

GUJARAT NARMADA VELLAY FERTILIZERS & CHEMICALS LIMITED

TDI PLANT, PLOT NO: - D/II/8 AT DAHEJ-II (NON-SEZ), INDUSTRIAL ESTATE,
AT. RAHIYAD, PO DAHEJ, TAL. VAGRA, DIST. BHARUCH

ENVIRONMENT CLEARANCE NO: SEIAA/GUJ/EC/1(d)/789/2018 dated
23/02/2018

PERIOD OF EC COMPLIANCE : July - 2020 to December - 2020

Sr. No	Conditions	Status of Compliance
A1	Specific Condition	
1	Unit shall comply the emission standards mentioned in the Notification by MoEF&CC vide no. S.O. 3305 (E) dated 07/12/2015.	Will be complied during project implementation.
2	Unit shall maintain completed Zero Liquid Discharge (ZLD) for the proposed CCPP Project by reuse/recycle of wastewater within premises.	Will be complied during project implementation.
3	Unit shall comply Coal Handling Guidelines published by Gujarat Pollution Control Board.	Will be complied during project implementation.
A2	WATER	
4	The fresh water requirement for the proposed expansion shall not exceed 165 KL/day and it shall be met through the existing water supply system from GIDC water supply. Permission from the Concern authority for additional water requirement shall be obtained.	Will be complied during project implementation.
5	Water from boiler blow down & CW blow down will be utilized for the coal handling system area (sprinklers), ash conditioning, cleaning of silo area of ash handling system and other plant's service water requirements & such as no increase in effluent load.	Will be complied during project implementation.
6	Metering of water shall be done and its records shall be maintained. No ground water shall be tapped in any case for meeting the project requirements.	Flow meter will be provided for new CPP project and its records will be maintained. Water source is only from GIDC.

7	The industrial effluent generation from the proposed installation of the power plant shall not exceed 184 KL/day and entire quantity of effluent shall be recycled after treatment in proposed ETP units. [Capacity 200 KL/day].	Will be complied during project implementation.
8	Entire quantity of wastewater from proposed CCPP shall be utilized for dust control sprinklers of coal handling & ash handling & floor washing of CCPP area.	Will be complied during project implementation.
9	There shall be no increase in discharge of industrial effluent due to proposed project in any case.	Will be complied during project implementation.
10	There shall be no additional domestic wastewater generation from the proposed project.	Will be complied during project implementation.
11	The unit shall provide metering facility at the inlets and outlets of the collection cum reuse system of waste water and maintain records of the same.	Will be complied during project implementation.
12	Proper logbooks of waste water reuse system showing quantity and quality of effluent reused shall be maintained and furnished to the GPCB from time to time.	Will be complied during project implementation.
A3	AIR	
13	Unit shall use Coal to the tune of 28 MT/hr or 672 MT/day for proposed 150 TPH steam Boiler.	Noted.
14	The Existing Boiler (Cap. 100 TPH) shall become stand-by after installation of new steam boiler Power Plant	Agreed.
15	Sulfur and ash content of the fuel to be used shall be analyzed and its record shall be maintained.	Will be complied during project implementation.
16	A long term study of radio activity and heavy metals contents on coal/lignite to be used shall be carried out through a reputed institute and results thereof analyzed regularly and reported along with monitoring reports. Thereafter mechanism for an in-built continuous monitoring for radio activity and heavy metals in coal/lignite and fly ash (Including bottom ash) shall be put in place.	A long term study of radio activity and heavy metals contents on coal/lignite will be carried out during operation stage of CPP.
17	Height of flue gas stacks attached to Boilers shall be minimum 110 meters.	Noted, At the time of detail engineering suitable height will be decided

		based on load.
18	A flue gas stack of 110 m height shall be provided with online monitoring system to existing Steam Boiler. Mercury emissions from stacks shall also be monitored on periodic basis.	Will be complied during project implementation.
19	High efficiency Electro Static Precipitators (ESP) with efficiency not less than 99.9% shall be installed for control of flue gas emission from the proposed Boilers. The ESP shall be operated efficiently to ensure that particulate matter emission does not exceed the GPCB norms. The control system shall be designed and integrated in plant DCS in such a way that if emission from ESP exceeds the specified standard prescribed in the Environment (Protection) Rules, 1986 as amended from time to time, utilization of boiler capacity shall reduce so that flue gas emission from the stack meets with the specified standards or boiler shall shut down totally.	Will be complied during project implementation.
20	Third party monitoring of the functioning of the ESP along with its efficiency shall be carried out once in a year through a reputed institute / organization.	Noted.
21	Lime stone injection technology shall be adopted to control SO ₂ and it shall be ensured that SO ₂ levels in the ambient air do not exceed the prescribed standards.	Will be complied during project implementation.
22	The company shall prepare schedule and carry out regular preventive maintenance of mechanical and electrical parts of ESPs and assign responsibility of preventive maintenance to the senior officer of the company.	Will be complied during project implementation.
23	Online monitoring system shall be installed to monitor the SO _x , NO _x and SPM in the flue gas stack. An arrangement shall also be done for reflecting the online monitoring results on the company's server, which can be assessable by the GPCB on real time basis.	Will be complied during project implementation.
24	Adequate storage facility for the fly ash in terms of closed silos shall be provided at site. No ash pond shall be constructed.	Will be complied during project implementation.
25	Handling of the fly ash shall be through a closed pneumatic system.	Will be complied during project implementation.
26	Ash shall be handled only in dry state.	Will be complied during project implementation.

27	<p>The unit shall strictly comply with the Fly Ash Notification under the EPA and it shall be ensured that there is 100% utilization of fly ash to be generated from the unit.</p>	<p>Will be complied during project implementation.</p>
28	<p>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.</p> <p>a) All handling & transport of coal shall be exercised through covered coal conveyors only.</p> <p>b) Enclosure shall be provided at Coal loading and unloading operations.</p> <p>c) Water shall be sprinkled on Coal stock piles periodically to retain some moisture in top layer and also while compacting to reduce the fugitive emission.</p> <p>d) All transfer points shall be fully enclosed.</p> <p>e) Adequate dust suppression/extraction system at crusher house as well as for the Coal/Lignite stock yard and other vulnerable areas shall be provided to abate dust nuisance.</p> <p>f) Accumulated coal dust /fly ash on the ground and other surfaces shall be removed / swept regularly and water the area after sweeping.</p> <p>g) Internal roads shall be either concreted or asphalted or paved properly to reduce the fugitive emission during vehicular movement.</p> <p>h) Air borne dust shall be controlled with water sprinklers at suitable locations in the plant.</p> <p>i) Coal/Lignite shall be transported through covered trucks only whereas fly ash shall be transported through closed trucks only.</p> <p>j) A green belt shall be developed all around the plant boundary and also along the roads to mitigate fugitive & transport dust emission.</p>	<p>Will be complied during project implementation.</p>
29	<p>Regular monitoring of ground level concentration of PM2.5, PM10, NO_x, SO₂ and Hg 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</p>	<p>Will be complied during project implementation.</p>

	consultation with the GPCB.	
A4	SOLID/ HAZARDOUS WASTE	
30	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.	Will be complied during project implementation.
31	Hazardous waste sludge shall be packed and stored in separate designated hazardous waste storage facility with impervious bottom and leachate collection facility, before its disposal.	Will be complied during project implementation.
32	ETP waste shall be disposed off to authorized TSDF site.	ETP sludge will be disposed to Secured Landfill site, i.e BEIL Dahej.
33	The used oil shall be sold to only to the registered recyclers / rerefiners.	Used Oil will be used at GNFC Bharuch unit.
34	The discarded containers / barrels / bags / liners shall be sold only to the authorized registered recycler.	The discarded containers will be sent to authorize recycler.
35	For storage of fly ash, closed silos of adequate capacity shall be provided. No ash pond shall be constructed in the project.	Noted.
36	The fly ash shall be supplied to the manufacturers of fly ash based products such as cement, concrete blocks, bricks, panels, etc. The unit shall strictly comply with the Fly Ash Notification under EPA and it shall be ensured that there is 100% utilization of fly ash to be generated from the unit.	Will be complied during project implementation.
37	All possible efforts shall be made for Co-Processing of the Hazardous waste prior to disposal into TSDF/CHWIF.	TDI Tar generated from existing unit is sent for Co-processing at Cement Industries.
A5	SAFETY	
38	The project management shall strictly comply with the provisions made in the Factories Act, 1948 as well as Manufacture, Storage and Impact of Hazardous Chemicals Rules 1989 as amended in 2000 for handling of hazardous chemicals.	Will be complied during project implementation.
39	Necessary precautions like continuous monitoring of hot spots using temperature detection systems, water sprinklers, avoiding stacking of lignite near steam	Will be complied during project implementation.

	pipeline etc. shall be made for storing lignite to prevent fire hazard.	
40	All the risk mitigation measures, general & specific recommendations mentioned in Risk Assessment Report shall be implemented.	Will be complied during project implementation.
41	A well designed fire hydrant system shall be installed as per the prevailing standards.	Noted.
42	Personal Protective Equipments shall be provided to workers and its usage shall be ensured and supervised.	Will be complied during project implementation.
43	First Aid Box and required antidotes for the chemicals used in the unit shall be made readily available in adequate quantity at all the times.	Will be complied during project implementation.
44	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.	Will be complied during project implementation.
45	Flameproof fittings shall be provided in the plant area.	Noted
46	Adequate fire fighting facilities shall be provided at the proposed power plant.	Will be complied during project implementation.
47	Proper ventilation shall be provided in the work area.	Noted
48	All transporting routes within the factory premise shall have paved roads to minimize splashes and spillages.	Noted
49	The project management shall prepare a detailed Disaster Management Plan (DMP) for the project as per the guidelines from Directorate of Industrial Safety and Health.	Will be complied during project implementation.
A6	NOISE	
50	To minimize the noise pollution the following noise control measures shall be implemented: a) Selection of any new plant equipment shall be made with specification of low noise levels. b) Manufacturers / suppliers of major noise generating machines / equipments like air compressors, feeder pumps, turbine generators, etc. shall be instructed to make required design	Noted

	<p>modifications wherever possible before supply and installation to mitigate the noise generation and to comply with the national / international regulatory norms with respect to noise generation for individual units</p> <p>c) Regular maintenance of machinery and vehicles shall be undertaken to reduce the noise impact.</p> <p>d) Noise suppression measures such as enclosures, buffers and / or protective measures shall be provided.</p> <p>e) Employees shall be provided with ear protection measures like earplugs or earmuffs.</p> <p>f) Proper oiling, lubrication and preventive maintenance shall be carried out of the machineries and equipments to reduce noise generation.</p> <p>g) Construction equipment generating minimum noise and vibration shall be chosen.</p> <p>h) Ear plugs and/muffs shall be made compulsory for the construction workers working near the noise generating activities / machines / equipment.</p> <p>i) Vehicles and construction equipment with internal combustion engines without proper silencer shall not be allowed to operate.</p> <p>j) Construction equipment meeting the norms specified by EP Act, 1986 shall only be used.</p> <p>k) Noise control equipment and baffling shall be employed on generators especially when they are operated near the residential and sensitive areas.</p> <p>l) Noise levels shall be reduced by the use of adequate mufflers on all motorized equipment.</p>	
51	<p>The overall noise level in and around the plant area shall be kept well within the prescribed standards by providing noise control measures including acoustic insulation, hoods, silencers, enclosures, vibration dampers etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under the Environment (Protection) Act and Rules. Workplace noise levels for workers shall be as per the Factories Act and Rules.</p>	<p>Will be complied during project implementation.</p>
A7	GREEN BELT AND OTHER PLANTATIONS	
52	<p>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</p>	<p>Will be complied during project implementation.</p>

	areas in consultation with the GIDC / GPCB and submit an action plan of plantation for next three years to the GPCB.	
53	Drip irrigation / low-volume, low-angle sprinkler system shall be used for the green belt development within the premises.	Noted
B	OTHER CONDITIONS	
54	The provisions of the Solid Waste Management Rules, 2016, e-Waste (Management) Rules, 2016, the Construction and Demolition Waste Management Rules, 2016 and the Plastics Waste Management Rules, 2016 shall be followed.	Will be complied during project implementation.
55	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.	Will be complied during project implementation.
56	All the recommendations, mitigation measures, environmental protection measures and safeguards proposed in the EIA report of the project prepared by M/s. Excel Enviro Tech, Ahmedabad & submitted vide letter no. NIL dated 09/10/2017 and commitments made during presentation before SEAC, proposed in the EIA report shall be strictly adhered to in letter and spirit.	Will be complied during project implementation.
57	All the recommendations of CREP guidelines as may be applicable from time to time shall be followed vigorously.	Noted
58	A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.	Will be complied during project implementation.
59	The project authorities must strictly adhere to the stipulations made by the Gujarat Pollution Control Board (GPCB), State Government and any statutory authority.	Agreed.
60	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.	Agreed.
61	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	Noted

	(Management, Handling and Transboundary Movement) Rules, 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules.	
62	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.	Will be complied during project implementation.
63	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.	Will be complied during project implementation.
64	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.	Noted
65	The applicant shall inform the public that the project has been accorded Environment clearance by the SEIAA and that the copies of clearance letter are available with GPCB and may also be seen at the website of GPCB/ SEIAA/SEAC. This shall be advertised within seven days from the date of the clearance letter, in at least two local newspapers that are widely circulated within the region, one of which shall be in Gujarati language and the other in English. A copy of the same shall be forwarded to the regional office of concerned ministry.	Complied. Published on dated 19 th March 2018 in following two news papers. 1) The Indian Express – page no 7 (in English) 2) Sandesh –page no 7 (in Gujarati)
66	The project proponent shall also comply with any additional condition that may be imposed by SEAC or the SEIAA nor any other competent authority for the purpose of Environmental protection and management.	Agreed
67	It shall be mandatory for project management to submit half-yearly compliance report in respect of the stipulated prior Environment clearance terms and conditions in hard and soft copies to the regulatory authorities concerned, on 1 st June and 1 st December of each calendar year.	Will be complied.
68	Concealing factual data or submission of false data and failure to comply with any of the conditions	Noted

	mentioned above may result in withdrawal of this clearance and attract actions under the provisions of Environment (Protection) Act, 1986.	
69	The project authorities shall also adhere to the stipulations made by the GPCB.	Noted
70	The SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not found satisfactory.	Agreed
71	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.	Agreed.
72	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 the start of the project.	Noted and will be informed.
73	This Environment clearance is valid for seven years from the date of issue.	Noted
74	An appeal against Environment clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under section 16 of the Nation Green Tribunal Act, 2010.	Noted
75	Submission of any false or misleading data which is material to screening or scoping or appraisal or decision on the application makes this environment clearance cancelled.	Noted