

**COMPLIANCE STATUS ON THE CONDITIONS OF ENVIRONMENTAL
CLEARANCE FOR THE DIESEL QUALITY UPGRADATION PROJECT
(DQUP) OBTAINED VIDES LETTER NO. J-11011/272/2008 –IA II (I)
DATED NOVEMBER 10, 2008 FROM
MOEF, NEW DELHI**

A. SPECIFIC CONDITIONS:

- i. The company shall comply with new standards/norms Notified by the Ministry for Oil refineries vide G.S.R. 186(E) dated 18th March 2008.

- *Compliance status of few points are as follows:*

(a) Secondary seals in IFRT and EFRT tanks -installation of double seals in EFRT, IFRT tanks in progress. Out of 35 nos. of tanks, installation completed in 7 nos of tanks in the first phase located at Refinery & Marketing Terminal and in the second phase, 19 nos completed so far. In third phase 5 nos completed. Now only 4 nos tanks are pending for which order already been placed.

(b) LDAR-programme: The same is implemented.

(c) Implementation of VOC recovery system in ETP: VOC recovery system in ETP has been implemented.

- ii. The company shall comply with all the stipulations of environmental clearances issued vide letter No. J-11011/92/2003-IA.II(I) dated 13th February 2004 and J-11011/203/2003-IA.II(I) dated 22nd March, 2004.

- *Complied.*

- iii. The process emissions (SO₂, NO_x, HC, VOCs and Benzene) from various units shall conform to the standards prescribed by the Assam State Pollution Control Board from time to time. 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 unit shall be immediately put out of operation and shall not be restarted until the desired efficiency has been achieved.

- *Presently being practiced and complied*

- iv. The Diesel Quality Up-gradation Project (DQUP) shall be through Hydrocracker from 1.1 to 1.45 MMTPA, Hydrogen Unit from 38,000 to 48150 TPA, CDU/VDU modification of CDU without any feed change to take out additional 0.35 MMTPA diesel for Hydrocracker, Sulphur unit 14.7 to 19.5 TPD and associated modifications for the utilities, offsite and flare facilities.

- *Complied.*

- v. Quarterly monitoring of fugitive emissions shall be carried out as per the guidelines of CPCB by fugitive emission detectors (GMI Leak Surveyor) and reports shall be submitted to the Ministry's regional office at Shillong.

- Presently being practiced and complied. Fugitive emission data for July'18 & Oct'18 for MSP, Sept'18 for HCU, Aug'18 for wax submitted to RO MOEF on 28.11.18 with action taken report of letter No. RO-NE/E/IA/AS/OR/3,9,10,17,25,26,33/868/869, Dated. 29th August'18

- vi. For control of fugitive emission, all unsaturated hydro carbon will be routed to the flare system and the flare system shall be designed for smoke less burning.

- Taken care during the preparation of DFR and BEDP.

- vii. The company shall strictly follow all the recommendation mentioned in the charter on corporate responsibility for environmental protection (CREP).

- Complied.

- viii. Occupational health surveillance of worker shall be done on a regular basis and records maintained as per the Factory Act.

- Presently being practiced and complied.

- ix. Greenbelt shall be developed to mitigate the effect of fugitive emission all around the plant in a minimum 30% plant area in consultation with DFO as per CPCB guidelines.

- Initially, as per Environmental Clearance granted for the Numaligarh Refinery Project, Ministry of Environment & Forest had stipulated a 500 mtrs wide green belt all around the refinery based on the EIA of Numaligarh Refinery carried out by NEERI.

On request from Numaligarh Refinery, the width of the Green Belt was later reduced from the suggested width of 500 mtrs to 100 mtrs because of the reason that almost all the surrounding areas are having tea garden with shade trees (Sirish trees). A wide natural green belt already existed all around the refinery.

Accordingly, a Green Belt covering a total area of around 60 hectares of land and around 100 mtrs width around the refinery and around 25 mtrs width around the NRMT has been developed as per the Green Belt Development Plan. (The Green Belt Development Plan has been submitted to MoEF along with the Half Yearly Report to MOEF on the 15th October, 2001).

Massive Plantation have been carried out in the Green Belt so that it can provide a natural barrier for attenuation of noise and air pollution. No. of

local variety have been planted including some fruit bearing samplings in & all around Green Belt.

Further, it has been planned to increase the density by planting more saplings in the Green Belt in the days ahead.

- x. The Company shall make the suitable arrangement for disposal of catalyst waste and other wastes. The report of waste disposal shall be submitted to Ministry's Regional Office at Shillong.

- Spent catalysts are disposed off through CPCB approved recyclers. Other wastes are being disposed off as per Hazardous Waste Management, Handling, Disposal (Trans Boundary Movement), 2008 with latest amendments and the reports are being sent to Pollution Control Board. The annual report of waste disposal (2017-18) submitted to RO MOEF on 28.11.18 with action taken report of letter No. RO-NE/E/IA/AS/OR/3,9,10,17,25,26,33/868/869, Dated. 29th August'18

- xi. The Company shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed. At place of ground flaring, the overhead flaring stack with knockout drums shall be installed to minimize gaseous emissions during flaring.

- Knockout drums are installed in the flare systems.

- xii. To prevent fire and explosion at Oil and Gas facility, potential ignition sources should be kept to a minimum and adequate separation distance between potential ignition sources and flammable material shall be in place.

- Complied.

- xiii. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, Safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

- Complied.

B. GENARAL CONDITIONS:

- i. The project authorities must strictly adhere to the stipulations made by the concerned State Pollution Control Board (SPCB) and the State Government and any other statutory body.

- The stipulations made by the Pollution Control Board of Assam and the State Government are strictly adhered to. A copy is enclosed as Annexure B.

- ii. No further expansion or modification in the project shall be carried without prior approval of the Ministry of Environment and Forests. In case of deviations or alternations in the project proposal from those submitted to the Ministry for clearance, a fresh reference shall be made to the Ministry.

- Any expansion or modernization in the plant will be taken up only with prior approval of the Ministry of Environment & Forests.

- iii. At no time, the emissions should go beyond the prescribed standards. In the event of failure of any pollution control system, the respective well site should be immediately put out of operation and should not be restarted until the desired efficiency has been achieved. Provision of adequate height of stack attached to DG sets & flare is to be done.

- All the emissions parameters are monitored on continuous basis and are well within the prescribed limits. Adequate stack heights are provided in all the furnaces.

- iv. Wastewater shall be properly collected and treated so as to conform to the standards prescribed under EP Act & Rules and mentioned in the Consents provided by the relevant SPCB.

- Wastewater generated is very minimal in quantity and is routed through the existing ETP for proper treatment. The effluent generated from refinery and township is totally reused after treatment.

- v. The overall noise levels in and around the premises shall be limited within the prescribed standards (75 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).

- Few noise generation sources in the project are the BFW pumps and the Air Blowers. Strong foundations are provided to mitigate the noise generation and the equipment are monitored regularly at a distance of 01 mtr from the source. The noise levels all around the refinery is being monitored regularly so as to maintain within the standards, prescribed under EPA Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time). Noise monitoring report during the period Jan'19 is enclosed in Annexure-II.

- Measures taken towards noise control:

- *Ensuring PPE use in high noise areas of the plant.*
- *CDU Crude booster pumps are being replaced with pump of latest design where noise generation will be less*

- vi. The project authorities must strictly comply with the provisions made in Manufacture, Storage and Import of Hazardous Chemicals Rules 1989 as amended in 2000 for handling of hazardous chemicals etc. Necessary approvals from Chief Controller of Explosives must be obtained before commission of the expansion project, if required. Requisite On-site and Off-site Disaster Management Plans will be prepared and implemented.

- The rules and regulations under the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 and as amended in 2000 are adhered to.

Approvals from Chief Inspectorate of Factories, Chief Controller of Explosives etc as applicable for the Numaligarh Refinery have been obtained.

- vii. Disposal of hazardous wastes shall be as per the Hazardous Wastes (Management and Handling) Rules, 2003. Authorization from the State Pollution Control Board must be obtained for collections/treatment/storage/disposal of hazardous wastes.

- The rules and regulations with regard to handling and disposal of hazardous wastes in accordance with the Hazardous Wastes (Management, Handling & Trans Boundary Movement) Rules, 2008 as per latest amendments are adhered to.

- viii. The project authorities will provide adequate funds as non-recurring and recurring expenditure to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided should not be diverted for any other purposes.

- Adequate funds have been provided for implementing the conditions stipulated by MoEF and the State Govt. and not diverted for any other purpose.

- ix. The company shall develop rain water harvesting structures to harvest the run off water for recharge of ground water.

- Storm water reuse system to refinery fire water network scheme commissioned.

- x. The stipulated conditions will be monitored by the concerned Regional Office of this Ministry /Central Pollution Control Board/State Pollution Control Board. A six monthly compliance report and the monitored data should be submitted to them regularly. It will also be displayed on the Website of the Company.

- A six monthly compliance report on the Environmental Clearance conditions of the Numaligarh Refinery along with the monitored data is being submitted regularly to the MoE&F Regional Office, Shillong. The same is being displayed in the company's website also.

- xi. The Project Proponent should inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the State Pollution Control Board/ Committee and may also be seen at Website of the Ministry of Environment and Forests at <http://www.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 should be forwarded to the concerned Regional office of this Ministry.

- The same has been complied. Advertisement regarding the environmental clearance for the Diesel Quality Upgradation Project (DQUP) was published in two local newspapers namely, The North East Times (in English) and The Amar Asom (Assamese) on the 16th November'08 and copies of both advertisements were forwarded to the MoE&F Regional Office, Shillong vide letter no. NRL/TS/ENV/2.3/07 dated 17.11.08.

- xii. A separate environment management cell with full fledged laboratory facilities to carry out various management and monitoring functions shall be set up under the control of a Senior Executive.

- A fully functional, dedicated environment management cell manned by qualified engineers/officers and headed by a Chief General Manager (Technical) has been continuously working for constant improvement, monitoring, safe guarding and reporting of environmental activities of the refinery. Also, a multidisciplinary Apex-level Committee on Environment which includes senior level officers from various departments as members under the chairmanship of Director (Technical) constantly guides the Environment Cell regarding all the environmental issues in the refinery. The Apex Committee that convenes quarterly discusses the unresolved issues if any and monitors the regular environmental activities.

- xiii. 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.

- The same has been complied.