

# State Level Environment Impact Assessment Authority, Uttar Pradesh

## Directorate of Environment, U.P.

Vineet Khand-1, Gomti Nagar, Lucknow - 226 010

Phone : 91-522-2300 541, Fax : 91-522-2300 543

E-mail : doeuplko@yahoo.com

Website : www.seiaaup.com

To,

Shri Dilip Kumar Bera,  
M/s Vedanta Limited (Division Cairn Oil & Gas),  
4<sup>th</sup> Floor, Vipul Plaza, Suncity Sector-54,  
Gurgaon, Haryana- 122002

Ref. No. <sup>265</sup>...../Parya/SEIAA/5902/2021

Date: 19 October, 2021

**Sub: Environmental Clearance for Proposed Onshore Oil and Gas Exploration and Appraisal and Early Production in GVONHP-2017-1 block (1817 km<sup>2</sup>) in Kheri and Shahjahanpur districts of Uttar Pradesh., M/s Vedanta Ltd.(Div: Carin Oil & Gas)**

Reference- MoEFCC Proposal no- SIA/UP/MIS/175859/2020 & SEIAA, U.P File no- 5902

Dear Sir,

This is with reference to your application / letter dated 30-09-2020, 05-10-2020, 02-12-2020, 15-12-2020, 12-02-2021 & 26-07-2021 on above mentioned subject. The matter was considered by SEAC in meeting held on 06-08-2021 and SEIAA in meeting held on 09-09-2021 & 30-09-2021.

A presentation was made by the project proponent along with their consultant M/s Eco Chem Sales & Services to SEAC on 06-08-2021.

### **Project Details Informed by the Project Proponent and their Consultant**

The project proponent, through the documents and presentation gave following details about their project –

1. The environmental clearance is sought for Onshore Oil and Gas Exploration and Appraisal and Early Production in GVONHP-2017-1 block (1817 km<sup>2</sup>) in Kheri and Shahjahanpur districts of Uttar Pradesh., M/s Vedanta Ltd.(Div: Carin Oil & Gas)
2. The proposed onshore oil and gas exploration & appraisal is expected to carry out drilling of 14 exploratories (including appraisal) wells and the exploratory and appraisal wells will be drilled to, explore the reservoirs up to a depth of 4500-5000 m approx. After successful drilling and discovery of hydrocarbon; 14 Nos of Early Production Units (EPUs)/ Quick Production Units (QPU) for produced well fluid processing and production of up to 8000 BOPD Crude Oil & associated gas of 1.2 MMSCFD of associated gas will be set up.
3. It encloses an area of 1817 Sq. Km block area and is bounded by the points having the following coordinates provided below Table.

#### **Co-ordinates of Block GV-ONHP-2017/1 (as per RSC)**

Corner	Latitude	Longitude
A	28° 9' 57.39" N	80° 0' 3.74" E
B	27° 49' 57.00" N	79° 59' 59.31" E



C	27°49'56.93"N	80°30'0.03"E
D	28° 9'54.21"N	80°29'59.79"E

**Co-ordinates of the Proposed Wells Location**

Well No	Latitude	Longitude	Village	Tehsil	District	Land Use
1.	27°53'32.31"N	80° 3'1.91"E	Kariyara village	Mohammdi	Kheri	Agricultural Land
2.	27°51'53.19"N	80°13'9.86"E	Hariharpur village	Mohammdi	Kheri	Agricultural Land
3.	27°52'3.24"N	80°20'34.86"E	Saraiyan Biliun village	Gola Gokaran Nath	Kheri	Agricultural Land
4.	27°51'54.74"N	80°26'34.93"E	Khanjan Nagar village	Mohammdi	Kheri	Agricultural Land
5.	27°58'7.22"N	80°26'43.10"E	Chandamau village	Gola Gokaran Nath	Kheri	Agricultural Land
6.	28° 4'25.51"N	80°22'9.39"E	Koriya Loharama village	Gola Gokaran Nath	Kheri	Agricultural Land
7.	28° 7'24.93"N	80°26'10.01"E	(Babupur village) Grant No-11	Bankeyganj Block	Kheri	Agricultural Land
8.	28° 7'29.12"N	80°16'24.84"E	Laukikhera village	Mohammdi	Kheri	Agricultural Land
9.	28° 7'30.36"N	80° 8'29.34"E	Bilsa village	Powayan	Shahjahanpur	Agricultural Land
10.	28° 2'27.85"N	80° 2'58.09"E	Bilaiya village	Powayan	Shahjahanpur	Agricultural Land
11.	27°59'13.56"N	80°16'29.89"E	Padariya village	Lakhimpur	Kheri	Agricultural Land
12.	28° 3'7.02"N	80°11'24.76"E	Khataua village	Powayan	Shahjahanpur	Agricultural Land
13.	28° 7'35.15"N	80° 2'59.82"E	Nahil village	Powayan	Shahjahanpur	Agricultural Land
14.	27°58'4.33"N	80° 8'57.34"E	Farenda village	Mohammdi	Kheri	Agricultural Land

Note: Actual geo-geographical surface coordinates of exploratory and appraisal well locations would be within a 2000 m radius of the proposed coordinates and that will be informed before starting any activity if there is any change in the activity area.

**4. Chronology for the project as submitted by the project proponent:**

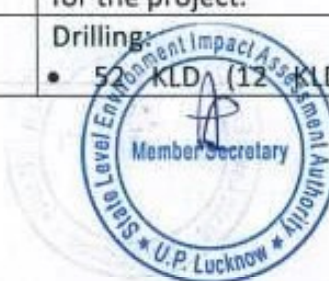
S. No.	Particulars	Date
1	ToR Application submission (as Cat 'A' project)	28.03.2019
2	Std. ToR Received	02.05.2019
3	Baseline Monitoring Period	March to May 2019



4	Submission of EIA for PH	14.10.2019
5	Public Hearing Date	3.01.2020 & 28.12.2019 (in two districts, Kheri and Shahjahanpur Uttar Pradesh)
6	Notification by MoEFCC for categorization of Oil & Gas Exploration as 'B2' project	16.01.2020
7	EC application to EAC-MoEFCC	30.04.2020
8	EDS received from EAC-MoEFCC advising submission EC application to SEIAA/ SEAC (as Cat-B2 project) in lieu of notification of MoEFCC dated 16.01.2020	31.07.2020
9	Application submitted to UP SEIAA/ SEAC for appraisal of EC under Cat- B2	30.09.2020

**5. Salient features of the project as submitted by the project proponent:**

S. No.	Particular	Description
1.	Category/ Item No. (in Schedule)	<b>1 (b) B2</b> (Offshore and onshore oil and gas exploration, development & production)
2.	Location of the Project	GV-ONHP-2017/1 hydrocarbon blocks falling in Kheri & Shahjahanpur Dist., Uttar Pradesh by <b>Vedanta Ltd. (Div.: Cairn Oil &amp; Gas)</b>
3.	Project Details	Vedanta Ltd.(Div: Cairn Oil & Gas) has been allocated GV-ONHP-2017/1 block by MoPN&G, Gol under the Revenue Sharing Contract (RSC) for exploration & extraction of hydrocarbons. Proposed Project activities include Exploration, Appraisal & Early Production in the block. <ul style="list-style-type: none"> <li>Block Area - 1817 sq. km.</li> <li>Drilling of 14 nos. Exploratory (including appraisal) wells and setting up of 4 nos. of Early Production units for Early Production of 8000 BOPD Crude Oil &amp; 1.2 MMSCFD Natural Gas.</li> </ul>
4.	Project Cost	Rs. 401.92 Crores
5.	Land	<ul style="list-style-type: none"> <li>For Drilling, 4 - 9 ha for each well pad/ drill site on short term lease,</li> <li>Early production units will be set up within the well pad itself in case of commercially viable discovery of hydrocarbons for which land will be taken on a long-term lease.</li> </ul>
6.	Water Requirement and Source	87 KLD during drilling per well and 15 KLD for each early production location. <b>Source:</b> The water requirement for the project is minimal & for a short duration and would be sourced locally from approved/ authorized sources through water tankers. No bore well will be drilled for the extraction of ground water for the project.
7.	Wastewater Generation	Drilling: <ul style="list-style-type: none"> <li>52 KLD (12 KLD Domestic, 40 KLD from drilling</li> </ul>



		operation) during drilling of each well.  Early Production: <ul style="list-style-type: none"> <li>• During the operation of EPU's/QPU's, approximately 225 KLD of produced water and other wastewater (Washing, etc) 8 KLD will be generated along with 2 KLD domestic wastewater from each early production location.</li> </ul>
8.	Energy & fuel	<b>For drilling:</b> 3350 KVA for drilling of each well and will be made available from the following D.G. Sets: <ul style="list-style-type: none"> <li>• 2 x 350 KVA (1W+1S) for Camp Site</li> <li>• 3 x 1000 KVA (2W+1S) for Drilling Site</li> <li>• 2 x 100 KVA (1W+1S) for Radio Room</li> <li>• 3 x 250 KVA (2W+1S) for Liquid mud plant</li> <li>• Diesel-fired Heater-Treater or IWBH (Induced Water Bath Heater) with Well Testing / Extended Well testing Set up (350 KVA).</li> </ul> <b>Quantity of fuel used: Approx. 24 KLD for drilling</b> <b>For Early Production:</b> Gas Engine Generator (GEG) - 1 MW and 1X500 KVA DG Set for emergency use.  Dual fuel (Diesel/Gas) fired Heater-Treater or IWBH (Induced Water Bath Heater) 800 KVA  <b>Kind of Fuel used:</b> HSD, Natural Gas in early production
9.	Air	DG sets for drilling operation (associated with drilling rig, Camp site, LMP & Radio room) and flaring during well testing/ extended well testing will be the main source of pollution. <ul style="list-style-type: none"> <li>• Periodic maintenance of GEG/ DG sets</li> <li>• Provision of adequate stack height with GEG/ DG sets &amp; flare</li> </ul>
10.	Manpower	80 (approx.) during drilling and 15 - 20 in early production
11.	Environment Management Plan	Budget estimate for implementation of EMP including environmental monitoring <ul style="list-style-type: none"> <li>• Rs.20 lakhs for each well drilling,</li> <li>• Rs.22 lakhs/ annum at each early production location.</li> </ul>
12.	Wild Life Sanctuary/ National Park/Eco-Sensitive Zone	No National Parks/ Wildlife Sanctuary/ Eco-Sensitive Zone located within 10 km from block boundary.
13.	Forest Land	Unchaulia, Kakraha, Bishokhar, South Kathna, Gola, North Kathna, Nathapur Reserve Forest falls in the block area.  None of the project activity is proposed in these forest lands. These forest areas are not part of this EC application.

6. Waste Management during Drilling



S.No	Waste Type	Hazardous Waste Category	During Drilling	Proposed Mitigation Measures
<b>Wastewater</b>				
1.	Drilling wastewater	-	40 KLD/well	ETP (50 KLD)
2.	Domestic wastewater	-	12 KLD/well	STP (20 KLD)- septic tank & soak pit system and the treated water would be used for dust suppression, green belt, etc.
<b>Solid, Hazardous waste &amp; Non-Hazardous Waste</b>				
1.	Drill Cuttings associated with WBM	Solid/Non-Hazardous waste	250 - 750 tons/ well	Collection into HDPE lined pit. Use for subgrade construction materials, disposal into low lying areas &/ or Co-processing in cement kiln.
2.	Drill Cuttings associated with SBM	HW Sch. 2.1	500 – 1500 tons/ well	Collection in HDPE lined pit & disposal as per Hazardous & Other Wastes (Mgt. & TM) Rules, 2016 (Co-processing in cement kiln/ common HW TSDF/ HW processing facility).
3.	Spent /Residual drilling mud	2.3	250 – 500 tons/ well	Collection in HDPE lined pit & disposal as per Hazardous & Other Wastes (Mgt & TM) Rules, 2016 (Co-processing in cement kiln/ common HW TSDF/ HW processing facility).
4.	Used Oil	5.1	1-2 tons/ well	Disposal as per Hazardous & Other Wastes (Mgt. & TM) Rules, 2016.
5.	Sludge containing oil & other drilling wastes	Sch. I Cat. 2.2	250-500 tons/ well	Disposal as per Hazardous & Other Wastes (Mgt. & TM) Rules, 2016.
6.	Left over chemicals and materials, scrap metal	-	250 - 500 kg/ well	Sent to registered vendors
7.	Biodegradable waste	-	25 - 30 kg/day/well	Compost Pit

#### 7. Waste Management during Early Production

S.No	Nature of waste	Hazardous Waste Category	During Early Production	Mode of Disposal
<b>Wastewater</b>				
1.	Produced Water	-	225 m <sup>3</sup> from each early production location	250 KLD ETP- Would be disposed-off using either to a nearby down hole disposal well



2.	Trade effluent	-	10 m <sup>3</sup> from each early production location	(by reinjection in abandoned well) or disposed of through the facilities suitable for onshore disposal.
<b>Solid, Hazardous waste &amp; Non-Hazardous Waste</b>				
1	Oily sludge/ residues from Well work over, crude storage tank bottom cleaning	2.2	20 Ton/Year from each early production location	Will be disposed of as per Hazardous Waste Rules, 2016
2	Waste oil (Slop oil) from Well work over, crude storage tank bottom cleaning	4.3	2 Ton/Year from each early production location	Will be disposed of as per Hazardous Waste Rules, 2016
3	ETP sludge from ETP operation	34.2	120 Ton/Year from each early production location	Will be disposed of as per Hazardous Waste Rules, 2016
4	Used oil/spent oil from DG sets maintenance and other misc.	5.1	1 KL/year from each early production location	Used oil will be sent to UPPCB authorized recyclers.
5	Oil contaminated filters, cotton, rags, gloves, etc. from Misc. maintenance	3.3 33.2	0.3 Ton/Year from each early production location	Will be disposed of as per Hazardous Waste Rules, 2016
6	Waste/residues containing oil	5.2	0.5 KL/Year from each early production location	Will be disposed of as per Hazardous Waste Rules, 2016
7	Spent Chemicals	--	0.6 Ton/Year from each early production location	Will be disposed of as per Hazardous Waste Rules, 2016
8	Spent carbon	36.2	3 Ton/Year from each early production location	Will be disposed of as per Hazardous Waste Rules, 2016
9	Discarded containers/barrels/liners contaminated with hazardous waste	33.1	50 nos./Year from each early production location	Will be disposed of as per Hazardous Waste Rules, 2016

8. It is a proposed project for Onshore Oil and Gas Exploration in the Block, GV-ONHP-2017/1 in Kheri and Shahjahanpur Districts of Uttar Pradesh which falls in the category - 1(b) of the schedule of the EIA Notification-2006.



9. Since the project falls in the B2 category as per the MoEF&CC's amendment EIA Notification vide S.O.236(E) dated 16.01.2020, the public consultation is not required as per paragraph 7 (i) (III) (i) (e) of the Environment Impact Assessment Notification-2006.

Based on the recommendations of the State Level Expert Appraisal Committee Meeting (SEAC) held on 06-08-2021 the State Level Environment Impact Assessment Authority (SEIAA) in its Meeting held 30-09-2021 and decided to grant the Environmental Clearance for proposed project along with subject to the effective implementation of the following conditions:-

#### **SPECIFIC CONDITION**

1. Route for man power, machines etc. will not be allowed through forest land.
2. The project proponent shall ensure that waste water is properly treated in STP and reused. As proposed treated waste water should be completely recycled/reused and ZLD should be achieved. No treated waste water shall be discharged to any drain/sewer line etc.
3. Hazardous And Other Wastes (Management and Trans boundary Movement) Rules, 2015 (as amended) and Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 (as amended) shall be followed strictly and in case of violation the Environmental Clearance shall stand null and void.
4. Within one month PP will submit to SEIAA details of best international practices adopted in this sector.
5. In their six monthly report, PP will submit progress of their operations along with environmental footprints vis-à-vis international best practices adopted in this sector and benchmark their operations accordingly.
6. Within three months duly qualified EHS professional will be engaged for this project.
7. Project proponent(PP) shall obtain separate Environment Clearance for commercial drilling and exploration as this proposal is for drilling of Exploration activity only as per EIA Notification, 2006 and amended dated 16.01.2020 {Category B2 of activity 1(b)}
8. No drilling shall be carried out in protected areas.
9. The company shall make all arrangements at the drilling site to prevent runoff of any oil-containing waste into the nearby water bodies. A separate drainage system shall be created for oil-contaminated and non-oil-contaminated. Effluent shall be property treated and treated wastewater shall confirm to CPCB/UPPCB standards.
10. Drill cuttings separated from drilling fluid shall be adequately washed and disposed of according to the HWMH rule, 2016. No effluent/ drilling mud/ drill cutting shall be discharged/disposed of 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<sup>th</sup> August 2005
11. Oil spillage prevention and mitigation schemes shall be prepared. In case of oil spillage/contamination, an 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 by the authorized recyclers.
12. After completion of drilling activities, in case of non-availability of hydrocarbons, the site shall be restored to its normal condition as per the prevailing Rules/Guidelines/Site restoration policy.
13. PP shall adopt best drilling practices and drilling operations shall be designed in such a way that there is no chance of contamination of groundwater aquifer.
14. PP shall take all precautionary measures to avoid any contamination of groundwater.
15. 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.



16. The unit shall have to adhere to the prevailing area-specific policies of UPCB concerning the discharge of pollutants, and shall carry out the project development in accordance & consistent with the same. The project proponent must strictly adhere to the stipulations made by the Uttar Pradesh Pollution Control Board, State Government, and/or any other statutory authority.
17. 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.
18. Company shall prepare operating manual in respect of all activities, which would cover all safety & Environment related issues and measures and measures to be taken for protection. One set of environment manuals shall be made available at the drilling site/ project site. Awareness shall be created at each level of management. All the schedules and results of environmental monitoring shall be available at the project site office. Remote monitoring of the site should be done.

### **Safety & Health:**

- a) PP shall carry out mock drills within the premises as per the prevailing guidelines of safety and display a proper evacuation plan in the manufacturing area in case of any emergency or accident.
- b) PP shall take all the necessary steps for human safety within premises to ensure that no harm is caused to any worker/employee 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 the latest technique available by various Risk Analysis Studies and unit shall submit Disaster Management Plan (DMP) to the concerned 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.
- f) 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 on regular basis as per Factories Act & Rules.
- g) The company shall take necessary measures to prevent fire hazards, containing oil spills and soil remediation as needed.
- h) Blow out preventer system shall be installed to prevent well blowouts during drilling operations.
- i) The emergency response plan shall be base on the guidance prepared by OISD, DGMs, and Govt. of India.

### **WATER**

1. Total Water requirement for the project shall not exceed 105 KLD per well (87 KLD for drilling & 18 KLD for early production). The freshwater requirement shall not exceed 105 KLD per well and it shall be met through tankers.
2. PP shall not dig borewell for freshwater requirements.
3. The industrial effluent generation from the project shall not exceed 40 KLD per well.
4. Total industrial effluent generated from various activities shall be treated in mobile ETP followed by UF & RO and reused back in the process.
5. PP shall obtain prior permission for disposal of treated effluent.





6. Zero Liquid Discharge [ZLD] status shall be maintained all the time and there shall be no drainage connection from the premises.
7. Domestic wastewater generation shall not exceed 12 KL/day per well for the 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 UPPCB.
8. 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 wastewater outside the premises in any case.
9. Unit shall provide buffer water storage tank of adequate capacity for storage of treated wastewater during rainy days.
10. The Unit shall provide a metering facility at the ETP, UF, RO, & STP and maintain records for the same.
11. Proper logbooks of ETP, UF, RO, & STP; treated effluent reused in gardening/plantation; consumption in effluent treatment; quantity & quality of treated effluent; power consumption, etc. shall be maintained and shall be furnished to the UPPCB from time to time.

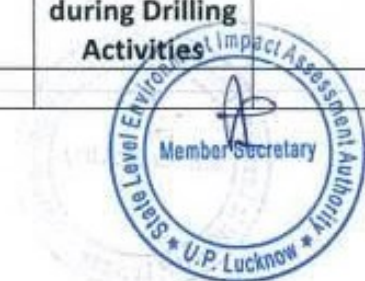
**AIR**

1. Unit shall provide adequate APCM with flue gas generation sources
2. There shall be no process, gas emission from drilling & exploration activities, and other ancillary operations.
3. The fugitive emission in the work zone environment is monitored. The emission shall conform to the standards prescribed by the concerned authorities from time (e.g. Director of Industrial Safety & Health). Following indicative guidelines shall also be followed to reduce fugitive emissions.
  - The internal road shall be either concreted or asphalted or paved to reduce 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.
4. Regular monitoring of Volatile Organic Compounds (VOCs) shall be carried out in the work zone area and ambient air.
5. Regular monitoring of the ground-level concentration of PM10, PM2.5, SO<sub>2</sub>, NO<sub>x</sub>, 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 UPPCB. 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 UPPCB.

**SOLID / HAZARDOUS WASTE:**

1. All the Solid/ Hazardous waste management shall be taken care of as mentioned below:

S. No	Nature of waste	Quantity during Drilling Activities	Mode of Disposal
A	Hazardous Waste		



S. No	Nature of waste	Quantity during Drilling Activities	Mode of Disposal
1	Drill cuttings associated with SBM	500-1500 tons/well	Cuttings will be washed and contained in the cuttings disposal area (HDPE lined collection pit) provided per the requirement of HW(MHTM), 2016 Rules
2	Spent /Residual drilling mud	250-500 tons/well	The mud will be disposed of as per Hazardous Waste Rules, 2016
3	Used Lubricating oil, Sludge containing oil, and other drilling work	1-2 tons/well 250-500 tons/well	Used oil will be sent to CPCB authorized recyclers. The oil-contaminated sludge will be disposed of as per Hazardous Waste Rules, 2016
<b>B</b>	<b>Non-Hazardous Waste</b>		
4	Drill cuttings associated with WBM	250-750 tons/well	Cuttings will be washed and contained in the cuttings disposal area (HDPE lined collection pit) and disposed of suitably.
5	Food waste	25-30 Kg per well	Food waste will be stored in a closed container and composted.
6	Non-combustible waste containing metallic residues, glass	1000-1200 Kg/well	To be disposed of their registered vendors periodically.
7	Packaging wastes including drums, wooden pallets, plastic containers, plastic foils.	1000 kg/well	To be analyzed for the trace/heavy metals content before disposing suitably
8	Leftover chemicals and materials, scrap metal, sludges, scales, batteries, spent acids, spent lubricants, filters, etc.	250-300 kg/well	Scrap metal and recoverable material to the salvages before dispose of balance material the registered vendors
9	Cement, grit, blasting, and painting wastes.	500 kg per well	To be disposed of their registered vendors periodically.

32. 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 Common Hazardous Waste Treatment, Storage and Disposal Facility (CHWTSDF) sites respectively.

#### OTHER

1. The project proponent shall also comply with any additional conditions that may be imposed by the SEAC or the SEIAA or any other competent authority for environmental protection and management.
2. Necessary permissions as mandated under the 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.
3. The project proponent shall allocate the separate fund of Rs. 6.02 Crore i.e. 1.5% 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 the half-yearly compliance report and to the district collector. The monitoring report shall be posted on the website of the project proponent.

4. All the environmental protection measures and safeguards proposed in Form-1 & PFR submitted by the project proponent and commitments made in their application shall be strictly adhered to in letter and spirit.

## **GENERAL CONDITION**

### **CONSTRUCTION PHASE:**

1. Water demand during construction shall be reduced by the use of curing agents, superplasticizers, and other best construction Practices
2. The project proponent shall ensure that the 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.
3. 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 times.
5. The project proponent shall strictly comply with the Building and other Construction Workers' (Regulation of Employment & Conditions of Service) Act 1996 and Uttar Pradesh rules made thereunder and their subsequent amendments. Local bye-laws of concern authority' shall be complied 'in letter and spirit.
6. Ambient noise levels. shall conform to residential standards both during day and night. Incremental pollution load on the ambient air and noise quality shall be closely monitored during the construction phase.
7. Use of Diesel Generator (JG) sets during the construction phase shall be strictly equipped with acoustic enclosure and shall conform to the EPA Rules for air and noise emission standards.
8. Safe disposal of wastewater and municipal solid wastes generated during the construction phase shall be ensured.
9. 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 the balance quantity of excavated earth shall be disposed of with the approval of the competent authority after taking the necessary precautions for general safety and health aspects. Disposal of the excavated earth during the construction phase shall not create an adverse effect on neighboring communities.
11. The project proponent shall ensure the 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.
13. Windbreaker of appropriate height i.e. 1/3rd of the building height and maximum up to 10 meters shall be provided. Individual buildings within the project site shall also be provided with barricades.
14. "No uncovered vehicles carrying construction material and waste shall be permitted."



15. "No loose soil or sand or construction & demolition waste or any other construction material that cause dust shall be left uncovered. Uniform piling and proper storage of sand to avoid fugitive emissions shall be ensured."
16. Roads leading to or at the 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 measures shall be displayed prominently at the construction site for easy public viewing.
19. Grinding and cutting of building materials in open areas shall be prohibited.
20. Construction material and waste should be stored only within the earmarked area and roadside storage of construction material and waste shall be prohibited.
21. Construction and demolition waste processing and disposal sites shall be identified and required dust mitigation measures are notified at the site. (If applicable).

#### **OPERATION PHASE:**

##### **WATER:**

1. The water meter shall be installed and records of daily and monthly water consumption shall be maintained.
2. All efforts shall be made to optimize water consumption by exploring Best Available Technology (BAT). The Unit shall continuously strive to reduce, recycle and reuse the treated effluent.

##### **AIR:**

1. 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 UPPCB every year along with half-yearly compliance report.
2. The 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.
3. Stack/ Vents (Whichever is applicable) of adequate height shall be provided as per the prevailing norms for flue gas emission/Process gas emission.
4. Flue gas emission & Process gas emission (If any) shall conform to the standards prescribed by the UPPCB/CPCB/MoEF&CC. At no time, the emission level should go beyond the stipulated standards.
5. All the reactors/vessels used in the manufacturing process shall be closed to reduce the fugitive emission

#### **HAZARDOUS/SOLID WASTE:**

1. 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 UPPCB shall be obtained for collection/treatment/storage/disposal of hazardous wastes.

2. Hazardous wastes shall be dried, packed, and stored in a separate designated hazardous waste storage facility with a bottom and leachate collection facility, before its disposal.
3. The unit shall obtain the necessary permission from the nearby TSDF site and CHWIF. (Whichever is applicable)
4. Trucks/Tankers used for transportation of hazardous waste shall be in accordance with the provisions under the) Motor Vehicle Act, 1988, and rules made thereunder.
5. The design of the Trucks/tankers shall be such that there is no spillage during transportation
6. All possible efforts shall be made for Co-Processing of the Hazardous waste prior to disposal into TSDF/CHWIF.
7. Management of fly ash (if any) shall be as per the Fly ash Notification 2009 & its amendment from time to time and it shall be ensured that there is 100% utilization of fly ash to be generated from the unit.

#### **SAFETY:**

1. The occupier/manager shall strictly comply with the provisions under the Factories Act 1948.
2. The project authorities shall strictly comply with the provisions made in Manufacture, Storage, and Import of Hazardous Chemicals Rules (MSIHC) 1989, as amended from time to time, and the Public Liability Insurance Act for the handling of hazardous chemicals, etc. Necessary approvals from the Chief Controller of Explosives and concerned Govt. Authorities shall be obtained before the commissioning of the project. Requisite On-site and Off-site Disaster Management Plans have to be prepared and implemented.
3. Main entry and exit shall be separate and clearly marked in the facility.
4. Sufficient peripheral open passage shall be kept in the margin area for free movement of fire tender/ emergency vehicle around the premises.
5. Storage of flammable chemicals shall be sufficiently away from the production area.
6. Sufficient number of fire extinguishers shall be provided near the plant and storage area.
7. All necessary precautionary measures shall be taken to avoid any kind of accident during storage and handling of toxic/hazardous chemicals.
8. All the toxic/hazardous chemicals shall be stored in optimum quantity and all necessary permissions in this regard shall be obtained before commencing the expansion activities.
9. The project management shall ensure to comply with all the environment protection measures, risk mitigation measures, and safeguards mentioned in the Risk Assessment report.
10. Only flame-proof electrical fittings shall be provided in the plant premises.
11. Storage of hazardous chemicals shall be minimized and it shall be in multiple small capacity tanks/containers instead of one single large capacity tank/container.
12. 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.
13. Handling and charging of the chemicals shall be done in a closed manner by pumping or by vacuum transfer so that minimal human exposure occurs.
14. Tie-up shall be done with nearby health care unit/doctor for seeking immediate medical attention in the case of emergency.
15. Personal Protective Equipments (PPEs) shall be provided to workers and its usage shall be ensured and supervised.



16. First Aid Box and required Antidotes for the chemicals used in the unit shall be made readily available in adequate quantity.
17. Training shall be imparted to all the workers on the safety and health aspects of chemicals handling.
18. 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.
19. Transportation of hazardous chemicals shall be done as per the provisions of the Motor Vehicle Act & Rules.
20. The company shall implement all preventive and mitigation measures suggested in the Risk Assessment Report.
21. Necessary permissions from various statutory authorities like PESO, Factory Inspectorate, and others shall be obtained prior to the commissioning of the project.

#### **NOISE:**

1. The company shall make all arrangements for the control of noise from the drilling activities.
2. The overall noise level in and around the plant area shall be kept well within the standard including engineering controls like acoustic insulation, hoods, silencers, enclosures, etc. ambient noise level shall conform to the standards prescribed under Environment (Protection) Act, & Rules, 1986 amended from time to time.
3. Noise levels for workers shall be as per the Factories Act & Rules.

#### **CLEANER PRODUCTION AND WASTE MINIMISATION:**

1. 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 UPPCB.
2. The company shall undertake various waste minimization measures Such as:
  - i. Metering and control of active ingredients to minimize waste.
  - ii. Reuse of by-products from the process as raw materials or as raw materials substitutes.
  - iii. Use of automated and close filling to minimize spillages.
  - iv. Use of close feed system Into batch reactors.
  - v. Venting equipment through vapour recovery system.
  - vi. Use of high-pressure hoses for cleaning to reduce wastewater generation.
  - vii. Recycling of washes to subsequent batches.
  - viii. Recycling of system condensate.
  - ix. Sweeping/ mopping of the floor instead of floor washing to avoid effluent generation.
  - x. Regular preventive maintenance for avoiding leakage, spillage, etc.

#### **GREEN BELT AND OTHER PLANTATIONS:**

1. The unit shall develop a green belt within the premises as per the CPCB guidelines. However, if adequate land is not available within the premises, the unit shall take up adequate plantation on road sides and suitable open areas in any other open areas in consultation with the Forest Department/UPPCB and submit an action plan of plantation for the next three years to the UPPCB.



2. Drip irrigation/low-volume, low-angle sprinkler system shall be used for the green belt development within the premises.

**OTHER CONDITION:**

1. The project proponent shall allocate the separate fund for Corporate Environment Responsibility (CER) in accordance with the MoEFCC's Office Memorandum No. F.No.22-65/2017-IA.III dated 01/05/2018 to carry out the activities under CER in the 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 MoEFCC as a part of the half-yearly compliance report and to the district collector. The monitoring report shall be posted on the website of the project proponent.
2. Rain water harvesting of surface, as well as rooftop 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, pretreatment must be done to remove suspended matter.
3. The unit shall 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 UPSIDC or UPPCB or any such authority created for this purpose by the Govt. / UPSIDC
4. 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.
5. The area earmarked as a green area shall be used only for plantation and shall not be altered for any other purpose.
6. 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.
7. The project proponent shall also comply with any additional condition that may be imposed by the SEAC or the SE1AA or any other competent authority for the purpose of environmental protection and management.
8. 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.
9. The project authorities must strictly adhere to the stipulations made by the Uttar Pradesh Pollution Control Board (UPPCB), State Government, and any statutory authority.
10. During material transfer there shall be no spillages and garland drains shall be constructed to avoid mixing of accidental spillages with domestic wastewater or stormwater.
11. Pucca flooring / impervious layer shall be provided in the work areas, chemical storage areas, and chemical handling areas to minimize soil contamination.
12. Leakages from pipes, pumps shall be minimal and if occurs, shall be arrested promptly.
13. 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.
14. The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act,1974, Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008 and the Public Liability Insurance Act, 1991, along with their amendments and rules.



15. The project proponent shall comply with 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.
16. The project management shall ensure that the 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 the project proponent.
17. The project authorities shall earmark adequate funds to implement the conditions stipulated by SEIAA as well as UPPCB along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purpose.
18. The applicant shall inform the public that the project has been accorded environmental clearance by the SEIAA and that the copies of the clearance letter are available with the UPPCB and may also be seen at the Website of SEIAA/ SEAC/ UPPCB. 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 Uttar Pradesh language and the other in English. 'A copy each of the same shall be forwarded to the concerned Regional Office of the Ministry.
19. 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.
20. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of the Environment (Protection) Act, 1986.
21. The project authorities shall also adhere to the stipulations made by the Uttar Pradesh Pollution Control Board.
22. The SEIAA may revoke or suspend the clearance if the implementation of any of the conditions is not found satisfactory.
23. 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.
24. The project authorities shall inform the UPPCB, 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.
25. This environmental clearance is valid for seven years from the date of issue.
26. 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.
27. Submission of any false or misleading information or data which is material to screening or scoping or appraisal or decision on the application makes, this environment clearance cancelled.
28. At the time of Construction/Operation, the project proponent will comply with all the guidelines issued by the Government of India/State Govt./District Administration related to Covid-19
29. In compliance to Hon'ble Supreme Court order dated 13/01/2020 in IA no. 158128/2019 and 158129/2019 in Writ petition no. 13029/1985 (MC Mehta Vs GOI and others) anti-smog guns shall be installed to reduce dust during excavation.
30. The project proponent shall submit within the next 3 months the data of groundwater quality including fluoride parameters to the limit of minimum deduction level for all six monitoring stations.





31. Plantation of trees should be of local indigenous species and may be as per the consultation of the local district Forest Officer.
32. The wastewater generated should be treated properly in a scientific manner i.e., domestic wastewater to be treated in STP and effluent such as RO rejects with high TDS and other chemical bearing effluents shall be treated separately.
33. All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.
34. Municipal solid waste shall be disposed of/managed as per Municipal Solid Waste (Management and Handling) Rules, 2016.
35. The project proponent shall obtain forest clearance under the provisions of the Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purposes involved in the project.
36. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
37. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and be approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (In case of the presence of schedule-I species in the study area).
38. The project proponent shall obtain Consent to Establish / Operate under the provisions of the Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
39. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of groundwater / from the competent authority concerned in case of drawl of surface water required for the project.
40. The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.
41. The self-environmental audit shall be conducted annually. Every three years third-party environmental audit shall be carried out.
42. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as a cylinder for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche, and First Aid Room, etc.
43. Adequate drinking water and sanitary facilities should be provided for construction workers at the site. Provision should be made for mobile toilets. The safe disposal of wastewater and solid wastes generated during the construction phase should be ensured.
44. The solid waste generated should be properly collected and segregated. Dry/inert solid waste should be disposed of off to the approved sites for landfilling after recovering recyclable material.
45. Corporate Environmental Responsibility (CER) shall be prepared by the project proponent and the details of the various heads of expenditure to be submitted as per the guidelines provided in the recent CER notification No. 22-65/2017-IA.III dated 01/05/2018. A copy of the resolution of the board of directors shall be submitted to the authority. A list of beneficiaries with their mobile nos./address should be submitted along with six monthly compliance reports.
46. No parking shall be allowed outside the project boundary.
47. Digging of basement shall be undertaken on account of structural safety of adjacent buildings under information/consultation with District Administration/Mining Department. All the



topsoil excavated during construction activities should be stored for use in horticulture /landscape development within the project site. Additional soil for leveling of the proposed site shall be generated within the sites (to the extent possible) so that the natural drainage system of the area is protected and improved.

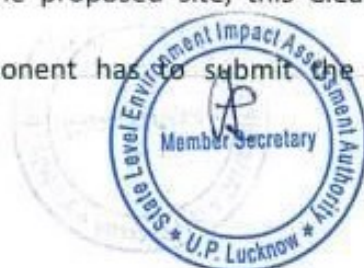
48. Surface rainwater has to be collected in the kaccha pond for groundwater recharging and irrigation of horticulture and peripheral plantation.
49. The approval of competent authority shall be obtained for the structural safety of the buildings due to any possible earthquake, adequacy of firefighting equipment, etc. as per the National Building Code including measures from lighting.
50. Disposal of muck during construction phase should not create any adverse effect on the neighboring communities and be disposed of taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of the competent authority.
51. The diesel generator sets to be used during the construction phase should be low sulphur diesel type and should conform to Environments (Protection) Rules prescribed for air and noise emission standards.
52. Ambient noise levels should conform to residential standards both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during the construction phase. Adequate measures should be made to reduce ambient air and noise level during the construction phase, to conform to the stipulated standards by CPCB/UPPCB.
53. The green area design along the periphery of the plot shall achieve attenuation factor conforming to the day and night noise standards prescribed for residential areas and pollution is also reduced. The open spaces inside the plot should be landscaped and covered with grass and shrubs. Green area Development shall be carried out considering CPCB guidelines including the selection of plant species and in consultation with the local DFO/ Agriculture Dept.
54. Pavements shall be so constructed as to allow infiltration of surface run-off of rainwater. Construction of pavements around trees should be able to facilitate suitable watering, aeration, and nutrition to the tree.
55. Roof topwater in the rainy season is to be discharged into RWH pits for groundwater recharging. The arrangement shall be made that wastewater and stormwater do not get mixed.
56. This environmental clearance is issued subject to land use verification. Local authority/planning authority should ensure this concerning Rules, Regulations, Notifications, Government Resolutions, Circulars, etc. issued if any.

Concealing factual data and information or submission of false/fabricated data and failure to comply with any of the conditions stipulated in the Prior Environmental Clearance attract action under the provision of Environmental (Protection) Act, 1986.

This Environmental Clearance is subject to ownership of the site by the project proponents in confirmation with approved Master Plan for G.B. Nagar. In case of violation; it would not be effective and would automatically be stand cancelled.

The project proponent has to ensure that the proposed site in not a part of any no-development zone as required/prescribed/identified under law. In case of the violation this permission shall automatically deemed to be cancelled. Also, in the event of any dispute on ownership or land use of the proposed site, this Clearance shall automatically deemed to be cancelled.

Further project proponent has to submit the regular 6 monthly compliance report



regarding general & specific conditions as specified in the E.C. letter and comply the provision of EIA notification 2006 (as Amended).

These stipulations would be enforced among others under the provisions of Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification, 2006 including the amendments and rules made thereafter.



(Ajay Kumar Sharma)  
Member Secretary, SEIAA

No..... /Parya/SEIAA/5902/2021 dated: As above

Copy, through email, for information and necessary action to –

1. The Principal Secretary, Department of Environment, Forest and Climate Change, Government of Uttar Pradesh, Lucknow (email – [soenvups@rediffmail.com](mailto:soenvups@rediffmail.com))
2. Joint Secretary, Ministry of Environment, Forest and Climate Change, Government of India, 3rd Floor, Prithvi-Block, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi-110003 (email – [sudheer.ch@gov.in](mailto:sudheer.ch@gov.in))
3. Deputy Director General of Forests (C), Integ rated Regional Office, Ministry of Environment, Forest and Climate Change, Kendriya Bhawan, 5th Floor, Sector "H", Aliganj, Lucknow – 226020 (email – [rocz.lko-mef@nic.in](mailto:rocz.lko-mef@nic.in))
4. District Magistrate Kheri and Shahjahanpur.
5. Member Secretary, Uttar Pradesh Pollution Control Board, TC-12V, Paryavaran Bhawan, Vibhuti Khand, Gomti Nagar, Lucknow-226010 (email – [ms@uppcb.com](mailto:ms@uppcb.com))
6. Copy to Web Master for uploading on PARIVESH Portal.
7. Copy for Guard File.

(Ajay Kumar Sharma)  
Member Secretary, SEIAA