

RECEIVED/DESPATCHED
02 DEC 2008
DGM (TS & INSP.) OFFICE
Numaligarh Refinery Ltd.



भारत सरकार
पर्यावरण एवं वन मंत्रालय
Government of India
Ministry of Environment & Forests
(IA Division)

Speed post

Paryavaran Bhawan
CGO Complex, Lodhi Road
New Delhi – 110 003

E-mail: hsmalviva@gmail.com

Telephone: 011: 2436 7076

F. No. J-11011/272/2008-IA-II(I)

Dated : November 10, 2008

To

M/s Numaligarh Refinery Ltd,
2nd Floor, AD Building,
PO NRL, PIN - 785699
District Golaghat,
Assam

nilim.k.borthakur@nrl.co.in

Sub: Diesel Quality Upgradation Project (DQUP) at Numaligarh Refinery Complex, District Golaghat, Assam by M/s Numaligarh Refinery Ltd. – Environmental Clearance reg.

Sir,

This has reference to your letter No. Nil dated March 4, 2008 alongwith Form I and pre-feasibility report seeking environmental clearance for the above project under the Environment Impact Assessment Notification, 2006 and subsequent communication vide letter dated August 19, 2008.

2.0 The Ministry of Environment and Forests has examined the application and noted that proposal is for Diesel quality upgradation project (DQUP) at Numaligarh Refinery Complex, District Golaghat, Assam by M/s Numaligarh Refinery Ltd. The company presently operates a 3.0 MMTPA refinery at Numaligarh, Dist. Golaghat Assam. The total expected cost of the project is Rs.434.94 Crores. For the upgradation of the plant existing land will be used. The total 60 hectares of land will be available for the green belt development. The refinery has two conversion unit viz. Hydrocracker of 1.1 MMTPA capacity and a Delayed Coker of 0.306 MMTPA capacity. The other supporting units are Hydrogen unit of 38,000 TPA, Coke Calcination Unit of 0.1 MMTPA, Sulphur Recovery Block and Utilities & Offsites facilities. After DQUP following will be the product patterns:

Pattern-1: with Maximum Euro-IV

Products	TPA	TPA
	EXISTING	POST DQUP
LPG	65880	72965
NAPHTHA	42250	41013
MS-BSII(Euro-II)	118143	131270
MS-EURO-III	66857	74286
ATF	108000	108000
SKO	135000	135000
HSD-BS-II(Euro-II)	1393470	0
HSD-Euro-III	360000	1169000
HSD-EURO-IV	0	814000
RPC	106920	118800
Sulphur	3780	7300
Fuel & loss	299700	328366
Total	2700000*	3000000

* The original design capacity is 3,000,000 TPA but due to Euro-II & Euro-III requirement presently it is limited to 2,700,000 TPA

Pattern-2: with fixed Euro-IV

Products	TPA	TPA
	EXISTING	POST DQUP
LPG	65880	72965
NAPHTHA	42250	41013
MS-BSII(Euro-II)	118143	131270
MS-EURO-III	66857	74286
ATF	108000	108000
SKO	135000	135000
HSD-BS-II(Euro-II)	1393470	0
HSD-Euro-III	360000	1833000
HSD-EURO-IV	0	150000
RPC	106920	118800
Sulphur	3780	7300
Fuel & loss	299700	328366
Total	2700000	3000000

3.0 The additional water requirement of the project will be 57 m³/hr for implementation of the DQUP. The water will be sourced from river Dhansiri. The present effluent generation is 110m³/hr and additional effluent will be 7m³/hr which will be treated in existing ETP of 220m³/hr capacity. In order to ensure the emission as per standard low sulphur fuels and well proven Low NOx Burners will be used.

4.0 The project activity is covered under para 4(a) of schedule of EIA Notification, 2006 covered under category "A" and considered & appraised at central level in the



Expert Appraisal Committee (Industry) in its 82nd meeting held during 10th – 12th June 2008 and reconsidered in 85th meeting held during 23rd – 25th September 2008. No public hearing is required as para 7 (ii) of EIA Notification 2006.

5.0 The Ministry of Environment and Forests hereby accords environmental clearance to above project under the provisions of EIA Notification dated 14th September, 2006 subject to the compliance to the following Specific and General conditions:

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.
- 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.
- 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.
- 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, offsites and flare facilities.
- 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.
- 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.
- vii. The company shall strictly follow all the recommendation mentioned in the charter on corporate responsibility for environmental protection (CREP).
- viii. Occupational health surveillance of worker shall be done on a regular basis and records maintained as per the Factory Act.



- 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.
- 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.
- 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.
- 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.
- 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.

B. GENERAL 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.
- 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.
- 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.
- 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.
- 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).

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



- 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

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

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

8.0 Any appeal against this environmental clearance shall lie with the National Environment Appellate Authority, if preferred within a period of 30 days as prescribed under Section 11 of the National Environment Appellate Authority Act, 1997.

9.0 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, the Public Liability Insurance Act, 1991, Hazardous Waste (Management & Handling) Rules, 1989 and Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 along with their amendments and rules.



(H.S. Malviya)
Joint Director

Copy to :

- 1 The Secretary, Department of Environment, Science & Technology, Assam Secretariat, Government of Assam, Guwahati- 781 006.
- 2 Chief Conservator of Forests, Ministry of Environment & Forests, Regional Office (NEZ), Upland Road, Laitumkhrah, Shillong : 793 003, Meghalaya.
- 3 The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi 110 032.
- 4 The Chairman, Assam State Pollution Control Board, Bamunimaidan, Guwahati- 781 021, Assam.
- 5 Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
- 6 Guard File.
- 7 Monitoring File.
- 8 Record File.



(H.S. Malviya)
Joint Director