer district. In addition, 300+ desk bags have been distributed to support primary school students. These function as both a bag and a portable desk which in turn bridges the infrastructural gap in schools in rural areas.</li> </ul>
10	Property damage due to vibration and earthquake near WPs	<p>Company is producing oil from Mangala, Aishwariya and Bhagyam fields with standard prescribed and approved practices, where in continuous water injection is done to maintain the reservoir pressures and void replacement. Thus, eliminating any possibility of reservoir disturbance through liquid production. These reports are monitored daily by DGH, ONGC and other relevant govt. agencies.</p> <p>The water injection pressures in these fields are way below the fracture pressures and do not disturb the framework and fabric of the subsurface, hence there is no possibility of any earthquake due to water injection in the fields under production. We also constantly monitor the land subsidence and conduct periodic surveys over the entire area including the water well monitoring since 2010. No land subsidence has been observed over our fields under production including areas of water abstraction. These reports are monitored by CGWB and other Govt. agencies. There has been no damage to the civil structures in our well pads till date and therefore any vibration or ground movement due to well pad equipment operation is not possible. Company</p>

S. No.	Concerns/Suggestions	Status of actions (as of September 2024)
		has procured vibration monitoring equipment and vibration monitoring is being conducted at multiple locations and results were found within limit.
11	Deterioration of ground water quality in area (Black color and foul smell from ground water)	<p>Detail study conducted and concluded that water quality in existing borewells is due to inherent nature of the bore wells and there is no contamination from Cairn's operation. Two observation wells are also drilled in Mangala field for continuous observation of ground water quality.</p> <p>Detailed report "Fact Paper – Ground water quality and subsurface geology of Mangala Oil field and Its Vicinity Area, Barmer" is submitted to District Administration in April 2020.</p>
12	Land acquisition without Government consent and Non-Agriculture (NA) conversion. Company is taking land on 10 Rs. Stamp paper by paying little amount.	Company follows all relevant Rules and Regulation applicable for procurement of Land. Also, Company follows all conversion Rules as applicable. Applications are pending with district administration; Requisite fees were also deposited along with the applications.
13	Training centre to be developed to train locals for employment opportunities in company	<p>CAIRN already runs 3 Skill training centres in Rajasthan - Barmer, Sanchore and Jodhpur to provide short term vocational training courses for creating employment opportunities for the local youths,</p> <p>In the year 2018-19, Cairn Enterprise Centre (CEC), Barmer and Jalore, have trained more than 1000 youth in mobile repairing, masonry, domestic electric repairing, etc. whereas ~250 students in Jodhpur and cumulatively these centres have trained more than 15,000 local youths till date. Approximately 70% placement has been given to the local youths via these programs.</p> <p>In FY 2019-20 (Apr – March), 728 students have been enrolled and trained and in FY 2020-21 (Apr – March), 629 students enrolled and trained with, with 80% placement record. Cairn has even extended the current contract to implement skill training at CEC, Barmer and Sanchore to ensure project continuity to provide sustainable and gainful employment opportunities to the local youths. Cairn's CSR implementing partners have also provided local employment opportunities by engaging ~88% of its agency staffs from local communities.</p> <p>Due to COVID 19 pandemic globally and precautionary guidelines issued by Government of India (GoI), we have not implemented any skill training programs. However, we planned to initiate the training programs from Oct 2020 by maintaining social distancing and other precautionary measures including some diverse courses like animal husbandry assistant, security guard, masonry, etc. Also considering need of the hour and new normal we have planned to implement online training programs on GST certification for commerce graduate, Debt Recovery Assistants for 12th pass with total target of over 2000 youths. In addition to this, the current contract for implementing the skill training project with SEEDS have been further renewed till March'22 to ensure continuity of project to provide sustainable and gainful employment opportunities to the</p>

S. No.	Concerns/Suggestions	Status of actions (as of September 2024)
		<p>local youths. Post relaxation in lockdown from government in second phase of COVID-19 pandemic, Skill trainings have been resumed in CEC. As per the MHA guidelines of running centres with 50% capacity. In FY21-22 we have trained more than 400+ students across various trades including but not limiting to GST, DRA, Electrician, computers, etc. through online and offline mode of training. As per the compliances of partnering with any agency, the contract for implementing our skill initiative was to be renewed. The tender process was initiated and carried out in H1. We as on Oct'22 have a partner on-boarded for running the vocational skill development courses from our CEC, Barmer. Under the new contract issued to learnt skills, we have enrolled 254 students till March'23. In addition to the trades of Data Entry Operator, Electrician, Mobile handset repair, Assistant Mason, for the first time we have successfully launched all girls batch on Beautician Assistant. The 30 girls inducted in this program has been first ever intervention in Baitu zone. The students have been currently undergoing On-job-training and will be placed by next month end.</p> <p>Over the H2 of FY23-24, we further trained 360+ with placement record reaching 92%. Through CEC new courses like BCBF, DRA, MIS Analyst and all girls batch for beauty assistant was introduced. Students continue to pursue trainings in courses NSDC certified vocational trainings. In addition, we also re-instated our Cairn Centre of Excellence, Jodhpur in partnership with Agriculture university. The program intends to offer degree &amp; short-term courses in farm and non-farm sector. Close to 175+ students have been engaged under this project. This initiative is a further extension of our efforts to promote entrepreneurs in the region along with supporting advancement of skills. The degree course offered further promotes agriculture as a stream to pursue for future career path.</p> <p>Awards won for Skill projects in Rajasthan -</p> <ol style="list-style-type: none"> <li>1) 3rd Rajasthan CSR Award under the theme Skill Development on June 4, 2019 by Ministry of Industries, Government of Rajasthan.</li> <li>2) Best Youth Icon in 2015 to the students of Cairn Centre of Excellence in Jodhpur by Govt. of Rajasthan.</li> </ol> <p>While at Cairn we have a local content policy which supports employment of local residents and engagement of vehicle/ business with local resident, through CSR initiative we also focus on empowering rural youths in possibilities of various vocational trades linked with employment opportunities.</p> <p>Under the on-going project of skill development, Cairn continues to train rural youths in various vocational trades like data entry operator, electrician, mobile handset repair, business correspondence and business</p>

S. No.	Concerns/Suggestions	Status of actions (as of September 2024)
		<p>facilitator, MIS analyst, etc. So far during the reporting period we have trained more than 300+ students with 89% placement record. In addition, we launched a Beautician Assistance Course empowering 30 women with skills to run or work in beauty parlours, enhancing their self-reliance and financial stability. In parallel to this, we have also been focusing on various allied activities to increase awareness of this project as well as help students develop holistically. While this has been Cairn’s approach in Barmer district, through another skill centre CCoE at Jodhpur, we have trained close to 600 students in farm and non-farm sector skills.</p>
14	Non engagement of farmers tractors	<p>Cairn engaged competent 3<sup>rd</sup> Party to carry out survey/study on use of farm tractors for industrial activities. The third-party agency has submitted the report and recommended not to use tractor with trolley. However, tractors are being used based on activity wise risk-based approach e.g. tractors are being used for site levelling and grading activities for development of new sites. Cairn is reviewing the risks related to other activities and time to time revising its road transport policy accordingly.</p>
15	<p>Poor maintenance of offsite Green Belt (GB) developed at Kharva Village. Priority to be given to local species like Khejri for GB development. Where are the expenses going related to the GB development?</p>	<p>Green Belt is being developed in consultation with School of Desert Science (SDS), CAZRI, Jodhpur. Periodical audit is undertaken to assess the health of saplings planted and necessary mitigation measures suggested are taken in case of any deficiencies found. Plantations consist of local species like Khejri, Acacia, Rohida, Jal, Neem etc. as per the recommendation of CAZRI and SDS. Company has developed ~121 HA of GB at community lands by planting ~80000 plants with survival rate ~75% and records are being submitted in six monthly EC compliance report submitted to MoEF&amp;CC and RSPCB. During 2019, high mortality was observed at few community plantation sites may be due to high plant density, damage by stray animal grazing, cutting of trees for fuel wood, termite attack etc. Cairn has initiated restoration of damaged plantation in community area by putting double security fencing, planting local species, termite control etc.</p>
16	<p>Cairn is working to make clean water available through RO water plants. At many villages, RO plants are not working.</p>	<p>Cairn has implemented “Safe Drinking Water” project in partnership with PHED and Govt. of Rajasthan, to provide clean and safe drinking water to communities. Based on the success of the pilot initiative in 2013 the project has been scaled up in the entire Barmer district. Land, Electricity and Raw Water are provided by PHED as per the MOU. PHED is the owner of the asset post commissioning and Cairn is the funding agency pre-commissioning of the RO.</p> <p>Under the tripartite MoU with PHED department to establish RO units across Barmer district, out which 124 RO units have been installed and commissioned across 124 villages till date in Barmer &amp; Jalore districts, benefiting more than one lac community members. Approximately 13,000 registered RO users are regularly</p>

S. No.	Concerns/Suggestions	Status of actions (as of September 2024)
		<p>availing the services of the project. In FY19-20, close to 1.28 lac community members benefited from the water initiative. In FY20-21 close to 1.18 lac community members benefited from the water initiative.</p> <p>The RO project has faced challenges due to multiples reasons like lack of ownership from local communities, Erratic or delay in electricity supply at RO plants, Thefts &amp; vandalism at RO plants, financial distress of vendors, inappropriate RO locations – ownership issues, limited catchment area, lack of availability of raw water or high TDS, high opex cost vs the revenue generated etc.</p> <p>However, Cairn has worked to resolve the issues mutually with PHED and local communities and also onboarded - Swajal, an MSME organization, who is responsible for Operation &amp; Maintenance of 32 old RO plants on community ownership model, auditing of RO plants, operationalization of defunct plants or shifting to areas having more community demands and ownerships, regular maintenance of plants, capacity building of trainers and water committees, and awareness generation.</p> <p>During H1 FY 2020-21, Cairn has revived more than 70 RO plants which were non-functional based on the stakeholder requests and in the next half, H2 FY 2020-21, 48 RO plants were revived which adds total functional 118 RO plants. So far 86 village committees have been formed and responsibility of RO operations have been handed over to these committees.</p> <p>In FY21-22 we have touched more than 1.34 lac community members benefited from this initiative. While the 124 RO units are functional and community is taking water from the same, efforts have been put in place to help strengthen the exit strategy and project sustainability. Focused intervention on IEC activities, water committee formation and handholding support on business plan has been extended to the communities at large, which has resulted in a positive response from the community. The community for the first time has come forward to undertake the responsibility of plant O&amp;M. At many places the water committee has already collected money as revolving fund for its operations as well as planning to set up chiller at few locations. 70+ RO plants have been successful handed over to the community as per their demand to carry out regular operations. Efforts are on-going to create stronger community acceptance and ownership across all RO plants.</p> <p>Besides RO project, Cairn has also constructed &amp; commissioned 10 bore wells in water constraint regions of Barmer district benefitting 2000 households on monthly basis In FY 21-22, additional 5 community borewells have been taken up in partnership with PHED. So far, through the 10 community borewells developed in phase 1 by Cairn were reported functional, benefiting more than 18,000 community members and 3000 livestock.</p>

S. No.	Concerns/Suggestions	Status of actions (as of September 2024)
		<p>One RO plant of capacity 1KL per hours has also been installed in the Barmer district hospital to serve the local communities visiting the hospital to get the healthcare services.</p> <p>Basis the success of the project seen so far, Cairn intends to extend AMC and basis handholding support to 124 RO plants installed and operationalized in Barmer district. For the same, a new partner agency has been on-boarded through the standard tender process. While the 124 RO units are functional and community is taking water from the same, efforts have been put in place to help strengthen the exit strategy and project sustainability. 86 RO plants have been successful handed over to the community as per their demand to carry out regular operations. Efforts are on-going to create stronger community acceptance and ownership across all RO plants. Regular meetings are being held with PHED official at District and block level for RO handover process to PHED. More than 43 Lakh Litres Clean and safe drinking water is sold from 82 RO plants benefitting 9241 families and generating a revenue of 10.84 lakh. For FY 22-23, we have ensured 1.10 lac people benefit from safe drink water initiative.</p> <p>In addition, under our Community Borewell project, for FY22-23, 2 Borewell Sites drilling, and water testing work has been Completed in Daulotpra &amp; Nimbalkot Villages. Two borewell drilling has been initiated in Kau Ka Kheda and Bandra Gram Panchayat. In addition to 10 borewells constructed in Phase 1, a total of 5 borewells will be added in phase 2 of Borewell Project, out of which 4 have been operationalized benefitting 4000+ community members on monthly basis.</p> <p>During H1 FY 23-24, Regular meetings are being held with PHED officials at District and block level for RO handover process to PHED. More than 69 Lakh Litres Clean and safe drinking water is sold from 124 RO plants benefitting 11,429 families and generating a revenue of ~approx. 17.32 lakh.</p> <p>Moving towards Sustainability, 92 out of 124 RO plants have been successfully hand overed to PHED dept after providing seven years of operation, maintenance &amp; handholding services. 32 out of 124 Community based RO plants have been successful handed over to the community as per their demand to carry out regular operations. Efforts are on-going to create stronger community acceptance and ownership across all RO plants.</p> <p>In H2 of FY23-24, the community water project (Jevan Amrit) was successfully handed over to the communities and PHED. In addition to this, we continued our efforts towards providing water to the interior of villages through community borewell intervention. In partnership with PHED, ground level resource</p>

S. No.	Concerns/Suggestions	Status of actions (as of September 2024)
		<p>work has been completed in 4 out of 5 Borewell plants. These 4 borewells are operational in 4 villages Bandra, Kau ka Kheda, Nimbalkot and Dholatpura benefiting 800 households.</p> <p>Furthermore, In Rajasthan, water scarcity has been a persistent issue, particularly in remote areas. The team in collaboration with the Public Health &amp; Engineering department-initiated drilling of a borewell at Rohidi village. The village is at the Indo-Pak border. The initiative will provide immediate relief by ensuring perennial water supply but will contribute towards sustainable development of the communities.</p> <p>Cairn in the last financial year successfully handed over 92 plants to the village water committee and PHED for operation and maintenance. Thus, in the community an investment of establishing and operationalizing 124 RO plants have been taken by Cairn in the past years. In addition, the 15 community borewells development across the interior villages have been helping communities with safe drinking water at their doorsteps. Basis the community request received from Rohidi village (close to Indo-Pak border), we have also successfully commissioned the community borewell and supporting 100+ villagers. Furthermore, we have also installed RO units in convergence model in 2 schools this reporting period towards providing safe drinking water to school children and nearby communities.</p>
17	Thousands of green trees are cut for developing the well pads. Sought records of tree cut.	Tree cut records are being maintained and provided in six monthly EC compliance report submitted to MoEF&CC and RSPCB. Refer <b>Annexure -4</b> to EC compliance for tree cut data and compensatory plantation.
18	Land procured through agreement on the stamp papers of 200, 300 / 10 Rs. How many have been returned to the farmers?	<p>Post 2010 there was no permanent land acquisition.</p> <p>Temporary land acquisition is a recurring process and being done according to Relevant rules, which does not require NA conversion.</p>
19	Information sought about greenbelt development details.	Greenbelt development is an integral part of the field development plan. Plantation is carried out based on source-receptor approach at facility as well as community lands. Status of Greenbelt Development is provided in Annexure -04 to the six-monthly EC compliance report
20	A query statement raised regarding blast happened on 25-09-2017, 5-10-2017 and thereafter, Collector has assured formation of committee and payment against damages. Newspaper cuttings describing the said events is presented.	Refer <b>Response to point no. 10 above</b>

S. No.	Concerns/Suggestions	Status of actions (as of September 2024)
21	No action for wildlife protection and development. Information sought about greenbelt development in the past 14 years	<p>Company has taken the following notable measures to protect flora and fauna of the area:</p> <ul style="list-style-type: none"> <li>• Planting of only native species of trees in the greenbelt.</li> <li>• Carrying out social forestry projects in association with local forest authorities and communities to increase green cover of the area.</li> <li>• Drinking water facility for wild animals has developed within protected forest area at Gaangli village in Sindhri Tehsil, Barmer and handed over to District Forest Department, Barmer from June, 2017. The facility includes a bore well (200 m depth) fitted with solar power submersible pump and flow meter and a Galjar (pond) of size 30X30X2 feet.</li> <li>• Provided MVLC &amp; MLCC at poles and 33KV overhead feeder power line from MPT to various remote well pads to provide safe perching for birds, including peacocks, and prevent electrocution.</li> <li>• Wild life rescue vehicle has been procured and handed over to Forest Department Barmer in 2013. This vehicle can be used to transport wild animal injured by accident to animal care facility in Barmer for treatment.</li> <li>• Wildlife protection display boards/signage's are displayed along the road side</li> <li>• Conducted biodiversity impact assessment studies to assess potential impacts and develop plan to improve biodiversity in our operational area</li> <li>• Under passes/culverts have been provided wherever possible. In addition to that Company follows Journey Management Plan and speed limits, vehicle movements monitored through Vehicle Tracking System and has system to control night travel as well as speed Breaker with signage provided to control travel and speed of vehicle to avoid wildlife crushing on road and safety of personnel.</li> <li>• Defensive driving training being provided to all drivers to avoid road killing of wild animals in the area</li> <li>• Green belt development as per plan developed by School of Desert Science have been taken up at facility and community lands in the RJON field. Approx. 121 ha land (including compensatory plantation by native tree species only) near to Bodhi Naadi, in Chokhla Panchayat, Goliya Jatmal and Sanchore Pashumela Maidan, Batadoo, Khariya Tala, Kudla, Nagar etc. have been developed as shelter belt</li> </ul>
22	When company came, it talked about adoption of polytechnic college, start petrochemical branch etc., but till today there is no action.	<p>Cairn has initiated the discussion with government engineering college Barmer to transfer technical knowledge to the students of the college through the experienced &amp; qualified resources in Cairn. A non-financial MoU has been signed between Vedanta Limited – Cairn Oil &amp; Gas and Government Engineering College – Barmer on 16th December 2019 in Jaipur during the 3rd Annual Higher &amp; Technical Education and HR Conclave organized by Govt. of Rajasthan, in the presence of Hon'ble Minister of Higher Education – Mr. Bhanwar Singh Bhati, Secretary of Higher and Technical Education – Ms. Shuchi Sharma and Commissioner of College Education – Mr. Pradeep Kumar Barod, Government of Rajasthan.</p> <p>This partnership is for a period of three years for –</p> <ul style="list-style-type: none"> <li>• Transfer of knowledge to the engineering students through Cairn's experienced resources.</li> </ul>



S. No.	Concerns/Suggestions	Status of actions (as of September 2024)
		<ul style="list-style-type: none"> <li>• Guiding students in their annual projects.</li> <li>• Facilitating exposure visits of students to some of Cairn assets in Rajasthan for their practical exposure.</li> <li>• Creating opportunity for Cairn employees to pursue research and driving innovations.</li> </ul> <p>In FY21-22, 20 students from petroleum department are being undergoing their summer internship with Cairn vendors. This is in addition to thousand + manhours contributed by our Cairn Employees who have taken virtual webinars for students, under Passion to Serve program. Cairn has been felicitated by the Government college for their technical support offered to the students' time and again. Regular support towards industry exposure and guest lectures by industry experts have continued in FY22-23 as well. More than 30 employees of Cairn have extended their time towards developing a local resource pool.</p> <p>Besides this, Cairn also runs 3 Skill training centres in Rajasthan - Barmer, Sanchore and Jodhpur to provide short term vocational training courses for creating employment opportunities for the local youths,</p> <p>Refer <b>response to point number 13</b> above from more detail on technical education and courses provided by company for skill development.</p> <p>During COVID 19, Cairn in partnership with the Government Engineering College organized webinars through its expert engineers and seniors on various topics of Petroleum Engineering subject.</p> <p>In addition, Cairn also supported these students with summer internship as well as encouraged its partner agencies for placement drives.</p>
23	<p>In our area, there is no classrooms in the schools. I want to tell you that 1-2 % of the oil &amp; gas production to be used for basic development.</p>	<p>Refer response to point no. 9 above for details on infrastructures provided in schools by Cairn</p>
24	<p>Cairn does not listen to the problems of the locals.</p>	<p>Cairn has dedicated Stakeholder relation team at all its assets in Barmer district viz-a-viz MPT, Bhagyam, Aishwariya and Raageshwari (Gudamalani) to proactively address the community grievances. Stakeholder team members are placed at each of these assests who listens to the concerns of the community and engage with them to address their concerns.</p> <p>To further strengthen the redressal process, Cairn has developed an application - NIVAARAN, which gives us a platform to log all community grievances as well as requests and assign the action/talks to the concerned department with timelines. The application is helps us to improve the grievance redressal turnaround time by automating the entire grievance handling processes through features of creating grievance, modifying, keeping track of the follow ups or actions taken by person/ people responsible for closure and maintaining the data for future purpose.</p>

S. No.	Concerns/Suggestions	Status of actions (as of September 2024)
25	Cairn conduct annual/quarterly meetings with local representative, administration etc.	Company is conducting periodic and as and when required meetings with the local representative as well as administration. The same will be continued.
26	Land acquired and till today payment not given to many farmers. Land compensation to be provided to these people within three months.	No legacy is pending as on date related to land compensation except in cases which are sub judice / Cases wherein the landowner has not accepted the payment.
27	It was promised to open a training institute to train the people but not fulfilled, the skilled workers/laborers are being brought from outside, not even 5% local laborers are employed.	Company is operating a skill development centre (Cairn Enterprise Centre) in Barmer & Sanchore and also CCoE (Cairn Centre of Excellence) in Jodhpur. All these centres are providing industry/job linked training to the youth of the region. The analysis of employment details reveals that locals from Barmer and Jalore district represents ~70% in unskilled category and ~45% in semi-Skilled and skilled category. Refer <b>response to point number 13</b> above for more detail on technical education and courses provided by company for skill development
28	Request for redeployment of blacklisted workers	Company is reviewing the request on case to case basis based on request from concerned personnel/agencies. Some persons/agencies are being de-listed from blacklist time to time.
29	The system for the complete health care to be provided by the Company.	Refer <b>response to point no. 1</b> above
30	There are two big tanks constructed in MPT and found heavy water seepage from these tanks. We have complained of the same and no actions have been taken.	As per initial studies conducted through expert agency, it is found that movement of subsurface water aquifer at MPT area is from north to south i.e. from MPT to the adjoining field in South. Only due to elevation difference between MPT and adjoining fields, percolated rainwater found to be getting stagnant at adjoining field. Cairn is also carrying out dewatering of underneath shallow water in affected area. Further, Cairn is in process to conduct study from an external expert agency to find out probable source of water seepage and will take appropriate action accordingly. However, due to ongoing pandemic the study is delayed.
31	District Collector advised Company to open a website, where Company can present its environment and social activities, so that the local people can view and understand. Also open a social media site for the benefit of both the people and the Company.	Cairn CSR program updates are available in Cairn as well as Vedanta websites. Please refer below website links - <a href="https://foundation.cairnindia.com/Pages/homepage.aspx">https://foundation.cairnindia.com/Pages/homepage.aspx</a> <a href="https://www.cairnindia.com/Pages/CorporateSocialResponsibility.aspx">https://www.cairnindia.com/Pages/CorporateSocialResponsibility.aspx</a> <a href="https://www.vedantalimited.com/Pages/Cairn.aspx">https://www.vedantalimited.com/Pages/Cairn.aspx</a> In addition, Cairn's corporate communication team keeps posting the CSR as well as other environment and business-related stories and updates through "Cairn Oil & Gas" handle.

S. No.	Concerns/Suggestions	Status of actions (as of September 2024)
		Further all EOI tender / contract details are published on newspapers as well as Cairn websites.
32	In Kawas hospital, there is no mortuary, therefore the locals have to go to the Barmer hospital.	<p>The development of mortuary is under the Department of Forensic Medicine and is required to be provided by the government including the land, electricity, human resources, legal approvals, etc. A mortuary is a specialized infrastructure that hygienically stores corpse/ dead bodies until the burial/cremation or physical examination/post mortum. Typically, the death certificate and post mortem formalities require jurisdictional procedures and thus cannot be carried out by a corporate or private entity as per the law of the land. In addition, with the functionalization of the medical college in Barmer, the mortuary is also being considered by the District Health Department, Government of Rajasthan. Cairn will support this infra development as required and post necessary due diligence with the government.</p> <p>However, Cairn is already supporting the Barmer district hospital in upgrading the infrastructure, maintaining cleanliness &amp; hygiene and providing specialized healthcare services through three doctors - Gynecologist, ENT and General Surgeon since 2015 besides its other health interventions in the region as mentioned above. Refer response to point no. 1 for further details on Cairn CSR initiatives in health sector.</p>
33	District collector informed that as per his knowledge CSR expenses have to be done only after the approval of the district committee, but no such approvals have been sought from the district administration. And the Company carried out CSR expenses as per its own plan, whereas for CSR the local administration and local people should necessarily be included.	<p>Cairn implements CSR programs as per the needs of the local communities by undertaking baseline and needs assessment once in every 3 years as per Vedanta CSR Standards. Cairn has conducted this study in 2015 by SEEDS and in 2018 by TARU leading edge. There is no legal or statutory requirement to secure district approval for social investment to be spend by the company. Moreover, Cairn complies with all statutory requirements adhering to schedule VII of Companies Act 2013.</p> <p>However, Cairn consults the district administration time to time and share the status of the CSR projects implemented in Barmer district and many of its CSR projects are in partnership with the government. Following are the major CSR programmes implemented in partnership with Government -</p> <ol style="list-style-type: none"> <li>1) Skill training in CEC and CCoE, Jodhpur in partnership with Department of Technical Education (Govt. of Rajasthan) and Rajasthan Skill &amp; Livelihood Development Corporation respectively</li> <li>2) Functionalization of First Referral Units in partnership with National Health Mission and Dept. of Medical Health &amp; Education (Govt. of Rajasthan)</li> <li>3) Hospital Sanitation project in partnership with Ministry of PRI and Zila Parishan (Barmer).</li> <li>4) Water Conservation in Barmer in partnership with Watershed Department (Govt. of Rajasthan) and NABARD.</li> <li>5) Nandghar Project in partnership with Ministry of Women &amp; Child Development, ICDS</li> <li>6) Solar electrification in 100 schools in partnership with Rajasthan Renewable Energy Corporation</li> </ol>

S. No.	Concerns/Suggestions	Status of actions (as of September 2024)
		<p>7) Safe drinking water project in partnership with PHED, Rajasthan            8) Household sanitation project in partnership with Zila Parishad Barmer            9) Agriculture and NRM project in partnership with NABARD and ICAR – CAZRI</p> <p>The CSR team holds regular meetings with the District collector to report on the progress of the field activities. The meetings aim to ensure effective coordination and collaboration between the CSR team and the District collector's office. The meetings also provide an opportunity for feedback and suggestions from the District collector on how to improve the quality and impact of the interventions.</p>
34	<p>District collector informed that Company has entered in to a MoU with the government to spend Rs. 1.5 Crores under the Chief Minister Jal Swawlamban Yojana. Wherein only Rs. 47 Lakhs have been spent so far. Company shall ensure compliance to all the MoU and submit the compliance report to the district administration from time to time.</p>	<p>Cairn is committed to adhering to all compliances under the Company's Act 2013, Schedule 7. It has invested INR 81.65 lakhs by the end of FY 2018-19 under Mukhya Mantri Jal Swawlamban Yojna for the development of watershed in the Barmer region. With the change in government this year, the project has been discontinued by the GOR.</p> <p>However, Cairn continues its watershed development under Barmer Unnati Project through a reputed agency - BAIF for many years and has constructed of 1506 rainwater harvesting structures in the form of Khadin structures in farmer's field in Barmer and Baitu Blocks. In addition to this, 28 Nadi (village community ponds) structures were renovated at the group as well as community levels to harvest rainwater which contributes to water security as well as recharging the ground water table in Barmer.</p> <p>Approximately 16 lakh cubic meters water has been harvested every year, converting around 200 ha area into cultivable land by conserving 9500 tons fertile soil every year. These Nadi renovations further helps in increase the floral and faunal diversity in the region. Over 16 migratory bird species have frequented the pond sites. Additionally, Roof water harvesting in 95 schools benefitting 8000 school children every year.</p> <p>Cairn has invested more than INR 2 CR. under this project in FY 2018-19, whereas INR 1 CR in FY 2019-20 till September 2019 and plans to invest another INR 1 CR by end of FY 2019-20.</p> <p>The project continued till March 2020 and launched new long-term agriculture NRM program with additional activities in FY 2021. Cairn has onboarded another credible partner agency – SM Sehgal Foundation to take up the watershed management &amp; NRM activities for another 3 years in the next phase of Barmer Unnati Project.</p> <p>Following are the awards &amp; appreciation received for the water conservation project -</p> <ol style="list-style-type: none"> <li>1) ET NOW WORLD CSR AWARD 2020</li> <li>2) 3rd Rajasthan CSR Award by Ministry of Industries, Government of Rajasthan.</li> </ol>

S. No.	Concerns/Suggestions	Status of actions (as of September 2024)
		<p>3) Zee Business National CSR Leadership Award 2019 for community development programs across three categories - Best CSR Impact Initiatives (Barmer Unnati Project) on Wednesday on September 18, 2019 in Bangalore by World CSR Congress.</p> <p>3) CII National Competition for Excellence in Water Management 2018 – Beyond the Fence for "Noteworthy Project in Water Management" awarded to Water Management &amp; NRM project in September 2018.</p> <p>4) SKOCH Bronze Award’ and ‘SKOCH Order of Merit’ awarded to Barmer Unnati Project on September 18, 2018 in New Delhi.</p> <p>5) Cairn felicitated and awarded the title of the ‘Highest Donor’ for contributing to Hon. CM (Rajasthan)’s signature initiative - Mukhya Mantri Jal Swavlamban Abhiyan (MJSA) by Mr. Shiva Prasad Nakate - District Collector, Barmer and Mr. M L Nehra - CEO, Zila Parishad, Barmer in June 2018.</p> <p>The project continued till March 2020 and launched new long-term agriculture NRM program with additional activities in FY 2021. Cairn has onboarded another credible partner agency – SM Sehgal Foundation to take up the watershed management &amp; NRM activities for another 3 years in the next phase of Barmer Unnati Project.</p>
35	<p>District collector has advised Company to upload into the Company website or Facebook page regarding the name, fathers name and village details etc., of all the people who were given the employment by the Company.</p>	<p>Company is maintaining the data related to employment provided to locals. However, the name of individuals is not disclosed on website. Cairn CSR program updates are available in Cairn as well as Vedanta websites. Please refer below website links -</p> <p><a href="https://foundation.cairnindia.com/Pages/homepage.aspx">https://foundation.cairnindia.com/Pages/homepage.aspx</a></p> <p><a href="https://www.cairnindia.com/Pages/CorporateSocialResponsibility.aspx">https://www.cairnindia.com/Pages/CorporateSocialResponsibility.aspx</a></p> <p><a href="https://www.vedantalimited.com/Pages/Cairn.aspx">https://www.vedantalimited.com/Pages/Cairn.aspx</a></p> <p>In addition, Cairn's corporate communication team keeps posting the CSR as well as other environment and business-related stories and updates through "Cairn Oil &amp; Gas" handle.</p> <p>Further all EOI tender / contract details are published on newspapers as well as Cairn websites.</p>
36	<p>District collector highlighted that for load testing, Company has authorized only one agency, due to which the agency is a monopoly and takes unreasonable charges. So, the people working for the Company are being exploited, whereas government test rates are very less. He also expressed that</p>	<p>Load testing is mandatory for safety of our work. In the interest of safety, we have authorized the agencies who are competent to carry out such load tests properly to prevent any accidents. Company has developed the criteria to assess &amp; authorize multiple agencies to carry out load test without compromising on safety. Currently, two agencies are authorized, and time to time we review documents of more companies carrying out load testing for authorization. Multiple agencies to carryout training &amp; certification of personnel on lifting safety.</p>

S. No.	Concerns/Suggestions	Status of actions (as of September 2024)
	by doing so, this is a way of preventing local people from working for the Company.	
37	District collector has suggested to set up a Centre for hearing and redressing the complaints of locals.	<b>Refer response to point no. 24 above</b>

## **Annexure – 7**

### **List of Environmental Clearances obtained for Exploration and Production of Hydrocarbons from RJON-90/1 Block Area**

**List of Environment Clearances for Extraction of Hydrocarbons from RJ-ON-90/1 Block in Barmer and Jalore Districts of Rajasthan**

Asset	EC File No.	Subject
RJ-ON-90/1 Production and Exploration	J-11011/382/2005 - IA II (I) dated 21 <sup>st</sup> March 2006	Hydrocarbon development of five fields namely, Mangala, Aishwariya, Saraswathi, Raageshwari oil and gas fields in RJ-ON-90/1 block of M/s Cairn India Ltd.
	J-11011/174/2007 - IA II (I) Dated 12 <sup>th</sup> March 2008	Hydrocarbon development of Bhagyam field in the RJ-ON-90/1 block, Rajasthan – Environment Clearance
	J-11011/175/2007 - IA II (I) dated 17 <sup>th</sup> May 2007 & dated 13 <sup>th</sup> December 2013.	Proposed hydrocarbon development and production of Guda Field in RJ-ON 90/1, block in Barmer and Jalore district in Rajasthan by M/s Cairn India. Ltd – Environment Clearance
	J-11011/98/2010 - IA II (I) Dated 23 <sup>rd</sup> November 2010	Augmentation of Crude Oil Production & Processing Capacity (140,000 BoPD to 1,60,000 BoPD) and Associated Gas Production (20.4 MMSCFD to 32 MMSCFD) at Mangala Processing Terminal (MPT) and Well Pads within RJ-ON-90/1 Block at District Barmer, Rajasthan – Environment Clearance
	J-11011/98/2010 - IA II (I) dated 16 <sup>th</sup> Oct 2012	Augmentation of crude oil production & processing capacity (160,000 BoPD to 175,000 BoPD) and associated gas production (32 MMSCFD to 35 MMSCFD) at Mangala Processing Terminal (MPT) and well pads within RJ-ON-90/1 block, Rajasthan – Environment Clearance
	J-11011/108/2012 - IA II (I) dated 14 <sup>th</sup> June 2013	Increase in crude oil production capacity from Mangala Processing Terminal (MPT) (in RJ-ON-9011 Block, Rajasthan) from 175,000 to 200,000 Bopd (Barrels of oil per day) and associated gas from 35 to 40 million standard cubic feet per day at village Nagana, Tehsil & District Barmer, Rajasthan by M/s Cairn India. Ltd
	J-11011/80/2013 - IA II (I) dated 11 <sup>th</sup> August 2014 and amendment dated 26 <sup>th</sup> April 2016	Augmentation of Hydro carbon production (2 lakh Bopd to 3 lakh Bopd) and 165 MMSCFD natural gas in RJ-ON – 90/01, block of M/s Vedanta Ltd. Located in Barmer and Jalore Districts, Rajasthan – Environment Clearance
	J-11011/13/2018 - IA II (I) dated 11 <sup>th</sup> April 2019	Enhancement of Production of Crude Oil 3 lac to 4 lac BOPD & Natural Gas from 250 to 750 MMSCFD Natural Gas in RJON 90/1 block at Barmer
	J-11011/25/2013 - IA II (I) dated: 8 <sup>th</sup> August 2014	Drilling of Exploratory/Appraisal Wells (300) at RJ-ON-90/1 Block of M/s Cairn India Ltd. at District Barmer & Jalore, Rajasthan - Environment Clearance



## **ANNEXURE NO. 08**

Brief Introduction – Environmental Laboratory

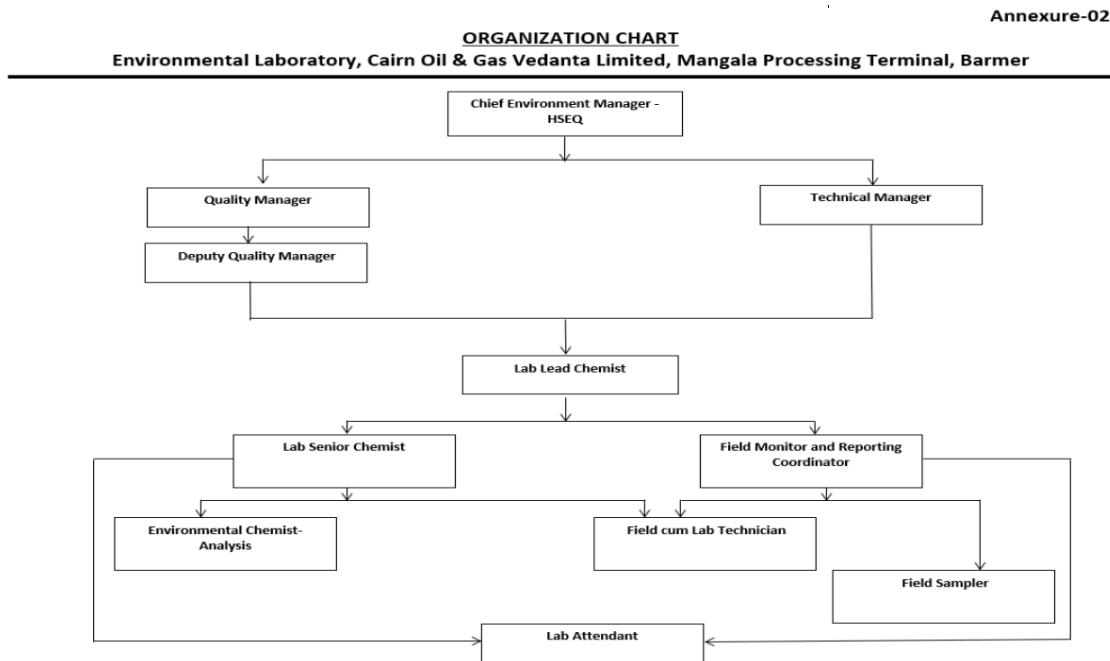
## 1.0 Introduction

Cairn oil and gas division is part of Vedanta Limited Group in joint venture with ONGC is operating an onshore oil & gas block RJ-ON-90/1 in Barmer and Jalore districts of Western Rajasthan. Vedanta Limited, in joint venture with ONGC is operating an onshore RJ-ON-90/1 block. The block is situated in the Barmer and Jalore districts of Western Rajasthan. Cairn has obtained Environmental Clearance for production of 400,000 BOPD of Crude Oil and 750 MMSCFD Natural Gas from block area.

Cairn is committed to Health and Safety of its workers and surrounding communities as well as protection of environment. Cairn has developed a full flagged Environmental Laboratory in RJON block area to carry out environmental condition monitoring. The lab is situated at its Mangala Processing Terminal (MPT) and **in operation since November 2014**. The laboratory gets approved by National Accreditation Board for Testing and Calibration Laboratories (**NABL**) for chemical testing in 2019. Copy of NABL certificate and detail scope is provided as an annexure to this document. Cairn has developed Environmental Monitoring Plan and Lab Operational manuals for routine operations and quality control. Details of Environmental Laboratory as provided in subsequent sections.

## 2.0 Organogram:

Cairn has dedicated environmental monitoring cells and organogram of Environmental Lab is as below:



Laboratory Manpower involved in Lab operation and Maintenance:

S.No.	Designation	No. of Position
1.	Lead Chemist	01
2.	Sr. Chemist	01
3.	Chemist	01
4.	Environment Field Coordinator	01
5.	Field Cum Lab Technician	01
6.	Field Sampler/Lab Helper	01
Total Manpower		06

#### List of Equipment and Instruments available at Environmental Lab

Cairn has following lab equipment and instruments to carry out sampling and analysis of various environmental attributes like Ambient Air Quality, Ambient Noise Quality, Stack Emission, Water, Wastewater, Solid and Hazardous Waste.

Master List of Equipment/Instrument			
S. No.	Name of Equipment	UID	Make/Model/Type/Year
1.	Respirable Dust Sampler	CAIRN/EL/RDS/1	Envirotech & APM-460 DXNL 124-DTE-2012
2.	Respirable Dust Sampler	CAIRN/EL/RDS/3	Envirotech & APM-460 DXNL 123-DTE-2012
3.	Respirable Dust Sampler	CAIRN/EL/RDS/4	Envirotech & APM-460 DXNL 335-R-225-DTL-2013
4.	Respirable Dust Sampler	CAIRN/EL/RDS/5	Envirotech & APM-460 DXNL 126-DTE-2012
5.	Gaseous Sampling Attachment	CAIRN/EL/GSA/1	Envirotech & APM-411-TE1266-DTK-2013 /Rotameter 13/0437
6.	Gaseous Sampling Attachment	CAIRN/EL/GSA/2	Envirotech & APM-411-TE 1277-DTL-2013 Rotameter 13/1241
7.	Gaseous Sampling Attachment	CAIRN/EL/GSA/3	Envirotech & APM-411-TE 1265-DTK-2013 Rotameter 13/0410
8.	Gaseous Sampling Attachment	CAIRN/EL/GSA/4	Envirotech & APM-411-TE 1059-DTE-2012 Rotameter 12/0310
9.	Gaseous Sampling Attachment	CAIRN/EL/GSA/5	Envirotech & APM-411-TE 1278-DTL-2013 Rotameter 13/1201
10	Gaseous Sampling Attachment	CAIRN/EL/GSA/6	Envirotech & APM -433 469-DTJ-2013 Rotameter PGD 171972
11	Gaseous Sampling Attachment	CAIRN/EL/GSA/7	Envirotech & APM -411TE 1060-DTE-2012 Rotameter 12/0306

Master List of Equipment/Instrument			
S. No.	Name of Equipment	UID	Make/Model/Type/Year
12	Gaseous Sampling Attachment	CAIRN/EL/GSA/8	Envirotech & APM -411TE 1276-DTL-2013 Rotameter B16A534
13	Gaseous Sampling Attachment	CAIRN/EL/GSA/9	Envirotech & APM -411 TE 1279-DTL-2013 Rotameter 13/0333
14	Gaseous Sampling Attachment	CAIRN/EL/GSA/10	Envirotech & APM -411TE 1058-DTE-2012 Rotameter 12/0341
15	Fine Particulate Sampler	CAIRN/EL/FPS/1	Envirotech & APM-550 1416-DTK-1013
16	Fine Particulate Sampler	CAIRN/EL/FPS/2	Envirotech & APM-550 1414-DTK-1013 S. No. 130701942
17	Fine Particulate Sampler	CAIRN/EL/FPS/3	Envirotech & APM-550 1422-DTK-2013 DGM NO. 130701944
18	Fine Particulate Sampler	CAIRN/EL/FPS/4	Envirotech & APM-550 1425-DTK-2013 DGM NO. 130700103
19	Fine Particulate Sampler	CAIRN/EL/FPSMFC/1	Envirotech & APM-550-MFC 118-DTF-2012
20	Stack Sampler	CAIRN/EL/SS/1	Vayubodhan-VSS-1 28-DTA-12
21	Rotameter 0-30 LPM	CAIRN/EL/SK/1	S.S FLOW S. No. F11B892
22	Rotameter 0-3 LPM	CAIRN/EL/SS/1	S.S FLOW S. No. F11B938
23	Differential Pressure Meter	CAIRN/EL/SS/1	Vayubodhan 28-DTA-12 Testo-510 S. No. PI-28
24	Vacuum Gauge -01	CAIRN/EL/SS/1	Vayubodhan-VSS-1 S. No. SVG-28 28-DTA-12
25	Vacuum Gauge -02	CAIRN/EL/SK/1	Vayubodhan-VSS-1 S. No. SVG-28 28-DTA-12
26	Pyrometer (k-type)	CAIRN/EL/SS/1	Vayubodhan-VSS-1 TP-28 28-DTA-12
27	Stopwatch	CAIRN/EL/SK/1	Vayubodhan-VSS-1 SW-28 28-DTA-12
28	Pitot Tube (0.6 Meter)	CAIRN/EL/SS/1	Vayubodhan S-typeV-46
29	Stack Sampler	CAIRN/EL/SS/2	Envirotech & VSS-3 10-DTA-2018
30	Rotameter 0-30 LPM	CAIRN/EL/SS/2	Envirotech & VSS-3 10-DTA-2018
31	Rotameter 0-03 LPM	CAIRN/EL/SS/2	Envirotech & VSS-3 10-DTA-2018
32	Differential Pressure Meter	CAIRN/EL/SS/2	Envirotech & VSS-3 10-DTA-2018
33	Vacuum Gauge -01	CAIRN/EL/SS/2	Envirotech & VSS-3 10-DTA-2018
34	Vacuum Gauge -02	CAIRN/EL/SS/2	Envirotech & VSS-3 10-DTA-2018
35	Pyrometer (k-type)	CAIRN/EL/SS/2	Envirotech & VSS-3 10-DTA-2018

Master List of Equipment/Instrument			
S. No.	Name of Equipment	UID	Make/Model/Type/Year
36	Stopwatch	CAIRN/EL/SS/2	Envirotech & VSS-3 10-DTA-2018
37	Pitot Tube (1.0 Meter)	CAIRN/EL/SS/2	Envirotech & VSS-3 10-DTA-2018
38	Diaphragm Gas Meter	CAIRN/EL/SS/2	Envirotech & VSS-3 10-DTA-2018
39	Sound Level Meter	CAIRN/EL/SLM/1	Envirotech & SLM 109554006
40	Sound Level Meter	CAIRN/EL/SLM/2	Envirotech & SLM 109554007
41	Sound Level Meter	CAIRN/EL/SLM/3	Envirotech & SLM 110554008
42	Sound Level Meter	CAIRN/EL/SLM/4	Quest Techlogies DKL 050001
43	UV-VIS-Spectrophotometer	CAIRN/EL/UV-VIS Spectrophotometer/1	HACH DR 5000 S. No. 1423979
44	UV-VIS-Spectrophotometer	CAIRN/EL/UV-VIS Spectrophotometer/2	Shimadzu Corp. UV-1800 A11454907996 CD
45	Weighing Balance	CAIRN/EL/WB/1	Mettler Toledo XSE205DU B516852005
46	Weighing Balance	CAIRN/EL/WB/2	Mettler Toledo XP6B 518885098
47	Weight Box	CAIRN/EL/WBX/1	DANWER2160107
48	Digital Thermo-Hygrometer	CAIRN/EL/DTH/01	CTH 288
49	Digital Thermo-Hygrometer	CAIRN/EL/DTH/02	CTH 288
50	Digital Thermo-Hygrometer	CAIRN/EL/DTH/03	CTH 288
51	Digital Thermo-Hygrometer	CAIRN/EL/DTH/04	CTH 288
52	Digital Thermo-Hygrometer	CAIRN/EL/DTH/05	Ankom International Bangalore/CENTER 31/ HYGRO THERMOMETER110811193
53	Test Sieves 425 micron	CAIRN/EL/TS/1	SETHI/WIRE TYPE
54	Test Sieves 2 mm	CAIRN/EL/TS/2	SETHI/WIRE TYPE
55	Wind Monitoring System	CAIRN/EL/WM/1	Envirotech/WW-271 327-DTB-2014
56	Hot Air Oven 300°C	CAIRN/EL/HAO/1	Puja Scientific Instruments 6/2012
57	pH/Conductivity Meter	CAIRN/EL/Ph,Cond./1	Hack HQ30d
58	Digital Temperature Controller Refrigerator	CAIRN/EL/REF/1	Remi E. Ltd BPI-2408
59	BOD Incubator	CAIRN/EL/BOD/2	WTC TS 606/3-i193-EA-67

Master List of Equipment/Instrument			
S. No.	Name of Equipment	UID	Make/Model/Type/Year
60	COD Digestor	CAIRN/EL/COD/1	Lab Line A1.7782
61	Temperature Controller with Sensor of Muffle Furnace	CAIRN/EL/MF/1	Puja Scientific
62	Water Bath	CAIRN/EL/Water Bath/1	Puja Scientific
63	Heating Magnetic Stirrer	CAIRN/EL/HMS/1	VLEP
64	Glass Thermometer -10 to 110 °C	93446	Omsons
65	Glass Thermometer 0 to 400 °F	93691	Omsons
66	Flue Gas Analyser	CAIRN/EL/FGA/01	Kane 9206

### 3.0 List of Parameters tested

Environment lab has capability to analyses following parameters:

#### Scope of Accreditation

S. No	Group of products, materials or items tested	Specific tests performed	* Test Method / Standard against which tests are performed
I.	ATMOSPHERIC POLLUTION		
1	Ambient Air Quality Monitoring	Ammonia (NH <sub>3</sub> )	IS 5182 (Part 25): 2018
		Hydrogen Fluoride	IS 5182 (Part 13): 1991:2019
		Hydrogen Sulphide	IS 5182 (Part 07): 2021
		Nitrogen Oxides (NO <sub>x</sub> )	IS: 5182 (Part 6) – 2006: 2017
		Ozone (O <sub>3</sub> )	IS: 5182 (Part 9) - 1974:2019
		Particulate Matter (PM10)	IS: 5182 (Part 23) – 2006: 2022
		Particulate Matter (PM2.5)	IS 5182 (Part 24): 2019
		Sulphur Dioxide (SO <sub>2</sub> )	IS: 5182 (Part 2/Sec 1) 2023
2	Stack Emission Monitoring	Total Fluoride	IS 5182 (Part 13): 1991:2019
		Particulate Matter (PM)	IS: 11255 (Part 1) -1985: 2014
		Sulphur Dioxide (SO <sub>2</sub> )	IS: 11255 (Part 2) - 1985: 2014
		Nitrogen Oxides (NO <sub>x</sub> )	IS: 11255 (Part 7) - 2005: 2017
		Flue Gas Velocity	IS: 11255 (Part 3): 2008: 2013
		Carbon Disulphide (CS <sub>2</sub> )	IS: 11255 (Part 4): 2022
3	Noise- Ambient Noise	Hydrogen Sulphide (H <sub>2</sub> S)	IS: 11255 (Part 4): 2022
		Ambient Noise Level	IS: 9989:1981:2020

S. No	Group of products, materials or items tested	Specific tests performed	* Test Method / Standard against which tests are performed
4	Noise- Source Noise	Source Noise Level	IS: 4758-1968: 2017
5	Meteorological Parameters	Wind Speed	SOP: Wind Monitor WM 271 RJON-RX-EM-PRO-0022 Issue date 01-01-2021
		Temperature	SOP: Wind Monitor WM 271 RJON-RX-EM-PRO-0022 Issue date 01-01-2021
		Relative Humidity	SOP: Wind Monitor WM 271 RJON-RX-EM-PRO-0022 Issue date 01-01-2021
		Wind Direction	SOP: Wind Monitor WM 271 RJON-RX-EM-PRO-0022 Issue date 01-01-2021
		Rain Fall	SOP: Wind Monitor WM 271 RJON-RX-EM-PRO-0022 Issue date 01-01-2021
II.	POLLUTION & ENVIRONMENT		
1	Wastewater (Sewage /Effluent)	Acidity	IS: 3025 (Part 22) – 1986:2019
		Ammonical Nitrogen	IS: 3025 (Part 34): 2019
		Bi-Carbonate Alkalinity	IS: 3025 (Part 51) –2023
		Biochemical Oxygen Demand (BOD)	IS: 3025 (Part 44) - 1993 (RA 2014)
		Calcium as Ca	IS: 3025 (Part 40) – 1991:2019
		Carbonate Alkalinity	IS: 3025 (Part 51) - 2023
		Chemical Oxygen Demand (COD)	IS: 3025 (Part 58) – 2006 (RA 2017)
		Chloride as Cl-	IS: 3025 (Part 32) – 1988:2019
		Chromium Hexavalent as Cr+6	IS: 3025 (Part 52) – 2003:2019
		Colour/Appearance	APHA (24th Edition) 2120-C; 2023
		Copper (as Cu)	IS: 3025 (Part 42): 2019
		Dissolved Oxygen DO	APHA (24th Edition) 4500 O-C; 2023
		Electrical Conductivity	IS: 3025 (Part 14) – 2013:2019
		Fixed Solids	APHA (24th Edition)2540-E; 2023
		Fluoride as F -	APHA (24th Edition) 4500 F- D: 2023
		Iron as Fe	IS: 3025 (Part 53) – 2003:2019
		Magnesium as Mg	IS: 3025 (Part 46) – 2023
		Nitrate (as NO <sub>3</sub> )	APHA (24th Edition) 4500 NO <sub>3</sub> -B; 2023
		Oil & Grease	IS: 3025 (Part 39) - 2021
		pH Value	IS: 3025 (Part 11) - 2022
Phenolic compounds (as CH <sub>5</sub> OH),	IS: 3025 (Part 43/Sec 1) - 2022		
Phosphorus	APHA (24th Edition) 4500 P-D; 2023		
Residual Free Chlorine	IS: 3025 (Part 26) - 2021		

S. No	Group of products, materials or items tested	Specific tests performed	* Test Method / Standard against which tests are performed
		Silica as SiO <sub>2</sub>	APHA (24th Edition) 4500 SiO <sub>2</sub> -C; 2023
		Sulphate as SO <sub>4</sub> -	APHA (24th Edition) 4500 SO <sub>4</sub> -E; 2023
		Sulphide	IS: 3025 (Part 29) - 1986 (RA 2014)
		Temperature	IS: 3025 (Part 9) - 2023
		Total Alkalinity	IS: 3025 (Part 23) - 2023
		Total Dissolved Solids	IS: 3025 (Part 16) - 2023
		Total Hardness	IS: 3025 (Part 21) – 2009:2019
		Total Solids	IS: 3025 (Part 15) – 1984:2019
		Total Suspended Solid (TSS)	IS: 3025 (Part 17) - 2022
		Turbidity	IS: 3025 (Part 10): 2023
		Volatile Solids	APHA (24th Edition)2540-E; 2023
<b>III.</b>	<b>SOIL</b>		
1	Soil	Calcium	Soil Testing Method manual by Govt. of India: 2011
		Calcium Carbonate	IS:2720 Part-23: 2020
		Electrical Conductivity	IS 14767 :2000: 2021
		Magnesium	Soil Testing Method manual by Govt. of India: 2011
		Organic Carbon	IS:2720 Part-22: 2020
		Organic Matter	IS:2720 Part-22: 2020
		pH Value	IS 2720 (Part 26):1987: 2021
		Total Soluble Sulphates	IS:2720 Part-27: 2020
		Water Content	IS 2720 (Part 2):1973:2020
<b>IV.</b>	<b>WATER</b>		
1	Drinking Water	Acidity	IS: 3025 (Part 22) – 1986:2019
		Ammonical Nitrogen	IS: 3025 (Part 34): 2019
		Bi-Carbonate Alkalinity	IS: 3025 (Part 51) –2023
		Calcium	IS: 3025 (Part 40) – 1991:2019
		Carbonate Alkalinity	IS: 3025 (Part 51) - 2023
		Chloride as Cl-	IS: 3025 (Part 32) – 1988:2019
		Chromium Hexavalent	IS: 3025 (Part 52) – 2003:2019
		Colour/Appearance	APHA (24th Edition) 2120-C; 2023
		Dissolved Oxygen DO	APHA (24th Edition) 4500 O-C; 2023:2023
		Electrical Conductivity	IS: 3025 (Part 14) – 2013:2019
		Fixed Solids	APHA (24th Edition) 2540-E; 2023:2023
		Fluoride as F -	APHA (24th Edition) 4500 F- D: 2023:2023
		Iron as Fe	IS: 3025 (Part 53) – 2003:2019
		Magnesium	IS: 3025 (Part 46) – 2023
		Nitrate (as NO <sub>3</sub> )	APHA (24th Edition) 4500 NO <sub>3</sub> -B; 2023:2023



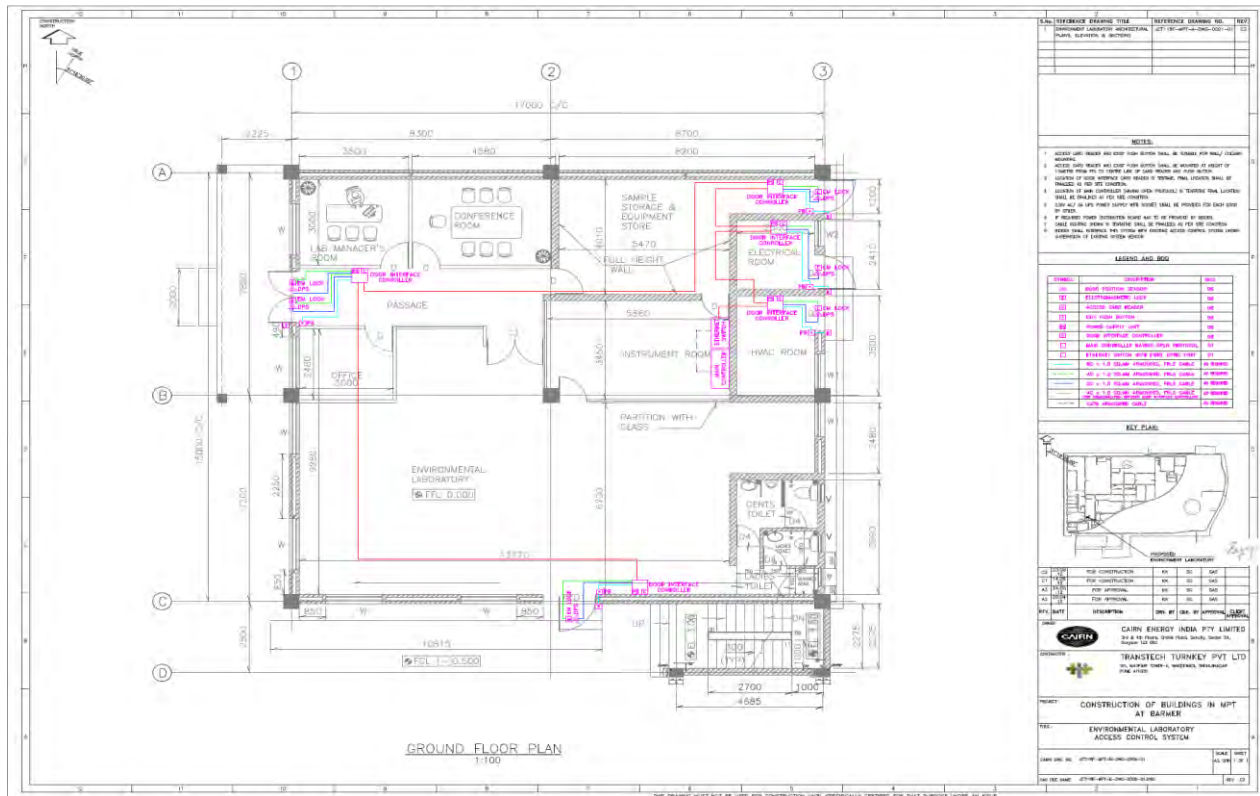
S. No	Group of products, materials or items tested	Specific tests performed	* Test Method / Standard against which tests are performed
2	Potable Water	Odor	IS: 3025 (Part 5) - 2018
		Oil & Grease	IS: 3025 (Part 39) - 2021
		pH Value @ 25 °C	IS: 3025 (Part 11) - 2022
		Phenolic compounds (as CH <sub>5</sub> OH),	IS: 3025 (Part 43/Sec 1) - 2022
		Phosphorus	APHA (24th Edition) 4500 P-D; 2023:2023
		Residual Free Chlorine	IS: 3025 (Part 26) - 2021
		Silica as SiO <sub>2</sub>	APHA (24th Edition) 4500 SiO <sub>2</sub> -C; 2023:2023
		Sulphate as SO <sub>4</sub> -	APHA (24th Edition) 4500 SO <sub>4</sub> -E; 2023:2023
		Temperature	IS: 3025 (Part 9) - 2023
		Total Alkalinity	IS: 3025 (Part 23) - 2023
		Total Dissolved Solids	IS: 3025 (Part 16) - 2023
		Total Hardness	IS: 3025 (Part 21) – 2009:2019
		Total Solids	IS: 3025 (Part 15) – 1984:2019
		Total Suspended Solid (TSS)	IS: 3025 (Part 17) - 2022
		Turbidity	IS: 3025 (Part 10): 2023
		Volatile Solids	APHA (24th Edition)2540-E; 2023
		Acidity	IS: 3025 (Part 22) – 1986:2019
		Ammonical Nitrogen	IS: 3025 (Part 34): 2019
		Bi-Carbonate Alkalinity	IS: 3025 (Part 51) –2023
		Calcium	IS: 3025 (Part 40) – 1991:2019
		Carbonate Alkalinity	IS: 3025 (Part 51) - 2023
		Chloride as Cl-	IS: 3025 (Part 32) – 1988:2019
		Chromium Hexavalent	IS: 3025 (Part 52) – 2003:2019
		Colour/Appearance	APHA (24th Edition) 2120-C; 2023
		Copper (as Cu)	IS: 3025 (Part 42): 2019
		Dissolved Oxygen DO	APHA (24th Edition) 4500 O-C; 2023
		Electrical Conductivity	IS: 3025 (Part 14) – 2013:2019
Fixed Solids	APHA (24th Edition)2540-E; 2023		
Fluoride as F -	APHA (24th Edition) 4500 F- D: 2023		
Iron as Fe	IS: 3025 (Part 53) – 2003:2019		
Magnesium	IS: 3025 (Part 46) – 2023		
Nitrate (as NO <sub>3</sub> )	APHA (24th Edition) 4500 NO <sub>3</sub> -B; 2023		
Odor	IS: 3025 (Part 5) - 2018		
Oil & Grease	IS: 3025 (Part 39) - 2021		
pH Value @ 25 °C	IS: 3025 (Part 11) - 2022		
Phenolic compounds (as CH <sub>5</sub> OH),	IS: 3025 (Part 43/Sec 1) - 2022		
Phosphorus	APHA (24th Edition) 4500 P-D; 2023		
Residual Free Chlorine	IS: 3025 (Part 26) - 2021		

S. No	Group of products, materials or items tested	Specific tests performed	* Test Method / Standard against which tests are performed
3	Ground Water	Silica as SiO <sub>2</sub>	APHA (24th Edition) 4500 SiO <sub>2</sub> -C; 2023
		Sulphate as SO <sub>4</sub> -	APHA (24th Edition) 4500 SO <sub>4</sub> -E; 2023
		Sulphide	IS: 3025 (Part 29) - 1986 (RA 2014)
		Temperature	IS: 3025 (Part 9) - 2023
		Total Alkalinity	IS: 3025 (Part 23) - 2023
		Total Dissolved Solids	IS: 3025 (Part 16) - 2023
		Total Hardness	IS: 3025 (Part 21) – 2009:2019
		Total Solids	IS: 3025 (Part 15) – 1984:2019
		Total Suspended Solid (TSS)	IS: 3025 (Part 17) - 2022
		Turbidity	IS: 3025 (Part 10): 2023
		Volatile Solids	APHA (24th Edition) 4500 O-C; 2023
		Acidity	IS: 3025 (Part 22) – 1986:2019
		Ammonical Nitrogen	IS: 3025 (Part 34): 2019
		Bi-Carbonate Alkalinity	IS: 3025 (Part 51) –2023
		Calcium	IS: 3025 (Part 40) – 1991:2019
		Carbonate Alkalinity	IS: 3025 (Part 51) - 2023
		Chloride as Cl-	IS: 3025 (Part 32) – 1988:2019
		Chromium Hexavalent	IS: 3025 (Part 52) – 2003:2019
		Colour/Appearance	APHA (24th Edition) 2120-C; 2023
		Copper (as Cu)	IS: 3025 (Part 42): 2019
		Dissolved Oxygen DO	APHA (24th Edition) 4500 O-C; 2023
		Electrical Conductivity	IS: 3025 (Part 14) – 2013:2019
Fixed Solids	APHA (24th Edition) 2540-E; 2023		
Fluoride as F -	APHA (24th Edition) 4500 F- D: 2023		
Iron as Fe	IS: 3025 (Part 53) – 2003:2019		
Magnesium	IS: 3025 (Part 46) – 2023		
Nitrate (as NO <sub>3</sub> )	APHA (24th Edition) 4500 NO <sub>3</sub> -B; 2023		
Odor	IS: 3025 (Part 5) - 2018		
Oil & Grease	IS: 3025 (Part 39) - 2021		
pH Value @ 25 °C	IS: 3025 (Part 11) - 2022		
Phenolic compounds (as CH <sub>5</sub> OH),	IS: 3025 (Part 43/Sec 1) - 2022		
Phosphorus	APHA (24th Edition) 4500 P-D; 2023		
Residual Free Chlorine	IS: 3025 (Part 26) - 2021		
Silica as SiO <sub>2</sub>	APHA (24th Edition) 4500 SiO <sub>2</sub> -C; 2023		
Sulphate as SO <sub>4</sub> -	APHA (24th Edition) 4500 SO <sub>4</sub> -E; 2023		
Sulphide	IS: 3025 (Part 29) - 1986 (RA 2014)		
Temperature	IS: 3025 (Part 9) - 2023		
Total Alkalinity	IS: 3025 (Part 23) - 2023		
Total Dissolved Solids	IS: 3025 (Part 16) - 2023		
Total Hardness	IS: 3025 (Part 21) – 2009:2019		
Total Solids	IS: 3025 (Part 15) – 1984:2019		
Total Suspended Solid (TSS)	IS: 3025 (Part 17) - 2022		

S. No	Group of products, materials or items tested	Specific tests performed	* Test Method / Standard against which tests are performed
		Turbidity	IS: 3025 (Part 10): 2023
		Volatile Solids	APHA (24th Edition) 4500 O-C; 2023

#### 4.0 Lab Building Layout:

Environment lab is situated in Mangala Processing Terminal. The lab is having office space, small conference room, storage rooms for samples, lab equipment, chemicals, hot zone and instrument room. Layout of Environment lab is provided below.





National Accreditation Board for  
Testing and Calibration Laboratories

NABL

**CERTIFICATE OF ACCREDITATION**

**ENVIRONMENTAL LABORATORY-CAIRN OIL & GAS  
VEDANTA LTD**

has been assessed and accredited in accordance with the standard

**ISO/IEC 17025:2017**

**"General Requirements for the Competence of Testing &  
Calibration Laboratories"**

for its facilities at

MANGLA PROCESSING TERMINAL, VILLAGE- NAGANA, BARMER, RAJASTHAN, INDIA

in the field of

**TESTING**

Certificate Number: TC-11983

Issue Date: 25/07/2023

Valid Until: 24/07/2025

This certificate remains valid for the Scope of Accreditation as specified in the annexure subject to continued satisfactory compliance to the above standard & the relevant requirements of NABL.  
(To see the scope of accreditation of this laboratory, you may also visit NABL website [www.nabl-india.org](http://www.nabl-india.org))

Name of Legal Identity : ENVIRONMENTAL LABORATORY - CAIRN OIL & GAS, VEDANTA LTD

Signed for and on behalf of NABL



N. Venkateswaran  
Chief Executive Officer



## National Accreditation Board for Testing and Calibration Laboratories

### SCOPE OF ACCREDITATION

<b>Laboratory Name :</b>	ENVIRONMENTAL LABORATORY-CAIRN OIL & GAS VEDANTA LTD, MANGLA PROCESSING TERMINAL, VILLAGE- NAGANA, BARMER, RAJASTHAN, INDIA
<b>Accreditation Standard</b>	ISO/IEC 17025:2017
<b>Certificate Number</b>	TC-11983
<b>Validity</b>	25/07/2023 to 24/07/2025
<b>Page No</b>	1 of 7
<b>Last Amended on</b>	-

S.No	Discipline / Group	Materials or Products tested	Component, parameter or characteristic tested / Specific Test Performed / Tests or type of tests performed	Test Method Specification against which tests are performed and / or the techniques / equipment used
Permanent Facility				
1	CHEMICAL- ATMOSPHERIC POLLUTION	Ambient Air	Ammonia (NH3)	IS 5182 (Part 25)
2	CHEMICAL- ATMOSPHERIC POLLUTION	Ambient Air	Hydrogen Fluoride	IS 5182 (Part 13)
3	CHEMICAL- ATMOSPHERIC POLLUTION	Ambient Air	Hydrogen Sulphide	IS 5182 (Part 07)
4	CHEMICAL- ATMOSPHERIC POLLUTION	Ambient Air	Nitrogen Oxides (NOx)	IS : 5182 (Part 6)
5	CHEMICAL- ATMOSPHERIC POLLUTION	Ambient Air	Ozone (O3)	IS : 5182 (Part 9)
6	CHEMICAL- ATMOSPHERIC POLLUTION	Ambient Air	Particulate Matter (PM10)	IS : 5182 (Part 23)
7	CHEMICAL- ATMOSPHERIC POLLUTION	Ambient Air	Particulate Matter (PM2.5)	IS 5182 (Part 24)
8	CHEMICAL- ATMOSPHERIC POLLUTION	Ambient Air	Sulphur Dioxide (SO2)	IS : 5182 (Part 2)
9	CHEMICAL- ATMOSPHERIC POLLUTION	Ambient Air	Total Fluoride	IS 5182 (Part 13)
10	CHEMICAL- ATMOSPHERIC POLLUTION	Ambient Noise	Noise	IS: 9989
11	CHEMICAL- ATMOSPHERIC POLLUTION	Meteorological Parameters	Rain Fall	SOP-RJON-RX-EML-PRO-0022
12	CHEMICAL- ATMOSPHERIC POLLUTION	Meteorological Parameters	Relative Humidity	SOP-RJON-RX-EML-PRO-0022
13	CHEMICAL- ATMOSPHERIC POLLUTION	Meteorological Parameters	Temperature	SOP-RJON-RX-EML-PRO-0022
14	CHEMICAL- ATMOSPHERIC POLLUTION	Meteorological Parameters	Wind Direction	SOP-RJON-RX-EML-PRO-0022
15	CHEMICAL- ATMOSPHERIC POLLUTION	Meteorological Parameters	Wind Speed	SOP-RJON-RX-EML-PRO-0022
16	CHEMICAL- ATMOSPHERIC POLLUTION	Source Noise	Noise	IS: 4758-19
17	CHEMICAL- ATMOSPHERIC POLLUTION	Stack Emission Monitoring	Carbon Disulphide (CS2)	IS: 11255 (Part 4)
18	CHEMICAL- ATMOSPHERIC POLLUTION	Stack Emission Monitoring	Flue Gas Velocity	IS: 11255 (Part 3)



## National Accreditation Board for Testing and Calibration Laboratories

### SCOPE OF ACCREDITATION

<b>Laboratory Name :</b>	ENVIRONMENTAL LABORATORY-CAIRN OIL & GAS VEDANTA LTD, MANGLA PROCESSING TERMINAL, VILLAGE- NAGANA, BARMER, RAJASTHAN, INDIA		
<b>Accreditation Standard</b>	ISO/IEC 17025:2017		
<b>Certificate Number</b>	TC-11983	<b>Page No</b>	2 of 7
<b>Validity</b>	25/07/2023 to 24/07/2025	<b>Last Amended on</b>	-

S.No	Discipline / Group	Materials or Products tested	Component, parameter or characteristic tested / Specific Test Performed / Tests or type of tests performed	Test Method Specification against which tests are performed and / or the techniques / equipment used
19	CHEMICAL- ATMOSPHERIC POLLUTION	Stack Emission Monitoring	Hydrogen Sulphide (H <sub>2</sub> S)	IS : 11255 (Part 4)
20	CHEMICAL- ATMOSPHERIC POLLUTION	Stack Emission Monitoring	Nitrogen Oxides (NO <sub>2</sub> )	IS : 11255 (Part 7)
21	CHEMICAL- ATMOSPHERIC POLLUTION	Stack Emission Monitoring	Particulate Matter (PM)	IS : 11255 (Part 1)
22	CHEMICAL- ATMOSPHERIC POLLUTION	Stack Emission Monitoring	Sulphur Dioxide (SO <sub>2</sub> )	IS : 11255 (Part 2)
23	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Acidity	IS : 3025 (Part 22)
24	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Ammonical Nitrogen	IS : 3025 (Part 34)
25	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Bi-Carbonate Alkalinity	IS : 3025 (Part 51)
26	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Biochemical Oxygen Demand (BOD)	IS : 3025 (Part 44)
27	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Calcium as Ca	IS : 3025 (Part 40)
28	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Carbonate Alkalinity	IS : 3025 (Part 51)
29	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Chemical Oxygen Demand (COD)	IS : 3025 (Part 58)
30	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Chloride as Cl <sup>-</sup>	IS : 3025 (Part 32)
31	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Chromium Hexavalent as Cr+6	IS : 3025 (Part 52)
32	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Colour/Appearance	APHA (23rd Edition) 2120-C
33	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Copper (as Cu)	IS : 3025 (Part 42)
34	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Dissolved Oxygen DO	APHA (23rd Edition) 4500 O-C
35	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Electrical Conductivity	IS : 3025 (Part 14)
36	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Fixed Solids	APHA (23rd Edition) 2540-E
37	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Fluoride as F <sup>-</sup>	APHA (23rd Edition) 4500 F- D



## National Accreditation Board for Testing and Calibration Laboratories

### SCOPE OF ACCREDITATION

<b>Laboratory Name :</b>	ENVIRONMENTAL LABORATORY-CAIRN OIL & GAS VEDANTA LTD, MANGLA PROCESSING TERMINAL, VILLAGE- NAGANA, BARMER, RAJASTHAN, INDIA		
<b>Accreditation Standard</b>	ISO/IEC 17025:2017		
<b>Certificate Number</b>	TC-11983	<b>Page No</b>	3 of 7
<b>Validity</b>	25/07/2023 to 24/07/2025	<b>Last Amended on</b>	-

S.No	Discipline / Group	Materials or Products tested	Component, parameter or characteristic tested / Specific Test Performed / Tests or type of tests performed	Test Method Specification against which tests are performed and / or the techniques / equipment used
38	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Iron as Fe	IS : 3025 (Part 53)
39	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Magnesium as Mg	IS : 3025 (Part 46)
40	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Nitrate (as NO <sub>3</sub> )	APHA (23rd Edition) 4500 NO <sub>3</sub> -B
41	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Oil & Grease	IS : 3025 (Part 39)
42	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	pH Value	IS : 3025 (Part 11)
43	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Phenolic compounds	IS : 3025 (Part 43)
44	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Phosphorus	APHA (23rd Edition) 4500 P-D
45	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Residual Free Chlorine	IS : 3025 (Part 26)
46	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Silica as SiO <sub>2</sub>	APHA (23rd Edition) 4500 SiO <sub>2</sub> -C
47	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Sulphates as SO <sub>4</sub> <sup>-</sup>	APHA (23rd Edition) 4500 SO <sub>4</sub> -E
48	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Sulphide	IS : 3025 (Part 29)
49	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Temperature	IS : 3025 (Part 9)
50	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Total Alkalinity	IS : 3025 (Part 23)
51	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Total Dissolve Solid	IS : 3025 (Part 16)
52	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Total Hardness	IS : 3025 (Part 21)
53	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Total Solids	IS : 3025 (Part 15)
54	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Total Suspended Solid (TSS)	IS : 3025 (Part 17)
55	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Turbidity	IS : 3025 (Part 10)
56	CHEMICAL- POLLUTION & ENVIRONMENT	Waste Water (Sewage /Effluent)	Volatile Solids	APHA (23rd Edition) 4500 O-C



## National Accreditation Board for Testing and Calibration Laboratories

### SCOPE OF ACCREDITATION

**Laboratory Name :**

ENVIRONMENTAL LABORATORY-CAIRN OIL & GAS VEDANTA LTD, MANGLA PROCESSING TERMINAL, VILLAGE- NAGANA, BARMER, RAJASTHAN, INDIA

**Accreditation Standard**

ISO/IEC 17025:2017

**Certificate Number**

TC-11983

**Page No**

4 of 7

**Validity**

25/07/2023 to 24/07/2025

**Last Amended on**

-

S.No	Discipline / Group	Materials or Products tested	Component, parameter or characteristic tested / Specific Test Performed / Tests or type of tests performed	Test Method Specification against which tests are performed and / or the techniques / equipment used
57	CHEMICAL- SOIL AND ROCK	Soil	Calcium	Soil Testing Method manual by Govt. of India
58	CHEMICAL- SOIL AND ROCK	Soil	Calcium Carbonate	IS:2720 Part-23
59	CHEMICAL- SOIL AND ROCK	Soil	Electrical Conductivity	IS 14767
60	CHEMICAL- SOIL AND ROCK	Soil	Magnesium	Soil Testing Method manual by Govt. of India
61	CHEMICAL- SOIL AND ROCK	Soil	Organic Carbon	IS:2720 Part-22
62	CHEMICAL- SOIL AND ROCK	Soil	Organic Matter	IS:2720 Part-22
63	CHEMICAL- SOIL AND ROCK	Soil	pH Value	IS 2720 (Part 26)
64	CHEMICAL- SOIL AND ROCK	Soil	Total Soluble Sulphates	IS:2720 Part-27
65	CHEMICAL- SOIL AND ROCK	Soil	Water Content	IS 2720(Part 2)
66	CHEMICAL- WATER	Drinking Water	Acidity	IS : 3025 (Part 22)
67	CHEMICAL- WATER	Drinking Water	Ammonical Nitrogen	IS: 3025 (Part 34)
68	CHEMICAL- WATER	Drinking Water	Bi-Carbonate Alkalinity	IS : 3025 (Part 51)
69	CHEMICAL- WATER	Drinking Water	Calcium	IS : 3025 (Part 40)
70	CHEMICAL- WATER	Drinking Water	Carbonate Alkalinity	IS : 3025 (Part 51)
71	CHEMICAL- WATER	Drinking Water	Chloride as Cl-	IS : 3025 (Part 32)
72	CHEMICAL- WATER	Drinking Water	Chromium Hexavalent	IS : 3025 (Part 52)
73	CHEMICAL- WATER	Drinking Water	Colour/Appearance	APHA (23rd Edition) 2120-C
74	CHEMICAL- WATER	Drinking Water	Dissolved Oxygen DO	APHA (23rd Edition) 4500 O-C
75	CHEMICAL- WATER	Drinking Water	Electrical Conductivity	IS : 3025 (Part 14)
76	CHEMICAL- WATER	Drinking Water	Fixed Solids	APHA (23rd Edition)2540-E
77	CHEMICAL- WATER	Drinking Water	Fluoride as F -	APHA (23rd Edition) 4500 F- D
78	CHEMICAL- WATER	Drinking Water	Iron as Fe	IS : 3025 (Part 53)
79	CHEMICAL- WATER	Drinking Water	Magnesium	IS : 3025 (Part 46)
80	CHEMICAL- WATER	Drinking Water	Nitrate (as NO3)	APHA (23rd Edition) 4500 NO3-B





## National Accreditation Board for Testing and Calibration Laboratories

### SCOPE OF ACCREDITATION

<b>Laboratory Name :</b>	ENVIRONMENTAL LABORATORY-CAIRN OIL & GAS VEDANTA LTD, MANGLA PROCESSING TERMINAL, VILLAGE- NAGANA, BARMER, RAJASTHAN, INDIA	<b>Page No</b>	5 of 7
<b>Accreditation Standard</b>	ISO/IEC 17025:2017	<b>Last Amended on</b>	-
<b>Certificate Number</b>	TC-11983		
<b>Validity</b>	25/07/2023 to 24/07/2025		

S.No	Discipline / Group	Materials or Products tested	Component, parameter or characteristic tested / Specific Test Performed / Tests or type of tests performed	Test Method Specification against which tests are performed and / or the techniques / equipment used
81	CHEMICAL- WATER	Drinking Water	Odor	IS : 3025 (Part 5)
82	CHEMICAL- WATER	Drinking Water	Oil & Grease	IS : 3025 (Part 39)
83	CHEMICAL- WATER	Drinking Water	pH Value @ 25 °C	IS : 3025 (Part 11)
84	CHEMICAL- WATER	Drinking Water	Phenolic compounds	IS : 3025 (Part 43)
85	CHEMICAL- WATER	Drinking Water	Phosphorus	APHA (23rd Edition) 4500 P-D
86	CHEMICAL- WATER	Drinking Water	Residual Free Chlorine	IS : 3025 (Part 26)
87	CHEMICAL- WATER	Drinking Water	Silica as SiO <sub>2</sub>	APHA (23rd Edition) 4500 SiO <sub>2</sub> -C
88	CHEMICAL- WATER	Drinking Water	Sulphate as SO <sub>4</sub> <sup>-</sup>	APHA (23rd Edition) 4500 SO <sub>4</sub> -E
89	CHEMICAL- WATER	Drinking Water	Temperature	IS : 3025 (Part 9)
90	CHEMICAL- WATER	Drinking Water	Total Alkalinity	IS : 3025 (Part 23)
91	CHEMICAL- WATER	Drinking Water	Total Dissolved Solids	IS : 3025 (Part 16)
92	CHEMICAL- WATER	Drinking Water	Total Hardness	IS : 3025 (Part 21)
93	CHEMICAL- WATER	Drinking Water	Total Solids	IS : 3025 (Part 15)
94	CHEMICAL- WATER	Drinking Water	Total Suspended Solid (TSS)	IS : 3025 (Part 17)
95	CHEMICAL- WATER	Drinking Water	Turbidity	IS : 3025 (Part 10)
96	CHEMICAL- WATER	Drinking Water	Volatile Solids	APHA (23rd Edition) 4500 O-C
97	CHEMICAL- WATER	Ground Water	Acidity	IS : 3025 (Part 22)
98	CHEMICAL- WATER	Ground Water	Ammonical Nitrogen	IS : 3025 (Part 34)
99	CHEMICAL- WATER	Ground Water	Bi-Carbonate Alkalinity	IS : 3025 (Part 51)
100	CHEMICAL- WATER	Ground Water	Calcium	IS : 3025 (Part 40)
101	CHEMICAL- WATER	Ground Water	Carbonate Alkalinity	IS : 3025 (Part 51)
102	CHEMICAL- WATER	Ground Water	Chloride as Cl <sup>-</sup>	IS : 3025 (Part 32)
103	CHEMICAL- WATER	Ground Water	Chromium Hexavalent	IS : 3025 (Part 52)
104	CHEMICAL- WATER	Ground Water	Colour/Appearance	APHA (23rd Edition) 2120-C
105	CHEMICAL- WATER	Ground Water	Copper (as Cu)	IS : 3025 (Part 42)
106	CHEMICAL- WATER	Ground Water	Dissolved Oxygen DO	APHA (23rd Edition) 4500 O-C
107	CHEMICAL- WATER	Ground Water	Electrical Conductivity	IS : 3025 (Part 14)
108	CHEMICAL- WATER	Ground Water	Fixed Solids	APHA (23rd Edition) 2540-E
109	CHEMICAL- WATER	Ground Water	Fluoride as F <sup>-</sup>	APHA (23rd Edition) 4500 F-D



## National Accreditation Board for Testing and Calibration Laboratories

### SCOPE OF ACCREDITATION

<b>Laboratory Name :</b>	ENVIRONMENTAL LABORATORY-CAIRN OIL & GAS VEDANTA LTD, MANGLA PROCESSING TERMINAL, VILLAGE- NAGANA, BARMER, RAJASTHAN, INDIA	<b>Page No</b>	6 of 7
<b>Accreditation Standard</b>	ISO/IEC 17025:2017	<b>Last Amended on</b>	-
<b>Certificate Number</b>	TC-11983		
<b>Validity</b>	25/07/2023 to 24/07/2025		

S.No	Discipline / Group	Materials or Products tested	Component, parameter or characteristic tested / Specific Test Performed / Tests or type of tests performed	Test Method Specification against which tests are performed and / or the techniques / equipment used
110	CHEMICAL- WATER	Ground Water	Iron as Fe	IS : 3025 (Part 53)
111	CHEMICAL- WATER	Ground Water	Magnesium	IS : 3025 (Part 46)
112	CHEMICAL- WATER	Ground Water	Nitrate (as NO3)	APHA (23rd Edition) 4500 NO3-B
113	CHEMICAL- WATER	Ground Water	Odor	IS : 3025 (Part 5)
114	CHEMICAL- WATER	Ground Water	Oil & Grease	IS : 3025 (Part 39)
115	CHEMICAL- WATER	Ground Water	pH Value @ 25 °C	IS : 3025 (Part 11)
116	CHEMICAL- WATER	Ground Water	Phenolic compounds	IS : 3025 (Part 43)
117	CHEMICAL- WATER	Ground Water	Phosphorus	APHA (23rd Edition) 4500 P-D
118	CHEMICAL- WATER	Ground Water	Residual Free Chlorine	IS : 3025 (Part 26)
119	CHEMICAL- WATER	Ground Water	Silica as SiO2	APHA (23rd Edition) 4500 SiO2-C
120	CHEMICAL- WATER	Ground Water	Sulphate as SO4-	APHA (23rd Edition) 4500 SO4-E
121	CHEMICAL- WATER	Ground Water	Sulphide	IS : 3025 (Part 29)
122	CHEMICAL- WATER	Ground Water	Temperature	IS : 3025 (Part 9)
123	CHEMICAL- WATER	Ground Water	Total Alkalinity	IS : 3025 (Part 23)
124	CHEMICAL- WATER	Ground Water	Total Dissolved Solids	IS : 3025 (Part 16)
125	CHEMICAL- WATER	Ground Water	Total Hardness	IS : 3025 (Part 21)
126	CHEMICAL- WATER	Ground Water	Total Solids	IS : 3025 (Part 15)
127	CHEMICAL- WATER	Ground Water	Total Suspended Solid (TSS)	IS : 3025 (Part 17)
128	CHEMICAL- WATER	Ground Water	Turbidity	IS: 3025 (Part 10)
129	CHEMICAL- WATER	Ground Water	Volatile Solids	APHA (23rd Edition) 4500 O-C
130	CHEMICAL- WATER	Potable Water	Acidity	IS : 3025 (Part 22)
131	CHEMICAL- WATER	Potable Water	Ammonical Nitrogen	IS: 3025 (Part 34)
132	CHEMICAL- WATER	Potable Water	Bi-Carbonate Alkalinity	IS : 3025 (Part 51)
133	CHEMICAL- WATER	Potable Water	Calcium	IS : 3025 (Part 40)
134	CHEMICAL- WATER	Potable Water	Carbonate Alkalinity	IS : 3025 (Part 51)
135	CHEMICAL- WATER	Potable Water	Chloride as Cl-	IS : 3025 (Part 32)
136	CHEMICAL- WATER	Potable Water	Chromium Hexavalent	IS : 3025 (Part 52)
137	CHEMICAL- WATER	Potable Water	Colour/Appearance	APHA (23rd Edition) 2120-C
138	CHEMICAL- WATER	Potable Water	Copper (as Cu)	IS: 3025 (Part 42)



## National Accreditation Board for Testing and Calibration Laboratories

### SCOPE OF ACCREDITATION

<b>Laboratory Name :</b>	ENVIRONMENTAL LABORATORY-CAIRN OIL & GAS VEDANTA LTD, MANGLA PROCESSING TERMINAL, VILLAGE- NAGANA, BARMER, RAJASTHAN, INDIA		
<b>Accreditation Standard</b>	ISO/IEC 17025:2017		
<b>Certificate Number</b>	TC-11983	<b>Page No</b>	7 of 7
<b>Validity</b>	25/07/2023 to 24/07/2025	<b>Last Amended on</b>	-

S.No	Discipline / Group	Materials or Products tested	Component, parameter or characteristic tested / Specific Test Performed / Tests or type of tests performed	Test Method Specification against which tests are performed and / or the techniques / equipment used
139	CHEMICAL- WATER	Potable Water	Dissolved Oxygen DO	APHA (23rd Edition) 4500 O-C
140	CHEMICAL- WATER	Potable Water	Electrical Conductivity	IS : 3025 (Part 14)
141	CHEMICAL- WATER	Potable Water	Fixed Solids	APHA (23rd Edition)2540-E
142	CHEMICAL- WATER	Potable Water	Fluoride as F-	APHA (23rd Edition) 4500 F- D
143	CHEMICAL- WATER	Potable Water	Iron as Fe	IS : 3025 (Part 53)
144	CHEMICAL- WATER	Potable Water	Magnesium	IS : 3025 (Part 46)
145	CHEMICAL- WATER	Potable Water	Nitrate (as NO3)	APHA (23rd Edition) 4500 NO3-B
146	CHEMICAL- WATER	Potable Water	Odor	IS : 3025 (Part 5)
147	CHEMICAL- WATER	Potable Water	Oil & Grease	IS : 3025 (Part 39)
148	CHEMICAL- WATER	Potable Water	pH Value @ 25 °C	IS : 3025 (Part 11)
149	CHEMICAL- WATER	Potable Water	Phenolic compounds	IS : 3025 (Part 43)
150	CHEMICAL- WATER	Potable Water	Phosphorus	APHA (23rd Edition) 4500 P-D
151	CHEMICAL- WATER	Potable Water	Residual Free Chlorine	IS : 3025 (Part 26)
152	CHEMICAL- WATER	Potable Water	Silica as SiO2	APHA (23rd Edition) 4500 SiO2-C
153	CHEMICAL- WATER	Potable Water	Sulphate as SO4-	APHA (23rd Edition) 4500 SO4-E
154	CHEMICAL- WATER	Potable Water	Sulphide	IS : 3025 (Part 29)
155	CHEMICAL- WATER	Potable Water	Temperature	IS : 3025 (Part 9)
156	CHEMICAL- WATER	Potable Water	Total Alkalinity	IS : 3025 (Part 23)
157	CHEMICAL- WATER	Potable Water	Total Dissolved Solids	IS : 3025 (Part 16)
158	CHEMICAL- WATER	Potable Water	Total Hardness	IS : 3025 (Part 21)
159	CHEMICAL- WATER	Potable Water	Total Solids	IS : 3025 (Part 15)
160	CHEMICAL- WATER	Potable Water	Total Suspended Solid (TSS)	IS : 3025 (Part 17)
161	CHEMICAL- WATER	Potable Water	Turbidity	IS: 3025 (Part 10)
162	CHEMICAL- WATER	Potable Water	Volatile Solids	APHA (23rd Edition) 4500 O-C



25 September 2024

OMAS-PCB-L-01235

To,  
Member Secretary,  
Rajasthan State Pollution Control Board,  
No. 4, Institutional Area, Jhalana Doongri,  
Jaipur-302004, Rajasthan

**Sub:-** Submission (through our email dtd. 25.09.2024) of Annual Environmental Statement as per Rule 14 of **The Environment (Protection) Rules, 1986.**

Dear Sir,

This is to inform you that we have submitted (through our email dtd. 25.09.2024) the Annual Environmental Statements-Form V as per the Environmental Clearance issued by MOEF, and CTE/CTO issued by RSPCB for onshore Hydrocarbon development & production from MPT, Mangala, Bhagyam, Aishwariya, Vijaya & Vandana Field, North Satellite Fields, Warehouses, CPF, PSY, Kawas NW, Operational Camps, AGI 1-6 & 7-8 and Exploratory & Appraisal Well Drilling Testing for Hydrocarbon Development 60 Wells in RJ-ON 90/1-Block, Rajasthan for the period from 1<sup>st</sup> April 2023 to 31<sup>st</sup> March 2024.

Please find attached copy of email submission as **Annexure-1**.

We hope you will find these submissions in order.

Thanking you,

Yours faithfully  
For Vedanta Ltd. (Cairn Oil & Gas)

**Dr BR Jat** Digitally signed  
by Dr BR Jat

**Dr. Bhoma Ram Jat**  
Chief Environment Manager

Enclosure: Copy of email.

Copy to: Regional Officer, Rajasthan State Pollution Control Board, Jasol Fantaa, Opposite JVVNL office, Industrial Area, Balotra – Rajasthan.



**VEDANTA LIMITED**  
(Formerly known as Sesa Sterlite Limited)

**Cairn Oil & Gas** : DLF Atria, Phase 2, Jacaranda Marg, DLF City, Gurugram-122002, Haryana, India  
T +91-124 459 3000 F +91-124 414 5612 | www.cairnindia.com

**Registered Office:** Vedanta Limited, 1<sup>st</sup> Floor, C Wing, Unit 103, Corporate Avenue, Atul Projects, Chakala, Andheri (East), Mumbai-400093, Maharashtra, India | T +91-22 664 34500 | F +91-22 664 34530 | www.vedantalimited.com

CIN. L13209MH1965PLC291394

o/k



23/10/2024

OMAS-PCB-L-01252

To,

**The Member Secretary**

Rajasthan State Pollution Control Board  
Institutional Area, Jhalana Doongari  
Jaipur – Rajasthan, Pin – 302004

**Subject:** Submission of Quarterly Returns Annexure: IV regarding Information on Operation of TSDF.**Reference:** Hazardous Waste Authorization issued by RSPCB vide letter no. RPCB/HWM/2021-2022/HDF/HSW/ 100 dated 08/02/2022 valid till 28/02/2027 issued by RSPCB

Dear Sir,

In reference to the authorization issued for hydrocarbon production from Mangala Processing Terminal (MPT) including captive TSDF, we hereby submitting quarterly return "Annexure: IV" regarding Information on Operation of TSDF. for the period of **Jul-24 to Sep-24** as per CPCB guidelines and Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2016.

Hope you find it in line with the requirement. Kindly acknowledge the receipt of same.

Yours faithfully

For Vedanta Limited - Cairn Oil &amp; Gas

**Dr. B. R. Jat**  
Chief Environment Manager

**Enclosures:**

1. Annexure-IV TSDF Quarterly returns for Jul-24 to Sep-24 with annexures
2. Manifest (Form-10) for the period of Jul-24 to Sep-24

CC: Regional Office, Rajasthan State Pollution Control Board, Fanta, Opposite J.V.V.N.L. Office,  
Balotra – Rajasthan.

**VEDANTA LIMITED**

**Cairn Oil & Gas:** ASF Center Tower A, 362-363, Jwala Mill Road, Phase IV, Udyog Vihar, Sector 18, Gurugram - 122016, Haryana, India  
T +91 124 459 3000 | F +91 124 414 5612 | www.cairnindia.com

**Registered Office:** Vedanta Limited, 1<sup>st</sup> Floor, 'C' wing, Unit 103, Corporate Avenue, Atul Projects, Chakala, Andheri (East), Mumbai - 400093, Maharashtra, India | T +91 22 664 34500 | F +91 22 664 34530 | www.vedantalimited.com

CIN: L13209MH1965PLC291394



## Annexure: IV

### Protocol for Performance Evaluation of Common Hazardous Waste TSDF/Common Hazardous Waste Incinerator

**Part B:** Information on Operation of TSDF to be provided by the Operator of the TSDF on Quarterly Basis (for the period from Jul-24 to Sep-24)

<b>I. General Information</b>					
(1)	Name & Address of the HWTSDF	:	M/s Vedanta Limited, Cairn Oil & Gas Mangala Processing Terminal Captive Integrated Waste Management-TSDF Village Nagana Tehsil and District Barmer, Rajasthan		
(2)	Contact person Telephone/Mobile No. Fax no. E-mail	:	Environment Manager –RJON 02982-820 4150 (Ext-29113) +919773380157 <a href="mailto:RJON.EnvironmentManagerMPT@cairindia.com">RJON.EnvironmentManagerMPT@cairindia.com</a>		
(3)	Validity of Consent under Water Act, 1974	:	Order No. 2021-2022/HDF/8810, dated 10/12/2021 Valid till 31/03/2026.		
(4)	Validity of Consent under Air Act, 1981	:	Order No. 2021-2022/HDF/8810, dated 10/12/2021 Valid till 31/03/2026.		
(5)	Validity of Authorization under Hazardous & other Waste (M,H & TM) Rules, 2016	:	Authorization No. RPCB/HWM/2021-2022/HDF/HSW/100 dated 08/02/2022 valid till 28/02/2027.		
(6)	Total number of member industries sent their wastes during the period (from Apr, 22 – Jun, 22) and the quantity of waste in tons (plz. attach list of the member industries not sent their waste during the quarter)	:	Not Applicable.  Captive TSDF is only to manage waste generated from the development, drilling and operation activities of RJON-90/1 Hydrocarbon Block in Rajasthan.		
(7)	Statements w.r.t total quantity of HW received treated and disposed or accumulated since Commission				
	<b>Period</b>	<b>Opening (MT) of Last Quarter</b>	<b>Receiving of Haz. Waste (MT)</b>	<b>Disposal of Haz. Waste (MT) Co-processing</b>	<b>Balance Quantity of landfill (MT)</b>
	<b>Q2- Jul-24 to Sep-24</b>	00	796.22	161.99	634.23
	Cumulative receipt Hazardous waste since commissioning		140587.74	26951.93	113635.81
(8)	Is the waste in stock properly labeled and stored	:	Yes, all the waste containers are labeled with From -08 as per HW (M, H & TM) Rules 2016.		
(9)	Performance of SLF related Activities				
	(i) No. of Cells filled and capped till the previous quarter	:	No Cell Capped till the previous quarter.		
	(ii) Cell number in use	:	One		
	(iii) Quantity of Leachate generated in KL (from Jul-24 to Sep-24)	:	540 KL		
	(iv) Characteristics of Leachate (Enclose	:	<b>Annexure-05 Leachate test report</b>		

		parameters with max. min. and average concentration for the Quarter)	
	(v)	Mode of treatment and disposal of Leachate	: Solar evaporation
(10)	Performance of Incineration/Plasma Pyrolysis		
	(i)	Monthly average operating hours of Incinerator/Plasma Pyrolysis	: Incinerator not in operation as waste is being disposed off through co-processing.
	(ii)	Fuel consumption in Kl/Energy Consumption during the quarter KL <b>(from Jul-24 to Sep-24)</b>	: 0 KL
	(iii)	Operating parameter	: NA
	(iv)	Stack gaseous emission monitoring results for the previous quarter	: NA
	(v)	Date of calibration of the instruments	: NA
	(vi)	Salt residue generation if leachate re-circulated for quenching purpose in tons	: NA
	(vii)	Final mode of disposal of salts generated from the incinerator/MEE	: NA
	(viii)	Total quantum of ash generated in tons	: NA
	(ix)	Final mode of disposal of ash generated from the incinerator	: NA
	(x)	Total quantum of scrubbed solution generated (in liters) and its mode of disposal	: NA
(11)	Pre-treatment/treatment Facility		
	(i)	List of chemicals / stabilizing agents used in the pre-treatment process in tons during the quarter	: NA
		a) Binding agent (Cement, Lime, Fly ash or any other agent) in tons	: NA
		b) Caustic in tons	: NA
		c) Aggregates in tons	: NA
		d) Any other	: NA
	(ii)	Total quantity of waste treated by stabilization /solidification process in tons	: NA
(12)	Monitoring and other Miscellaneous Details		
	(i)	Ambient air quality	: <b>Annexure – 2 Environment Monitoring Report</b>
	(ii)	Ground Water from monitoring wells	: <b>Annexure – 2 Environment Monitoring Report</b>
	(iii)	Gaseous emissions from vents providing to the capped SLF	: Not Applicable, no Cell is Capped till the date.
	(iv)	Soil Characteristics	: <b>Annexure-4 Soil test report</b>
	(v)	Amount deposited in Escrow fund during the quarter (Rupees in lacs)	: Escrow agreement is not applicable. This is not a commercial facility. The Captive TSDF will receive wastes only from the Cairn's various facilities in the RJ0-ON-90/1 block i.e. drilling, production and construction activities. Adequate financial arrangements shall be made for the post –closure monitoring.
	(vi)	Cumulative Amount in Escrow (Rupees in lacs)	: Adequate financial arrangements shall be made for the post –closure monitoring.
	(vii)	Any accidents including fire/explosion/	: No accident/incident recorded till the date.

	landslides occurred and measures taken (attach details separately if required)	
(13)	Any major changes observed in the characteristics of the wastes of the member units (provide list of such member industrial units with details)	No, The Captive TSDF is purposefully established for wastes only from the Cairn's various facilities in the RJ0-ON-90/1 block i.e. drilling, production and construction activities. As per Comprehensive Waste Analysis records of Drill cuttings which are the major waste will be disposed off into the landfill meets the direct landfill disposal criteria of CPCB Guidelines.
(14)	Self assessment with regard to the status on environmental consequences due to the operation of TSDF (pl. attach details)	There are no environmental consequences observed due to the operation of TSDF. <b>Annexure – 2</b> Environment Monitoring Report for details.
(15)	Remedial measures proposed for restoration of damage caused due to the improper operation of the facility(please attach details)	All the procedure for Operation and Emergency control are in place, please refer <b>Annexure-3</b> list of procedures followed for environmentally sound facility operation.
(16)	Electrical resistivity Data around SLF (to be submitted at the end of the last quarter only)	Electrical resistivity study data around SLF has been submitted in previous reports.
(17)	Progress towards online tracking of vehicles carrying wastes from the generator.	VTS (Vehicle Tracking System) is installed in all hazardous waste transportation vehicles.
(18)	Report on Health status of the public living within 05 KM radius and workers appointed by the facility operator (plz. attach details once in a year)	Preventive Health Checkup reports for TSDF staff is being carried out on regular intervals and report submitted with Q-1 return.
	a) workers removed from the services if any during the quarter and the reasons there of	NIL
(19)	Environment Management Plan (EMP) Compliance	Complied with, this is the Captive TSDF site established as a pollution control measure for managing wastes from the Cairn's various facilities in the RJ0-ON-90/1 block i.e. drilling, production and construction activities within the Mangala Processing Terminal, Nagana- Barmer. Therefore the EMP for Mangala Processing Terminal is being followed.
(20)	Any other operations carried out in the Facility (like pre-treatment of incinerable waste for use in kilns or recycle or re-use of other wastes)	No other operation carried out in the facility excepting landfill operation. Waste/Used Oil and empty chemical barrels/bags is being disposed off to the SPCB/CPCB authorized recyclers.

## Declaration

Certify that the contents of stated above are true to the best of my knowledge and based on the records as available with this facility





**Station:** Barmer

**Signature of Operator of a Facility**

**Date:**23.10.2024

**Dr. B. R. Jat**

**Chief Environment Manager**

**Address:** Mangala Processing  
Terminal Village: Nagana, District: Barmer

**Enclosures:**

**ANNEXURE 1.** SUMMARY REPORT & MANIFESTS FOR THE WASTE RECEIVED TILL DURING THE REPORTING PERIOD.

**ANNEXURE 2.** ENVIRONMENT MONITORING REPORT

**ANNEXURE 3.** LIST OF PROCEDURES FOLLOWED FOR ENVIRONMENTALLY SOUND FACILITY OPERATION.

**ANNEXURE 4.** SOIL TEST REPORT

**ANNEXURE 5.** LEACHATE TEST REPORT

# **ANNEXURE NO. 11**

Compliance to GSR 546 E

## Compliance Status

### Guidelines for Discharge of Gaseous Emission:

S.No.	Conditions	Status	Remarks
1.0	DG Sets		
1.1	DG Sets at drill site as well as production station shall conform with the norm notified under the Environment (Protection) Act, 1986.	Complied	All DG sets used for drill site & production meet the norms for height of stacks/ vents & acoustic enclosures as notified by MoEF&CC/ CPCB/ E(P) Rules.
2.0	Elevated/ground flares		
2.1	Cold Venting of gases shall never be resorted to and all the gaseous emissions are to be flared.	Complied	All the process units, vessels and tanks are connected to Vapor Recovery Units (VRUs). Six VRUs (capacity 1390 SCM/hr each) have been installed and recovered vapor is fed into fuel gas system. All the pop ups from the PSVs are routed to flare and there is no fugitive emissions and/or cold venting of gases. Cold venting of gases is not allowed. Cairn carried out Fugitive Emission Monitoring study through independent third-party agency during Mar'24-April'24. This demonstrates Cairn's stringent preventive maintenance of equipment's/joints etc. which prevents process leaks.
2.2	All flaring shall be done by elevated flares except where there is any effect on crop production in adjoining areas due to the flaring. In such cases, one may adopt ground flaring.	Complied	Elevated flaring is provided at processing terminals & is being used during appraisal and well testing phase as well. Enclosed ground flares are provided at locations where need to avoid any impact due to heat and glare.
2.3	In case of ground flare, to minimize the effects of flaring, the flare pit at Group Gathering Station(GGS)/Oil Collecting Station(OCS) and Group Collection Station(GCS) shall be made of RCC surrounded by a permanent wall (made of refractory brick) of minimum 5m height, to reduce the radiation and glaring effects in the adjoining areas.	Complied	Ground flares are provided to avoid any impact due to heat and glare and is made of RCC surrounded by a permanent wall (made of refractory brick) with minimum 5m height, to reduce the radiation and glaring effects in the adjoining areas. High efficiency flare tip is being used. Flare pit is constructed in a corner of well pad to avoid exposure to local inhabitant as well as well pad operational area. Ground Flare is for emergency use only like shut down/ maintenance of elevated/ enclosed ground flare.

2.4	A green belt of 100 m width may be developed around the flare after the refractory wall in case of ground flaring.	Complied	Greenbelt has been developed around the ground flare wherever feasible. Ground Flare is for emergency use only like shut down/ maintenance of elevated/ enclosed ground flare.
2.5	If the ground flaring with provision of green belt is not feasible, enclosed ground flare system shall be adopted, and be designed with proper enclosure height, to meet the ground level concentration (GLC) requirement.	Complied	Enclosed Ground Flare (EGF) have been adopted with proper enclosure height. Ground Flare is for emergency use only like shut down/ maintenance of elevated/ enclosed ground flare. The flare systems are designed as per the API 521 and OISD 106 standards.
2.6	In case of elevated flaring, the minimum stack height shall be 30m. Height of the stack shall be such that the max. GLC never exceeds the prescribed ambient air quality limit.	Complied	The flare systems are designed as per the API 521 and OISD 106 standards. The height of flare stack installed at Processing Terminals is 30 m. Enclosed Ground Flare system is being used at few well pads with all necessary precautions (knockout drum, etc.) in place.
3.0	Burning of effluent in the pits shall not be carried out at any stage.	Complied	Burning of effluent in the pits is not carried out at any stage.

**Disposal of Drill Cutting and Drilling Fluids for On-shore Installations:**

<b>S.No.</b>	<b>Conditions</b>	<b>Status</b>	<b>Remarks</b>
a.	Drill Cuttings (DC) originating from on-shore or locations close to shore line and separated from Water Base Mud (WBM) should be properly washed and unusable drilling fluids (DF) such as WBM, Oil Base Mud (OBM), Synthetic Base Mud (SBM) should be disposed off in a well designed pit lined with impervious liner located off-site or on-site. The disposal pit should be provided additionally with leachate collection system.	Complied	Drilling is not a regular activity & only happens as & when required. The WBM cuttings generated are non-hazardous in nature. These cuttings are used for construction activities like backfilling of low-lying areas, construction of well pads etc. SOBMs drill cutting generated are segregated at the sources of generation and disposed in real time to cement industry for coprocessing. The drill cuttings generated using the SOBMs are processed through cutting dryer to further recover SOBMs and dry cuttings are disposed through coprocessing at cement industries or disposed in secured captive landfill at MPT. HDPE lined concrete pits are also available at site for interim storage & handling of drill cuttings. During drilling process, waste residual mud & drilling flow-back water are collected in

			<p>the container for treatment, recycling and disposal.</p> <p>The drilling fluid after solid – liquid separation is being recycled and/or disposed through adequately designed and lined solar evaporation ponds and deep dump well disposal.</p> <p>The oil base drill cuttings and residual dry mud are shifted to the MPT captive hazardous landfill for appropriate disposal or being sent for co-processing in cement industry.</p>
b.	Use of diesel base mud is prohibited. Only WBM should be used for on-shore oil drilling operations.	Complied	<p>Drilling is not a regular activity &amp; only happens as &amp; when required.</p> <p>Diesel based mud is not used in any of the drilling of the wells.</p> <p>Water Based Mud (WBM) is used as the drilling fluid for drilling the upper section of well (~250 - 500 meters) or up to complete target depth of the well subject to geological formation. In case of hard strata, Synthetic Oil Based Mud (SOBM) is used to counter difficult drilling situations, such as high down hole temperatures, hydrated shales, or salt, where the properties of WBMs would limit performance.</p>
c.	In case of any problem due to geological formation for drilling, low toxicity OBM having aromatic content < 1% should be used. If the operators intend to use such OBM to mitigate specific whole problem/ SBM it should be intimated to Ministry of Environment and Forests/State Pollution Control Board.	Complied	<p>Drilling is not a regular activity &amp; only happens as &amp; when required.</p> <p>OBM is not used for drilling of the hydrocarbon wells, however bio-degradable low toxicity SOBM is only used, which is having aromatic content of &lt; 1%.</p> <p>Refer <b>Annexure 1</b> to this document for analysis report of SOBM.</p>
d.	The chemical additives used for the preparation of DF should have low toxicity i.e. 96 hr LC50 > 30,000 mg/l as per mysid toxicity or toxicity test conducted on locally available sensitive sea species. The chemicals used	Complied	<p>Drilling is not a regular activity &amp; only happens as &amp; when required.</p> <p>As the drilling is carried out in the desert region, which has water table (mainly rainwater recharged) till the depth of average 20m. Whereas the drilling is carried out using WBM till the depth of 250m-500m.</p>

	(mainly organic constituents) should be biodegradable.		Thereafter the SOBМ type of the drilling fluid is used considering the geological formation drilling advantage requirements. The SOBМ's main constituent is Saraline 185. Detailed toxicity level studies of SOBМ using Saraline as base oil is conducted by CSIR-NIO and results rated Saraline 185 as "Non-toxic" grade. Refer <b>Annexure 1</b> to this document for executive summary of study conducted by CSIR-NIO.
e.	DC separated from OBM after washing should have oil content at < 10 gm/kg for disposal into disposal pit.	Complied	Drilling is not a regular activity & only happens as & when required. OBM is not used as the drilling fluid. SOBМ is only used, and it is continuously recycled and not discharged for the disposal. Whereas the drill cuttings generated using the SOBМ are processed through cutting dryer to further recover SOBМ and dry cuttings are disposed through co-processing at cement industries or disposed in secured captive landfill at MPT.
f.	The waste pit after it is filled up shall be covered with impervious liner, over which, a thick layer of native soil with proper top slope is provided.	Complied	Drilling is not a regular activity & only happens as & when required. Drill cuttings generated at the drilling site are segregated and disposed in real time to cement industry for coprocessing or disposed in secured captive landfill at MPT. WBM cuttings are non-hazardous in nature & are used as sub-grade construction material. HDPE lined concrete waste pits are also constructed at site for interim storage and handling of drill cuttings. Waste pits are also being regularly emptied out. At exploratory sites, during site restoration all waste is being removed from waste pits and pits are backfilled with native soil.
g.	Low toxicity OBM should be made available at installation during drilling operation.	Complied	Drilling is not a regular activity & only happens as & when required. OBM is not used and only SOBМ is used. Refer <b>Annexure 1</b> to this document for analysis report of SOBМ.

h.	Drilling wastewater including DC wash water should be collected in the disposal pit evaporated or treated and should comply with the notified standards for on-shore disposal.	Complied	Drilling is not a regular activity & only happens as & when required. The drilling flow-back water is collected and treated for further reuse in drilling or injection purpose. Reject from solid-liquid separation unit is either disposed through deep dump well or stored in HDPE line pits for the natural solar evaporation (since the heat radiation is high in the Barmer and Jalore districts of Rajasthan) and disposed in deep dump well (>1000 mts.) after meeting required specifications.
i.	Barite used in preparation of DF shall not contain Hg> 1 mg/kg & Cd> 3mg/kg.	Complied	Drilling is not a regular activity & only happens as & when required. Complied and refer <b>Annexure 1</b> to this document for the Barite analysis report.
j.	Total material acquired for preparation of drill site must be restored after completion of drilling operation leaving no waste material at site. SPCB should be informed about the restoration work.	Complied	Drilling is not a regular activity & only happens as & when required. Exploratory drill sites are temporarily acquired and based on the drilling success; the permanent land acquisition is being planned. If the drilling is unsuccessful, the drilled well is plugged and all the safety measures are installed and ensured, there after the drilling site is cleared and restored back for the original land use plan. Detail of site restored is provided to MOEF&CC and RSPCB as part of six-monthly EC compliance report, if applicable.
k.	In case, environmentally acceptable methods for disposal of drill waste such as (a) injection to a formation through casing annulars, if conditions allow (b) land farming at suitable location (c) bioremediation (d) incineration or (e) solidification can be considered, in such cases oil industry is required to submit proposal to Ministry of Environment and Forests/State Pollution Control Board (MoEF/SPCB) for approval.	Complied	Cairn has already obtained permission from RSPCB for co-processing of SOBM drill cuttings in cement industry. Please find enclosed as <b>Annexure-2</b> copy of Hazardous Waste Authorization (HWA) granted by RSPCB.

TO,  
 HALLIBURTON OFFSHORE SVCS INC  
 Halliburton Base Camp, MPT Road, KIRI Base,  
 Near Kawas,Nagana, Barmer – 344031,  
 Rajasthan, INDIA

Order No	4517556513
P O Date	28-05-2024
Batch No	PR/01-300-2024
Mfg Date	29-05-2024
Exp Date	3 Years

## BARITE POWDER CERTIFICATE OF ANALYSIS;

1) Density (API 13A/ISO 13500 : 2009 )	4.124	g/ml
2) Water Soluble alkaline earth metals as Calcium (API 13A/ISO 13500 : 2009 )	36	Mg/kg
3) Residue greater than 75 Microns (API 13A/ISO 13500 : 2009 )	1.70	% (W/W)
4) Total Barium as BaSO4 (API 13K Spec 18 <sup>th</sup> Edition )	86.23	% (W/W)
5) Magnesium as Mgo (API 13K)	0.18	% (W/W)
6) Cadmium as Cd (API 131/ISO 10416:2002)	ND	ppm
7) Mercury (API 131/ISO 10416:2002)	ND	ppm
8) Particles less than 6µm, in equivalent spherical Diameter ( using particle size analyzer )	18.26	%

For PR MINERALS & CHEMICALS

*G. Lokesh Reddy*  
 Managing Partner





**BHARAT PETROLEUM CORPORATION LIMITED**  
(A Govt. of India Enterprise)  
**WADILUBE INSTALLATION**  
**Mallet Road, Wadibunder, Mumbai - 400 009**  
(An ISO 9001:2015; ISO 14001:2015; ISO 50001:2018; ISO 45001:2018 Certified)

**QUALITY ASSURANCE LABORATORY**

**TEST REPORT**

Test Report No. : 24-56248212  
Issued To : Plant Manager / Customer Date : 15.06.2024  
Name of Product : **MAK DRILLOL** Date of Sampling : 15.06.2024  
Batch Number : W.56248212 Date of Receipt in Lab : 15.06.2024  
Source of Sample : BS 01  
Reason for Testing : Batch Formation Date of Testing : 15.06.2024

S. No.	Characteristic	Test Method	Test Results
8.	Aromatic Content, % wt	MAK MS- 2	< 0.05

**Remark:**

**2. The Product as represented by the sample meets the specification of MAK DRILLOL w.r.t. the above tests carried out as per Internal Specification.**

Authorised Signatory

**(Mahendra Thakur)**

**Notes:**

1. The sample is drawn by the client & the result relates to the sample tested.
2. This certificate shall not be reproduced wholly or in part without prior written consent of the laboratory
3. This certificate shall not be used in any advertising media or as evidence in the court of Law without prior written consent of laboratory
4. Latest version of test methods used as per latest specification.

**\*\*\* End of Test Report \*\*\***

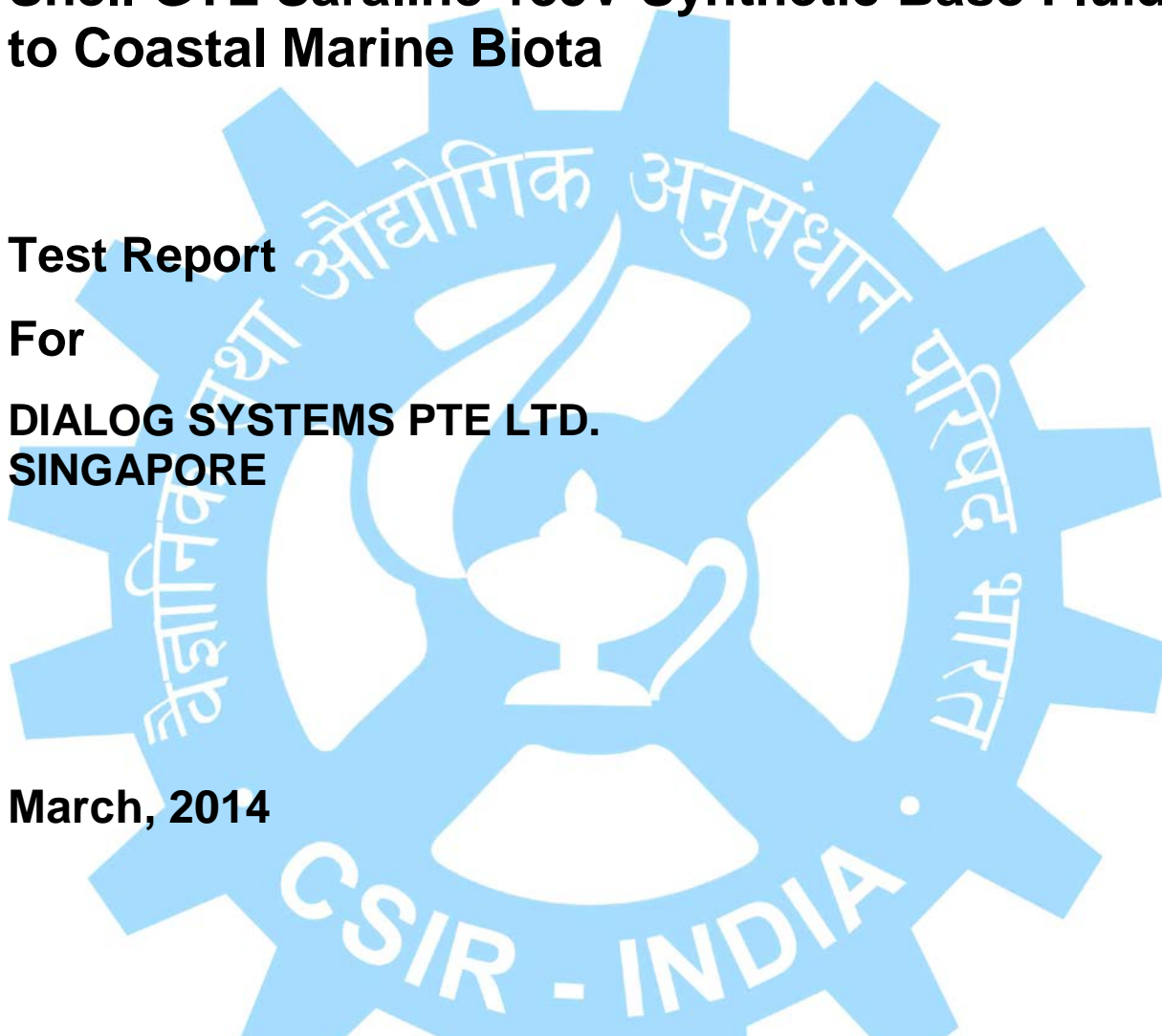
# Ecotoxicity Assessment (96 hrs LC<sub>50</sub>) of Shell GTL Saraline 185V Synthetic Base Fluid to Coastal Marine Biota

Test Report

For

**DIALOG SYSTEMS PTE LTD.**  
**SINGAPORE**

March, 2014



	<p>सीएसआईआर – राष्ट्रीय समुद्र विज्ञान संस्थान CSIR-NATIONAL INSTITUTE OF OCEANOGRAPHY (वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद) (COUNCIL OF SCIENTIFIC &amp; INDUSTRIAL RESEARCH) दोना पावला, गोवा भारत / DONA PAULA, GOA - 403004 India फ़ोन/Tel : 91(0)832-2450450/ 2450327 फैक्स /Fax: 91(0)832-2450602 इ-मेल/e-mail : <a href="mailto:ocean@nio.org">ocean@nio.org</a> बसाईट//Website: <a href="http://www.nio.org">www.nio.org</a></p>	
---	--	---

## EXECUTIVE SUMMARY

With ever increasing demand for petroleum and its related products all around the world, oil and gas resources are being tapped from the oceanic regions. As offshore oil exploration increases to meet the growing demand for new sources of oil, more and deeper wells are being drilled.

Drilling fluids (also known as drilling mud) are used in oil and natural gas industry to perform a variety of tasks in the well, including drill string lubrication, prevention of gel formation, plugging the porous bore hole, stabilization of well bore hole, equalization of borehole pressure and transportation of drill cuttings to the surface. The drilling fluids are either water-based (WBM) or synthetic oil base (SOBM) of appropriate density and chemical properties, which are specific to particular drilling conditions. The main sources of drilling fluids into water environment are accidental spillage, standing of tankers and also drill cutting processes. As offshore oil exploration increases to meet the growing demand for new sources of oil and natural gas, more and deeper wells are being drilled. With the advancement in the field of drilling fluids, their usage is also increasing.

With the recent upsurge in petrochemical drilling operations for offshore oil and gas along the Indian coast, the possibility of pollution arising from the increased use of drilling fluids has become pertinent. In the past, little attention was paid to the environmental management of drilling wastes and disposal practices. However, in the recent years, many countries have adopted stricter regulatory requirements for the use and disposal of drilling fluids. On the other hand, drilling and fluid system technologies have become advanced and it has been noticed that drilling fluid manufacturers/companies have developed highly efficient drilling fluids and voluntarily adopted the waste management strategies.

Water-based drilling muds (WBMs) are by far the most commonly used mud, both onshore and offshore. They are widely used in shallow wells and shallower portions of deeper wells, but are not very effective in deeper wells. On the other hand, Synthetic based drilling fluids (SBFs) are a relatively new class of drilling

muds that are particularly useful for deepwater and deviated hole drilling. They were developed to provide an environmentally superior alternative to WBMs.

The main environmental issues associated with the discharge of drilling waste mud and drill cuttings containing base fluids into the coastal marine environment include toxicity to coastal marine biota, persistence and biodegradability, leachability of Non-Aqueous Drilling Fluids (NADFs) into the water column, bioaccumulation/bioconcentration of drilling fluid constituents in marine food chain, smothering effect of accumulated drill cuttings on marine biota, tainting of commercially important fish species and sediment anoxia as a result of organic matter enrichment.

Ecotoxicity tests (bioassays) are generally performed to evaluate the toxicity of effluents and other materials used to determine the relative sensitivity of different living organisms and permissible effluent discharge dose. It is a procedure in which the responses of aquatic organisms are used to detect or measure the presence or effect of one or more substances, in a particular ecosystem. Median lethal concentration ( $LC_{50}$ ) of a toxicant is the concentration that results in mortality of a specified portion of the population within a definite period of time. Median lethal concentration ( $LC_{50}$ ) of a toxicant in an environmental medium which results in 50% mortality of test organisms within a definite period of exposure (periods such as 24 hr, 48 hr, 72 hr and 96 hr) is called  $LC_{50}$ . The  $LC_{50}$  values in turn represent median lethal concentration or median tolerance limit.

The criteria for selection of a particular drilling fluid would depend on the lubricating efficiency during drilling operations and its relative toxicity to the marine biota and the environment. The toxicity characteristics of drilling fluids influence their environmental impacts on marine communities.

Shell MDS (Malaysia) Sendirian Berhad (Bintulu, Malaysia) & Shell Qatar Limited (Ras Laffan, Qatar) are operating companies of the Royal Dutch/Shell Group. These Companies are the owners and operators of the Shell GTL (Gas-To-Liquids) plant in Bintulu, Malaysia & Ras Laffan, Qatar respectively. Shell Group has developed a series of eco-friendly Synthetic Base Fluids (SBF) for

use as drilling base fluids in oil and gas industry. These base fluids have been widely used by various operators involved in oil and gas industries worldwide.

M/s. Dialog Systems Pte Ltd. (DSPL)—a wholly owned subsidiary of DIALOG Group is an establishment registered in Singapore. DSPL is the authorized distributor of Shell Group to market the product, Shell GTL Saraline 185V—low toxic synthetic base drilling fluid in India. DSPL contracted the CSIR-National Institute of Oceanography (CSIR-NIO), Dona Paula, Goa (India) to assess the ecotoxicity (96 hr LC<sub>50</sub>) of Synthetic Base Drilling Fluid ‘Shell GTL Saraline 185V’ for obtaining necessary approvals from regulatory bodies (MoEF/CPCB) for its use in onshore and offshore oil and gas explorations in India. It is therefore proposed to evaluate the acute toxicity (96 hr LC<sub>50</sub>) of ‘Shell GTL Saraline 185V’ SBF to sensitive local coastal marine biota as per the MoEF/CPCB guidelines. Approval for use and discharge of drilling base fluids in India involves testing of drilling fluids on locally available sensitive sea species and the chemicals used (mainly organic constituents) should be biodegradable (MoEF, 2005).

Bioassay tests for assessing the acute toxicity (96 hr LC<sub>50</sub>) of ‘Shell GTL Saraline 185V SBF’ were performed in accordance with the notification of the Ministry of Environment and Forests (MoEF), Government of India No. G.S.R.546 (E) dtd. 30th August, 2005). Short-term acute toxicity tests (96 hr) were carried out to determine the median lethal concentrations (96 hr LC<sub>50</sub> values) of ‘Shell GTL Saraline 185V SBF’. The LC<sub>50</sub> values for 24 hr, 48 hr, 72 hr and 96 hours of exposure period for ‘Shell GTL Saraline 185V SBF’ were determined using post larvae of coastal marine shrimp species (*Penaeus monodon*) and juveniles of estuarine and coastal finfish, grey mullet (*Mugil cephalus*) as test organisms.

The determined median lethal concentrations (96 hr LC<sub>50</sub> values) of SPP for ‘Shell GTL Saraline 185V SBF’ tested to local sensitive species were determined to be 880,150 mg/l (88.02%) for post larvae of black tiger shrimp (*Penaeus monodon*) and 704,330 mg/l (70.43%) for juveniles of grey mullet (*Mugil cephalus*). The criterion limit specified by MoEF/CPCB for safe use of drilling base fluids and drilling muds in onshore/offshore oil and gas industry in India is that the 96 hr LC<sub>50</sub> values with local sensitive sea species should be

>30,000 mg/l or >3% (by volume) The determined 96 hr LC<sub>50</sub> values for 'Shell GTL Saraline 185V SBF' manufactured by Shell Group and marketed by Dialog Systems Pte Ltd. (Singapore) fell within the acceptance criterion of >30,000 mg/l (>3%) for safe use and disposal in the onshore and offshore oil and gas industry by MoEF/CPCB. Furthermore, the median lethal concentrations (96 hr LC<sub>50</sub> values) determined for 'Shell GTL Saraline 185V SBF' manufactured by Shell Group and marketed by DSPL (Singapore) to post larvae of shrimp and fish, respectively exceed by 29 and 24 times than the specified limit (>30,000 mg/l) by MoEF/CPCB.

The toxicity indices determined for 'Shell GTL Saraline 185V SBF' on comparison with the Toxicity Rating Classification System of EPA/NPDES/BAT indicated that the Synthetic Base Fluid 'Shell GTL Saraline 185V' is rated as 'Non-Toxic' (NT) Grade.

In conclusion, the bioassay tests that assessed the acute toxicity (96 hr LC<sub>50</sub>) of 'Shell GTL Saraline 185V SBF' manufactured by Shell Group and marketed by DSPL (Singapore) to two species of sensitive local marine organisms fell within the acceptance criterion by MoEF/CPCB for the safe use of drilling base fluids in oil and gas industry.

## Certificate of Quality: SO18-00071.002 reissue 001

"This is re-issue documents and supersedes all previous versions"

The results shown in this test report specifically refer to the sample(s) tested as received unless otherwise stated. All tests have been performed using the latest revision of the methods indicated, unless specifically marked otherwise on the report. Precision parameters apply in the determination of the above results. Users of the data shown on this report should refer to the latest published revisions of ASTM D3244; IP 367 and ISO 4259 and when utilising the test data to determine conformance with any specification or process requirement. This Test Report is issued under the Company's General Conditions of Service (copy available upon request or on the company website at [www.sgs.com](http://www.sgs.com)). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues defined therein. This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT ORDER NUMBER :	SITME_GTL SARALINE 185V	SGS REF. NO.:	SO-JO039R-OM18
CLIENT ID :	ITADLN0003	VESSEL :	Tank Transfer
LOCATION :	Sohar Port, Oman	PRODUCT DESCRIPTION :	SARALINE 185V
SAMPLE SOURCE :	Shore Tank	SOURCE ID :	1002
SAMPLE TYPE :	Composite Sample	SAMPLE BY :	SGS
SAMPLED :	27/Feb/2018	RECEIVED :	28/Feb/2018
ANALYSED :	27-28/Feb/2018	COMPLETED :	28/Feb/2018

The laboratory analysis for the Sub-Contract Laboratory tests are provided by:  
S1-Subcontracted to another SGS-ISO 17025 Laboratory - SGS Dubai

PROPERTY	METHOD	RESULT UNITS	MIN	MAX
Density at 15°C	ASTM D4052	779.3 kg/m <sup>3</sup>	--	790
Appearance at 25°C	Visual	Clear & Bright ---	Clear	
Saybolt Color of Petroleum Products	ASTM D156			
Saybolt Color		+30 ---	+30	--
Distillation of Petroleum Products at Atmospheric Pressure	ASTM D86			
Initial boiling point (IBP)		200.2 °C	Report	--
Final boiling point (FBP)		342.1 °C	Report	--
Sulfur Content	ASTM D5453	<1,0 mg/kg	--	3.0
Aromatic Hydrocarbon in Hydrocarbon solvents	SMS 2728			
Aromatics		<0,05 % (m/m)	--	0.1
Flash Point by PMCC	ASTM D93 (Procedure A)	85.0 °C	85	--
Pour Point	ASTM D97	-30 °C	--	-20
Cloud Point	ASTM D2500	-18 °C	--	-10
Kinematic Viscosity at 40 °C (104 °F)	ASTM D445	2.771 cSt	--	3.0
S1 - Aniline Point	ASTM D611	96.8 °C	75	--

**\*\* End of Analytical Results \*\***

AUTHORISED SIGNATORY



Ramalingam Jagannathan  
Laboratory Supervisor





# SV ENVIRO LABS & CONSULTANTS

(Environmental Engineers & Consultants in Pollution Control)

Corporate Office: Enviro House, B-1, Block-B, IDA, Autonagar, Visakhapatnam-530012

& Laboratory www.svenviolabs.com, Ph:0891-2755528, Cell: +91 9440338628

info@svenviolabs.com, svenviro\_labs@yahoo.co.in

Hyderabad Office : Flat No. 302, H.No.7-1-396/B/12, Sai Ram Residency,  
Balkampet Road, S.R. Nagar, Hyderabad-500038

Recognized by Govt. of India-MoEF & CC, New Delhi, Accredited by: NABL & NABET



Ref: SVELC/SCOGPSL/23-04/01

Date: 15-05-2023


## EARTHWORM ACUTE TOXICITY TEST

### STUDY INFORMATION


Test Method : OECD 222  
Test Substance : SOBM  
Sample ID No. : SVELC/23/2050  
Sample Submitted by : CHANDRA OIL & GAS PROJECT SERVICES PVT LTD.  
(On behalf of Halliburton)  
Source of Sample : HALLIBURTON RAVVA LOCATION  
(Formulation Details Enclosed in Annexure Provided by Client)  
Start Date of Analysis : 13.04.2023  
End Date of Analysis : 12.05.2023

### RESULTS

Test Substance	Test Organism	Method Followed	Result	Requirement as per OECD 222	Pass/Fail
SOBM	Pheretima posthuma	OECD 222	48 Juveniles	≥30 Juveniles	Pass

  
ANALYZED BY  
(Sr.Chemist)  
K. SRINIVAS



  
APPROVED BY  
(Lab-Incharge)  
B.RAVI PRASAD





# SV ENVIRO LABS & CONSULTANTS

(Environmental Engineers & Consultants in Pollution Control)

**Corporate Office:** Enviro House, B-1, Block-B, IDA, Autonagar, Visakhapatnam-530012  
**& Laboratory** www.svenviolabs.com, Ph:0891-275528, Cell: +91 9440338628  
 info@svenviolabs.com, svenviro\_labs@yahoo.co.in

**Hyderabad Office :** Flat No. 302, H.No.7-1-396/B/12, Sai Ram Residency,  
 Balkampet Road, S.R. Nagar, Hyderabad-500038

**Recognized by Govt. of India-MoEF & CC, New Delhi, Accredited by: NABL & NABET**



**Table 1 – Study Information**

Test Substance	Synthetic Oil Based Mud (SOBM)	Sample ID.	SVELC/23/2050
Customer Name	Chandra Oil & Gas Project Services Pvt Ltd., (On-behalf of Halliburton)	Test Personnel	Mr. K. Srinivas, Sr. Chemist
Address	Meenakshi Manor, Three Light Junction, Prakasam Street, Ramaraopeta, Kakinada – 533004	Test Facility	SV Enviro Labs and Consultants, Enviro House, Block B, IDA, Autonagar, Visakhapatnam
Source of Sample	Halliburton Kakinada LMP	Test Guidelines	OECD 222
Sample Receipt Date:		11.04.2023	
Physical Condition of Sample:		Black Colour	
Storage Condition:		4°C	

**Table 2 – OECD Method 222 Criteria and Test Data**

Test Acceptability Criteria	Test Data
95% or greater survival in controls	100% control survival
OECD Requirements	Test Data
Minimum of 5 Test Concentration + Control	5 test concentrations + control
3 replicates per concentration	3 replicates/concentration
Minimum Test Substrate of 500-600gms per replicate	550gms/replicate
10 organism for replicate	10 organism/replicate
Test Organism two months to one year old	One year old
Wet mass of worms to be 250-600mg	400mg
Incubation time	4weeks
Daily feeding with	Cow Manure
Mortality No.	48 Juveniles
Controlled Light Dark Cycles	16hrs Light and 8hrs Dark
EPA Recommendations	Test Data
Temperature range of 20±2°C	21.0°C



# SV ENVIRO LABS & CONSULTANTS

(Environmental Engineers & Consultants in Pollution Control)

**Corporate Office:** Enviro House, B-1, Block-B, IDA, Autonagar, Visakhapatnam-530012

**& Laboratory** www.svenvirolabs.com, Ph:0891-2755528, Cell: +91 9440338628

info@svenvirolabs.com, svenviro\_labs@yahoo.co.in

**Hyderabad Office :** Flat No. 302, H.No.7-1-396/B/12, Sai Ram Residency,  
Balkampet Road, S.R. Nagar, Hyderabad-500038

**Recognized by Govt. of India-MoEF & CC, New Delhi, Accredited by: NABL & NABET**



## Test Organisms:

The species used in test are PHERETIMA POSTHUMA.

Adult worms between two months and one year old and with a clitellum are required to start the test.

The worms should be selected from a synchronized culture with a relatively homogeneous age structure.

Individuals in a test group should not differ in age by more than 4 weeks.

## Experimental Procedure:

Acute toxicity test was performed following the method described in the OECD (1984) guideline for testing of chemicals no. 222. The Test Containers made of Glass or other chemically inert material of about one to two litres capacity should be used. The design of the container cover should permit gaseous exchange between the substrate and the atmosphere and access to light.

An artificial soil is used in this test. The dry artificial soil is moistened by adding enough de-ionized water before start of test to obtain approximately half of the final water content. The soil is treated after the worms are added. The test containers are first filled with the moistened soil substrate and the weighed worms are placed on the surface. Healthy worms normally burrow immediately into substrate and consequently any remaining on the surface after 15 minutes are defined as damaged and must be replaced.

The test chemical should not be added to the soil within half an hour of introducing the worms (or if worms are present on the soil surface) so as to avoid any direct exposure to the test chemical by skin contact. 10 earthworms in 500-600g dry mass of artificial soil is used. Seven concentrations, 10, 100 and 1000mg/kg was taken. The test chemical is applied to the surface of the soil as evenly as possible using a scale spraying device to simulate spray application in the field.



# SV ENVIRO LABS & CONSULTANTS

(Environmental Engineers & Consultants in Pollution Control)

**Corporate Office:** Enviro House, B-1, Block-B, IDA, Autonagar, Visakhapatnam-530012  
**& Laboratory** www.svenviolabs.com, Ph:0891-2755528, Cell: +91 9440338628  
info@svenviolabs.com, svenviro\_labs@yahoo.co.in

**Hyderabad Office :** Flat No. 302, H.No.7-1-396/B/12, Sai Ram Residency,  
Balkampet Road, S.R. Nagar, Hyderabad-500038

**Recognized by Govt. of India-MoEF & CC, New Delhi, Accredited by: NABL & NABET**



Before application the cover of the test container is removed and replaced by a liner which protects the side walls of the container from spray. The application was done at a temperature with 21°C.

Food is provided one day after adding the worms and applying the test chemical to the soil. Approx 5gms of food is spread on the soil surface of each container and moistened with deionized water. Therefore food is provided once in a week during the 4week test period.

### Statistical Method:

Mortality was determined for all replicates after 4weeks. Report was expressed as number of Juveniles produced.

**TABLE 3 – Survival Data**

Concentrations (mg/kg)	Total No. of Worms Exposed for Each Replicate	Observation after 4weeks (Produced Juveniles)
0 (Control)	10	50
1.0	10	48
10	10	27
100	10	18
1000	10	15
2000	10	8
4000	10	3
8000	10	0

-----End of Report-----

**ANNEXURE**

**Formulation Details (Provided by Client):**

S.No	Product	Concentration (PPB)
1.	MAK Drillol (SG=0.803)	171.71
2.	EZ MUL ® NT	10.00
3.	INVERU ® NT	0.00
4.	Lime	5.00
5.	LIQUITONE ®	2.50
6.	DURATONE ® HT	4.00
7.	GELTONE ® II	2.00
8.	Water	75.60
9.	Sodium Formate NaCOOH	17.04
10.	RM ® 63	0.50
11.	BARACARB ® 5	5.00
12.	BARACARB ® 50	5.00
13.	Barite (SG=4.15)	120.96

\*\*\*\*\*



Saraline 185V (SG= 0.78)	ppb	158.078					
MAK Drillol (SG= 0.803)	ppb				162.811		
EZ MUL® NT	ppb	6			6		
INVERMUL® NT	ppb	1			1		
Lime	ppb	7			7		
LIQUITONE®	ppb	2			2		
GELTONE® II	ppb	3			3		
Water	ppb	89.6			89.6		
Sodium Formate NaCOOH	ppb	20.917			20.917		
RM® 63	ppb	0.5			0.5		
BARACARB® 5	ppb	5			5		
BARACARB® 50	ppb	5			5		
Barite (SG= 4.15)	ppb	120.788			115.609		
<b>Mixing &amp; Aging Parameters</b>							
Mixer Type & Speed		Silverson @ 6000 RPM			Silverson @ 6000 RPM		
Mixed Volume		2 bbl			2 bbl		
Hot rolling Temperature		168°F			168°F		
Hot rolling Time		16 h			16 h		
Static Aging Temperature		170°F			170°F		
Static Aging Time		48 h			48 h		
AHR Mixing		2 bbl on HBM low speed for 5 min			2 bbl on HBM low speed for 5 min		
<b>Properties</b>							
Mud wt. SG (ppg)		10			10		
OWR		70/30			70/30		
WPS, ppm		185000			185000		
Viscometer, FANN 35 @ 120°F		<b>BHR</b>	<b>AHR</b>	<b>48h ASA</b>	<b>BHR</b>	<b>AHR</b>	<b>48h ASA</b>
600 rpm		38	47	48	45	54	55
300 rpm		24	32	33	30	37	38
200 rpm		18	25	27	23	29	30
100 rpm		13	18	20	16	22	22
6 rpm		6	9	10	7	10	11
3 rpm		5	8	9	6	9	10
PV, cP		14	15	15	15	17	17
YP, lbs/100ft2		10	17	18	15	20	21
Tau 0, lbs/100ft2		5.12	7.55	8.39	5.47	8.13	9.2
10 sec, lb/100ft2		7	10	10	8	11	10
10 min, lb/100ft2			14	12		15	13
30 min, lb/100ft2			15	14		17	14
ES @ 120F, Volts		289	309	343	305	350	372
Excess Lime, ppb			5.32			5.32	
Water Activity, aw			0.8141			0.8124	
HTHP @ 250°F, mL/30min			4			3.6	
Sag Factor				0.519			0.518

<b>HALLIBURTON</b> Baroid		<b>HTC Pune</b>					
<b>Project Name</b>		SBM for Cairn Vedanta					
<b>Customer /Fluid System</b>		Cairn / ENVIROMUL					
<b>Requester</b>		Punit Mudgal					
<b>Request #</b>		2129287					
<b>Assigned Chemist.</b>		Bryan Brown Madtha					
		25-04-2023					
<b>Products in order of addition</b>		<b>Conc.</b>	<b>Barcode</b>	<b>Time (min)</b>	<b>12 1/4" Optimized mud - Raava SOBM (75%) + Hot Rolled Mix 2A (25%) with Treatment</b>		
					<b>Treatment 2</b>		
Barite (SG= 4.15)	ppb	10297932	10	64.3		19.3	
MAK Drillol (SG 0.803)	bbl	C020238	5		0.028	0.036	
Lime	ppb	C034064	5	3			
BaraFLC 513	ppb	C013320	5	4			
DURATONE® HT	ppb	C016761	5	3			
<b>Mixing &amp; Aging Parameters</b>		<b>Specs</b>					
Mixer Type & Speed		2 bbl on Multimixer for 5 min					
Mixed Volume		2 bbl					
Ageing Condition						Dynamic	Static
Ageing Temperature						300°F	350°F
Ageing Time						16 hr	96 hr
AHR Mixing		2 bbl on Multimixer for 5 min					
<b>Properties</b>							
WPS, anion, mg/l		160000-180000		228619			
OWR		75/25 - 80/20		76/24	77/23	78/22	78.09 : 21.91
Mud wt, ppg (SG)		12 ppg (1.438 SG)		12	11.7		12.1
Mixing Comment				• OWR at 76/24. • Added additives as above. • Took BHR rheology.	• Added Base Oil to get OWR to 77/23. • Checked BHR rheology & MW.	• Added Base Oil to get OWR to 78/22. • Added Barite to get to 12 ppg. • Checked BHR rheology & MW	
<b>Viscometer, FANN 35, 150°F</b>		<b>Specs</b>		<b>BHR-76%</b>	<b>BHR-77%</b>	<b>BHR-78%</b>	<b>AHR</b>
600 rpm				145	122	107	92
300 rpm				93	78	67	56
200 rpm				73	61	53	42
100 rpm				51	42	36	28
6 rpm		8-11		22	18	15	10
3 rpm				20	16	13	9
<b>PV</b>				52	44	40	36
<b>YP</b>		lb/100 ft²		41	34	27	20
<b>LSYP</b>		lb/100 ft²		18	14	11	8
<b>TAU 0</b>		7-9		14.33	14.33	14.33	8.11
10 sec		lbs/100 ft²				18	13
10 min		lbs/100 ft²					30
30 min		lbs/100 ft²					31
ES @ 150°F		Volts		>450		602	520
<b>HPHT</b>							300°F / 500 psid
30 min FL							0.4
2x30 min FL				<4			0.8
Water in filtrate							0
<b>Chemical Analysis</b>							
Excess Lime		ppb		2-4			1.3
Whole Mud Chlorides		mg/L					43000
Whole Mud Calcium		mg/L					44800
<b>Retort Analysis</b>							
% Oil in Fluid (v/v)		%					60.60
% Water in Fluid (v/v)		%					17.00
% Solids in Fluid (v/v)		%					22.40
OWR - Oil		75/25 - 80/20					78.09
OWR - Water							21.91
LGS		%		<6			7.8
HGS		%					12.8
<b>Dynamic Sag Testing (VSST)</b>							
mF1		gms					14.73
mF2		gms					15.51
Byssr		ppg					0.65
<b>PPA @ 300°F, 500 psid 10µ ceramic disc</b>							
1 min, mL							0
5 min, mL							0
7.5 min, mL							0.1
10 min, mL							0.1
15 min, mL							0.1
20 min, mL							0.1
25 min, mL							0.1
30 min, mL							0.1
Spurt [4V7.5min-2V30min], mL				<1			0.2
Total [2V30min], mL				<4			0.2
<b>Static Sag Testing (96h/350°F/500psi)</b>							
Free Oil, ml							21
Free Oil, %							6.00
Top SG							1.437
Bottom SG							1.554
Sag Factor				<0.53			0.519
Remarks							



# SV ENVIRO LABS & CONSULTANTS

(Environmental Engineers & Consultants in Pollution Control)

**Corporate Office:** Enviro House, B-1, Block-B, IDA, Autonagar, Visakhapatnam-530012  
**& Laboratory** www.svenviolabs.com, Ph:0891-2755528, Cell: +91 9440338628  
info@svenviolabs.com, svenviro\_labs@yahoo.co.in

**Hyderabad Office:** Flat No. 302, H.No.7-1-396/B/12, Sai Ram Residency,  
Balkampet Road, S.R. Nagar, Hyderabad-500038

Recognized by Govt. of India-MoEF & CC, New Delhi, Accredited by: NABL & NABET



Ref: SVELC/SCOGPSL/23-04/01

Date: 18-05-2023


## VEGETATIVE VIGOUR TEST

### STUDY INFORMATION


Test Method : OECD 227  
Test Substance : SOBM  
Sample ID No. : SVELC/23/2050  
Sample Submitted by : CHANDRA OIL & GAS PROJECT SERVICES PVT LTD.  
(On behalf of Halliburton)  
Source of Sample : HALLIBURTON RAVVA LOCATION  
(Formulation Details Enclosed in Annexure Provided by Client)  
Start Date of Analysis : 13.04.2023  
End Date of Analysis : 12.05.2023

### RESULTS

Test Substance	Test Substance	Method Followed	Result (%)	Requirement as per OECD 277	Pass/Fail
SOBM	Solanum lycopersicon	OECD 227	75% at 20mg/kg	70%	Pass

  
ANALYZED BY  
(Sr.Chemist)  
K. SRINIVAS



  
APPROVED BY  
(Lab-Incharge)  
B.RAVI PRASAD



# SV ENVIRO LABS & CONSULTANTS

(Environmental Engineers & Consultants in Pollution Control)

**Corporate Office:** Enviro House, B-1, Block-B, IDA, Autonagar, Visakhapatnam-530012

**& Laboratory** www.svenviolabs.com, Ph:0891-2755528, Cell: +91 9440338628

info@svenviolabs.com, svenviro\_labs@yahoo.co.in

**Hyderabad Office :** Flat No. 302, H.No.7-1-396/B/12, Sai Ram Residency,

Balkampet Road, S.R. Nagar, Hyderabad-500038

**Recognized by Govt. of India-MoEF & CC, New Delhi, Accredited by: NABL & NABET**



**Table 1 – Study Information**

Test Substance	Synthetic Oil Based Mud (SOBM)	Sample ID.	SVELC/23/2050
Customer Name	Chandra Oil & Gas Project Services Pvt Ltd., (On-behalf of Halliburton)	Test Personnel	Mr. K. Srinivas, Sr. Chemist
Address	Meenakshi Manor, Three Light Junction, Prakasam Street, Ramaraopeta, Kakinada – 533004	Test Facility	SV Enviro Labs and Consultants, Enviro House, Block B, IDA, Autonagar, Visakhapatnam
Source of Sample	Halliburton Kakinada LMP	Test Guidelines	OECD 227
Sample Receipt Date:	11.04.2023		
Physical Condition of Sample:	Black Colour		
Storage Condition:	4°C		

**Table 2 – OECD Method 227 Criteria and Test Data**

Test Acceptability Criteria	Test Data
90% or greater survival in controls	95% control survival
OECD Requirements	Test Data
Minimum of 5 Test Concentration + Control	5 test concentrations + control
4 replicates per concentration	4 replicates/concentration
Test Substrate 0.35 to 0.85mm in diameter	0.60mm in diameter
4 plants per one pot as replicate	4Plants/replicate
Test Species – 2- to 4- True Leaf	4- True Leaf Stage
Seeding Emergence 70%	75% at 20mg/kg
Test Duration	28 days
Controlled Light Dark Cycles	16hrs Light
OECD Recommendations	Test Data
Temperature range of 20±10°C	26.0°C±4°C
Humidity – 70% ±25%	80-90%





# SV ENVIRO LABS & CONSULTANTS

(Environmental Engineers & Consultants in Pollution Control)

**Corporate Office:** Enviro House, B-1, Block-B, IDA, Autonagar, Visakhapatnam-530012

**& Laboratory** www.svenvirolabs.com, Ph:0891-2755528, Cell: +91 9440338628

info@svenvirolabs.com, svenviro\_labs@yahoo.co.in

**Hyderabad Office :** Flat No. 302, H.No.7-1-396/B/12, Sai Ram Residency,  
Balkampet Road, S.R. Nagar, Hyderabad-500038

**Recognized by Govt. of India-MoEF & CC, New Delhi, Accredited by: NABL & NABET**



## Test Substance:

The Test Substance used is *Solanum lycopersicon*.

Plants are grown in pots using a sandy loam contains 2.0 percent organic carbon. Field soil should be sieved to 2 mm particle size in to homogenize it and remove coarse particles. The soil is classified according to a standard classification scheme. The soil is heat treated to reduce the effect of soil pathogens.

## Experimental Procedure:

Plants of the same species were grown in pots from seeds to the 2- to 4 true leaf stage. The number of plants per pot are 4Nos with 4replicates and a control. After the seeds have emerged, thinning was done so that there is only one plant per pot for larger-growing species, while for smaller growing species more than one plant per pot. Thus, depending on the ultimate size the plant, a replicate can be one plant per pot, several plants per pot, or a tray of pots, each with one plant.

Mainly the test conditions plays a major role in survival of Plants. Temperature is maintained as  $20\pm 4^{\circ}\text{C}$  and Humidity is maintained between 80-90%. The photoperiod is 16hrs light.

Control groups are used to assure that effects observed are associated with attributed only to the test substance exposure. The appropriate control group should be identical in every respect to the test group except for exposure to the test substance. Within a given test, all test plants including the controls should be from the same source.

The test concentrations taken are 5.0, 10.0, 20.0, 30.0 & 50.0 mg/kg units of application. For crop protection products concentrations/rates could be based on the recommended or maximum concentration or application rate.

During the observation period, the plants are observed frequently (at least weekly and if possible daily) for visual phytotoxicity and mortality. At the end of the test, biomass of surviving plants has measured on different parts of the plant. The latter include abnormalities in appearance of the young plants, stunted growth, mortality, and effects on plant development. The final biomass is measured using final average dry shoot weight of surviving plants, by harvesting the shoot at the soil surface and drying them to constant weight at  $60^{\circ}\text{C}$ .



# SV ENVIRO LABS & CONSULTANTS

(Environmental Engineers & Consultants in Pollution Control)

**Corporate Office:** Enviro House, B-1, Block-B, IDA, Autonagar, Visakhapatnam-530012  
**& Laboratory** www.svenviolabs.com, Ph:0891-2755528, Cell: +91 9440338628  
info@svenviolabs.com, svenviro\_labs@yahoo.co.in

**Hyderabad Office:** Flat No. 302, H.No.7-1-396/B/12, Sai Ram Residency,  
Balkampet Road, S.R. Nagar, Hyderabad-500038

**Recognized by Govt. of India-MoEF & CC, New Delhi, Accredited by: NABL & NABET**



## Statistical Method:

Mortality was determined for all replicates after 28days. Report was expressed as percentage of plants survived.

**TABLE 3 – Survival Data**

Concentrations (mg/kg)	Total No. of Seeds Exposed for Each Replicate	Observation after 28days % Growth
0 (Control)	4	95
5.0	4	90
10.0	4	80
20.0	4	75
30.0	4	65
50.0	4	40

-----End of Report-----

**ANNEXURE**

**Formulation Details (Provided by Client):**

S.No	Product	Concentration (PPB)
1.	MAK Drillool (SG=0.803)	171.71
2.	EZ MUL ® NT	10.00
3.	INVERU ® NT	0.00
4.	Lime	5.00
5.	LIQUITONE ®	2.50
6.	DURATONE ® HT	4.00
7.	GELTONE ® II	2.00
8.	Water	75.60
9.	Sodium Formate NaCOOH	17.04
10.	RM ® 63	0.50
11.	BARACARB ® 5	5.00
12.	BARACARB ® 50	5.00
13.	Barite (SG=4.15)	120.96

\*\*\*\*\*





**RAJASTHAN STATE POLLUTION CONTROL BOARD**

**Regional office, Rajasthan state pollution control Board, Jasol phanta, Opp. J.  
office, Jasol Road Balotra, District - Barmer.**



**Registered**

**File No: F(HSW)/Barmer(Barmer)/4776(1)/2023-2024/2174-2175**

**Date:- 01/11/2023**

**Unit Id : 24118**

**M/s Vedanta Limited, Cairn Oil and Gas(Old Name Cairn India Limited**

**(Aishwariya Field),  
DLP Area, Phase 2, Jacranda Marg, DLF City , Gurugram , Tehsil:Gurugram**

**District:Gurugram**

**Sub:-** Authorization for operating a facility for Collection, Co-Processing, Disposal, Disposal at landfill, Generation, Incineration, Reuse, Storage, Transport of Hazardous Wastes Under Hazardous and Other Waste (Management and Transboundary Movement) Rules, 2016.

**Ref:-** Your application No. 345,303 received on 27/07/2023 and subsequent correspondence.

**Sir**

- 1 Number of authorization RPCB/HWM/2023-2024/Balotra/HSW/10.
- 2 **FGM RJ OIL of M/s Vedanta Limited, Cairn Oil and Gas(Old Name Cairn India Limited (Aishwariya Field)) is hereby granted an authorization based on the enclosed signed inspection report for Collection, Co-Processing, Disposal, Disposal at landfill, Generation, Incineration, Reuse, Storage, Transport of Hazardous waste on the premises situated at Village Sar Ka Par, Kawas, Tehsil Barmer District Barmer, Tehsil: Barmer District: Barmer, , District: Barmer.**
- 3 The authorization is granted for the Collection, Co-Processing, Disposal, Disposal at landfill, Generation, Incineration, Reuse, Storage, Transport of hazardous waste in the state of Rajasthan.
- 4 The authorization shall be in force for period from 01/12/2023 to 30/11/2028 .





**RAJASTHAN STATE POLLUTION CONTROL BOARD**

**Regional office, Rajasthan state pollution control Board, Jasol phanta, Opp. JDVNL  
office, Jasol Road Balotra, District - Barmer.**

**Registered**

**File No: F(HSW)/Barmer(Barmer)/4776(1)/2023-2024/2174-2175**

**Date:- 01/11/2023**

**Unit Id : 24118**

- 5 i. That this authorization shall cease to be valid & shall be liable to be revoked without any further notice in case of refusal/expiry of consent to operate under the provisions of Water(Prevention and Control of Pollution) Act,1974 and Air(Prevention and Control of Pollution)Act,1981 by the State Board.**
- ii. That no recycling/ re-processing of the hazardous waste covered under schedule IV shall be carried out without prior authorization from Rajasthan State Pollution Control Board as recycler/ re-processor of hazardous waste under the rule 6 of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.**
- iii. That no hazardous waste shall be utilized for co-processing as a supplementary resource or for energy recovery or after processing without prior and valid approval of Central Pollution Control Board under the rule 9 of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.**
- iv. That in case of any expansion or change in process or product or change in mode/ practice of disposal of hazardous waste or its quantity, fresh authorization shall be obtained.**
- v. That the arrangements for transportation of the hazardous waste for disposal shall be done by the authorized/ dedicated vehicles only and any environmental damages during Transportation shall be borne by sender/ receiver whoever arranges the transportation.**
- vi. That this authorization is issued for Drilling and hydrocarbon Production at Mangala Well Pad - 17.**
- vii. That the hazardous waste, which are to be disposed through captive secured landfill and captive incinerator at mangala processing terminal shall be transferred through manifest system as prescribed in Rules.**
- viii. The unit shall be inspected by the Board Officials to check the compliance of the unit. If any non compliance found the consent may be revoked.**





**RAJASTHAN STATE POLLUTION CONTROL BOARD**

**Regional office, Rajasthan state pollution control Board, Jasol phanta, Opp. JDVNL  
office, Jasol Road Balotra, District - Barmer.**

**Registered**

**File No: F(HSW)/Barmer(Barmer)/4776(1)/2023-2024/2174-2175**

**Date:- 01/11/2023**

**Unit Id : 24118**

**6 That this authorization is being issued for following hazardous waste: -**

- a) Drill cutting with excluding those from water based mud, category 2.1 with capacity of 925 MT/Well/Annum.
- b) Sludge containing oil, category 2.2 with capacity of 53 MT/Well/Annum.
- c) Drilling mud containing oil, category 2.3 with capacity of 475 MT/Well/Annum.
- d) Sludge and filters contaminated with oil, category 3.3 with capacity of 8 MT/Well/Annum.
- e) Used or spent oil, category 5.1 with capacity of 5 MT/Well/Annum.
- f) Waste or residues containing oil, category 5.2 with capacity of 55 MT/Well/Annum.
- g) Empty barrels/ containers/liners contaminated with hazardous chemical/wastes, category 33.1 with capacity of 8 MT/Well/Annum.
- h) Contaminated cotton rags or other cleaning materials, category 33.2 with capacity of 10 MT/Well/Annum.
- i) Concentration or evaporation residues, category 37.3 with capacity of 51 MT/Well/Annum.

7 That the unit shall comply all the provisions of the guideline issued by State Board for transportation of the hazardous waste under Hazardous Waste (Management, Handling & Transboundary Movement) Rules-2016 vide circular dated 19/01/2010. (annexure-A).

8 That this authorization is valid only for transportaion of hazardous waste from authorized generator to authorized disposal facility/registred recycler/ authorized incinerator within the Satate of Rajasthah.

9 That vehicle used for transportation of hazardous waste shall not be utilized for any purpose.

10 That the transporter shall not accept hazardous waste from an occupier for transport unless it is accompanied by copies 3 to 6 of the manifest.

11 That the transporter shall submit copies 3 to 6 of the manifest duly signed with date to the operator of the facility alongwith the waste consignment.

12 That the transporter shall not dispose or unload the hazardous waste in between way to disposal facility/recycler/incinerator.





**RAJASTHAN STATE POLLUTION CONTROL BOARD**

**Regional office, Rajasthan state pollution control Board, Jasol phanta, Opp. JDVNL  
office, Jasol Road Balotra, District - Barmer.**

**Registered**

**File No: F(HSW)/Barmer(Barmer)/4776(1)/2023-2024/2174-2175**

**Date:- 01/11/2023**

**Unit Id : 24118**

- 13 That in case of any damage to the environment due to mishandling / inappropriate transportation the transporter shall be responsible for the cost of mitigation/remediation of such damage.
- 14 The authorization is subject to the conditions stated at Annexure "A" enclosed with the authorization letter and the such conditions as may be specified in the Rules for the time being forced under the Environmental (Protection) Act, 1986.
- 15 That the annual reports/returns in the form prescribed under the Rules shall be submitted to the Board by 30th June of every year and records of hazardous waste Generation, handling & transportation shall be maintained according to the provisions of the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2016 and shown & submitted to the Board as and when asked for.
- 16 The hazardous waste shall not be kept in transportation for a period beyond 48 hours, failing which the authorization shall deemed to be revoked.
- 17 Any other conditions for compliance as per the guidelines issued by the MoEF or CPCB.
- 0 It shall be ensured that the Hazardous waste is handled, managed & transported of strictly in accordance with the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2016. Non compliance of the Rules or any of the conditions contained in the authorization shall be tantamount to automatic cancellation/revocation of the authorization.
- 19 **That Authorization is issued under the provisions of Hazardous Waste (Management ,Handling and Transboundary Movement) Rules, 2016 from the environmental angle only, and does not absolve the project proponent from the other statutory obligations prescribed under any other law or any other instrument in force. The sole and complete responsibility, to comply with conditions laid down in all other for the time-being in force, rests with the industry/unit/project proponent.**
- 20 That this Authorization shall not, in any way, adversely affect or jeopardize the legal proceeding, if any, instituted in the past or that could be instituted against you by the State Board for violation of the provisions of the Act or the Rules made thereunder.





**RAJASTHAN STATE POLLUTION CONTROL BOARD**  
**Regional office, Rajasthan state pollution control Board, Jasol phanta, Opp. JDVVNL**  
**office, Jasol Road Balotra, District - Barmer.**

**Registered**

**File No: F(HSW)/Barmer(Barmer)/4776(1)/2023-2024/2174-2175**

**Date:- 01/11/2023**

**Unit Id : 24118**

**Yours sincerely,**

**Regional Officer**

**Copy To:-**

1 Master File

**Regional Officer**





**ANNEXURE NO. 12**

BOP Details

A Blowout Preventer (BOP) is an assembly of specialized valves or similar mechanical devices installed, during drilling, between the wellhead system and the drill floor. It is used to seal, control and monitor the well in case of blowout.

A BOP is usually composed of:

- An annular BOP, which can close the well at different devices such as the drill string, for example,
- Different types of Rams, which can close the well with the drill-pipe inside the well. In an emergency shear Rams can be used to cut the pipe inside the well if necessary.
  - **Pipe rams** close around a drill pipe, restricting flow in the annulus between the outside of the drill pipe and the wellbore, but do not obstruct flow within the drill pipe.
  - **Blind rams**, which have no openings for pipe, can close off the well when the well does not contain a drill string and seal it.
  - **Shear rams** are designed to shear the pipe in the well and seal the wellbore simultaneously.

All the Rams are hydraulically activated. During drilling operations the closure of the well with the BOP can be manually or automatically activated.

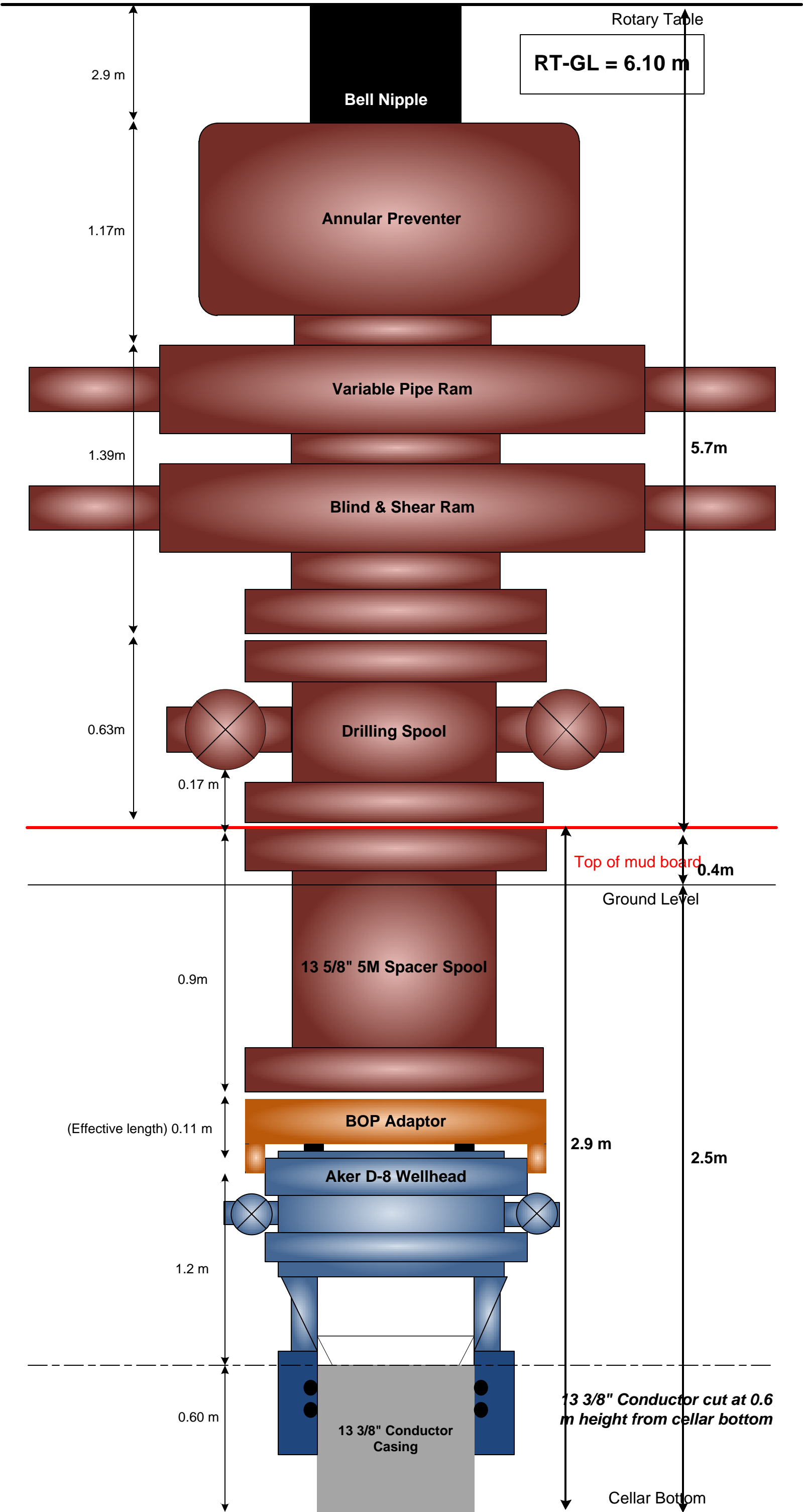
To control a Blowout, the BOP Stack is fitted with hydraulic lines which allow drillers:

- To pump a heavier drilling fluid in the well (Kill line),
- To evacuate the lighter fluid from the well (Choke line).

The service pressure of the BOP is chosen to support the maximum pressure encountered during drilling operations. The pressure range is usually from 5000 psi to 15000 psi.

The primary functions of a blowout preventer system are to:

- Confine well fluid to the wellbore
- Regulate and monitor wellbore pressure
- Shut in the well
- “Kill” the well (prevent the flow of formation fluid, influx, from the reservoir into the wellbore)
- Seal the wellhead (close off the wellbore)



## Annexure – 13 CER Projects

Vedanta Limited-Cairn Oil & Gas received environmental clearance (EC) for our hydrocarbon production augmentation for production of 400000 BOPD of Crude Oil and 750 MMSCFD of Natural Gas from onshore RJ-ON-90/1 block area in Barmer & Jalore districts of Rajasthan. As per original EC condition no. 9 (u), **at least 1.5%** of the total project cost (INR 12000 Crores) shall be allocated for Corporate Environment Responsibility (CER) in addition to the capital cost earmarked towards environmental pollution control measures.

Further, Cairn submitted a proposal for EC amendment for issuing a corrigendum in Environmental Clearance for correction in CER budget allocation & spent, that is 0.125 %, instead of 1.5 % of total expansion project cost, in line with MoEF&CC office memorandum dated 1<sup>st</sup> May, 2018. The proposal was considered in 24<sup>th</sup> meeting of Expert Appraisal Committee (EAC Industry-2) held on 19<sup>th</sup> October 2020. EC with revised CER condition was issued by MoEF&CC on 11<sup>th</sup> December 2020.

As per MoEF&CC O.M. dated 1<sup>st</sup> May, 2018, some of the activities which can be carried out in CER are Infrastructure creation for drinking water supply, sanitation, health, education, skill development, roads, cross drains, electrification including solar power, solid waste management facilities, scientific support and awareness to local farmers to increase yield of crop and fodder, rain water harvesting, soil moisture conservation works, avenue plantation, plantation in community areas, etc.

During the period of **Apr'24 - Sept'24 ~ 1.22 cr** has been spent towards CER activities such as Water & Sanitation, Healthcare & Sports & Culture.

In line with above guidelines, Cairn has identified below listed projects to be carried out as part of its Corporate Environment Responsibility (CER), which will be carried out progressively over a period of next 10 years.

Sl. No	Thematic Area	Proposed CER Activities
1	Safe drinking water supply	ROs, Bore well, and provision of safe drinking water in community and schools
2	Health and Sanitation	Swasthya Pathshala interventions for promoting health and hygiene in 40 schools
3	Education & Sports	Smart Class in schools, School Library, Playground at Schools, School Rooms, Mid-day meal shed, Sanitation Work, Computer support & furniture, school renovation work, Support to Players
4	Biodiversity Conservation/Community plantation/Avenue Plantation	Development of dedicated drinking water facility for Wildlife in protected forest area Carrying out plantation at community land Revival of Khejri Plantation
5	Restoration of natural water bodies (Nadi)	Khadin/Nadi Revamping
6	Rainwater harvesting and solar electrification of Government Schools	Rainwater harvesting structures at Schools
7	Solid Waste Management	Awareness Programs
8	Skill development of local people for enhancing their livelihood opportunities, etc. (Training e.g. Fitter, welders, Tailoring, electronics item repairing, electrical, masonry work, etc.) of unskilled villagers	Vocational trainings

Under above identified project categories, Cairn in discussion with concerned stakeholder has finalized below activities (considering the issues raised during public hearing) and started field activities accordingly:

### **CER Activity: Biodiversity Conservation/Community Plantation/Avenue Plantation**

#### **Projects:**

1. **Development of dedicated drinking water facility for Wildlife in protected forest area** – Based on our past experience and considering water scarcity area, low rainfall, extreme hot climate as well as to keep the wild animals (Deer etc.) safe from stray dogs, the creation of dedicated drinking water facility in protected forest area will be of very useful for wild animals. **Cairn has identified location in discussion with District Forest Office for development of solar powered borewell and Gajlar (pond) for making provision of drinking water for wild animals. Facility is developed at Dhorimanna Village Forest area and is operational from 1 July'22.**
2. **Biodiversity Conservation: Biodiversity assessment** is carried out at all the assets and action plan prepared from Biodiversity conservation. Biodiversity Assessment based on IBAT and STAR Matrix with objective to draw No Net Loss or Net Positive Impact completed.
3. **Avifauna Protection** - Installation of Milli Voltage Cable Cover (MVCC) and Milli Voltage Line Cover (MLVC) at Pole crossing to avoid electrocution of birds. Recently, spikes are installed on double poles across 140 KM OHL network.
4. For cherishing the biodiversity near to our asset, designed and released Coffee Table Book **“Know Your Flora- A glimpse of Thar Ecosystem”**.
5. Provided **Wildlife rescue vehicle** to Forest Department Barmer.
6. **Promoting plantation of native species** within the facility & community as well. Approx. 1500 seed balls and 10000 saplings of indigenous species developed at MPT Nursery.
7. Carrying out **social forestry projects** in association with local forest authorities and communities to increase green cover of the area.
8. Installation of Warning Signages board in the block area for Wildlife crossing to prevent wildlife related road incidents.
9. Construction on underpasses & culverts for wildlife crossing.
10. Defensive driving training being provided to all drivers to avoid road killing of wild animals in the area.
11. Revival of Khejari in Thar Ecosystem through Agro forestry: Distributed 3000 saplings of Thar Shobha Khejari to community farmers.
12. Identification of Nectar/Pollen Species. Preparation of monthly pollen/Nectar chart. Plantation of species according to the chart in flood channel for attracting honeybees/butterfly. Baseline survey of Honeybee Hives.
13. Habitat identification of Spiny Tail Lizard (IUCN List of Threatened Species) & create awareness among stakeholders.
14. **Safe drinking water supply** - While the RO units are functional and the community is taking water from the same, efforts have been put in place to help strengthen the exit strategy and project sustainability. Focused intervention on IEC activities, water committee formation and handholding support on business plan has been extended to the communities at large, which has resulted in a positive response from the community. With the continuous mobilization of community to bring ownership among them, CSR team has been successful in bringing ownership and convergence with community there has been a net saving INR 25 lakhs. Total 106 RO plants have been revived & functionalized, out of 124 community plants. 20000+ beneficiaries have been availing safe and hygienic drinking water from our RO plants on monthly basis. 4 more borewells have been set up in Banda, Nimbalkot, Kau ka Kheda & Dholatpura gram panchayat benefiting 800 households. This is in addition to the 10 community borewell operational in phase 1. The PHED department has taken over the operation and maintenance of 124 RO plants from Cairn after seven years. These RO plants

are based on a community model and have achieved sustainability. They are all functional and provide safe drinking water to the 20000+ people.

15. **Community Plantation nearby our operation areas** – Cairn has received suggestion to carryout plantation in community fellow land in many forums including public hearing during EIA for expansion projects. Cairn is in process to identify suitable area (single large patch of land) to carry out mass plantation. Company has initiated discussion with various states departments (Environment, Forests and district administration) to identify land parcels and finalize the execution plan for plantation.
16. **Project Khejri** – Khejri is native plant species and known as “Kalpvriksha of Thar”. Cairn has planned for development & distribution of Thar Sobha variety of Khejri for increasing farmer's income as well as improving soil health condition. Cairn is already initiated preparation of Khejri saplings and initiated discussion with interested farmers to plant these Khejri in their land.
17. **Carbon sequestration through Greenbelt Developed:**
  - a. **Cairn's RJ-ON-90/1 block situated in the Thar Desert.** Despite of deserts inhospitable life conditions with continuous efforts, Cairn has been able to develop green carpet of 227 Hectares in and around their facilities including community land with approx. 1,50,000 trees. Carbon sequestration study is carried out which confirmed the carbon sequestration potential of Cairn developed plantation is **23156 tons of CO2e** which is calculated based on carbon stock stored.
  - b. **MOU with Government of Rajasthan for Mass Plantation in Barmer:** A step towards our ESG commitment of planting 2M trees by 2030; organization has signed MOU with Rajasthan Forest Development Agency to develop carbon sink by plantation of 0.35 M trees over 700 hectares of forest land in Barmer district.
18. **Rainwater harvesting Rainwater harvesting in Corridor Area:** Cairn has initiated construction of 3 rainwater harvesting structures in Bhagyam Road & pipeline corridor outside its facilities. The surface runoff from catchment area of ~75000 sqm will be diverted to this rainwater harvesting cum recharge structures. These structures will have annual rainwater harvesting potential of ~10000 KL/Annum. **Cairn's natural resource management project uses traditional wisdom on catchment characteristics along with modern scientific engineering to renovate these historically existing zones which have dried up owing to vast quantities of silt deposits accumulated over the years. As on date we have renovated 28 community Nadi and constructed 95 Roofwater harvesting structures in schools, conserving more than 18 lakh cubic meter water annually.**

## **ANNEXURE – 14**

# **EMP Compliance Audit – EC for Exploratory & Appraisal Drilling of 300 Wells**

**EMP Compliance Report\_EIA for Drilling of 300 Exploratory & Appraisal wells in RJON-90/1 Block, Rajasthan**

S. No.	Aspect	Potential Impacts	Mitigation Measures Proposed in EIA Report	Compliance Status & Observations Ugr' 24
<b>Drilling and Development of Well Pads</b>				
1	Land Procurement	Loss of Income Issues pertaining to compensation	<ul style="list-style-type: none"> <li>Well location to be selected after considering options to avoid agricultural land with preference for any fallow land in the vicinity and possibility for horizontal directional drilling in case of an agricultural land.</li> <li>Consultations to be carried out with land owners for finalizing compensation packages.</li> <li>Information disclosure to community and individual land owners about the project activities.</li> <li>Adequate compensation for any standing crops and loss of income for the lease period; and</li> <li>The center of drill site to be located at least 300m from any settlement, habitation, or sensitive location e.g., religious structure, school, hospital/ dispensary etc.</li> </ul>	<p>The project proponent has taken following measures related land procurement for project activities.</p> <ul style="list-style-type: none"> <li>Sites for exploratory drilling are finalized based on seismic survey results, however micro siting criteria to avoid agricultural land, dense vegetation area, population habitat, permanent structures etc are considered for finalization of well pad site.</li> <li>Availability of existing infrastructure such as roads, existing and proposed interfiled pipelines etc. are considered for the selection of well pad sites.</li> <li>Land is being acquired on temporary lease basis with mutual consents and agreed compensation are being paid in due time in compliance with the regulatory requirements.</li> <li>Exploratory sites are located far from habitation or sensitive locations at most of the locations.</li> <li>PP shall provide a grievance mechanism to address land related issues while procuring/ lease of land. Maintain records and closure of grievances.</li> </ul>
2	Site Clearance and Grading	Dust Generation Loss of top soil Increased runoff Loss of vegetation	<ul style="list-style-type: none"> <li>The final site selection to be done for site with minimum trees and involving minimum cutting.</li> <li>Top soil management: Water sprinkling to be carried out while working in proximity of agricultural fields or settlements/habitations.</li> <li>Runoff from drill sites located near ponds and catchment of tankas to be channelized through silt trap.</li> </ul>	<p>Project proponent have taken measures to mitigate impacts during site clearance stage.</p> <ul style="list-style-type: none"> <li>Criteria like non-availability of agricultural land, forest land, dense plantation, other structures etc. during land acquisition and avoided to extent possible.</li> <li>Cutting of trees are avoided or minimized.</li> <li>Necessary permission is also being obtained for cutting of trees, if required after proper compensation.</li> </ul>



**EMP Compliance Report\_EIA for Drilling of 300 Exploratory & Appraisal wells in RJON-90/1 Block, Rajasthan**

S. No.	Aspect	Potential Impacts	Mitigation Measures Proposed in EIA Report	Compliance Status & Observations Ugr' 24
				<ul style="list-style-type: none"> <li>In desert field, there is no distinguished top soil available, however layer of top soil is stripped and used in greenbelt area around the well pad.</li> <li>Water sprinkling is being carried out at project sites during dry season to avoid generation of dust.</li> <li>Garland drains are provided to collect storm water.</li> <li>PP shall compensate any tree cuttings as per the forest department Compensatory afforestation as per the latest revised rules in consultation with Forest Dept.</li> <li>PP shall ensure adequate garland drains are provided as was observed in few of the exploratory sites Garland drains not adequately connected and maintained.</li> </ul>
3	Construction of Drill Site	Handling of excess earth; Noise generation Increase in traffic volumes Additional employment Health & Safety risks	<ul style="list-style-type: none"> <li>The final site selection to be done for site with minimum trees and involving minimum cutting.</li> <li>Top soil management Water sprinkling to be carried out while working in proximity of agricultural fields or settlements/habitations.</li> <li>Runoff from drill sites located near ponds and catchment of tankas to be channelized through silt trap.</li> </ul>	Project proponent have taken following measures to address noise dust traffic related issues. <ul style="list-style-type: none"> <li>Construction material is stored in covered shed. Loose materials are covered during transportation. Loose and fine material is handled carefully to avoid generation of dust. Drop height is kept to minimum to avoid dust generation.</li> <li>Vehicle speed limits are followed as per Cairn Road Transport Safety Policy.</li> <li>Well pad area including pit area are secured using chain link and barbed wire mesh to avoid entry of wild animals or any unauthorized personnel with the provision of security staff or caretaker available.</li> <li>Training on "Road Safety and Journey Management Plan" is being imparted to vehicle drivers.</li> </ul>

**EMP Compliance Report\_EIA for Drilling of 300 Exploratory & Appraisal wells in RJON-90/1 Block, Rajasthan**

S. No.	Aspect	Potential Impacts	Mitigation Measures Proposed in EIA Report	Compliance Status & Observations Ugr ' 24
				<ul style="list-style-type: none"> <li>Mandatory PPEs (coverall, safety shoe, safety glass, hard hat, gloves etc.) as per Cairn HSE requirements are required for entering the well pad</li> </ul>
4	Construction of Campsite	Structural Failure of crane Crane overturning/Collapse Falling Objects Health & Safety risks	<ul style="list-style-type: none"> <li>CIL to ensure that each crane for the site is equipped with a legible, durable load chart that shows the manufacturer's recommended load configurations and maximum load weights;</li> <li>Crane at site (including those brought in by the contractors) must be equipped with a legible, durable load chart that shows the manufacturer's recommended load configurations and safe working loads;</li> <li>Surface conditions to be examined prior to movement of crane;</li> <li>Provision and usage of adequate PPEs to workers as applicable and identified for the respective activity.</li> </ul>	<p>Project proponent have implemented following measures.</p> <ul style="list-style-type: none"> <li>Only certified equipment, machineries as well as tools &amp; tackles are allowed to use at site. Cranes and other lifting tools &amp; tackles are inspected and colour coded on quarterly basis.</li> <li>All lifting machinery and tools shall be inspected and certified by competent &amp; cairn certified agency.</li> <li>All jobs are being carried out with dedicated PTW and job safety analysis Workers always use full PPE while working at site</li> </ul>

**EMP Compliance Report\_EIA for Drilling of 300 Exploratory & Appraisal wells in RJON-90/1 Block, Rajasthan**

S. No.	Aspect	Potential Impacts	Mitigation Measures Proposed in EIA Report	Compliance Status & Observations Ugr' 24
5	Transportation of Drilling Components and Rig	Congestion of roads Road accidents Vehicular emissions Damage to road conditions Oil leaks	<ul style="list-style-type: none"> <li>• Movement of rig &amp; associated machinery to be avoided to the extent possible during peak traffic hours on road between Barmer and MPT, crossing at Guda Manali and NH-15 at Bhadka;</li> <li>• CIL's existing Journey Management Plan to be instructed to all contractors and maintain a low speed (30 kmph) while travelling through village area.</li> <li>• Only trained drivers with knowledge of CIL's requirement on defensive driving to be involved in the movement of rigs. Local administration and village administration as applicable to be informed during movement of rigs through village roads.</li> <li>• Training to be provided to drivers involved for movement of rigs.</li> <li>• Breakdown of vehicles to be attended within 2 hours of reporting.</li> <li>• All vehicles to be verified for valid PUC;</li> <li>• Periodic maintenance of all vehicles and rigs to be carried out</li> <li>• Drip pans to be used while parking of the vehicles.</li> </ul>	<p>Project proponent have taken following measures related to transportation of drilling components and Rig.</p> <ul style="list-style-type: none"> <li>• Vehicle movement including Rig are being carried out with approved JMP. Night movement of rig is prohibited.</li> <li>• All vehicles have inspected for valid PUC and other documents as per RTSO requirement before issuing tag for entering the site.</li> <li>• Drivers engaged by Cairn and contractors are undergoing mandatory defensive driving training before starting to work at site.</li> <li>• Speed limits for all vehicles are defined as 65 kmph on main roads and 30 kmph on internal roads and same is being complied and monitored through VTS system.</li> <li>• Speed limit of 15kmph is being maintained within the site. Training on "Road Safety and Journey Management Plan" is being imparted to vehicle drivers.</li> <li>• Vehicles are maintained in an appropriate road worthy condition and including all necessary safety equipment. Vehicle Inspections (in terms of road safety, regulatory requirements- PUC checks etc.) is being carried out by competent persons as per Standard Operating Procedure and Vehicle Inspection Tag is being issued to qualified vehicles only.</li> <li>• Site specific vehicle entry certificate are being issued on daily basis for restriction of movement of vehicles inside plant areas and well pads. Vehicles entering inside MPT and well pads shall have mandatory red zone gate pass.</li> </ul>

**EMP Compliance Report\_EIA for Drilling of 300 Exploratory & Appraisal wells in RJON-90/1 Block, Rajasthan**

S. No.	Aspect	Potential Impacts	Mitigation Measures Proposed in EIA Report	Compliance Status & Observations Ugr ' 24
				<ul style="list-style-type: none"><li>• Material transportation route from one site to other sites are defined and being followed. Same is being ensured through CIL Journey Management Plan.</li><li>• All vehicles entering red zone area of operating terminals are fitted with spark arrestors.</li></ul>

**EMP Compliance Report\_EIA for Drilling of 300 Exploratory & Appraisal wells in RJON-90/1 Block, Rajasthan**

S. No.	Aspect	Potential Impacts	Mitigation Measures Proposed in EIA Report	Compliance Status & Observations Ugr' 24
6	Drilling and Well Testing	<p>Additional stress on the local water resources.</p> <p>Potential for contamination due to handling, storage, and transportation of wastes</p>	<ul style="list-style-type: none"> <li>• Water requirement for all drill sites to be met through CIL's existing sources approved by CGWA / PHED water sources.</li> <li>• Two separate Drill cutting disposal pits to be provided for WBM and SBM cuttings.</li> <li>• Drill waste pits to be provided with HDPE lining on bottom and side surfaces;</li> <li>• WBM to be tested for hazardous characteristic and disposed-off accordingly,</li> <li>• SBM drill cuttings to be transported from well site to the existing captive landfill at MPT or third party TSDF;</li> <li>• A detailed waste management plan to be prepared by the Waste Manager for the Project;Used hazardous chemical barrels, used oil and other hazardous waste to be sent to RSPCB / CPCB / MoEF authorized recyclers;</li> <li>• CIL to also explore disposing drill cuttings containing for co-processing as alternate fuel and or raw material (AFR) in cement industry based on suitability and availability.</li> </ul>	<p>Project proponent have taken following measures to address water related issues.</p> <ul style="list-style-type: none"> <li>• Water is being sourced from approved ground water sources (CGWA approved ground water source or in case of remote site PHDE approved water supply site).</li> <li>• WBM cuttings are non-hazardous in nature and being used for filling low lying area within site after proper washing and drying SOBM cuttings are processed through cutting dryer to recover the mud and cuttings are disposed in real time to cement industry for coprocessing (AFR)</li> <li>• All waste pits are HDPE lined for interim storage of waste. Detailed waste management plan is already developed and being implemented.</li> <li>• All recyclable hazardous waste is being disposed through authorized recycler.</li> <li>• PP shall ensure timely evacuation of waste water and Solid waste from well pads post drilling and well testing as to ensure no Liquid or Solid waste left at site for long time.</li> </ul>

**EMP Compliance Report\_EIA for Drilling of 300 Exploratory & Appraisal wells in RJON-90/1 Block, Rajasthan**

S. No.	Aspect	Potential Impacts	Mitigation Measures Proposed in EIA Report	Compliance Status & Observations Ugr ' 24
7		Generation of noise	<ul style="list-style-type: none"> <li>• Rotary equipment on rig for drilling to be provided with silencers, rubber claddings and noise isolators.</li> <li>• The proposed center of the well site to be located at least 300m from any existing settlement or sensitive receptors (hospitals, schools and any religious structures).</li> <li>• Effective noise barriers to be set up at fence line when working at a distance of less than 300m from center of the well site;</li> <li>• Equipment upkeep and regular maintenance to minimize noise generation from all rotary equipment;</li> <li>• Effective noise barrier at the fence-line of the site to be set up, especially when working close to habitation;</li> <li>• PPE's such as ear plugs, muffs to be provided to workers at site;</li> <li>• Preventive maintenance of vehicles and machinery to be undertaken;</li> <li>• DG sets to be provided with acoustic enclosures as per requirements under EPA norms.</li> </ul>	<p>Project proponent have made following controls in place to address noise during drilling activities.</p> <ul style="list-style-type: none"> <li>• Before deployment of the rig to any location, presence of engineering controls such as acoustic enclosure, vibration arrestors, silencers etc. are being ensured.</li> <li>• Well Pad site is selected considering various criteria like non-availability of agricultural land, forest land, dense plantation, other structures (settlement, schools, hospitals etc.). are being considered during land acquisition and avoided to extent possible.</li> <li>• Equipment is maintained as per the Total Equipment Maintenance schedule. Workers are provided with necessary PPEs (ear plugs and ear muff) based on exposure levels.</li> <li>• DG sets are provided with acoustic enclosures and maintenance of the DG sets &amp; other equipment's is being done as per manufacturer recommendations.</li> <li>• PP shall ensure all the Rig equipment's are tested before deployment as to verify the suitability and efficiency to meet the Consent requirement and comply to regulations</li> </ul>

**EMP Compliance Report\_EIA for Drilling of 300 Exploratory & Appraisal wells in RJON-90/1 Block, Rajasthan**

S. No.	Aspect	Potential Impacts	Mitigation Measures Proposed in EIA Report	Compliance Status & Observations Ugr ' 24
8		Air emissions	<ul style="list-style-type: none"> <li>• Flare burner characteristics to be optimized to ensure maximum burning of hydrocarbons produced during well testing.</li> <li>• CIL to explore the use of low NOx burners in extended flaring.</li> <li>• As far as possible elevated flare shall be considered, If ground flare pit to be considered, then Flare pit to be made of RCC surrounded by a permanent wall of minimum 5m height as per EPA norms.</li> <li>• If enclosed ground flare system adopted, then RCC walls shall be covered with the refractory bricks, and 100m dense plantation shall be constituted around the flare pit, provided extended well testing shall be planned out.</li> <li>• Location of the flare stack to be decided at the design stage taking into consideration nearest habitations, vegetation, and other public amenities.</li> <li>• Flaring of crude oil to be avoided. Crude oil to be effectively separated at the drill site and stored in barrels/tankers for transportation to the nearest terminal for effective handling and management.</li> <li>• All the emitting stacks including the flare pit shall be positioned orthogonal direction to the prevailing wind direction.</li> <li>• Cold venting of gas not to be carried out.</li> <li>• Adequate stack heights to be provide for generators, adhering to the EPA standards for diesel generators.</li> <li>• Heavy machinery engaged at site to be optimized for fuel efficiency</li> </ul>	<p>Project proponent have taken following measures to address air emissions in control.</p> <ul style="list-style-type: none"> <li>• Elevated flare is being used during appraisal and well testing.</li> <li>• High efficiency flare tip is being used Flare pit is constructed in a corner of well pad to avoid exposure to local inhabitant as well as well pad operational area.</li> <li>• Cold venting of gases is not allowed.</li> <li>• All air pollution sources are provided with adequate stack height and acoustic enclosures.</li> <li>• Regular maintenance of equipment is carried out to avoid any abnormal emission and noise.</li> </ul>
9		Influx of migrant Labour Conflict with local community	<ul style="list-style-type: none"> <li>• Locals to be given preference over the migrant laborer's based on skill base.</li> <li>• Migrant Labour to be sensitized towards customs and traditions of the local population;</li> </ul>	<ul style="list-style-type: none"> <li>• All unskilled and semi-skilled manpower is deployed from locals.</li> <li>• Migrant workers are being sensitized about local customs and tradition</li> </ul>

**EMP Compliance Report\_EIA for Drilling of 300 Exploratory & Appraisal wells in RJON-90/1 Block, Rajasthan**

S. No.	Aspect	Potential Impacts	Mitigation Measures Proposed in EIA Report	Compliance Status & Observations Ugr' 24
10		Occupational Health & Safety Risks	<ul style="list-style-type: none"> <li>• Blowout preventers to be provided; All personnel engaged in working at more than 3 m height, to be protected at all times by guardrail systems;</li> <li>• Flare pit to be placed at a safe distance from the well head and fuel storage areas.</li> <li>• Firefighting measures to be provided near all welding operations;</li> <li>• All the incidents related to Health, safety, Environment, security and Community shall be reported in the Cairn Incident management System(CIMS)</li> </ul>	<p>Project proponent have taken following measures</p> <ul style="list-style-type: none"> <li>• Blow out preventer stack is installed on each well during drilling and BOPs are maintained, inspected, and periodically tested, to ensure their fit for purpose status.</li> <li>• During well planning and during drilling, well bore hydrostatic pressure is maintained, mud logging is used to identify any possible well activity.</li> <li>• As per Cairn standard, any work at a height of more than 1.8 meter is considered as work at height and all necessary precautions like hand rail, guard rail, toe board are provided at working platform. Use of double lanyard safety harness is mandatory, while working at height. Flare pit is constructed in a corner of well pad to avoid exposure to local inhabitant as well as well pad operational area.</li> <li>• All necessary firefighting arrangements are provided at site. All near miss and incidents are being reported in CIMS</li> </ul>



**EMP Compliance Report\_EIA for Drilling of 300 Exploratory & Appraisal wells in RJON-90/1 Block, Rajasthan**

S. No.	Aspect	Potential Impacts	Mitigation Measures Proposed in EIA Report	Compliance Status & Observations Sep' 24
11	Hydro Fracking	Water resource consumption Movement of tankers Potential for groundwater contamination	<ul style="list-style-type: none"> <li>Water to be sourced from existing sources of CIL approved by CGWA.</li> <li>Wastewater from fracking to be disposed of by solar evaporation or to be stored in tankers and reused for fracking of other wells.</li> <li>In case of significant volume of back flow, the effluent shall be solar evaporated and if required shall be treated using mobile effluent treatment plant at the well site.;</li> <li>A desiccated HDPE lined pit of adequate capacity shall be constructed to collect the frac fluid at the drilling site.</li> <li>Solar evaporation ponds to be designed and constructed at common locations, An enhanced mechanical evaporator shall be utilized for quicker evaporation of the fluids.</li> <li>The residues deposited after evaporation shall be disposed to the MPT captive landfill.</li> </ul>	<p>Project proponent have taken following measures related to water resources and consumption.</p> <ul style="list-style-type: none"> <li>Water is being sourced from approved ground water sources.</li> <li>Waste water from fracking and drilling is being treated for reuse and disposal through solar evaporation and injected back into the reservoir after treatment Dedicated HDPE lined pits are provided for storage of waste water.</li> <li>Concentrated residue from bottom of pit is being disposed in captive landfill at MPT.</li> <li>PP shall ensure waste water collected and transferred to centralized location to treat and dispose to Deep dump well as per the CPCB guidelines.</li> </ul>
12	Operation of Campsites	Stress on water resources; Potential contamination from generation of biomedical waste Wastewater generation Waste generation	<ul style="list-style-type: none"> <li>Potable drinking water as per IS 10500 / Packaged drinking water as per IS 24543 to be provided at campsites.</li> <li>All waste to be collected in bins located near each set of porta cabins.</li> <li>Segregation of waste at the source of generation to be put in practice.</li> <li>All hazardous waste to be collected and stored on secure and paved area, and subsequently sent to authorized recyclers.</li> <li>Food waste to be stored in a closed container and composted using Organic waste composter / vermi composting.</li> <li>Bio-medical waste to be collected as per BMW Rules and to be disposed off at incineration at MPT;</li> <li>Septic tank followed by soak pit to be provided for campsites as per IS 2470;</li> </ul>	<p>Project proponent have taken below measures to address the water resources.</p> <ul style="list-style-type: none"> <li>Potable drinking water is being tested as per applicable IS standard.</li> <li>Waste is being collected, segregated, and disposed as per approved plan and records are maintained.</li> <li>All hazardous waste is collected in and stored in dedicated waste bin or paved surface area provided with weather protection arrangements.</li> <li>Food waste /organic waste is stored separately and treated further using Organic waste convertor to convert into compost which is further utilized in greenbelt maintenance.</li> <li>Bio-medical waste is being disposed as per applicable rules at nearest OB clinic. Cairn</li> </ul>

**EMP Compliance Report\_EIA for Drilling of 300 Exploratory & Appraisal wells in RJON-90/1 Block, Rajasthan**

S. No.	Aspect	Potential Impacts	Mitigation Measures Proposed in EIA Report	Compliance Status & Observations Sep' 24
			<ul style="list-style-type: none"> <li>Waste generation to be separated and disposal as per the regulatory requirements</li> </ul>	<p>has authorization for 3 clinics at OB, BH-06 and RGT.</p> <ul style="list-style-type: none"> <li>Septic tank -soak pits/ STP are provided for collection/ disposal/ treatment of domestic waste water. STP treated waste water is being used in green belt.</li> <li>Waste disposal being done as per regulatory requirements.</li> </ul>

**EMP Compliance Report\_EIA for Drilling of 300 Exploratory & Appraisal wells in RJON-90/1 Block, Rajasthan**

S. No.	Aspect	Potential Impacts	Mitigation Measures Proposed in EIA Report	Compliance Status & Observations Sep' 24
13	Operation of mud plant and warehouses	<p>Waste generation Potential contamination due to mud preparation.</p> <p>Dust due to stacking of the materials</p> <p>Emission due to the forklifts and crane usages</p>	<ul style="list-style-type: none"> <li>• Effective stacking of the materials to be followed to protect from the environmental situations such as wind, rain and sunlight. If area not paved, then periodic sprinkling shall be carried out. All diesel operated generators shall have acoustic enclosures and effective stack heights.</li> <li>• Waste shall be effectively segregated at the source of generation and disposed as per the waste management plan. Water required for the mud preparation shall be met from CGWA / PHED approved sources.</li> <li>• Liquid mud plant for preparation of the synthetic oil-based mud shall be set up in the bund protected wall to prevent any spill over.</li> <li>• All the vehicles to be operated inside the mud plant and warehouse shall follow all the HSE requirements to protect environment and have safety operations such as load test, proper maintenance etc.</li> <li>• Warehouse shall have approved layout for conducting the operations indicating materials stack area, office area, vehicle parking, mud plant etc.</li> </ul>	<p>Project proponent have taken following measures to address waste generation dust controls during handling of materials and Mud plant operations.</p> <ul style="list-style-type: none"> <li>• Material is properly stacked at mud plants. Chemical storage area at mud plant is paved and regular water sprinkling is being carried out at vehicle movement area.</li> <li>• All diesel generators are provided with adequate stack height and acoustic enclosure. Waste generated at mud plant is segregated for effective management and real time disposal.</li> <li>• Water for mud preparation is being sourced from approved ground water sources.</li> <li>• Mud plant is set up on paved area with secondary containment to avoid any spills and soil contamination.</li> <li>• All the vehicles/equipment's used within Cairn Facilities, mud plant and warehouse are duly inspected before deployment as per Cairn HSE Procedures.</li> </ul>

**EMP Compliance Report\_EIA for Drilling of 300 Exploratory & Appraisal wells in RJON-90/1 Block, Rajasthan**

S. No.	Aspect	Potential Impacts	Mitigation Measures Proposed in EIA Report	Compliance Status & Observations Sep' 24
14	Decommissioning and Abandonment	Demolition of drill cutting pits	<ul style="list-style-type: none"> <li>• A site restoration approved plan shall be prepared with the detailed checklist All drill cuttings, spent mud, waste oil and other waste to be completely removed from the site and sent to designated disposal place prior to commencement of demolition work.</li> <li>• Unused chemicals at the site to be shifted to another site or contractors' storage area prior to demobilization.</li> <li>• All concrete or steel installations will be removed to at least 1 m below ground level, so as to ensure that there will be no protruding surface structures.</li> <li>• The casing wellhead and the top joint of the casings will be cut below the ground level and capped with a cement plug.</li> <li>• Prior to commencement of any demolition, a planned programme of site clearance will be formulated.</li> <li>• All pits, cellars and holes will be removed and filled to ground level, any oil or otherwise contaminated soil will be removed and disposed to Landfill.</li> <li>• Roads and other paving will be removed to sufficient depth to allow soil replacement and revegetation.</li> <li>• Any remaining topsoil that has been stocked during the site clearance will be re-spread over appropriate portions of the site.</li> <li>• Plantation, if possible, will be commenced in and around the site.</li> </ul>	<p>Project proponent have made provisions to address Decommissioning and Abandonment.</p> <ul style="list-style-type: none"> <li>• Cairn has developed site restoration plan. After completion of appraisal activities, if the production of hydrocarbon is not found commercially viable, the site is restored back to near original condition and handed over back to land owner.</li> <li>• After permanent plugging of well as per OISD guidelines, all hazardous waste is being removed from site.</li> <li>• All above and below ground utilities are being removed. All civil structures are removed, and debris disposed off, in some case, where landowner wants to retain some structure or fence, the same is left after getting the request in writing from land owner.</li> <li>• Area is restored to near original condition and soil samples are also tested for fertility. If required, manure is also provided to make the site ready for agriculture.</li> <li>• NOC is obtained from concerned person after completion of restoration and handing over the site.</li> <li>• The relevant details of the restored sites are being submitted to regulatory bodies as part of compliance requirement.</li> <li>• During reporting period, Cairn has abandoned three wells only in Mangla field. Cairn complies with OMR 58 regarding well plugged &amp; abandoned requirements.</li> </ul>