COMPLIANCE STATUS ON THE CONDITIONS OF ENVIRONMENTAL CEARANCE FOR THE COKE CALCINATION UNIT OBTAINED VIDES LETTER NO. J-11011/203/2003 –IA II (I) DATED MARCH 22, 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 and letter no. J-11011/92/2003- IA.II (I) dated 13th February 2004.

- Complied.

ii. The company shall ensure that the total sulphur emission from the Assam refinery (including Coke Calcination Unit) shall not exceed the existing level of 128 kg/hr as sulphur (256 kg/hr as SO_2).

-The sulphur emission from the refinery including Coke Calcination Unit is maintained below 128 kg/hr as Sulphur (256 kg/hr as SO_2). The average SO_2 emission during current year from April'18 to Sept'18 is 83.86 kg/hr only.

iii. The company should take adequate measures for control of fugitive emissions from the Coke handling system by installation of Bin vent filters and coke handling through closed conveyor system. Multiple cyclone separators should be installed for recovering coke particles from the Rotary Cooler Exhausts and bag filters to control suspended particulate matter from the waste heat recovery boiler exhaust gas.

-To control the fugitive emission from the Coke Calcination Unit, the following measures have been taken -

a)Bin vent filters provided to control even minor fugitive emissions from coke handling system.

b)The major portion of coke handling is done through closed conveyor system.

c)Cyclone separator provided for recovering coke particles from rotary cooler exhaust.

d)Bag filters with automatic pneumatic back flushing system to control SPM from waste heat boiler at exhaust gas has been provided.

e)The finished product of CPC has been packed in an automatic bagging machines, thus controls the fugitive emissions.

f)A 100 m wide green belt all along refinery boundary wall has been developed.

iv. Water requirement of 15 m^3/hr should be met from the recycling of coke cutting water from Delayed Coker Unit. There should be no additional drawl of water for the CCU from the river Dhansiri.

-Coke cutting water from DCU is regularly used for quenching in CCU. There is no additional drawl of water beyond the permissible limit from the river Dhansiri for CCU.

v. The Company should install continuous stack monitoring system for online measurement for SPM, SO_2 and NOx.

-Continuous stack monitoring systems for online measurement of SPM, SO_2 and NOx have been provided in the CCU stack. Action initiated for installation of online CO analyser.

vi. The solid waste generated should be disposed off in the secured landfill site within the plant premises. The ground water quality around the secured landfill site should be monitored regularly and data submitted to the Ministry /CPCB/SPCB.

-Normally the solid waste generated in the CCU is recycled back with the feed. There is no such solid waste generated at present, however any small quantity which is not possible to recycle back will be disposed off in the Secure Land Fill Facility.

Ground water around the secured landfill is monitored and results are submitted to MOE&F / CPCB & PCBA regularly.

Analysis report of ground water around Secured Land Fill is enclosed as Annexure –I.

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 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 modernization in the plant should be carried out without prior approval of the Ministry of Environment and Forests.

- 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.

- *The recommendations made in the EMP of the Comprehensive Environmental Impact Assessment and the Risk Assessment reports have been implemented for the Numaligarh Refinery, which includes CCU also as an integral part of the refinery.*

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 major sources of noise generation in the CCU are the BFW pumps and the Air Blowers, having low duty. Strong foundations have been provided to mitigate the noise generation further. The equipments are monitored regularly at a distance of 01 mtr from the source and corrective measures are taken to maintain the noise level below 85 dBA. The ambient noise levels all around the refinery are 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 result carried out in the Refinery recently enclosed as Annexure II

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 the 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 Numaligarh Refinery 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 through Secured Land Fill 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 funds have been provided for implementing the conditions stipulated by MoE&F and the State Govt. and not diverted for any other purpose.

ix. The stipulated conditions will be monitored by the Regional of this Ministry at Shillong /Central Pollution Control Board/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 of the Numaligarh Refinery along with the monitored data has been submitted regularly to the MoE&F Regional Office, Shillong. Along with six monthly compliance report, the compliance status on the environmental clearance conditions for the CCU Unit also have been submitted to the MoE&F Regional Office at Shillong, CPCB, Shillong and the SPCB, 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 Coke Calcination Unit was published in two local newspapers namely, The Assam Tribune (in English) and The Pratidin (Assamese) on the 26th March'04 and copies of both advertisements were forwarded to the MoEF Regional Office, Shillong vide letter no. NRL/TS/ENV/2.1/14 dated 27.03.04.

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.*

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