S. J. PANDIT, IFS (Retd.) **MEMBER SECRETARY** SEIAA (GUJARAT)



STATE LEVEL ENVIRONMENT **IMPACT ASSESSMENT** AUTHORITY **GUJARAT**

Government of Gujarat

No. SEIAA/GUJ/EC/1(b)/ 9 16 /2021

Date: 2 2 JUN 2021 BY R.P.A.D.

Amendment to Environment Clearance Order No:- SEIAA/GUJ/EC/5(f)/1436/2020 dated 03/12/2020. (Under the provision of Environmental Impact Assessment (EIA) Notification, 2006)

In exercise of the power conferred under the provision of Environmental Impact Assessment (EIA) Notification, 2006 under sub-rule (3) of Rule 5 of the Environment (Protection) Rules, 1986, the Environment Clearance granted to Vedanta Limited (Cairn Oil & Gas) of Onshore Oil and Gas Exploration, Appraisal and Early Production in the Block CB-ONHP-2017/1 block (1490 km2) in Patan & Banaskantha Districts, vide this office letter no. SEIAA/GUJ/EC/5(f)/1436/2020 dated 03/12/2020, is being subjected to amendment in which early production is not mentioned in para-1 & 2 of EC letter dated: 03/12/2020. In this regard kindly note below.

And whereas SEIAA has granted Environment Clearance vide office order letter no. SEIAA/GUJ/ EC/5(f)/ 1436/2020 dated 3/12/2020, under the provisions of the aforesaid Notification.

And whereas project proponent has applied for amendment in the environmental clearance. The project was scheduled for hearing in the SEAC meeting held on 22/02/2021.

The SEAC, Gujarat had recommended the project vide their letter dated 11/05/2021 to grant amendment in Environmental Clearance to the SEIAA, Gujarat based on the decision taken during SEAC meeting held on 22/02/2021. The proposal was considered by SEIAA, Gujarat in its meeting held on 25/05/2021 at Gandhinagar. After careful consideration, Environment Clearance order dated 03/12/2020 is hereby amended as below.

Survey number of the environmental clearance order no. SEIAA/GUJ/EC/5(f)/1436/2020 dated 03/12/2020 have been amended and shall be read as under:

Paragraph No. 1 in page no. 1 shall be read as under:

Environmental Clearance to Vedanta Ltd. (Div: Cairn Oil & Gas) for setting up Onshore Oil and Gas Exploration, Appraisal and Early Production in the Block CB-ONHP-2017/1 in Patan & Banaskatha dist. of Gujarat. In category 1(b) of Schedule annexed with EIA Notification dated 14/09/2006.

Paragraph no. 2 in page no. 1 shall be read as under:

The proposal is for Environmental Clearance to M/s. Vedanta Ltd. (Div: Cairn Oil & Gas) for setting up onshore Oil & Gas Exploration, Appraisal and Early Production in the Block CB-ONHP-2017/1 located in Patan and Banaskantha district of Gujarat. It is a proposed project for onshore Oil & Gas Exploration, Appraisal and Early Production in the Block CB-ONHP-2017/1 located in Patan & Banaskantha district of the Block CB-ONHP-2017/1 located in Patan & Banaskantha district of Galact which fall in the category 1(b) of Schedule annexed with EIA Notification dated 14/09/2006. The Bloop OB-ONHP-2017/1 located in Patan & Banaskantha district of Gujarat. It encloses an area of 1490 Sq. SEIA Am. and is bounded by the points having following coordinates provided in below Table. The proposed ons oil and gas exploration & appraisal is expected to carry out Drilling of 69 exploratory (including appraisal) wells and the exploratory and appraisal wells will be drilled to explore the reservoirs up to a depth of 3500 meter approx. After successful drilling and discovery of hydrocarbon, 14 nos. of Early

> Office: Gujarat Pollution Control Board, "Paryavaran Bhavan" Sector-10 A, Gandhinagar-382010 Page 1 of 2 Phone No.:- (079) 232-32152,232-41514 Fax No.:-(079) 232-22784

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Production Units (EPUs)/Quick Production Unit (QPU) for produced well fluid processing and production of up to 28000 BOPD crude oil & associated natural gas of 4.2 MMSCFD of associated natural gas will be set up.

Rest of all the conditions of the Environment Clearance orders no SEIAA/GUJ/EC/5(f)/1436/2020 dated 03/12/2020 shall remain unchanged.

With regards, Yours sincerely,

(S. J. PANDIT) Member Secretary

issued to:

To, Vedanata Limited (Cairn Oil & Gas), Dilipkumar Bera, DGM Environment, ASF Centre, Tower-A; 362, 363, Jwala Mill Road, Phase-IV; Udyog Vihar, Sector-18, Gurgaon-122016. HARYANA.



S. M. SAIYAD, IFS MEMBER SECRETARY SEIAA (GUJARAT)



STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY GUJARAT

Government of Gujarat

No. SEIAA/GUJ/EC/5(f)/

Date:

3 DEC 2020

ByRPAD

Sub: Environment Clearance to M/s: Cairn Energy for setting up Onshore Oil and Gas Exploration & Appraisal at Block CB-ONHP-2017/1 in Patan; Banaskatha, State: Gujarat. In Category 1(b) of Schedule annexed with EIA Notificadidat 41/40/2008.

Ref: Your Proposal No. SIA/GJ/IND2/140764/2020.

Dear Sir

of Impa

This has reference to your application along with Form-1, pre Feasibility Report, Environment Management Blan and other supporting documents dated 20/02/2020 submitted to SEIAA, seeking Environmental Cleanage under Environment Impact Assessment Notification, 2006.

The proposal is for Environmental Clearance to Mrs. Saint Energy for setting up Onshore Oil and Gas Exploration & Appraisal at Block CB-ONHP-2017/1 in Patan, Banaskatha district of Guigard, it is, a proposed project joir onshore Oil and Gas Exploration and Appraisal in the Block CB-ONHP-2017/1 in Patah; and Banaskatha district of Guigard. It schedule of the EIA Notification-2005. The Block CB-ONHP-2017/1 located in patan and Banaskatha district of Guigard. It encloses an area of 1490 Sq. MM. and is Spinged by the points having deliowing coordingtes provided in below Table. The proposed project is green field in nature. The proposed onshore oil and das exploration, appraisal is expected to carry out Drilling of 69 exploratory (including appraisal) wells and the exploratory and appraisal wells will be drilled to explore the reservoirs up to a depth of 3500 m approx.

Apex Co-ordinates of Block CB-ONHP-2017/1 boundary (as per RSC)

Points	Longitude	Latitude	Points	Longitude	Latitude
1 %	719 40	24°10'	JF 16	72° 4'	24° 2'
2	71° 50°	24° 10'	17	72° 4'	24° 1'
	71° 50'	24° 8'	18	72° 5'	24° 1'
4	71° 53'	24° 8'	19	72° 5'	24° 0'
5	71° 53'	24° 7'	20	72° 6'	24° 0'
6	711 58	24° 7'	21	72° 6'	23° 59'
700000	/ 1 50 . VOC	24° 6'	22	72° 7'	23° 59'
8	72° 0'	24° 6'	23	72° 7'	23° 58'
9	72° 0'	24° 5'	24	72° 8'	23° 58'
10	72:1	24° 5'	25	72° 8'	23° 57'
11	72% 1'	24° 4'	26	72° 9'	23° 57'
12	72° 2'	24° 4'	27	72° 9'	23° 56'
13	72° 2'	24° 3′	28	72° 10'	23° 56'
14	72° 3'	24° 3'	29	72° 10'	23° 50'
15	72° 3'	24° 2' /illage and Taluka/Teh	30	71° 40'	23° 50

Proposed Well Locations

Well Id	Latitude	Longitude	Village Name	Taluka/Tehsil	District
1	71°46'32.23"E	23°51'25.59"N	Manpura	Kankrej	Banaskantha
2	71° 58' 20.641" E	23° 50' 44.332" N	Sankra	Harij	Patan
3	72° 0' 52.031" E	23° 50' 35.243" N	Fulesana	Patan	Patan
4	71° 59' 42.033" E	23° 51' 15.508" N	Dudharampura	Patan	Patan
5	71°45'20.36"E	23°52'51.26"N	Umbri	Kankrej	Banaskantha
6	71° 55' 11.207" E	23° 52' 26.957" N	Mota Jampur	Kankrej	Banaskantha
7	71° 57' 44.413" E	23° 52' 35.751" N	Dunawada	Harij	Patan
8	72° 0' 28.095" E	23° 52' 7.112" N	Dudharampura	Paten	Patan
9	71°55'7.55"É	23°53'33.54"N	Vithlod	Kankrej	Banaskantha
10	71°59'5.42"E	23°53'6.66"N	Vareda	Sarsvati	Patan
11	71°55'8.16"E	23°54'34.36"N	Kasara	Kankrej	Banaskantha
12	71° 56' 17.234" E	23° 55' 43.187" N	Golivada	Sarsvatica	Patan
13	71°43'58.62"E	23°55'31.85"N	Tativana	Kankrej	Banaskantha
14	71°56'20.29"E	23°56'58.23"N	Golivada	Sarsvati	Patan
15	71°43'49.53"E	23°56'38.75"N	Jakhel	Kankrei	S Banaskantha
16	71° 57' 42.785" E	23° 58' 3.448" N	Sampra	Sarsvati	Patan
17	71° 57' 56.611" E	23° 56½60.052" N	Sampra	Sarsvati	Patan
18	71° 43' 11.923" E	23° 58\6.001" N	Ruvel	Kankrej	Patan Banaskantha
19	71° 44' 46.871" F	23° 58' 9.024" N	Jakhel	Kankrei	
20	71° 42' 25.390" E	23° 59' 45,330' N	Ruvel		Banaskantha
21	71° 43' 46.896" E	23° 59' 25,918" N	V/A	Kankrej	Banaskantha
22	71° 43' 43.762" E	24° 0' 53.283" N	Ruvel	Kankrej	Banaskantha
23	1 1997	A	Terwada	Kankrej	Banaskantha
24	72° 2'23.70"E	23°59'35.29"N	Kamboj	Kankrej	Banaskantha
	71° 47' 39 634" E	24° 153.713" N	Vibhaneshda	Kankrej	Banaskantha
25	72° 1' 29 744" E	24° 1' 55.976" N	Vayad	Sarsvati	Patan
26	72° 2' 0.069° E	24° 0' 39.566" N	Kamboi	Kankrej	Banaskantha
727	718,46' 42.276" E	24° 2' 45.191" N	Nathpura	Kankrej	Banaskantha
28	71° 52' 46.290" E	24° 4' 2.833° N	Padardi	Kankrej	Banaskantha
29	72°.0'30.66".E	72° 0'30:66"E	Umbri	Kankrej	Banaskantha
.30	71°51'17.38"E	24°/4'29.87"N	Padardi	Kankrej	Banaskantha
31	71° 58' 26.380" E	24° 4' 25.518" N	Goliya	Kankrej	Banaskantha
32	71° 59' 37.111" E	24° 4' 26.914" N	Umbri	Kankrej	Banaskantha
33	74° 49' 56.250" E	24° 5' 23.418" N	Mulakpur	Deodar	Banaskantha
34	71°58'53.71"E	24° 5'9.94"N	Ucharpi	Kankrej	Вапаѕкаптна
35	71°42'17.22"E	23°51'10.81"N	Jetalpura	Radhanpur	Patan
36	71° 49' 19.725" E	23° 51' 14.840" N	Bhadrevadi	Kankrej	Banaskantha
37	71° 52' 51.532" E	23° 51' 19.173" N	Ashaldi	Patan	Patan
38	71° 56' 23.353" E	23° 51' 23.426" N	Sankra	Hanj	Patan
39	72° 3' 27.036" E	23° 51' 31.690" N	Hanumanpura	Patan	Patan
40	72° 6'50.85"E	23°51'44.00"N	Sampalpati	Patan	Patan
41	72° 9'19.66"E	23°51'33.98"N	Patan	Patan	Patan
42	71° 42' 11 215" F	23° 54' 20.707" N	Arjansar	Patan	
72			Aljansar		Patan

44	71°48'32.08"E	23°54'27.00"N	Anandpura	Kankrej	Banaskantha
45	71°52'58.84"E	23°54'57.63"N	Mota Jampur	Kankrej	Banaskantha
46	72° 5' 17.284" E	23° 56' 48.389" N	Balva	Sarsvati	Patan
47	71° 59′ 50.689" E	23° 54' 42.430" N	Sariyad	Sarsvati	Patan
48	72° 3' 22.624" E	23° 54' 46.532" N	Kansa	Sarsvati	Patan
49	72° 7'2.17"E	23°55'15.90"N	Tankvasna	Sarsvati	Patan
50	72° 9'4.88"E	23°55'19.44"N	Aghar	Sarsvati	
51	71° 46' 18.606" E	23° 57' 29.528" N			Patan
52	71°49'5.07"E	23°57'23.09"N	Changa	Kankrej	Banaskantha
53	71°52'11.54"E		Sadujivas	Kankrej	Banaskantha
54	_	23°58'30.26"N	Amblun	Kankrej	Banaskantha
	71°56'10.01"E	23°59'16.74"N	Undra	Sarsyati	Patan
55	71° 59' 46.176" E	23° 57' 57.260" N	Sampra	Sarşvati	Patan
56	72° 3'23.28"E	23°57'53.18"N	Nayta	Sarsvati	Patan
57	71° 46' 13.726" E	24° 0' 44.312" N	Changa	Kankre	Banaskantha
58	71° 49' 5.395" E	24° 0' 59.232" N	Indramana	Kankrej 🗞	Banaskantha
59	71°52'44.29"E	24° 1'19.37"N	Quantum Dugrasan	Kankrei	Banaskantha
60	71°56'2.61"E	24° 2'3.30"N	Shihori	- 3	A
61	71°59'50.97"E	24° 1'10.23"N	Kambol	Kankrei	Banaskantha Banaskantha
62	71°41'22.64"E	24° 4'37,22"N	Bhadkasar	Deodar	5566
63	71°45'47.29"E	24° 4°45.49"N	Vakha 🔗	Decdar	Banaskantha
64	71° 49' 0.589" F	24° 4" 14.026" N		- 2550000	Banaskantha
65	71°55'43.94"E	24° 5'36.01"N	Surana	Kankrei	Banaskantha
66	71°41'47.81"E	M000000	Chekhala	Kankrej	Banaskantha
67		24° 8'6'83"N	Vadiya	Deodar	Banaskantha
	71° 45' 23.535" E	324° 8' 7.728" N	Deodar √	P Deodar	Banaskantha
68	71° 48' 55.770" E	24° 7′ 28.818″ N	Salpura	Deodar	Banaskantha
69	71° 52' 28.019" E	24°7' 33.207" N	Nanota	Kankrej	Banaskantha

Note: Actual geo-graphical surface coordinates of exploratory and appraisal well locations would be within 2000 m radius of the proposed coordinates.

The project activity is covered in 1(b) and is of B' Category. Since, the project falls in B2 category as per the MoEFRCE's amendment EIA Notification yide S.O. 23(E) dated 16.01.2020, the public consultation is not required as per paragraph 70 (III) (i) (e) of the Environment impact Assessment Notification-2006.

The SEAO, Gujard, vide their letter dated 03/11/2020 had recommended to the SEIAA, Gujarat, to grant the Environment Glegariac for the above-mentioged project based on its meeting held on 07/09/2020. The proposal was considered by SEIAA, Gujarat in its meeting held on 07/11/2020 at Gandhinagear. After careful consideration, the SEIAA held score Environmental Clearance to above project under the provisions of EIA Notification dated 14th September, 2006 subject to the compliance of the following conditions.

A.CONDITIONS : A.1SPECIFIC CONDITION :(

- Project proponent (PP) shall obtain separate Environmental Clearance for commercial drilling and exploration as this
 proposal is for drilling of Exploration activity only as per EIA Notification 2006 and amendment dated 16.01.2020
 [Category B2 of activity 1(b)]
- No drilling shall be carried out in protected areas.
- The company shall make all arrangements at 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 waste water shall confirm to CPCB/GPCB standards.
- Drill cuttings separated from drilling fluid shall be adequately washed and disposed according to HWMH rule, 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 dated 30 the August ,2005
- 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.
- After completion of drilling activities, in case of non-availability of hydrocarbons the site shall be restored back to its normal condition as per the prevailing Rules/Guidelines/Site restoration policy.
- PP shall adopt best drilling practices and drilling operations shall be designed in such a way that there is no chance of contamination of ground water aquifer
- 8. PP shall take all precautionary measures to avoid any contamination of ground water.
- The National Ambient Air Quality Emission Standards issued by the Ministry vide, G. S. R. No. 826 (E) dated 16th November, 2009 shall be complied with.
- 10. Unit shall have to adhere to the prevailing area specific policies of GPCB with respect to the discharge of pollutants, and shall carry out the project development in accordance & consistence with the same.
- The project proponent must strictly adhere to the stipulations made by the Gujarat Politifion Control Board, State Government and/or any other statutory authority.
- 12. The company shall develop a contingency plan for \$\text{P2S}\$, release including all necessare, aspects from evacuation to resumption of normal operations. The workers shall be provided with personal H2S detectors in locations of high risk of exposure along with self-containing breathing apparatus.
- 13. 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 environment manual shall be made available at the drilling site /project site. Ayaraness shall be created at each fevel of management. All the schedules and results of the environmental monitoring shall be available state project site office. Remote monitoring of site should be done.
- 14. Safety & Health:
 - a) PP shall carry/out mock drill within the premises as per the prevailing guidelines of safety and display proper evacuation plan in the manufacturing area in case of any emergency or accident.
 - PP afail take all the necessary steps for human safety within premises to ensure that no any harm is any workeremployee or labor within premises.
 - c) The consequence arising out of incidents such as Well Blow Out, Fire, Explosion, Natural Calamities etc. shall be accurately predicted with the help of latest technique available by various Risk Analysis Studies and unit shall submit Disaster Management Plan (DMP) to the concern authority based on such probable scenarios.
 - d) Personal Protective Equipments (PPEs) shall be provided to workers and its usage shall be ensured and supervised.
 - e) First Aid Box shall be made readily available in the unit.
 - Coupational healing surveillance of the workers shall be done and its records shall be maintained. Preemployment and periodical medical examination for all the workers shall be undertaken on regular basis as per Fabilities Act 8.606s.
 - g) The company shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed.
 - h) Blow out preventer system shall be installed to prevent well blowouts during drilling operations.
 - i) Emergency response plan shall be based on the guidance prepared by OISD, DGMs and Govt. of India.

A. 2 WATER:

- 15. Total water requirement for the project shall not exceed 87 KLD per well. Unit shall reuse 50 KLD per well of treated industrial effluent within premises. Hence, fresh water requirement shall not exceed 27 KLD per well and it shall be met through tankers.
- 16. PP shall not dig borewell for fresh water requirements.
- 17. The industrial effluent generation from the project shall not exceed 1150 KLD.
- 18. Total Industrial effuent generated from various activities shall be treated in mobile ETP and reused back in process.

- 19. PP shall obtain prior permission for disposal of treated effluent.
- Zero Liquid Discharge [ZLD] status shall be maintained all the time and there shall be no drainage connection from the
 premises.
- 21. Domestic wastewater generation shall not exceed 12 KL/day for proposed project and it shall be treated in STP. Treated sewage shall be utilized for gardening and plantation purpose within premises after achieving on-land discharge norms prescribed by the GPCB.
- During monsoon season when treated sewage may not be required for the plantation / Gardening / Green belt purpose, it shall be stored within premises. There shall be no discharge of waste water outside the premises in any case.
- 23. Unit shall provide buffer water storage tank of adequate capacity for storage of treated waste water during rainy days.
- The unit shall provide metering facility at the ETP & STP and maintain records for the same.
- 25 Proper logbooks of ETP & STP, treated effluent reused in gardening/ plantation, chemical consumption in effluent treatment; quantity & quality of treated effluent; power consumption etc. shall be maintained and shall be furnished to the GPCB from time to time.

A.3 AIR

Unit shall not exceed fuel consumption for drilling site, camp site, liquid mud pump, radio from and lesting flare as mentioned below:

	CG DEIOW.					War II
S.no.	Source of emission with Capacity	Stack Height (meter)	Type of Fuel	Quantity of Fuel MT/Day	Type of emissions i.e. Air Pollutants	Alt Pollution Control Measures (APCM)
1	Drilling Site- 3 x 1000 KVA (two working and one standby) or 2x 1850 KVA (one working and one standby)	10	HSD	13-13	BM10, NOx	Exhausts of diesel generators will be
2	Camp Site- 2 X 350 KVA (one working and one standby)	18.00	HSD	2-3	PM10, NOx	positioned at a sufficient height to ensure dispersal of
3	Liquid Mud Pump (LMP)- 3X250 KVA (two working and one standby)	7	HSD	1.5-2	PM10, NOx	exhaust emissions; Periodic maintenance of DG sets will be
4	Radio Room- 2X100 KVA	10	HSD	0.74-1.5	PM10, NOx	undertaken
6	Teeling Flare Stack	30		#	PM10, NOx,SO₂	Proper engineering to ensure controls to only the complete combustion of gas; No cold venting will be resorted instead flaring will be done with combustion efficient levated flare tip; and Location of flare stacks to be chosen considering the sensitive receptors adjoining the sensitive



- 27. Unit shall provide adequate APCM with flue gas generation sources as mentioned above:
- 28. There shall be no process gas emission from drilling & exploration activities and other ancillary operations.
- 29. The fugitive emission in the work zone environment shall be monitored. The emission shall conform to the standards prescribed by the concerned authorities from time to time (e.g. Directors of Industrial Safety & Health). Following indicative guidelines shall also be followed to reduce the fugitive emission.
 - Internal roads shall be either concreted or asphalted or paved properly to reduce the fugitive emission during vehicular movement.
 - > Air borne dust shall be controlled with water sprinklers at suitable locations in the plant.
 - A green belt shall be developed all around the plant boundary and also along the roads to mitigate fugitive & transport dust emission.

Office : Gujarat Pollution Control Board, "Paryavaran Bhavan". Sector-10 A, Gandhinagar-382010 Page 5 of 10 Phone No.: (079) 232-32152,232-41514 Fax No.: (079) 232-22784 E-mail: msseinagi@@mail.com, Website: www.seina.gujparat.gov.in

- 30. Regular monitoring of Volatile Organic Compounds (VOCs) shall be carried out in the work zone area and ambient air.
- 31. Regular monitoring of ground level concentration of PM10, PM2.5, SO2, NOx, and VOCs shall be carried out in the impact zone and its records shall be maintained. Ambient air quality levels shall not exceed the standards stipulated by the GPCB. If at any stage these levels are found to exceed the prescribed limits, necessary additional control measures shall be taken immediately. The location of the stations and frequency of monitoring shall be decided in consultation with the GPCB.

A.4 SOLID / HAZARDOUS WASTE:

32. All the hazardous waste management shall be taken care as mentioned below:

S. no.	Type/Name of Hazardous waste	Specific Source of generation (Name of the Activity, Product etc.)	Category and Schedule as per HW Rules.	Quantity (MT/Annum)	Management of HW	
1	Drill cuttings associated with SBM	SBM	HW Schedule I category 2.1	500-1500 tons/well	Collection in HDRE lined bit and disposal as per Hazardous waste Rules. 2015 (Co processing in cement kin as fuel substitute, common Hazardous waste TSDF. HVV processing facility).	
2	Spent /Residual drilling mud	Drilling	HW Schedule category 2.2	250-500 tons/well	Collection in HDPE, lined pit and disposal as per Bazardous waste Rules, 2016 (Co processing in cement, kiln, as fuel substitute, common Hazardous waste TSDF, HW processing facility)	
3	Used Lubricating oil, Sludge containing oil and other drilling work	Others.	HW Schedule I category 2.3	/i²2 Toĥs/well 250-500 Tons/well ∕	Disposal as per Hazardous Waste Rules, 2016	i Im
4	ETP sludge from ETP operation	Others	HW Schedule I category 34.2	25 Tons/well	and disposed as per Hazardous	,
5	Discarded containers/barreis/liners contaminated with házardous waste	Others	HW Schedule 1 category 33	30 Nos/well	The Discarded containers will be disposed as per Hazardous Waste Rules, 2016	୍ୟୁ

- 33. Authorized end-users shall have permissions from the concerned authorities under the Rule 9 of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016.
- 34 Unit shall explore the possibilities for environment friendly methods like co-processing of hazardous waste for disposal of Incinerable & land fillable wastes before sending to CHWIF & TSDF sites respectively.

A. 5 OTHER:

- 35. The project proponent shall also comply with any additional condition that may be imposed by the SEAC or the SEIAA or any other competent authority for the purpose of the environmental protection and management.
- Necessary permissions as mandated under water (Prevention and control of Pollution) act, 1974 and the Air (prevention and control pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board.
- 37. The project proponent shall allocate the separate fund of Rs. 11.21 Crore i.e. 1 % of the capital investment for the activities in accordance to the MoEFCC's Office Memorandum No. F.No.22-65/2017-IA.III dated 01/05/2018. The entire activities proposed under CER shall be monitored and the monitoring report shall be submitted to the regional office of MoEF&CC as a part of half-yearly compliance report and to district collector. The monitoring report shall be posted on the website of the project proponent.
- 38. All the environmental protection measures and safeguards proposed in the Form-1 & PFR submitted by the project proponent and commitments made in their application shall be strictly adhered to in letter and spirit.

B.GENERAL CONDITIONS: B.1 CONSTRUCTION PHASE:

- Water demand during construction shall be reduced by use of curing agents, super plasticizers and other best construction practices.
- Project proponent shall ensure that surrounding environment shall not be affected due to construction activity. Construction materials shall be covered during transportation and regular water sprinkling shall be done in vulnerable areas for controlling fugitive emission.
- All required sanitary and hygienic measures shall be provided before starting the construction activities and to be maintained throughout the construction phase.
- 4. First Aid Box shall be made readily available in adequate quantity at all the times.
- The project proponent shall strictly comply with the Building and other Construction Workers' (Regulation of Employment & Conditions of Service) Act 1996 and Gujarat rules made there under and their subsequent amendments. Local byelaws of concern authority shall be complied in letter and spirit.
- Ambient noise levels shall conform to residential standards both during day and hight incremental pollution load on the ambient air and noise quality shall be closely monitored during construction phase.
- Use of Diesel Generator (DG) sets during construction phase shall be strictly equipped with acoustic encourage and shall conform to the EPA Rules for air and noise emission standards.
- 8. Safe disposal of waste water and municipal solid wastes generated during the construction phase shall be ensured.
- All topsoil excavated during construction activity shall be used in horticultural / landscape development within the project site.
- 10. Excavated earth to be generated during the construction phase; shall be utilized within the premises to the maximum extent possible and balance quantity of excavated earth shall be disposed off with the approval of the competent authority after taking the necessary prequitions for general safety and treating the necessary prequitions for general safety and treating the species. Disposal of the excavated earth during construction phase shall not cregic adverse effect on (paginbouring communities).
- Project proponent shall ensure use of eco-friendly building materials including fly ash bricks, fly ash paver blocks, Ready Mix Concrete [RMC] and lead free paints in the project.
- 12. Fly ash shall be used in construction wherever applicable as per provisions of Fly Ash Notification under the E.P. Act, 1986 and its subsequent amendments from time to time.
- Wind breaker of appropriate height i.e. 1/3rd of the building height and maximum up to Individual building within the project site shall also be provided with particades.
- 14. "No uncovered vehicles carrying construction material and waste shall be permitted."
- 15. "No loose soil of sand or construction & genolition waste or any other construction material that cause dust shall be left uncovered. Uniform pilling and proper storage of sand to avoid fugitive emissions shall be ensured."
- 16. Roads leading to or at construction site must be paved and blacktopped (i.e. metallic roads).
- 17 No excavation of soil shall be carried out without adequate dust mitigation measures in place.
- 18 Dust mitigation measure shall be displayed prominently at the construction site for easy public viewing.
- 19. Grinding and cutting of building materials in open area shall be prohibited.
- 20 Construction material and waste should be stored only within earmarked area and road side storage of construction material and waste shall be prohibited.
- Construction and demolition, waste processing and disposal site shall be identified and required dust mitigation
 measures be notified at the site. (If applicable).

B.2 OPERATION PHASE:

B.2.1 WATER:

- 22. The water meter shall be installed and records of daily and monthly water consumption shall be maintained.
- 23. All efforts shall be hade to optimize water consumption by exploring Best Available Technology (BAT). The unit shall continuously strive to reduce, recycle and reuse the treated effluent

B.2.2 AIR:

- 24. In case of use of spray dryer, the unit shall provide the adequate & efficient APCMs with spray dryer so that there should not be any adverse impact on human health & environment. Unit shall carry out third party monitoring of the proposed Spray dryer & its APCM through the credible institutes and study report for impacts on Environment and Human Health shall be submitted to GPCB every year along with half yearly compliance report.
- Acoustic enclosure shall be provided to the DG sets (If applicable) to mitigate the noise pollution and shall conform to the EPA Rules for air and noise emission standards.
- Stack/Vents (Whichever is applicable) of adequate height shall be provided as per the prevailing norms for flue gas emission/Process gas emission.
- 27. Flue gas emission & Process gas emission (If any) shall conform to the standards prescribed by the



GPCB/CPCB/MoEF&CC. At no time, emission level should go beyond the stipulated standards.

All the reactors / vessels used in the manufacturing process shall be closed to reduce the fugitive emission.

3 HAZARDOUS/SOLID WASTE:

- 29. The company shall strictly comply with the rules and regulations with regards to handling and disposal of Hazardous waste in accordance with the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016. as may be amended from time to time. Authorization of the GPCB shall be obtained for collection / treatment / storage / disposal of hazardous wastes.
- 30. Hazardous wastes shall be dried, packed and stored in separate designated hazardous waste storage facility with pucca bottom and leachate collection facility, before its disposal.
- 31. The unit shall obtain necessary permission from the nearby TSDF site and CHWIF. (Whichever is applicable)
- 32. Trucks/Tankers used for transportation of hazardous waste shall be in accordance with the provisions under the Motor Vehicle Act, 1988, and rules made there under.
- 33. The design of the Trucks/tankers shall be such that there is no spillage during transportation
- 34. All possible efforts shall be made for Co-Processing of the Hazardous waste prior to disposal into TSDF/CHWIF.
- 35. Management of fly ash (If any) shall be as per the Fly ash Notification 2009 & its amendment time to time and it shall be ensured that there is 100% utilization of fly ash to be generated from the unit.

B.2.4 SAFETY:

- 36. The occupier/manager shall strictly comply the provisions under the Factories Act 1948 and the Gujarat Factories Rules 1963
- 37. The project authorities shall strictly comply with the provisions made in Manufacture, Storage and Import of Hazardous Chemicals Rules (MSIHC) 1989, as amended time to time and the Public Liability Insurance Act for handling of hazardous chemicals etc. Necessary approvals from the Ohief Controller of Explosives and concerned Govt. Authorities shall be obtained before commissioning of the project. Requisite On-site and Off-site Disaster Management Plans have agrent Impr to be prepared and implemented.
- 38. Main entry and exit shall be separate and clearly marked in the facility.
- 39. Sufficient peripheral open passage shall be kept in the margin area for free movement of fire tender/ emergency vehicle around the premises.
- 40. Storage of flammable chemicals shall be sufficiently away from the production area.
- 41. Sufficient number of fire extinguishers shall be provided near the plant and storage area.
- 42. All necessary preceditionary measures shall be taken to avoid any kind of accident during storage and handling of hazardous chemicals
- 43. All the toxic/hazardous chemicals shall be stored in optimizin quantity and all necessary permissions in this regard shall be obtained before commencing the expansion activities.
- 44. The project management shall ensure to comply with all the environment protection measures, risk mitigation measures and safeguards mentioned in the Risk Assessment report.
- Only flame proof electrical fittings shall be provided in the plant premises.
- 46% Storage of hazardous chemicals shall be minimized and it shall be in multiple small capacity tanks / containers instead of one single large capacity tank / containers
- 47 All the storage tanks shall be fitted with appropriate controls to avoid any leakages. Bund/dyke walls shall be provided for storage tanks for Hazardous Chemicals.
- 48. Handling and charging of the chemicals shall be done in closed manner by pumping or by vacuum transfer so that minimal human exposure occurs
- 49. Tie up shall be done with nearby health care unit / doctor for seeking immediate medical attention in the case of emergency.
- 50. Personal Protective Equipments (PPEs) shall be provided to workers and its usage shall be ensured and supervised.
- 51. First Aid Box and required Antidotes for the chemicals used in the unit shall be made readily available in adequate 52. Training shall be imparted to all the workers on safety and health aspects of chemicals handling.
- 53. Occupational health surveillance of the workers shall be done and its records shall be maintained. Pre-employment and periodical medical examination for all the workers shall be undertaken as per the Factories Act & Rules.
- 54. Transportation of hazardous chemicals shall be done as per the provisions of the Motor Vehicle Act & Rules.
- 55. The company shall implement all preventive and mitigation measures suggested in the Risk Assessment Report. 56. Necessary permissions from various statutory authorities like PESO, Factory Inspectorate and others shall be obtained
- prior to commissioning of the project.

B.2.5 NOISE:

- 57. The company shall make all arrangement for control of noise from the drilling activities.
- 58. The overall noise level in and around the plant area shall be kept well within the standards by providing noise control measures including engineering control like acoustic insulation, hoods, silencers, enclosures etc. on all source of noise generation. The ambient noise level shall confirm to the standards prescribed under Environment (Protection) Act & Rules, 1986 amended from time to time.
- 59. Noise levels for workers shall be as per the Factories Act & Rules.

B.2.6 CLEANER PRODUCTION AND WASTE MINIMISATION:

- 60. The unit shall undertake the Cleaner Production Assessment study through a reputed institute / organization and shall form a CP team in the company. The recommendations thereof along with the compliance shall be furnished to the GPCB.
- 61. The company shall undertake various waste minimization measures such as :
 - a. Metering and control of quantities of active ingredients to minimize waste.
 - b. Reuse of by-products from the process as raw materials or as raw materials substitutes.
 - c. Use of automated and close filling to minimize spillages.
 - d. Use of close feed system into batch reactors.
 - e. Venting equipment through vapour recovery system.
 - f. Use of high pressure hoses for cleaning to reduce wastewater generation.
 - g. Recycling of washes to subsequent batches.
 - h. Recycling of steam condensate.
 - i. Sweeping / mopping of floor instead of floor washing to avoid effluent generation
 - j. Regular preventive maintenance for avoiding leakage, spillage etc.

B.2.7 GREEN BELT AND OTHER PLANTATION:

- 62. The unit shall develop green belt within premises as per the CPCB guidelines, However, if the adequate land is not available within the premises, the unit shall take up adequate plantation on road sides and suitable open areas in GIDC estate or any other open areas in Corporation with the GIDC GPCB and submitting action plan of plantation for next three years to the GPCB.
- 63. Drip irrigation / low-volume, low-angle sphinkler system shall be used for the green belt development within the premises.

3 OTHER CONDITION

- 84. Unit shall comply all the applicable standard conditions prescribed in Office Memorandum (OM) published by MoEF&CC vide no. F. No. 3234/2018 IA. III. dated 09/08/2018 for Rharmaceujical and Chemical Industries mentioned at (Sr. no. XX).
- 65. The project/propogent shall allocate/the separate fund for Corporate Environment Responsibility (CER) in accordance to the MgEFCC's Office Memorandim No. F.No. 22-85/2017 (A: III) dated 01/05/2018 to carry out the activities under CER in affected area around the project. The entire activities proposed under CER shall be monitored and the monitoring report shall be submitted to the regional office of MGEFCC as a part of half-yearly compliance report and to district collector. The monitoring report shall be gosted on the vegicile of the project proponent.
- 66 Rain water harvesting of surface as well as confloor runoff shall be undertaken and the same water shall be used for the various activities of the project to conserve fresh water as well as to recharge ground water. Before recharging the surface run off, pre-treatment must be done to remove suspended matter.
- 67. The unit mail join and participate financially and technically for any common environmental facility / infrastructure as and when the same is taken up either by the Industrial Association or GIDC or GPCB or any such authority created for this purpose by the Govt. / GIDG.
- Application of solar energy/shall be incorporated for illumination of common areas, lighting for gardens and street lighting
 in addition the provision for solar water heating system shall also be provided.
- 69. The area earmarked as green area shall be used only for plantation and shall not be altered for any other purpose.
- 70. All the commitments / undertakings given to the SEAC during the appraisal process for the purpose of environmental protection and management shall be strictly adhered to.
- 71. The project proponent shall also comply with any additional condition that may be imposed by the SEAC or the SEIAA or any other competent authority for the purpose for the environmental protection and management.
- 72. In the event of failure of any pollution control system adopted by the unit, the unit shall be safely closed down and shall not be restarted until the desired efficiency of the control equipment has been achieved.
- 73. The project authorities must strictly adhere to the stipulations made by the Gujarat Pollution Control Board (GPCB), State Government and any statutory authority.
- 74. During material transfer there shall be no spillages and garland drain shall be constructed to avoid mixing of accidental spillages with domestic wastewater or storm water.

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- 75. Pucca flooring / impervious layer shall be provided in the work areas, chemical storage areas and chemical handling areas to minimize soil contamination.
- 76. Leakages from pipes, pumps shall be minimal and if occurs, shall be arrested promptly.
- 77. No further expansion or modifications in the plant likely to cause environmental impacts shall be carried out without obtaining prior Environment Clearance from the concerned authority.
- 78. The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1931, the Environment (Protection) Act, 1986, Hazardous Wastes (M.1974, Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (M.1974, Handling and Transboundary Movement) Rules, 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules.
- 79. The project proponent shall comply all the conditions mentioned in "The Companies (Corporate Social Responsibility Policy) Rules, 2014" and its amendments from time to time in a letter and spirit.
- 80. The project management shall ensure that unit complies with all the environment protection measures, risk mitigation measures and safeguards recommended in the EMP report and Risk Assessment study, report as well as proposed by project proponent.
- 81. The project authorities shall earmark adequate funds to implement the conditions stipulated by SEIAA as well as GPCB along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purpose.
- 82. The applicant shall inform the public that the project has been accorded environmental degrance by the SEJAA and that the copies of the clearance letter are available with the GPCB and may also be seen at the Website of SEJAAV SEAC/ GPCB. This shall be advertised within seven days from the date of the clearance letter, in at least two local newspapers that are widely circulated in the region, one of which shall be in the Gujarati language and the other in English. A copy each of the same shall be forwarded to the concerned Regional Office of the Ministry.
- 83. It shall be mandatory for the project management to submit half-yearly compliance report in respect of the stipulated prior environmental clearance terms and conditions in soft copies to the regulatory authority concerned, on 1st June and 1st December of each calendar year.
- 84. Concealing factual data or submission of felber/abricated data and failure to comply with any of the conditions mentioned above may result in withdrawel of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- 85. The project authorities shall also adhere to the stigulations made by the Gujarat Pollution Control Board.
- 86. The SEIAA may revoke or suspend the clearance it implementation of any of the above conditions is not found satisfactory.
- 87. The company in a time bound manner shall implement these conditions. The SEIAA reserves the right to stipulate additional conditions. If the same is found necessary.
- 88. The project authorities shall inform the GPCB, Regional Office of MoEF and SEIAA about the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.
- 89. This environmental clearance is valid for seven years from the date of issue.
- 90. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
- Submission of any faise or misleading information or data which is material to screening or scoping or appraisal or decision on the application makes this environment clearance cancelled.

Yous sincerely SEIAA

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With regards,