

**COMPLIANCE STATUS ON THE CONDITIONS OF ENVIRONMENTAL
CLEARANCE FOR THE EURO III MOTOR SPIRIT PROJECT OBTAINED
VIDE LETTER NO. J-11011/92/2003 – IA II (I) DATED FEBRUARY 13,
2004 FROM MOEF, NEW DELHI**

A.SPECIFIC CONDITIONS:

- i. The company shall ensure strict implementation / compliance of the terms and conditions mentioned vide Ministry's letter No. J-11011/16/90-IA.II dated 31.05.1991.

- *,Complied.*

- ii. The company shall ensure that the total sulphur emission from the Assam refinery (including MS Quality Improvement Project) shall not exceed 128 kg/hr as sulphur (256 kg/hr as SO₂). M/s NRL should maintain regular record of sulphur balance in the refinery. Off gases from the proposed unit should be treated in amine absorption and regeneration unit meant for H₂S removal for desulphurization of off gases. Performance evaluation of sulphur recovery block should be done regularly. Data on VOC should be monitored and submitted to the Ministry. The continuous emission monitoring systems for SO_x and NO_x in the major stacks with proper calibration facilities should be installed. The low NO_x burners should be installed in all the furnaces.

-The total sulphur emission from the refinery including Euro III Motor Spirit Project being maintained below 128 kg/hr as Sulphur (256 kg/hr as SO₂).

-Regular sulphur balance of the refinery is maintained and the average SO₂ emission from the refinery during The average SO₂ emission during current year from April'18 to Mar'19 is 102 kg/hr only.

-Off gases from the proposed unit has been treated in the amine absorption and regeneration unit.

-Performance evaluation of Sulphur Recovery Block is done on a daily basis.

- VOC data for MS for July'18 & Oct'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

-Continuous emission monitoring for SO₂ and NO_x have been provided in all the stacks.

-Ultra low NO_x burners have been provided in all the furnaces.

- iii. Additional water requirement shall not exceed 1200 m³/hr. The total quantity of effluent generation should not exceed 3830 m³/day as indicated in the EMP of which (3530 m³/d from the existing and 300 m³/d from the proposed unit). Treated effluent should be recycled and rest should be discharged after primary, secondary and tertiary treatment into the Dhansiri river through 11

km long pipeline. The treated effluent should comply with the prescribed standards.

-The additional water requirement is very minimal as compared to the present requirement and is maintained within the limits. Treated effluent quality in Effluent Treatment Plant is maintained within the prescribed standards and all the treated effluent is recycled inside the refinery. NRL has achieved 100 % reuse of treated effluent since October,2006.

- iv. As reflected in the EIA / EMP, the spent catalyst (0.33 TPM) along with small quantity of oily and chemical sludge should be disposed off in secured landfill site within the plant premises. The leachate from the landfill site should be sent back to the effluent treatment plant. The ground water quality around the secured landfill site should be monitored regularly and data submitted to the Ministry/CPCB/SPCB. The biological sludge generated from the ETP should be used as manure/fertilizer for the green belt.

The oily sludge, generated in ETP is disposed off in the Secured Land Fill Facility (SLF) after recovering the oil by centrifuging. As per the requirement, leachate generated is routed back to the IRS of ETP for further processing.

The ground water quality around the Secured Landfill site has been monitored on a regular basis and the monitoring data has been submitted regularly to the MoE&F Regional Office, Shillong along with the half-yearly report and to SPCB.

Spent catalyst is disposed off through authorized recyclers as per Hazardous Waste Management Handling and Transboundary Movement Rules, of latest amendment.

Ground water monitoring data around Secured Land Fill is enclosed as Annexure –I

- v. Oil spill response facilities should be in place, in accordance with OISD guidelines with regard to the likely risks associated with transportation of finished products. All recommendations made in the risk analysis report should be complied with during design, construction and operation stages to contain the risk within the plant boundary.

-The same is complied.

- Oil from various units is routed through OWS (Oily Water Sewer) & CRWS (Contaminated rain Water Sewer) to ETP. The oily water from various units, OM&S and NRMT go through the CRWS and OWS systems to ETP for necessary oil removal and treatment in various sections. The slop oil is recovered in ETP and sent to OM&S for needful reprocessing in various units.

The Storm Water Channel from various plants are connected and channel through Oil Catchers. There are several oil catchers in the final outlet of Storm Water channel. The final outlet of storm water channel is made closed

immediately in case of any accidental oil carryover and is trapped in the oil catcher for necessary removal. The accumulated oil from the oil catchers is lifted with the help of MOSRU (Mobile Oil Spill Recovery Unit).

- vi. Green Belt of adequate width and density as per the CPCB guidelines should be provided to mitigate the effects of fugitive emission all around the plant in consultation with the local DFO. The bio sludge should be used as manure in the Green Belt development.

A Green Belt of width around 100 mtrs surrounding the refinery and around 25 mtrs. around the NRMT covering a total area of about 60 hectares have been provided. with adequate trees and proper density. Massive plantation has been carried out in the Green Belt so that it can provide a natural barrier for attenuation of noise and air pollution. Nos of local variety have been planted including some fruit bearing samplings in & all around Greenbelt. Further, to increase the density in the Green Belt, fresh plantation it being continued at regular intervals. Within the Numaligarh Refinery premises, few gardens have been developed near various units including one in ETP with varieties of flowering plants. Also, different varieties of saplings are also planted in the roadside areas, through-out the refinery.

- vii. Occupational Health Surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act and the West Bengal Factories Rules.

- The same is complied.

B. GENERAL CONDITIONS:

- i. The project authorities must strictly adhere to the stipulations made by the Assam Pollution Control Board and the State Government.

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

- ii. No further expansion or modernization in the plant should be carried out without prior approval of the Ministry of Environment and Forests.

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

- iii. The Company shall implement all recommendations made in the EMP and Risk Analysis reports.

- Complied.

- iv. At no time, the emissions should go beyond the prescribed standards. In the event of failure of any pollution control system adopted by the units, the respective unit should be immediately put out of operation and should not be restarted until the desired efficiency has been achieved.

- 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.

- v. The overall noise levels in and around the plant area should be kept well within the standards (85 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).

-The overall noise levels in and around the plant premises has been maintained below 85 dBA at 1 mtr distance from the source. For the same, control measures like silencer to vent, low noise Rotary equipment have been provided. The ambient noise levels all around the refinery are monitored regularly so as to maintain the standards prescribed under EPA Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).

-Noise monitoring result carried out is enclosed as 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 rules and regulations under Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 as amended in 1994 and 2000. Prior approvals from Chief Inspectorate of Factories, Chief Controller of Explosives, Fire Safety Inspectorate etc. must be obtained.

The rules and regulations under the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 and as amended in 1994 and 2000 are adhered to. Approvals from Chief Inspectorate of Factories, Chief Controller of Explosives etc as applicable for the proposed unit have been obtained.

- vii. 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 and Handling) Rules, 2003. Authorization from the State Pollution Control Board must be obtained for collection/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 & Transboundary Movement) Rules, 2008 are adhered to. In regard to the same, authorization for collection/treatment/storage and disposal of hazardous wastes has been obtained from the PCB, Assam.

viii. The project authorities will provide adequate funds both recurring and non-recurring to implement the conditions stipulated by the Ministry of Environment & 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 fund has been provided for implementing the conditions stipulated by the MOEFCC and the State Govt and not diverted for any other purpose.*

ix. The stipulated conditions will be monitored by the Regional Office of this Ministry at Shillong / Central Pollution Control Board/The State Pollution Control Board. A six monthly compliance report and the monitored data should be submitted to them regularly.

- *A six monthly compliance report on the Environmental Clearance conditions and NOC conditions of Numaligarh Refinery including the compliance status on the environmental Clearance for MS Plant being submitted six monthly regularly to the MoE&F Regional Office, Shillong, CPCB, Shillong and the SPCB, Regional Office, Golaghat, Assam.*

x. 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 & 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 should be forwarded to the Regional office.

The same has been complied. Advertisement regarding the environmental clearance for the Euro III MS Project was published in two local newspapers, The Assam Tribune (in English) and The Pratidin (in Assamese) on 18th Feb'04 and copies of both were forwarded to the MoE&F Regional Office, Shillong vide letter no NRL/NG/ENV/2.1/11 dated 20th Feb'04.

xi. The Project Authorities should 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.

-The same has been complied.

3.0 The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

- Noted.

- 4.0 The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner will implement these conditions.

- *Noted.*

- 5.0 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 Waste (Management, Handling & Transboundary Movement) Rules, 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules.

- *Noted.*
