

Environmental Clearance; Letter No J-11011 / 152 / 2006-IA-II (I) Dt. 21.05.2007 and corrigendum dated 18.09.2007

For Revamping of Ammonia and Urea Plant at Gadepan, Kota; Rajasthan by M/S Chambal Fertilisers and Chemicals Ltd (CFCL)

Six monthly compliance report for the Period April 2017 ~ Sept. 2017

| SI No as per EC | Conditions as per EC | CFCL Status |
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| 2.0 | <p>The Ministry of Environment & Forests has examined the application. It is noted that CFCL have proposed for the revamping/expansion of existing capacity of Ammonia and Urea from 3,040 & 5240 to 3900 and 6,800 TPD respectively at Gadepan, Kota, Rajasthan Total land available is 800 ha and expansion will be carried out in 400 ha.</p> | <p>Maximum production in a day in the period was within the approved capacities, the highest production on any day in above period is as below Urea - 6312 MT Ammonia - 3622 MT</p> <p>Revamp project has been implemented in the land available in existing plant</p> |
| 3.0 | <p>Low NOX burners will be installed to reduce NOx emissions. SO2 will be significantly reduced due to use of NG. To control the fugitive emissions/odour nuisance, ammonia and ammonical water will be routed through closed drains/pipes and discharged to atmosphere through vent stacks after scrubbing with condensate. Total water requirement from Kali Sindh river will be 41,760 m3/d for which 'Permission' has been accorded by the Irrigation Department. All the treated effluent will be recycled and reused in the process or used for green belt development within the premises during non-rainy season. During rainy season, treated effluent will be discharged into Kali Sindh river only after meeting the norms as prescribed by the SPCB / CPCB. Sludge from ETP and STP generated as solid waste will be used as manure within CFCL premises. Used oil and spent catalyst will be sold to authorized Recyclers/reprocessors.</p> | <p>No new boiler has been installed in Revamp. To control the fugitive emissions/odour nuisance, ammonical water is routed through closed pipes and ammonia is recovered and recycled back to process. Total water drawl from Kali Sindh river is within prescribed limits; the maximum water drawl from Kali Sindh river on any day in the period was 37900 m3/d All the treated effluent (process condensates) is recycled and reused in the process. Cooling tower blow down, DM plant regeneration effluent etc after treatment are used for green belt development only after meeting the norms as prescribed by the SPCB / CPCB; within the premises during non-rainy season. During rainy season, treated effluent is discharged into Kali Sindh river only after meeting the norms as prescribed by the SPCB / CPCB. STP Sludge is used as manure within CFCL premises. Used oil and spent catalyst is sold to authorized Recyclers/reprocessors.</p> |
| 4.0 | <p>Public hearing meeting was held on 13th April 2006. 'NOC' has been accorded by the Rajasthan State Pollution Control Board (RSPCB) vide letter no. F12 (21-63) RSCB/G.I./312 dated 31st May, 2006. Air and water consents for the existing plant have also been accorded by the RSPCB which is valid upto 30.06.2006. Total cost of the project is Rs 685.60 Crores.</p> | <p>Air & Water consents renewed and valid up to 30.06.2022, accorded by RSPCB</p> |

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| 5.0 | The Ministry of Environment and Forests hereby accords environmental clearance to the above unit under the EIA Notification, 1994 as amended subsequently subject to the compliance of the terms and conditions mentioned below: | Noted |
| A | SPECIFIC CONDITIONS: | |
| [i] | The gaseous emissions (SO ₂ , NO _x , NH ₃ , Urea dust) particulate matter from various process units shall conform to the standards prescribed by the concerned authorities from time to time. Low-NO _x burners shall be installed in boiler and reformer to reduce NO _x emissions and shall be monitored as per the CPCB guidelines. CO ₂ recovery plant shall be installed to reduce CO ₂ emissions in the environment. At no time, the emission levels shall go beyond the stipulated standards. In the event of failure of pollution control system(s) adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. | The gaseous emissions (SO ₂ , NO _x , NH ₃ , Urea dust) particulate matter from various process units conform to the standards prescribed by RSPCB. Refer Table-1 for emissions monitoring data from various sources CFCL has selected the process technology KRES wherein additional production is being achieved by no addition of reformer fuel and effectively post revamp specific CO ₂ emissions have reduced as no additional furnace has been added into the system. All the pollution control systems form the integral part of the process and controlled by process itself. With any process failure; plants go to a safe shutdown condition where production stops automatically; plant is restarted only after rectification |
| [ii] | In urea plant, particulate emissions shall not exceed 50 mg/Nm ³ . Monitoring of Prilling tower shall be carried out as per the CPCB guidelines. Hydrocarbon monitors shall also be installed. | Emissions from Prilling towers are within prescribed norms please refer Table-1 for monitoring data |
| [iii] | To control the fugitive emissions/odour nuisance ammonia and ammoniacal water from different pump ground leakages, vents, vessels etc. will be routed through closed drains/pipes and shall be connected to the vent stacks. Hydrolyser stripper and Ammonia stripper will be revamped during expansion and Ammonia will be discharged to atmosphere through vent stacks after scrubbing with condensate. | To control the fugitive emissions; ammoniacal water from different pump gland leakages etc are routed through closed drains/pipes for recovery and off gases after scrubbing are connected to the vent stack. Hydrolyser strippers in urea plant and process condensate strippers in Ammonia plants have been revamped. Entire stripped condensate is recycled back to process as boiler feed water |
| [iv] | Ambient air quality monitoring stations shall be set up in the downwind direction as well as where maximum ground level concentration are anticipated in consultation with the RSPCB and data submitted to the Ministry's Regional Office at Lucknow six monthly and RSPCB quarterly alongwith statistical analysis. | 05 Ambient Air Quality Monitoring Stations are functioning within the factory premises; these stations have been installed in consultation with R.O. Kota. Ambient Air Quality Monitoring at all the five stations are being carried out as per the standard procedures on bi-weekly basis and data regularly submitted to RSPCB & MoEF's Regional Office at Lucknow. Refer Table-2 for monitoring data |

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| [v] | Total water requirement after expansion shall not exceed 41,760 m ³ /d as per the permission accorded by the Irrigation Department, Govt. of Rajasthan Efforts shall be made to reduce water consumption by adopting water conservation measures and recycling & reusing treated waste water in the process to reduce the fresh water consumption or for green belt development within the premises. No effluent shall be discharged outside the premises except during the rainy season into Kali Sindh river after meeting the norms prescribed under the E (P) Act, 1986 and RSPCB whichever are more stringent. | Total water drawl from Kali Sindh river is within prescribed limits; the maximum water drawl from Kali Sindh river on any day in the period was 37900 m ³ /d Continuous efforts are made for water conservation, entire process condensates are reused in process after treatment Cooling tower blow down, DM plant regeneration effluent etc after treatment are used for green belt development only after meeting the norms as prescribed by the SPCB / CPCB; within the premises during non-rainy season. During rainy season, treated effluent is discharged into Kali Sindh river only after meeting the norms as prescribed by the SPCB / CPCB |
| [vi] | Regular monitoring of ground water by installing peizometric wells around the guard pond shall be periodically monitored and reports submitted to Ministry's Regional Office at Lucknow, CPCB and RSPCB. | Regular monitoring of ground water is done through peizometric wells around the guard pond & holding pond and reports are submitted to Ministry's Regional Office at Lucknow, CPCB and RSPCB. Refer Table-3 for monitoring data |
| [vii] | Spent catalysts generated shall be properly stored in closed metallic drums before selling to authorize recyclers/reprocessors. Used oil and spent catalyst shall also be sold to authorised recyclers/reprocessors. Sludge from raw water treatment plant and STP sludge generated as solid waste shall be used as manure within CFCL premises. | Spent catalysts generated are properly stored in closed metallic drums and are sold to authorized recyclers/reprocessors. Used oil is sold to authorized recyclers/reprocessors. Sludge from raw water treatment plant and STP is used as manure within CFCL premises. |
| [viii] | The company shall undertake adequate protection measures for handling of ammonia vapours in case of plant upset conditions. Safety valve exhaust and drains shall be connected to a separate close header from which ammonia vapours shall be vented from vent stack after diluting with steam. | Adequate protection measures are in place for handling of ammonia vapours in case of plant upset conditions. Safety valve and vents are connected to a separate close header with provision for dilution with steam before venting at safe height |
| [ix] | The company shall implement all the recommendations made in the Charter on Corporate Responsibility for Environmental Protection (CREP) for fertilizer industries. | CFCL has implemented all the recommendations made in the Charter on Corporate Responsibility for Environmental Protection (CREP) for fertilizer industries. |
| [x] | The company shall develop rain water harvesting structures to harvest the run off water from the roof tops and by laying a separate storm water drainage system for recharge of ground water. | CFCL has constructed rain water harvesting structures (check dam) on near by Kalisindh and Parwan rivers. Other rain water harvesting projects have also been undertaken in the campus to harvest run off rain water |

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| [xi] | Green belt shall be developed in at least 33 % of total plant area excluding lawns etc. and properly maintained. An effort shall be made to further increase the percentage by regularly planting trees at all the vacant spaces to mitigate the effects of fugitive emissions all around the plant as per the Central Pollution Control Board guidelines. Density of trees at the site shall be maintained as 2,000-2,500 trees/ha. | In CFCL Gadepan more than 33.0 % of total area developed under the green belt (excluding lawns). The green belt is being properly maintained and regular tree plantation is carried out. Regarding the plant density every plant species has their optimal spacing depending upon type of species, climate, usage, land and soil type. CFCL Green belt development has been based on the optimal spacing as per recommendation of literature, books and experts. |
| B | GENERAL CONDITIONS: | |
| [i] | The project authorities must strictly adhere to the stipulations made by the Rajasthan State Pollution Control Board (RSPCB) and the State Government. | CFCL strictly adheres to the stipulations made by the Rajasthan State Pollution Control Board (RSPCB) and the State Government. |
| [ii] | No further expansion/modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests. | Noted. |
| [iii] | The project authorities must strictly comply with the rules and regulations with regard to handling and disposal of hazardous wastes in accordance with the Hazardous Wastes (Management & Handling) Rules, 2003. | CFCL strictly complies with the rules and regulations with regard to handling and disposal of hazardous wastes in accordance with the Hazardous Wastes (Management, Handling and Transboundary) Rules, 2008 |
| [iv] | The project proponent shall also comply with all the safeguards recommended in the EIA/EMP Report. | CFCL has complied with all the safeguards recommended in the EIA/EMP Report |
| [v] | The project authorities will set up a separate environmental management cell for effective implementation of all the above stipulations under control of Senior Executive. | A separate Environmental Management cell with suitably qualified people to carry out various functions is already operational under the control of Senior Executive, who reports directly to the Head of the organization. |
| [vi] | As proposed in EIA/EMP, Rs. 3.20 Crores allocated towards environmental pollution control measures shall be judiciously utilized to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government and a time bound implementation schedule for all the conditions stipulated here in shall be submitted. The funds so provided shall not be diverted for any other purposes. | Rs. 4.095 Crores have been utilized towards environmental pollution control measures during the revamp project implementation |
| [vii] | The Regional Office of this Ministry at Lucknow / CPCB / RSPCB shall monitor the stipulated conditions. A six monthly compliance status report and the monitored data alongwith statistical interpretation shall be submitted to monitoring agencies regularly. | Six monthly compliance status report and the monitored data is submitted to monitoring agencies regularly. |

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| [viii] | The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the RSPCB / Committee and may also be seen at Website of the Ministry of Environment and Forests at http://envfor.nic.in . This should 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 Regional office at Lucknow. | Public was informed regarding environment clearance by publicizing in local news papers and copies of news paper were submitted to MoEF Lucknow vide our letter SMEQC/01/87/285286 dated 05.03. 2008 |
| [ix] | The Project Authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work, if any. | Date of financial closure of the revamp project is 27.10.2010 |
| 6.0 | The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory. | Noted |
| 7.0 | The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner will implement these conditions. | Noted |
| 8.0 | The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management and Handling) Rules, 2003 and the Public Liability Insurance Act, 1991 along with their amendments and rules. | Air & Water consents renewed and valid up to 30.06.2022; accorded by RSPCB Environment statement, Form-4 (annual return for hazardous waste) and Form-10 (hazardous waste manifest) are being submitted on regular basis to RSPCB. Form -3 is maintained by us at site Public Liability Insurance policy is taken and is renewed regularly. Copy of Policy (Valid up to 18.01.2018) has been submitted to RSPCB . |