

# State Level Environment Impact Assessment Authority, Uttar Pradesh

## Directorate of Environment, U.P.

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To,

Mr. Sanjiv Datta,  
 General Manager, (Business Development),  
 Gail India Ltd. 16, Bhikaiji, Cama Place,  
 R.K. Puram, New Delhi-110066

UM(BD) - Arun  
 SM(BD) - Asheshh 31/10/14  
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Ref: 1628 /Parya/SEAC/681/2010/DDY

Dated 20 October, 2014

**Sub: Environmental clearance for Greenfield 380 MW Gas Based Combined Cycle Power Plant at Dibiyapur, District-Auraiya, U.P., M/s Gail India Pvt. Ltd.**

Dear Sir,

Please refer to your application/letter dated 15/03/2011, 11/09/2012, 18/10/2013, 02/04/2014, 10/06/2014 and 01/07/2014 addressed to the Secretary, SEAC, Directorate of Environment, Govt. of U.P., Lucknow on the subject as above. The matter was considered by the State Level Expert Appraisal Committee in its meetings dated 09/05/2011, 09/11/2012, 24/12/2012, 04/01/2013, 19/03/2014 & 11/04/2014. The project proponent submitted replies to the queries of committee. The matter was considered for final appraisal in SEAC meeting dated 05/08/2014.

A presentation was made by the project proponent alongwith their consultant M/s EMTRC Consultants Pvt. Ltd. The Project proponent, through the documents submitted and the presentation made, informed the committee that:-

1. The environmental clearance is sought for 380 MW Greenfield based combined cycle power plant at Dibiyapur, Tehsil-Auraiya, District-Auraiya, U.P. M/s GAIL.
2. GAIL is operating Gas Compressor Station at Dibiyapur, Dist Auraiya, UP. This new power project is proposed within the existing premises of GAIL's compressor station at Dibiyapur.
3. Total land available with GAIL at Dibiyapur is 70 acres, out of which 40 acres shall be used to establish the 380 MW CCPP.
4. Quantity of fuel (natural gas) required shall be around 530 MMSCMA at 80% PLF. Gas shall be transported to the Gas Metering Station of CCPP from adjacent GAIL Compressor Unit through pipeline.
5. GAIL has signed a long term gas contract with M/s Sabine Pass Liquefaction, LLC for supply of 3.5 MTPA of LNG.
6. Power plant, cooling tower, switch yard, guard pond, administrative buildings, water reservoir and other related infrastructure facilities are proposed.
7. Production of electricity (380 MW) is proposed using gas fired turbines and heat recovery steam generators.
8. Reservoir for raw water, closed storage yard for chemicals, spare parts, equipments, maintenance tools. No storage is required for fuel as natural gas will be supplied through pipeline.
9. Waste water from CT blow down, HRSG blow down, DM Plant regeneration etc. would be collected in Central Monitoring Basin (Guard Pond).
10. Gas pipelines shall be laid for transporting natural gas.

11. Transmission lines to load center (adjacent to the site) for evacuation of power will be laid by GAIL. Second option is to evacuate the generated power to the Bhauti PGCIL substation which is around 80 KM from the proposed site.
12. Water requirement shall be 10920 KLD, which shall be met from Lower Ganga Canal (Mangalpur Distributory). Application for allotment of water from Lower Ganga Canal has been made to Uttar Pradesh Jal Nigam Ltd.
13. 2184 KLD wastewater will be generated in the form of blowdown from cooling tower, boiler and backwash. All wastewater will be taken to guard pond. Treated wastewater will be 100% reused for landscaping and gardening. Wastewater is fit for irrigation use. No discharge on streams / nallas is proposed.
14. Domestic sewage will be treated in septic tanks.
15. Surface runoff from plant site will be taken for rainwater harvesting.
16. There shall be temporary influx of about 200 people during construction and permanent influx of about 100 (Staff) after commencement of proposed project.
17. As the natural gas is to be used as fuel for power generation, the flue gas emissions will not have particulate matter and SO<sub>2</sub> emissions. With state of the art dry low NO<sub>x</sub> burners, NO<sub>x</sub> emissions shall be restricted within 50 ppm.
18. No solid waste will be generated from the plant. Sludge from water treatment plant shall be mixed with poor quality soil and used as soil conditioner. Commercial garbage will be segregated and recyclable materials will be given to kabadis. Containerized garbage collection proposed. Spent oil and lubricants will be collected and given to authorized recyclers.
19. 33% of the available land will be developed as greenery (13 acres). 2500 trees will be planted per hectare all around the plant (13360 trees). 75% survival rate shall be ensured. 50 m wide greenbelt in three tier system will be developed.

Based on the recommendations of the State Level Expert Appraisal Committee (meeting held on 05/08/2014), the State Level Environment Impact Assessment Authority (meeting held on 02/09/2014) has decided to grant the Environmental Clearance to the project subject to the effective implementation of the following general and specific conditions:

**A. General Conditions:**

1. Storage facilities for auxiliary liquid fuel such as LDO and/ HFO/LSHS (if any) 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.
2. First Aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.
3. 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.
4. 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 Level Environment Impact Assessment Authority.

5. A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parisad / Municipal Corporation, urban local Body and the Local NGO, if any, from whom suggestions/representations, if any, received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.
6. An Environmental Cell shall be created at the project site itself and shall be headed by an officer of appropriate seniority and qualification. It shall be ensured that the Head of the Cell shall directly report to the Head of the organization.
7. 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, Lucknow the respective Zonal Office of CPCB and the SPCB & SEIAA.
8. 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 environment 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.
9. Regional Office of the Ministry of Environment & Forests at Lucknow 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 NOx (from stack & ambient air) shall be displayed at the main gate of the power plant and in public domain.
10. 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.
11. 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.
12. Full cooperation shall be extended to the Scientists/Officers from the Ministry / Regional Office of the Ministry at Lucknow/CPCB/SPCB who would be monitoring the compliance of environmental status.
13. The SEIAA reserves the right to revoke the clearance if conditions stipulated are not duly implemented. The SEIAA may also impose additional environmental conditions or modify the existing ones, if necessary.
14. The environmental clearance accorded shall be valid for a period of five years to start operations by the power plant.
15. 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.
16. In case of any deviation or alteration in the project proposed including Change of fuel 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.

17. 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 and Handling) Rules, 1989 and its amendments, the Public Liability Insurance Act, 1991 and its amendments.
18. Comprehensive EIA covered three season data excluding monsoon to be submitted with one year for the date of issuance of Environmental Clearance.
19. Any appeal against this environmental clearance shall lie with the National Green Tribunal Authority, if preferred, within a period of 30 days as prescribed under Section 11 of the National Environment Appellate Authority Act, 1997.

**B. Specific Conditions:-**

1. 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 such a change in environmental clearance along with necessary documents as required under EIA notification, 2006 (and its amendments).
2. No ground water shall be extracted for the project work at any stage as committed.
3. It shall be ensured that the area drainage is not disturbed due to the proposed expansion.
4. Hydro-geological study of the area shall be reviewed annually to assess the sustainability of the source of water particularly in lean season. The review report duly vetted by the concerned Dept. in the state government shall be submitted to the SEIAA & Regional Office, MoEF. In case adverse impact on ground and surface water is observed, immediate mitigating steps to contain the same shall be undertaken.
5. A sewage treatment plant shall be provided (as applicable) and the treated sewage shall be used for raising greenbelt/plantation. Continuous monitoring of effluent discharge shall be undertaken and it shall be ensured that the temperature of effluent should not be more than 5<sup>0</sup>C above the temperature of natural drain at discharge point.
6. The treated effluents conforming to the prescribed standards only shall be reused to the extent possible and excess is discharged in to natural drain. Arrangements shall be made to avoid effluents and storm water mixing.
7. Monitoring of ground and surface water quality shall be regularly conducted and records maintained. Monitoring for heavy metals in ground water should also be done. The monitored data shall be submitted to the R.O. MoEF regularly. Further, monitoring points shall be located between the plant and drainage in the direction of flow of ground water and records maintained.
8. A well designed rainwater harvesting plan be drawn in consultation to Central Ground Water Board within a period of three months from the date of issuance of clearance and details shall be furnished. Status of implementation shall be submitted to the SEIAA, CPCB, SPCB and Regional Office, MoEF, Lucknow.
9. Adequate safety measures shall be provided in the plant area to check/minimize spontaneous fires especially during summer season. Copy of these measures with full details along with location plant layout shall be submitted to the SEIAA, CPCB, SPCB and Regional Office of the MoEF, Lucknow.

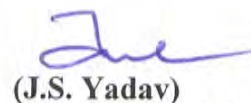
10. Noise levels emanating from turbines shall be so controlled using noise attenuation devices so that the noise in the work zone is kept below 75 dBA at 1m distance from the source of noise. Workers in high noise area should be provided the requisite personal protective equipment like earplugs/ear muffs etc. Workers engaged in noisy areas such as turbine area, air compressors etc shall be periodically examined and there audiometric record is maintained. Medical assistance for any hearing loss including shifting to non-noisy/less noisy areas should also to be done.
11. NOx emission from each Gas Turbine shall not exceed 50 ppm.
12. Stack of 70 m height is to be provided with continuous online monitoring equipments. Exit velocity of flue gases shall not be less than 22 m/sec
13. Regular monitoring of ground level ambient air concentration of SO<sub>2</sub>, NO<sub>x</sub>, PM<sub>10</sub> & PM<sub>2.5</sub> etc. shall be carried out in the impact zone and records maintained. If at any stage these 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 monitoring reports shall be submitted to the SEIAA, CPCB, SPCB and Regional Office of the MoEF, Lucknow. The data shall also be put on the website of the company.
14. Local employable youth shall be trained in skills relevant to the project for eventual employment in the project itself. The action taken report and details thereof to this effect shall be submitted to the Regional Office of the Ministry and the State Govt. Dept. concerned from time to time.
15. Environmental Corporate Responsibility (ECR) plan along with budgetary provision amounting to 2% of total project cost shall be submitted within a month on need base assessment study in the study area. Income generating measures which can help in upliftment of weaker section of society consistent with the traditional skills of the people should be identified and implemented. The programme can include activities such as development of fodder farm, fruit bearing orchards, vocational training etc. In addition, vocational training for individuals shall be imparted so that weaker section of society can take up self employment jobs. A separate budget for community development activities and income generating programmes shall be specifically made.
16. It shall be ensured that in-built monitoring mechanism for the schemes identified is in place and annual social audit shall be got done from the nearest government institute of repute in the region. The project proponent shall also submit the status of implementation of the scheme from time to time.
17. Green Belt consisting of 3 tiers of plantations around the plant of 50 m width and adequate tree density not less than 2500 per ha with survival rate not less than 80 % shall be developed. In case 50 m width is not possible adequate justification shall be submitted to this Authority and green belt shall not be less than 33% of the total area.
18. Comprehensive EIA report covering three season data excluding monsoon is to be submitted wit in one year from the date of issuance of Environmental Clearance.
19. Low nox burner should be installed.

You are also directed to ensure that the proposed site is not a part of any no-development zone as required/prescribed/identified under law. In case of violation, this permission shall automatically deem to be cancelled. Also, in the event of any dispute on ownership or land use of the proposed site, this clearance shall automatically deem to be cancelled.

The project proponent will have to submit approved plans and proposals incorporating the conditions specified in the Environmental Clearance within 03 months of issue of the clearance. The SEIAA/MoEF reserves the right to revoke the environmental clearance, if conditions stipulated are not implemented to the satisfaction of SEIAA/MoEF. SEIAA may impose additional environmental conditions or modify the existing ones, if necessary. Necessary statutory clearances should be obtained.

These stipulations would be enforced among others under the provisions of Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification, 2006 including the amendments and rules made thereafter.

This is to request you to take further necessary action in the matter as per provision of Gazette Notification No. S.O. 1533(E) dated 14.9.2006, as amended and send regular compliance reports to the authority as prescribed in the aforesaid notification.




(J.S. Yadav)  
Member Secretary, SEIAA

No...../Parya/SEAC/681/2010/DDY

Dated: As above

**Copy for Information and necessary action to:**

1. The Principal Secretary, Environment, U.P. Govt., Lucknow.
2. Dr. P.L. AhujaRai, Advisor, IA Division, Ministry of Environment, Forests & Climate Change, Govt. of India, Indira ParyavaranBhawan, JorBaghRoad, Aliganj, New Delhi.
3. Chief Conservator, Ministry of Environment & Forests, Regional Office (Central Region), KendriyaBhawan, 5th Floor, Sector-H, Aliganj, Lucknow.
4. The Member Secretary, U.P. Pollution Control Board, TC-12V, ParyavaeanBhawan, Vibhuti Khand, Gomti Nagar, Lucknow.
5. District Magistrate, Auraiya, U.P.
6. Deputy Director, Regional Office, Directorate of Environment, Meerut.
7. Copy for Web Master/Guard file.



(Dr. R.K. Sardana)  
Director (I/c)/Secretary, SEAC  
Directorate of Environment