



J 13012/53/2011-IA. II(T)

Government of India

Ministry of Environment, Forests and Climate Change

3rd Floor, Vayu Block,
Indira Paryavaran Bhawan, Jor Bagh Road,
Aliganj, New Delhi-110003

Dated: 20th June, 2014

To

M/s GAIL India Ltd.
16, Bhikaiji Cama Place,
R.K. Puram, New Delhi-110 066

Sub: 380 MW Gas based Combined Cycle Power plant at Village Vijaipur, in Guna Distt., Madhya Pradesh by M/s GAIL India Ltd. - reg. Environmental Clearance.

Sir,

The undersigned is directed to refer to your letters dated 15.03.2011, 11.09.2012, 08.02.2013 and 31.10.2013 on the subject mentioned above. The Ministry of Environment & Forests has examined the application.

2. It is noted that the proposal is for setting up of 380 MW Gas based Combined Cycle Power plant at Village Vijaipur, in Guna Distt., Madhya Pradesh. Land requirement will be 45 acres which is within existing premises of GAIL's LPG manufacturing facility/Compressor station. The co-ordinates of the site are located within Latitude 24°27'52.46" N to 24°29'14.28" N and Longitude 77°08'40.96"E to 77°09'34.72" E. Gas requirement will be 1.452 MMSCMD at 85% PLF. Water requirement of 10920 KLD will be sourced from Gopi Krishna Sagar Dam through a pipeline at a distance of about 12 km from project site. Induced draft cooling system will be installed. Stack height will be 60 m. There are around 3 protected forests namely Raghogarh, Dongar and Ajrora and 3 water bodies namely Parwati River, Ruthyai River and Gopi Krishna Sagar Dam within 10 km of the project site. Public Hearing was held on 11.04.2012. Cost of the project will be Rs.1209.0 Crores.

3. The project has been considered in accordance with the provisions of the EIA notification issued by the Ministry of Environment & Forests vide S.O. 1533 (E), dated September 14, 2006.

4. Based on the information submitted by you as at para no.2 above and others and presentations made by you and your consultant, M/s. EMRTC Consultants Pvt. Ltd., before the Expert Appraisal Committee (Thermal) in its 58th & 8th meetings held during October, 8-9, 2012 and January 9-10, 2014 respectively, the Ministry of Environment and Forests hereby *accords environmental clearance* to the above project under the provisions of EIA Notification dated September 14, 2006, subject to the compliance of the following Specific and General conditions:

A. Specific Conditions:

- i) Vision document specifying prospective plan for the site shall be formulated and submitted to the Regional Office of the Ministry within **six months**.
- ii) In case fuel for running the power plant is proposed to be changed from natural gas to other fuel (Liquid or solid) the project proponent shall apply for

Approved

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- such a change in environmental clearance along with necessary documents as required under EIA notification, 2006 (and its amendments).
- iii) Harnessing solar power within the premises of the plant particularly at available roof tops shall be carried out and status of implementation shall be submitted periodically.
 - iv) Stacks of 70 m each shall be provided with continuous online monitoring equipments. Exit velocity of flue gases shall not be less than 22 m/sec.
 - v) One of the AAQ monitoring Station shall be installed in the down wind direction i.e. across the river during the whole life of operation of the plant.
 - vi) Dry Low NO_x burners shall be installed to control NO_x emission. NO_x emission from each Gas Turbine shall not exceed 50 ppm.
 - vii) Concentration for photochemical oxidants shall be monitored along with NO_x and permanent monitoring stations shall be installed.
 - viii) Regular monitoring of ground level concentration of NO_x shall be carried out in the impact zone and records maintained. If at any stage the levels are found to exceed the prescribed limits, necessary control measures shall be provided immediately. The location of the monitoring stations and frequency of monitoring shall be decided in consultation with SPCB. Periodic reports shall be submitted to the Regional Office of this Ministry. The data shall also be put on the website of the company.
 - ix) Monitoring of surface water quantity and quality shall also be regularly conducted and records maintained. The monitored data shall be submitted to the Ministry regularly. Further, monitoring points shall be located between the plant and drainage in the direction of flow of ground water and records maintained. Monitoring for heavy metals in ground water shall be undertaken.
 - x) A well designed rain water harvesting system shall be put in place within six months, which shall comprise of rain water collection from the built up and open area in the plant premises
 - xi) **No discharge in the River is permitted, except if the quality of the effluent is of the same quality as that of River.**
 - xii) COC of minimum 5.0 shall be adopted.
 - xiii) No ground water shall be extracted for the project work at any stage.
 - xiv) Minimum required environmental flow suggested by the Competent Authority of the State Govt. (if any) shall be maintained in the Channel/ Rivers (as applicable) even in lean season.
 - xv) Detailed hydro-geological study of the area shall be carried out to assess the sustainability of the source of water particularly in lean season. Hydro-geological study shall also be thereafter reviewed annually and results submitted to the Ministry and concerned agency in the State Govt. In case adverse impact on ground and surface water is observed, immediate mitigating steps to contain any adverse impact on shall be undertaken.
 - xvi) Green Belt consisting of three tiers of plantations of native species around plant and at least 50 m width shall be raised. Wherever 50 m width is not feasible a 20 m width shall be raised and adequate justification shall be submitted to the Ministry. Tree density shall not be less than 2500 per ha with survival rate not less than 80 %.
 - xvii) CSR schemes identified based on need based assessment shall be implemented in consultation with the village Panchayat and the District Administration starting from the development of project itself. As part of CSR prior identification of local employable youth and eventual employment in the project after imparting relevant training shall be also undertaken. Company shall provide separate budget for community development activities and income generating programmes.
 - xviii) A minimum amount of Rs 5.0 Crores as one time investment shall be earmarked for activities to be taken up under CSR during construction

phase of the Project. Recurring expenditure for CSR thereafter shall be minimum Rs 1.0 Crores per annum till the life of the plant. Details of the activities to be undertaken with budgetary provisions shall be **submitted within one month** along with road map for implementation.

- xix) Social Audit by a reputed University or an Institute shall be carried out annually and details to be submitted to MOEF besides putting it on Company's website.
- xx) An Environmental Cell comprising of at least one expert in environmental science / engineering, occupational health and social scientist, shall be created preferably at the project site itself and shall be headed by an officer of appropriate superiority and qualification. It shall be ensured that the Head of the Cell shall directly report to the head of the organization who would be accountable for implementation of environmental regulations and social impact improvement/mitigation measures.

B. General Conditions:

- (i) The treated effluents conforming to the prescribed standards only shall be re-circulated and reused within the plant. Arrangements shall be made that effluents and storm water do not get mixed.
- (ii) A sewage treatment plant shall be provided (as applicable) and the treated sewage shall be used for raising greenbelt/plantation.
- (iii) Adequate safety measures shall be provided in the plant area to check/minimize spontaneous fires in coal yard, especially during summer season. Copy of these measures with full details along with location plant layout shall be submitted to the Ministry as well as to the Regional Office of the Ministry.
- (iv) Storage facilities for auxiliary liquid fuel such as LDO/ HFO/LSHS shall be made in the plant area in consultation with Department of Explosives, Nagpur. Sulphur content in the liquid fuel will not exceed 0.5%. Disaster Management Plan shall be prepared to meet any eventuality in case of an accident taking place due to storage of oil.
- (v) First Aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.
- (vi) Noise levels emanating from ~~machines~~ shall be so controlled such that the noise in the work zone shall be limited to 85 dB(A) from source. For people working in the high noise area, requisite personal protective equipment like earplugs/ear muffs etc. shall be provided. Workers engaged in noisy areas such as turbine area, air compressors etc shall be periodically examined to maintain audiometric record and for treatment for any hearing loss including shifting to non noisy/less noisy areas.
- (vii) Provision shall be made for the housing of construction labour (as applicable) 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.
- (viii) The project proponent shall advertise in at least two local newspapers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned within seven days from the date of this clearance letter, informing that the project has been accorded environmental clearance and copies of 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://envfor.nic.in>.
- (ix) A copy of the 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 website of the Company by the proponent.
- (x) The proponent shall upload the status of compliance of the stipulated environmental 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 MOEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM (PM_{2.5} & PM₁₀), SO₂, NO_x (ambient levels as well as stack emissions) shall be displayed at a convenient location near the main gate of the company in the public domain.
 - (xi) The environment 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, 1985, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Offices of the Ministry by e-mail.
 - (xii) **The project proponent shall submit six monthly reports on the status of the implementation of the stipulated environmental safeguards to the Ministry of Environment and Forests, its Regional Office, Central Pollution Control Board and State Pollution Control Board. The project proponent shall upload the status of compliance of the environmental clearance conditions on their website and update the same periodically and simultaneously send the same by e-mail to the Regional Office, Ministry of Environment and Forests.**
 - (xiii) Regional Office of the Ministry of Environment & Forests will monitor the implementation of the stipulated conditions. A complete set of documents including Environmental Impact Assessment Report and Environment Management Plan along with the additional information submitted from time to time shall be forwarded to the Regional Office for their use during monitoring. Project proponent will up-load the compliance status in their website and up-date the same from time to time at least six monthly basis. **Criteria pollutants levels including NO_x (from stack & ambient air) shall be displayed at the main gate of the power plant.**
 - (xiv) Separate funds shall be allocated for implementation of environmental protection measures along with item-wise break-up. These cost shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for other purposes and year-wise expenditure should be reported to the Ministry.
 - (xv) The project authorities shall inform the Regional Office as well as the Ministry regarding the date of financial closure and final approval of the project by the concerned authorities and the dates of start of land development work and commissioning of plant.
 - (xvi) Full cooperation shall be extended to the Scientists/Officers from the Ministry / Regional Office of the Ministry / CPCB/ SPCB who would be monitoring the compliance of environmental status.

5. The Ministry of Environment and Forests reserves the right to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the Ministry. The Ministry may also impose additional environmental conditions or modify the existing ones, if necessary.

6. The environmental clearance accorded shall be valid for a period of 5 years from the date of issue of this letter to start operations by the power plant.

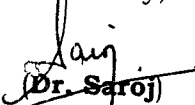
7. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.

8. In case of any deviation or alteration in the project proposed including coal transportation system from those submitted to this Ministry for clearance, a fresh reference should be made to the Ministry to assess the adequacy of the condition(s) imposed and to add additional environmental protection measures required, if any.

9. The above stipulations would be enforced among others under the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and rules there under, Hazardous Wastes (Management Handling & Transboundary Movement) Rules, 2008 and its amendments, the Public Liability Insurance Act, 1991 and its amendments.

10. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

Yours faithfully,


(Dr. Saroj)
Director

Copy to:

1. The Secretary, Ministry of Power, Shram Shakti Bhawan, Rafi Marg, New Delhi 110001.
2. The Secretary (Environment), Environment Department, Government of Madhya Pradesh, Bhopal.
3. The Chairman, Central Electricity Authority, Sewa Bhawan, R.K. Puram, New Delhi-110066.
4. The Chairman, Madhya Pradesh State Pollution Control Board, Paryavaran Prisar, E-5 Area Colony, Bhopal - 462 016
5. The Chairman, Central Pollution Control Board, Farivesh Bhawan, CBD-cum-Office Complex, East Arun Nagar, Delhi- 110032.
6. The Chief Conservator of Forests, Ministry of Environment and Forests, Regional Office(WZ), E-5, Kendriya Paryavaran Bhawan, E-5 Area Colony, Link Road-3, Ravishankar Nagar, Bhopal -462016
7. The District Collector, Guna District, Madhya Pradesh.
8. Guard file.
9. Monitoring file.


(Dr. Saroj)
Director