

COMPLIANCE OF CONDITIONS GIVEN IN ENVIRONMENT CLEARANCE No. : IA-J-11011/901/2007-IA-II(I) dated 24.01.2022 -  
FOR REVAMPING OF EXISTING UREA PLANTS (UREA-I @1,03,200 MTPA & UREA II @2,64,000 MTPA= TOTAL PRODUCTION  
CAPACITY 3,67,200 MTPA), LOCATED AT GSFC COMPLEX

Sr. No.	Conditions	Compliance Status (Period April '24 to Sept '24)
<b>A</b>	<b>SPECIFIC CONDITION</b>	
(i)	The Unit shall comply with all the Specific and General EC conditions, as mentioned in the existing ECs. The implementation report shall be submitted to the IRO, MoEF&CC in this regard.	<b>Complied.</b> For the existing ECs, six monthly compliance is regularly submitted to MoEFCC.
(ii)	The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP and other Reports in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.	<p><b>Will be Complied.</b> EMP: Revamping of existing Urea Plants (Urea-I &amp; II) will be done by replacing existing total recycle process to latest ammonia stripping process to achieve the energy norms. There shall be no increase in air pollution. Wastewater Treatment Section will be installed to recover NH<sub>3</sub>, CO<sub>2</sub> and Urea contained in the process water and, at the same time, to produce clean process condensate, which can be used as Cooling Tower Makeup.</p> <p>Risk assessment study has been undertaken to identify the Hazard and preparation of mitigation. All measures are already adopted as per the guideline. A separate EMP cell, Fire &amp; Safety cell and Occupational Health Centre are provided in the plant for compliance of Environmental management plan.</p> <p>Following conclusions and recommendations provided during risk assessment are:</p> <ul style="list-style-type: none"> <li>✚ The existing ammonia storage facilities will be used.</li> <li>✚ The safety measures and emergency actions being taken for risk and associated hazards are adequate and are being followed properly.</li> <li>✚ On-site and off-site emergency action plan should be regularly followed and complied.</li> <li>✚ Regular mock-drills should be done, and the assessment should be done via audits.</li> <li>✚ Provision of ammonia detectors/sensors at strategic locations in the common corridors should be maintained.</li> <li>✚ Other hazardous pipelines (acid/hazardous materials/inflammable materials) should be located away with all safety measures.</li> <li>✚ Regular hazard survey should be done to ensure detection of leakage in the plant.</li> </ul> <p>Other risk mitigation measures and safeguards are as under :</p> <ul style="list-style-type: none"> <li>✚ Hazard Identification and Risk Assessment.</li> <li>✚ Work Permit System procedure has been established for safely execution of job.</li> </ul>

		<ul style="list-style-type: none"><li>Electrical isolation/Lock Out and Tag Out procedure has been established for Isolation of energized equipment's/ machineries. Standard Operating procedures.</li><li>Start-up procedure shut down procedure, emergency procedure is being followed.</li><li>Inbuilt safety measures such as trips, alarms, logics.</li><li>Safety instrumentation- DCS System for plant process monitoring has been established. For the proposed revamping project, DCS shall be established.</li><li>DISH Approved training centre to impart training for all the level of employees/Contract workmen.</li><li>MSDS related to all the chemicals used in complex are available.</li><li>On-site emergency Plan &amp; Mock drills.</li><li>Various PPES, Fire extinguishers, safety showers, first aid boxes (filled) &amp; air masks, Gas masks etc. are provided at various Hazardous installations.</li></ul>																				
(iii)	The project proponent shall utilize modern technologies for capturing of carbon emitted and shall also develop carbon sink/carbon sequestration resources capable of capturing more than emitted. The implementation report shall be submitted to the IRO, MoEF&CC in this regard.	<p><b>Complied.</b> Urea Revamping Project itself is an energy reduction Project. The proposed revamping will result in potential savings in energy of 0.75 GCal/MT. A detailed information on carbon reduction is as under;</p> <table><tr><th></th><th>Basis</th><th>Total power generation</th><th>Carbon reduction</th></tr><tr><td>Energy reduction for Proposed Urea Revamping (367200 MTPA)</td><td>Saving of 0.75 Gcal/MT energy = 871 KWh</td><td>0.45 MT CO2/MT of Urea</td><td>165240 MT of CO2 reduction</td></tr><tr><td>Wind power (2023-24)</td><td>1MT CO2 = 1396.648 KWh</td><td>171541119.8 kWh</td><td>122823.45 MT of CO2 reduction</td></tr><tr><td>Solar Power (2023-24)</td><td>1MT CO2 = 1396.648 KWh</td><td>18702946.91 KWh</td><td>13391.31 MT of CO2 reduction.</td></tr><tr><td>Tree Plantation</td><td>40 trees reduce 1 T of CO2</td><td>202633 nos. Of trees in GSFC.</td><td>5065.82 MT of CO2 reduction.</td></tr></table>		Basis	Total power generation	Carbon reduction	Energy reduction for Proposed Urea Revamping (367200 MTPA)	Saving of 0.75 Gcal/MT energy = 871 KWh	0.45 MT CO2/MT of Urea	165240 MT of CO2 reduction	Wind power (2023-24)	1MT CO2 = 1396.648 KWh	171541119.8 kWh	122823.45 MT of CO2 reduction	Solar Power (2023-24)	1MT CO2 = 1396.648 KWh	18702946.91 KWh	13391.31 MT of CO2 reduction.	Tree Plantation	40 trees reduce 1 T of CO2	202633 nos. Of trees in GSFC.	5065.82 MT of CO2 reduction.
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(iv)	No banned raw materials/chemicals shall be used in the unit. The project proponent shall adhere to the notifications/guidelines of the Government in this regard.	<b>Complied.</b> No banned raw materials/chemicals is used in the unit. GSFC follows the notifications/guidelines of the Government in this regard.																				
(v)	The continuous online (24x7) monitoring system for	<b>Complied</b> Continuous online monitoring system for existing Urea-I & II plant is																				

	<p>stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server.</p>	<p>installed and same will be utilized after revamping. The gaseous pollutants emitted from the existing facilities are regularly monitored through NABL approved lab &amp; in-house laboratory. The report is submitted to GPCB &amp; MoEF regional office on half yearly basis.</p> <p>Existing stack parameters details as per OMS for Compliance period <b>April '24 to Sept. '24:</b></p> <table><tr><th>Stack Id and Norms</th><th>UREA_MELA_EC S-Ammonia - (Limit:175 mg/Nm3)</th><th>Stack_P_1_UREA_I_Prilling_tower-Ammonia - (Limit:175 mg/Nm3)</th><th>Stack_P_1_UREA_I_Prilling_tower-PM - (Limit: 150 mg/Nm3)</th></tr><tr><td>Avg</td><td>21.17</td><td>45.77</td><td>47.38</td></tr><tr><td>Min</td><td>13.91</td><td>44.84</td><td>13.97</td></tr><tr><td>Max</td><td>22.15</td><td>49.15</td><td>70.12</td></tr><tr><th>Stack Id and Norms</th><th>Stack_P_2_UREA_II_Prilling_tower-Ammonia - (Limit: 150 mg/Nm3)</th><th>Stack_P_2_UREA_II_Prilling_tower-PM - (Limit: 150 mg/Nm3)</th><th></th></tr><tr><td>Avg</td><td>18.70</td><td>82.36</td><td></td></tr><tr><td>Min</td><td>17.94</td><td>43.38</td><td></td></tr><tr><td>Max</td><td>20.09</td><td>131.75</td><td></td></tr></table>	Stack Id and Norms	UREA_MELA_EC S-Ammonia - (Limit:175 mg/Nm3)	Stack_P_1_UREA_I_Prilling_tower-Ammonia - (Limit:175 mg/Nm3)	Stack_P_1_UREA_I_Prilling_tower-PM - (Limit: 150 mg/Nm3)	Avg	21.17	45.77	47.38	Min	13.91	44.84	13.97	Max	22.15	49.15	70.12	Stack Id and Norms	Stack_P_2_UREA_II_Prilling_tower-Ammonia - (Limit: 150 mg/Nm3)	Stack_P_2_UREA_II_Prilling_tower-PM - (Limit: 150 mg/Nm3)		Avg	18.70	82.36		Min	17.94	43.38		Max	20.09	131.75	
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	<p>For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.</p>	<p>Apart from above, effluent from other manufacturing facilities of premise is treated and discharged to common effluent conveyance channel of M/s VECL with real time effluent monitoring. Hence as a part of effluent discharging unit, online continuous effluent monitoring system has been installed as per prevailing guideline.</p>																																
(vi)	<p>The storage of toxic/hazardous raw material shall be bare minimum with respect to quantity and inventory. Quantity and days of storage shall be submitted to the Integrated Regional Office of Ministry and SPCB along with the compliance report.</p>	<p><b>Complied.</b> Liquid Ammonia is stored in double walled double integrity storage tanks with bare minimum quantity. Liquid Ammonia was stored in the range of 3543 MT to 9048 MT during April '24 to Sept. '24:</p>																																
(vii)	<p>The treated waste water 613.68 KLD shall be discharge through GSFC drainage system for deep sea disposal after conform to the standards prescribed under the Environment (Protection) Rules, 1986.</p>	<p><b>Will be complied.</b> Data will be submitted after startup of plant operation.</p>																																

(viii)	<p>Total fresh water requirement shall not exceed 2907.6 KLD. Necessary permission obtained in this regard shall be renewed from time to time.</p> <p>The fresh water demand shall be reduced by 10% using rain water harvesting system.</p>	<p><b>Will be complied.</b> Data will be submitted after startup of plant operation.</p> <p>Moreover, GSFC is withdrawing water from its own French wells located in Mahi river for operation of the plants. GSFC got permission for 29.00 MLD drawl of water from Vadodara Irrigation Division (VID) for the year 2024-25 vide letter no. J.N.Versiv/PB-1/GSFC-Vadodara /Annual Qty. Reser./Year 2024-25/433 dated 28/02/2024. As per agreement of GoG, +/-25% beyond permissible limit is allowed on annual basis without any penalty. Avg. water drawl for the period April '24 to Sept '24 is 25.14 MLD for GSFC Vadodara complex.</p> <p>GSFC has installed Roof top rainwater harvesting in GSFC's Corporate building, A block, ADC, R&amp;D, Central Lab, SDO, Officer Punching &amp; Mechanical Store building. @ 12743 m3 of rainwater is collected during April '24 to Sept. '24 and re used for fire water make up.</p>				
(ix)	As proposed by PP, Rs.12 Crores shall be allocated towards CSR for the complex for 2021-22.	<b>Complied.</b> CSR proposal for FY 21-22 was made before financial closure of FY 21-22. After financial closure, required CSR fund was Rs. 7.69 Crores against that GSFC had spent Rs. 9.76 Crores. GSFC has spent Rs. 1,22,76,09/- towards CSR during April '24 –Sept '24				
(x)	The occupational health centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers.	<p><b>Complied.</b> GSFC has a fully-fledged 25 bed hospital with various facilities like central oxygen facilities (24x7), first aid boxes (125 no.). The hospital possess fully equipped indoor facilities like the following:</p> <ul style="list-style-type: none"><li>• Digital X-ray</li><li>• Full-fledged Physiotherapy</li><li>• ECG multi parameter, defibrillator ventilator</li><li>• Fully equipped advanced laboratory</li><li>• Advanced Pharmacy</li><li>• ICU Beds, Sterilized Dressing Pad</li><li>• First responder facilities with splint, eye wash bottles, safety shower</li><li>• Emergency communication</li></ul> <p>Regular health check-up (six monthly) of employees is carried out by Occupational Health Centre located within premises. Records are maintained at OHC. Month wise summery of employees who underwent periodical and pre medical examination and tests/investigations carried out during medical examination are given below.</p> <p>Periodical Medical Examination details for compliance period April '24 to Sept '24::</p> <table><tr><th>Month</th><th>Periodical Medical Examination numbers</th></tr><tr><td></td><td></td></tr></table>	Month	Periodical Medical Examination numbers		
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(xi)	Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.	<p><b>Complied.</b> Regular training on safety and health aspects are organized by safety department. Health awareness information is regularly circulated by Medical Dept.</p> <p>Safety &amp; Health training imparted to workers/employees during April '24 - Sept '24 by Safety department is as under;</p> <table><tr><td>Month</td><td>Training Topic</td><td>Nos. of members present</td></tr><tr><td>April-24</td><td>Safety Site Talk</td><td>314</td></tr></table>	Month	Training Topic	Nos. of members present	April-24	Safety Site Talk	314																																										
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(xii)	The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms.	<b>Complied.</b> Fire-fighting system as per norms for present operation is in place and being maintained. Additional Fire-fighting installations for proposed revamping shall be installed during construction phase and before commissioning of revamped plant.																																																											
(xiii)	Necessary precautions shall be taken to avoid accidents and action plan shall be implemented for avoiding accidents.	<b>Noted.</b> All necessary safety precautions shall be taken during construction phase and present work permit system with safety permits and SOP being followed in plant operation & maintenance activities.																																																											

(xiv)	<p>The storm water from the roof top shall be channelized through pipes to the storage tank constructed for harvesting of rain water in the premises and harvested water shall be used for various industrial processes in the unit.</p> <p>No recharge shall be permitted within the premises. Process effluent/ any wastewater shall not be allowed to mix with storm water.</p>	<p><b>Complied.</b> GSFC has installed Roof top rainwater harvesting in GSFC's Corporate building, A block, ADC, R&amp;D, Central Lab, SDO, Officer Punching &amp; Mechanical Store building. @ 12743 m<sup>3</sup> of rainwater is collected during April '24 to Sept. '24 and re used for fire water make up.</p> <p>Rain Water Harvesting System exists at the Guest House, Science Foundation Building and Township's residential areas with well water recharging, Roof Top Rain Water Harvesting and Rain water harvesting ponds. Further to this, GSFC has constructed 15 water harvesting structure (Recharge well &amp; Furrat system) in phase manner in 2009 &amp; 2012. The filtrations rate is in the in the range of 65-70 M<sup>3</sup>/ Hr. of each wells. Ponds have also been dug out to store the rain water runoff and percolate the same.</p> <p>Rain water recharge structure located outside the factory premise. Necessary precaution is taken to ensure the process effluent/any wastewater does not get mixed by storm water.</p>						
(xv)	<p>The company shall undertake waste minimization measures as below</p> <ol style="list-style-type: none"> <li>Metering and control of quantities of active ingredients to minimize waste;</li> <li>Reuse of by products from the process as raw materials or as raw material substitutes in other processes.</li> <li>Use of automated filling to minimize spillage.</li> <li>Use of Close Feed system into batch reactors.</li> <li>Venting equipment through vapour recovery system.</li> <li>Use of high-pressure hoses for equipment clearing to reduce wastewater generation.</li> </ol>	<p><b>Will be complied.</b></p>						
(xvi)	<p>The green belt of at least 5-10 m width shall be developed in nearly 33 % of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map. Trees have to be planted with spacing of 2m x 2m and number of trees has to be increased accordingly. The plant species can be selected that will give better carbon sequestration and plantation shall be started from first year onwards.</p>	<p><b>Complied.</b> The total area of premises was 328 ha. Out of which 0.65 Ha. was diverted for Bullet Train Project and hence total area is 327.35 ha. The green belt area is 133.35 Ha which is 40.73 % of total plot area in which 7.46 Ha. has been developed in GSFC owned land in Ranoli, Vadodara.</p> <p>Total 187133 number of trees/plantation available in existing Green Belt (GB) in GSFC complex and 15500 numbers of trees/plantation available in existing GB in Ranoli Kotar land.</p> <table border="1" data-bbox="1133 1321 1957 1391"> <thead> <tr> <th data-bbox="1133 1321 1216 1391">Sr. No.</th><th data-bbox="1216 1321 1749 1391">Particulate</th><th data-bbox="1749 1321 1957 1391">Total Area (Ha)</th></tr> </thead> <tbody> <tr> <td> </td><td> </td><td> </td></tr> </tbody> </table>	Sr. No.	Particulate	Total Area (Ha)			
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			2	Green Belt (Township)	86.05																												
			3	Green Belt in Ranoli (Kotar land),Nandesari	7.46																												
				Total GB area (40.73%)	133.35																												
				<b>Total area</b>	<b>327.35</b>																												
(xvii)	The activities and the action plan proposed by the project proponent to address the socio-economic issues in the study area, shall be completed as per the schedule presented before the Committee and as described in the EMP report in letter and spirit.	<b>Noted.</b> It is believed that the project will be provide more benefits both to environmental and socio-economic aspects as per given below;  ✚ It is expected to gain income and upsurge the turnover of GSFC. ✚ It will ease the availability of chemical fertilizers to farmers. ✚ The proposed revamping project would generate direct and indirect employment opportunities, which will benefit the local people during Construction period that would help in decrease of migration. ✚ Business opportunities to the local people shall be available during the Construction phase. ✚ It will improve the economy of the local nearby vendors. ✚ The Project shall contribute towards local training and employment programmes. ✚ There will be some boost to the state's business sector, including manufacturing, construction, transport, engineering, and related consultancies.																															
(xviii)	A separate Environmental Management Cell (having qualified person with Environmental Science/ Environmental Engineering/ specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.	<b>Complied,</b> GSFC has separate environment cell and fully fledged laboratory facilities for environment management and monitoring. EMC details like name of persons, designation, and technical qualification along with parameter wise equipment available for in-house monitoring are listed below. EC Dept. Staff list: <table><tr><th>Sr. No</th><th>Name of employees</th><th>Designation</th><th>Tech. Qualification</th></tr><tr><td>1</td><td>K S Badlani</td><td>Sr. VP (I&amp;MB, U&amp;EC, PLM &amp; FU) &amp; MR</td><td>B.E (Chemical)</td></tr><tr><td>2</td><td>P D Kachchhi</td><td>Chief (U&amp;EC &amp; TTWWP)&amp; Dy.MR</td><td>B.E. (Env.), PDIS</td></tr><tr><td>3</td><td>Mrs.S Y Singh</td><td>Chief (EC &amp; IMS)</td><td>B.E. (Civil)</td></tr><tr><td>4</td><td>Prashant U Kadu</td><td>Sr. Mgr (EC)</td><td>B.E. (TEXTILE)</td></tr><tr><td>5</td><td>Jaxesh P Trivedi</td><td>Mgr (EC)</td><td>B.E (Chemical), M.Tech (EPD), PDIS</td></tr><tr><td>6</td><td>Ashok H Shah</td><td>Mgr(EC)</td><td>B. Sc (Chemistry)</td></tr></table>				Sr. No	Name of employees	Designation	Tech. Qualification	1	K S Badlani	Sr. VP (I&MB, U&EC, PLM & FU) & MR	B.E (Chemical)	2	P D Kachchhi	Chief (U&EC & TTWWP)& Dy.MR	B.E. (Env.), PDIS	3	Mrs.S Y Singh	Chief (EC & IMS)	B.E. (Civil)	4	Prashant U Kadu	Sr. Mgr (EC)	B.E. (TEXTILE)	5	Jaxesh P Trivedi	Mgr (EC)	B.E (Chemical), M.Tech (EPD), PDIS	6	Ashok H Shah	Mgr(EC)	B. Sc (Chemistry)
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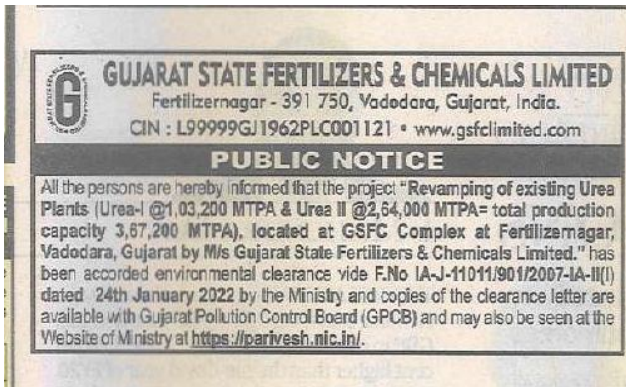



		7	Jayesh M Dave	Mgr(EC)	B. Sc (Chemistry)
		8	Prateek Jain	Dy.Mgr (EC).	B. Tech. (Chem.)
		9	Pankaj K Sharma	Dy.Mgr (EC)..	B.Tech. (Chem. )
		10	Mosmi M Patel	Asst.Mgr (EC)...	B.Tech. (RE & EE)
		11	H V Shah	Plant Engr.	B. Sc (Chemistry)
		12	Ambalal K Rana	Sr.Operator	B. Sc (Chemistry)
		13	Anil L Arora	Sr.Operator	B. Sc (Chemistry)
		14	Vipul R Upadhyay	Sr.Operator	B. Sc (Chemistry)
		15	Rajesh H Patel	Sr. Operator	B. Sc (Chemistry)
		16	Kanubhai B Padhiyar	Sr. Operator	B. Sc (Chemistry)
		17	Hitesh D Patel	Sr. Operator	M.Sc (Env. Sci.)
		18	K S Dave	Sr. Operator	B. Sc (Chemistry)
		19	MB Kharachia	Sr. Operator	SSC
		20	K C Dave	Sr. Operator	B. Sc (Chemistry)
		21	A B Shukla	Foreman	ITI
		22	M R Chandlekar	Foreman	ITI
		23	S A Christian	Foreman	HSC
		24	H G Pandey	Foreman	12th
		25	MM Parmar	Foreman	SSC
		26	Jayesh Solanki	Foreman	Old SSC
		27	Bhavesh C Patel	Operator	M.Sc (Indus. Chem)
		28	Biren R Patel	Jr. Operator	M.Sc. (Env), PDIS, Cert. (Dis.Mgmt)
		29	Purvish S Shah	Jr. Operator	M.Sc. (Env), Cert. (Dis. Mgmt)
		30	Jayesh S Patel	Attendant	Bsc. (Chem.)
		31	Bhavdip S Vamja	Assistant Operator	B.Sc Chemistry
		32	Gami Ravi kumar	Assistant Operator	B.Sc Chemistry
		33	K K Mahida	Asst.Operator (OC)	Dip. (Chemical)

		<p>* Total 12 nos. of contract workmen available.</p> <p>Fully fledged laboratory along with equipment are also set up to carry out environment monitoring and management functions.</p>
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B	GENERAL CONDITIONS																																										
(i)	No further expansion or modifications in the plant, other than mentioned in the EIA Notification, 2006 and its amendments, shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change/SEIAA, as applicable. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry/SEIAA, as applicable, to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.	<b>Noted</b> and directives shall be followed in case of alterations in the project proposal.																																									
(ii)	The Project proponent shall strictly comply with the rules and guidelines issued under the Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989, as amended time to time, the Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996, and Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016 and other rules notified under various Acts.	<b>Complied.</b> All applicable rules and guidelines are complied.																																									
(iii)	The energy source for lighting purpose shall be preferably LED based, or advanced having preference in energy conservation and environment betterment.	<b>Complied.</b> For 2023-24, @ 1400 various types of conventional lighting fittings were replaced by latest LED type of fittings for saving of power besides upgradation of lighting system.																																									
(iv)	The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under the Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).	<b>Complied.</b> Presently, Noise monitoring is carried out at different locations within GSFC premises and at ambient air monitoring stations. Details (Max., Min along with comparison with standards) are given below and are in the norms. <u>Noise Level for compliance period April'24 – Sept '24:</u> <table><tr><th rowspan="2">Location</th><th colspan="3">Noise Level, Limit-75 dB(A) Daytime</th><th colspan="3">Noise Level, Limit-70 dB(A) Night time</th></tr><tr><th>Avg</th><th>Min</th><th>Max</th><th>Avg</th><th>Min</th><th>Max</th></tr><tr><td>Nr Marketing Yard</td><td>61</td><td>48</td><td>74</td><td>56</td><td>42</td><td>70</td></tr><tr><td>Nr Adm. Building</td><td>58</td><td>46</td><td>70</td><td>53</td><td>40</td><td>66</td></tr><tr><td>B/H SA-IV</td><td>58</td><td>44</td><td>70</td><td>54</td><td>42</td><td>66</td></tr><tr><td>Vadnagar Tank Farm</td><td>51</td><td>40</td><td>62</td><td>48</td><td>39</td><td>58</td></tr></table>	Location	Noise Level, Limit-75 dB(A) Daytime			Noise Level, Limit-70 dB(A) Night time			Avg	Min	Max	Avg	Min	Max	Nr Marketing Yard	61	48	74	56	42	70	Nr Adm. Building	58	46	70	53	40	66	B/H SA-IV	58	44	70	54	42	66	Vadnagar Tank Farm	51	40	62	48	39	58
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(v)	The company shall undertake all relevant measures for improving the socioeconomic conditions of the surrounding area. The activities shall be undertaken by	<b>Complied.</b> CSR activities are done and detail is given as per point no. (ix) in specific condition.																																									

	involving local villages and administration. The company shall undertake eco developmental measures including community welfare measures in the project area for the overall improvement of the environment.																	
(vi)	<p>The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change as well as the State Government along with the implementation schedule for all the conditions stipulated herein.</p> <p>The funds so earmarked for environment management/ pollution control measures shall not be diverted for any other purpose.</p>	<p><b>Complied.</b> The company has granted approval of Rs. 453.20 Crores as a total project cost for execution of Urea Revamping project.</p> <p>GSFC has provided adequate funds to implement the conditions stipulated by the MoEF and it is integral part of the project. The fund earmarked to implement the conditions has been utilized for intended purpose only.</p> <p>Cumulative Expenditure incurred over last 3 years are given below. <u>Past three year investment in pollution control:</u></p> <table><tr><th>Description</th><th colspan="3">Expenses in lakhs</th></tr><tr><td></td><th>Till 2021-22</th><th>Till 2022-23</th><th>Till 2023-24</th></tr><tr><td>Investment in Pollution control</td><td>4198.58</td><td>4198.58</td><td>4198.58</td></tr><tr><td>Total Investment</td><td>521036.12</td><td>528422.48</td><td>539630.49</td></tr></table> <p>Budget is prepared every year for the expenses to be carried out by Environment Control dept.</p>	Description	Expenses in lakhs				Till 2021-22	Till 2022-23	Till 2023-24	Investment in Pollution control	4198.58	4198.58	4198.58	Total Investment	521036.12	528422.48	539630.49
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Total Investment	521036.12	528422.48	539630.49															
(vii)	A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.	<b>Not applicable</b> as the project permission received under clause 7 under the para 7(ii) of EIA notification 2006.																
(viii)	The project proponent shall also upload/submit six monthly reports on Parivesh Portal on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data to the respective Integrated Regional Office of MoEF&CC, the respective Zonal Office of CPCB and SPCB. A copy of	<b>Complied.</b> Half-yearly compliance report is regularly prepared and submitted to regulatory authorities.																

	Environmental Clearance and six monthly compliance status reports shall be posted on the website of the company.	
(ix)	The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Integrated Regional Office of MoEF&CC by e-mail.	<p><b>Complied.</b> Last Environment Statement submitted to GPCB vide letter EC/IMS/ES/10/2023-24 dtd.14.06.2024 for the year 2023-24.</p> <p>EC compliance status along with Form – V are put in website and regularly mailed to IRO.</p>
(x)	The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry and at <a href="https://parivesh.nic.in/">https://parivesh.nic.in/</a> . This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.	<p><b>Complied,</b> GSFC has published advertisement of Env. Clearance in local newspapers i.e. Indian Express &amp; Sandesh newspapers on 29/01/2022.</p> <p>The copy of same is forwarded by letter no- EC/Urea Revamping/Adv./2022 on dated 31/01/2022 to IRO- MoEFCC Gandhinagar.</p> <p><u>Published advertisements are as:</u></p> 

		
(xi)	The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.	<b>Will be complied as project is under execution.</b>
(xii)	This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.	<b>Will be complied.</b>

**Monitoring the Implementation of Environmental Safeguards**  
**Ministry of Environment & Forests & Climate Change**  
**Regional Office (WZ), Gandhinagar**  
**Monitoring Report**

**DATA SHEET**

No.	Conditions	Compliance		
1.	<b>Project type:</b> River-valley / Mining/ Industry/Thermal/Nuclear/Others(specify)	Industrial		
2.	<b>Name of the Project</b>	Revamping of existing Urea Plants (Urea-I @1,03,200 MTPA & Urea II @2,64,000 MTPA= total production capacity 3,67,200 MTPA), located at GSFC Complex at Fertilizernagar, Vadodara, Gujarat (Plant area 328 ha.) by M/s Gujarat State Fertilizers & Chemicals Limited		
3.	<b>Clearance letter(s) OM No. and date</b>	IA-J-11011/901/2007-IA-II(I) dated 24.01.2022		
4.	<b>Location</b> a) District (s) b) State (s)  c) Location/ Latitude / Longitude	Gujarat State Fertilizers & Chemicals Ltd. P.O. Fertilizernagar - 391750, Vadodara Gujarat		
		<b>Point</b>	<b>Latitude</b>	<b>Longitude</b>
		A	22°21'51.48" N	73°9'30.91" E
		B	22°22'2.48" N	73°9'42.67" E
		C	22°23'15.59" N	73°8'37.76" E
		D	22°22'49.97" N	73°8'11.38" E
		E	22°22'25.01" N	73°8'19.54" E

5.	<b>Address for Correspondence</b> a) Address of the Concerned Project Chief Engineer (with Pin Code & Mob. No/Telephone/ Telex/ E-mail)  b) Address of concerned Project Engineer (with Pin code & Mob No / Telephone/ Telex/ E-mail)	Mr. K S Badlani, Sr. Vice President (I&MB, U&EC, PLM & FU) & MR P.O.: Fertilizernagar - 391750, Tal. & District : Vadodara, State : Gujarat Mo. no. :9909965842; email: ksbadlani@gsfcld.com  Mr. P R Shah, Sr. Vice President (Project Development) Po: Fertilizernagar - 391750, Tal. & District : Vadodara, State : Gujarat Mo. no. :9909965889; email:prshah@gsfcld.com
6.	<b>Salient Features</b> a) of the Project   b) of the Environmental Management Plans	a) Revamping of existing Urea-I & II Plant.  b) EMP: Revamping of existing Urea Plants (Urea-I & II) will be done by replacing existing total recycle process to latest ammonia stripping process to achieve the energy norms. There shall be no increase in air pollution. Wastewater Treatment Section will be installed to recover NH3, CO2 and Urea contained in the process water and, at the same time, to produce clean process condensate, which can be used as Cooling Tower Makeup.
7.	Production details during compliance period and (or) during the previous financial year.	Construction work is started.
8.	<b>Breakup of the Project Area</b> a) Submergence area : Forest & Non-Forest  b) Others	Not Applicable  Project is located in existing premises.
9.	<b>Breakup of the project affected population</b> with enumeration of those Losing Houses/ Dwelling Units only, Agricultural Land only, Both Dwelling Units & Agricultural Land & I Landless Laborers/ Artisans : a) SC, ST / Adivasi b) Others (Please indicate whether these figures are based on any scientific and systematic survey carried out or only provisional figures, if a survey is carried out and give details & year of survey)	None (Project is within existing Factory Complex area)



10	<b>Financial Details :</b> a) Project Cost as originally revised estimates and the year of price reference.  b) Allocation made for environmental management plans with item wise and year wise break-up.  c) Benefit cost ratio/Internal rate of Return and the year of assessment (if applicable)  d) Whether (c) includes the cost of environmental management as shown in the above  e) Actual expenditure incurred on the Project so far.  f) Actual expenditure incurred on the environmental management plans so far.	a) Rs. 306 Crore. (Actual Project cost is Rs. 453 crore)  b) Rs. 4 crore proposed budget for environment management plan.  c) –  d) ---  e) ---
11	<b>Forest Land Requirement</b> a) The status of approval for diversion of forest land for non-forestry use b) The status of clearing felling. c) The status of compensatory afforestation, if any. d) Comments on the viability & sustainability Of compensatory afforestation program In the light of actual field experience so far	Not applicable.
12	<b>The Status of Clear Felling</b> in non-forest Area (such as submergence area or Reservoir, approach roads), if any with Quantitative information required.	Not applicable as project area is located within Factory Complex area.

13	<b>Status of Construction</b> (actual and/ or planned) a) Date of commencement (Actual and/or planned) b) Date of completion (Actual and/or planned)	a) Planned – August 2023 b) Planned Revised – July 2025
14	<b>Reason for the delay</b> if the project is yet to start	Not applicable as Project is moving ahead as per Project schedule.
15	<b>Dates of Site Visits</b> a) The dates on which the project was monitored by the Regional Office on previous occasions, if any b) Date of site visits for this monitoring report.	Dy. Director -MoEF, Bhopal visited GSFC complex on 23.06.2021. IRO-Gandhinagar visited on 12.05.23.
16	Details of correspondence with project authorities for obtaining action plans/information on status of compliance to safeguards other than the routine letters for logistic support for site visit.  (The first monitoring report may contain the details of all the letters issued so far but the later reports may cover only the letters issued subsequently)	--

**Current Status. :**

GSFC has issued Letter of Intent to M/s L&T on 25/10/2022 and acceptance to the same was also received from M/s L&T on 25/10/2022. Engineering and procurement activities are almost completed. Critical equipment from L&T i.e. Urea Reactor, Hydrolyzer and HP Carbamate Separator, HP Stripper and HP Carbamate Condensers received at Project Site and erected. Some of the non-critical equipment (around 20 nos.) are also received and erected at Site. FAT of DCS-ESD system completed at Yokogawa Bangalore in Mid-September 2024. Manufacturing of ordered items are on the verge of completion. Modification job (Crosshead and piston replacement job) in one of the Co2 Compressors (XU-K101B) is completed in presence OEM. Civil Foundation works of all area are completed except few locations in N-S Pipe rack & Peroni / Ebara Pump, where the front is not available. Structural Members erection are completed in majority part. Piping erection works is in progress. Electrical modification works in existing substation is in progress.