

F. No. J-11011/49/2015- IA II (I)
Government of India
Ministry of Environment, Forests and Climate Change
(I.A. Division)

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Dated 22nd June, 2015

To,

Shri M K Dutta (DGM-HS&E)
M/s Indian Oil Corporation Ltd.
Gujarat Refinery, PO, Jawaharnagar
Vadodara-391320

Subject: Proposed installation of GT-6 (30 MW) along with HRSG-6 (125 MT per Hour) at Gujarat Refinery, Koyali, District Vadodara, Gujarat by M/s Indian Oil Corporation Limited (IOCL)— Environmental Clearance reg.

Ref.: Your online proposal no. IA/GJ/IND/26448/2011dated 10th January, 2015

Sir,

This has reference to your letter dated 10th January, 2015 alongwith project documents including Form 1, Prefeasibility Report, Draft Terms of References and EIA/EMP report on the above mentioned subject.

2.0 The Ministry of Environment, Forests and Climate Change has examined the application. It is noted that the proposal is for installation of Additional Gas Turbine (GT-6) along with Heat Recovery Steam Generator (HRSG-6) at Gujarat Refinery, Koyali, District Vadodara, Gujarat. It is reported that Residue Upgradation project (RUP) comprising of units like HGU, DHDT, ISOM, VGO HDT, Delayed Coker Unit (DCU), SRU etc. were commissioned in the Refinery. All these units are for up-gradation of fuel quality and distillate yield. The power and steam requirement is met from the captive generation. There are 5 Gas Turbines (GTs) each of 30 MW capacity and 2 Turbo Generators (TGs) each of 12 MW capacity and one TG of 12.5 MW with the commissioning of residue up-gradation project, the power consumption has gone up. To meet the power requirement, Gujarat Refinery has proposed for installation of 6th Gas Turbine of 30 MW capacity with HRSG of 125 MT per hour HP steam. Mahi River is flowing at a distance of 4.5 Km from the project site. It is reported that no National Park / Wildlife Sanctuary is located within 10 km radius of the project site. No additional land will be required for the proposed project. The vacant space beside GT/HRSG-5 will be utilized for erection of GT-6 & HRSG-6. Cost of project is Rs. 375 Crore. Natural Gas will be procured from existing GAIL/ GSPL pipeline network.

3.0 Stack height (60 m) will be provided to HRSG-6 as main stack (60 m height) and Stack height (30m) will be provided to GT-6 as bypass stack. DM water injection will be done in the gas turbine to reduce NOx concentration. Additional water requirement from Mahi River will be 20 m³/hr. Around 16 m³/hr. of effluent will be generated from GT-6. However, there will be net reduction of 57 m³/hr. effluent discharge due to stoppage of 2 STGs and 2 Boilers. The entire effluent from the GT-6 project will be



treated in the existing common effluent treatment plant (CETP) of the Refinery. The maximum treated effluent will be recycled back to the refinery and balance will be disposed to Effluent Channel of ECPL, leading to Gulf of Cambay. Used oil/spent oil will be sent to authorized recyclers/re-processors.

4.0 All the Petroleum Refinery Plants are listed at S.N. 4(a) under Category 'A' and appraised at the Central level. Any modification or installation within existing refinery will be considered as integrated project and treated as Category 'A' project.

5.0 Public hearing was exempted as per section 7 (i), (iii) Stage (3), Para (i)(b) of EIA Notification, 2006.

6.0 The proposal was considered by the SEAC, Gujarat in its meeting held on 20th December, 2011 and the Reconstituted Expert Appraisal Committee (Industry) in its 38th meeting held during 20th-21st April, 2015 respectively. The Committee recommended the proposal for environmental clearance. Project Proponent and the EIA Consultant namely Envirotech East Pvt. Ltd., have presented EIA / EMP report as per the TOR. EAC has found the EIA / EMP Report and additional information to be satisfactory and in full consonance with the presented TORs. The Committee recommended the proposal for environmental clearance.

7.0 Based on the information submitted by the project proponent, 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 of the following Specific and General Conditions:

A. SPECIFIC CONDITIONS :

- i. The gaseous emissions from Additional Gas Turbine (GT-6) along with HRSG-6 shall be dispersed through stack of adequate height as per CPCB/GPCB guidelines. The stack emissions from various units shall conform to the standards prescribed under the Environment (Protection) Act. 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 of the pollution control device has been achieved.
- ii. Additional fresh water requirement from Mahi River should not exceed 20 m³/hr.
- iii. Additional industrial effluent generation should not exceed 16 m³/hr. Additional effluent shall be treated in the CETP of Refinery.
- iv. Automatic /online monitoring system (24 x 7 monitoring devices) for flow measurement and relevant pollutants in the treatment system to be installed. The data to be made available to the respective SPCB and in the Company's website.
- v. All the recommendations mentioned in the rapid risk assessment report, disaster management plan and safety guidelines shall be implemented.

B. GENERAL CONDITIONS:

- i. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board (SPCB), State Government and any other statutory authority.
- ii. No further expansion or modification in the project shall be carried out without prior approval of the Ministry of Environment & Forests. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to

assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.

- iii. The project authorities must strictly comply with the rules and regulations under Manufacture, Storage and Import of Hazardous Chemicals Rules, 2000 as amended subsequently. Prior approvals from Chief Inspectorate of Factories, Chief Controller of Explosives, Fire Safety Inspectorate etc. must be obtained, wherever applicable.
- iv. The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (nighttime).
- v. A separate Environmental Management Cell equipped with full fledged laboratory facilities must be set up to carry out the environmental management and monitoring functions.
- vi. Adequate funds shall be earmarked towards capital cost and recurring cost/annum for environment pollution control measures and shall be used to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government alongwith the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purposes.
- vii. The Regional Office of this Ministry/Central Pollution Control Board/State Pollution Control Board will monitor the stipulated conditions. A six monthly compliance report and the monitored data along with statistical interpretation shall be submitted to them regularly.
- viii. A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad / Municipal Corporation, Urban Local Body and the local NGO, if any, from whom suggestions / representations, if any, were received while processing the proposal. The clearance letter shall also be put on the web site of the company by the proponent.
- ix. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MOEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; PM₁₀, PM_{2.5}, SO₂, NO_x, HC (Methane & Non-methane), VOCs (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
- x. The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MOEF, the respective Zonal Office of CPCB and the SPCB. The Regional Office of this Ministry / CPCB / SPCB shall monitor the stipulated conditions.
- xi. The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company alongwith the status of compliance of environmental conditions and shall also be sent to the respective Regional Offices of the MOEF by e-mail.

xii. 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 SPCB and may also be seen at Website of the Ministry of Environment and Forests at <http://envfor.nic.in>. This shall 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.

xiii. 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.

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

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

10.0 The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of Water Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules, 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules.

11.0 Environmental Clearance is issued to M/s Indian Oil Corporation Ltd. (IOCL) for installation of GT-6 (30 MW) along with HRSG-6 (125 MT per Hour) at Gujarat Refinery, Koyali, District Vadodara, Gujarat



(Lalit Bokolia)
Additional Director

Copy to :-

1. The Principal Secretary, Forests & Environment Department, Government of Gujarat, Sachivalaya, 8th Floor, Gandhi Nagar - 382 010, Gujarat.
2. The Additional Principal Chief Conservator of Forests(central), Ministry of Environment & Forests, Regional Office, E-5, Arera Colony, Link Road -3, Bhopal -462 016, M.P.
3. The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi - 110 032.
4. The Chairman, Gujarat State Pollution Control Board, Paryavaran Bhawan, Sector 10 A, Gandhi Nagar-382 043, Gujarat.
5. Monitoring Cell, Ministry of Environment, Forests and Climate Change, Indira Paryavaran Bhavan, Jorbagh, New Delhi.
6. Guard File/Monitoring File/Record File.



(Lalit Bokolia)
Additional Director