

Government of Maharashtra

No.: SEAC 2010/CR. 523 /TC-2

Environment department,
Room No. 217, 2nd floor,
Mantralaya Annexe,
Mumbai 400 032
Date: 19th April, 2011

To,
M/s Pioneer Gas Power Ltd.
8-2-311/C, Mithila Nagar,
Road No. 10,
Banjara Hills,
Hyderabad - 500034
Maharashtra

Subject: 425 MW Natural Gas based power plant at D-119, Ville-Bhagad, MIDC, Tehsil Mangaon, District Raigad by M/s Pioneer Gas Power Ltd. - Environmental clearance regarding.

Sir,

This has reference to your communication dated 22nd May, 2010 on the above mentioned subject. The proposal was considered as per the EIA Notification - 2006, by the State Level Expert Appraisal Committee, Maharashtra in its 35th meeting and decided to recommend the project for prior environmental clearance to SEIAA. Information submitted by you has been considered by State Level Environment Impact Assessment Authority in its 34th meeting held on 28th February, 2011.

2. It is noted that the proposal is for grant of Environmental Clearance for 425 MW Natural Gas based power plant at D-119, Ville-Bhagad, MIDC, Tehsil Mangaon, District Raigad by M/s Pioneer Gas Power Ltd. SEAC considered the project under screening category 1 (d) as per EIA Notification 2006. EIA report submitted by project proponent.

Project information from documents submitted by you & considered by SEAC & SEIAA is summarized as below-

Name of the Project	:	425 MW Natural Gas based power plant
Project Proponent	:	M/s Pioneer Gas Power Ltd.
Location of the project	:	D-119, Ville-Bhagad, MIDC, Tehsil Mangaon, District Raigad
Land	:	20.56 hectares
Power plant area	:	10 hectares
Estimated cost of the project	:	₹ 1490 Cr.

Production Capacity: 425 MW power

Manufacturing process: based on Gas turbine system

Fuel requirement:

Name of Fuel/Raw Materials	(Quantity/day)
Natural Gas	17,55,445 Sm ³ /day
Nutrients N, P, , K for green belt	25 Kg/day in the form of Organic Fertilizer Compost
Oil and Grease	200 liter/day



Water Requirement: 1282.20 m³/day; source: MIDC

Effluent generation and treatment:

- Domestic sewage: 10 KLD and which will be treated in 15 KLD capacity of STP.
- STP technology: SAFF technology and 90 % of treated water will be used for gardening/ horticulture.

Industrial effluent:

- Cooling tower: 227.52 KLD,
- DM plant: 40.80 KLD,
- Boiler heat recovery system: 360 KLD
- Total industrial effluent generation: 628.38 KLD; It will be treated through three stage double module reverse osmosis System. Treated 624 KLD water will be used for cooling tower make up and 4.32 KLD of brine residual concentrate will be suitably evaporated and salts of carbonates, sulphate and chlorides will be used for site land filling. Care should be taken that it will not harm environment.

Solid Waste Management:

Particulars	Quantity	Disposal
Canteen waste	50 kg/day	Composted and used as manure in garden
Office and packing trash	20 Kg/day	sale
Hazardous waste		
Used oil (cat.5.1)	2 MT/Year	To preprocessors
Residues containing oil	1.5 MT/yr	CHWTSDF
ETP Sludge	75 Kg/day	CHWTSDF

Air pollution control measures:

- In order to limit NOX level in the gas turbine exhaust, the GT is provided with a dry low NOX combustor or with water injection. NOX emission level will be limited to a maximum of 50 ppmvd dry at 15% O₂. Stack of 60 m height will be provided.
- HSRG is basically installed at the gas turbine exhaust end to recover substantial amount of heat from the gas turbine exhaust gases which will enable reduction of the temperature of the exhaust gases to an acceptable lower values, thereby reducing thermal heat into the atmosphere.
- Arrangement of water sprinklers during construction phase.

Green belt development: area: 25 acres; 1000 nos. of new trees will be planted.

Environmental Management Plan: Capital cost: ₹ 22.75 lakhs and Operation and Maintenance cost: ₹ 65.15 lakhs

3. The proposal has been considered by SEIAA in its 34th meeting & decided to accord environmental clearance to the said project under the provisions of Environment Impact Assessment Notification, 2006 subject to implementation of the following terms and conditions:

- (i) This environmental clearance is issued subject to land use verification. Local authority / planning authority should ensure this with request to Rules, Regulations, Notifications, Government Resolutions, Circulars, etc. issued if any. This environmental clearance issued with respect to the environmental consideration and it does not mean that State Level Impact Assessment Authority (SEIAA) approved the proposed land use.



- (ii) "Consent for Establishment" shall be obtained from Maharashtra Pollution Control Board under Air and Water Act and a copy shall be submitted to the Environment department before start of any construction work at the site.
- (iii) No land development / construction work preliminary or otherwise relating to the project shall be taken up without obtaining due clearance from respective authorities.
- (iv) No additional land shall be used /acquired for any activity of the project without obtaining proper permission.
- (v) For controlling fugitive natural dust, regular sprinkling of water & wind shields at appropriate distances in vulnerable areas of the plant shall be ensured.
- (vi) Regular monitoring of the air quality, including SPM & SO2 levels both in work zone and ambient air shall be carried out in and around the power plant and records shall be maintained. The location of monitoring stations and frequency of monitoring shall be decided in consultation with Maharashtra Pollution Control Board (MPCB) & submit report accordingly to MPCB.
- (vii) A detailed scheme for rainwater harvesting shall be prepared and implemented to recharge ground water.
- (viii) Arrangement shall be made that effluent and storm water do not get mixed.
- (ix) Periodic monitoring of ground water shall be undertaken and results analyzed to ascertain any change in the quality of water. Results shall be regularly submitted to the Maharashtra Pollution Control Board.
- (x) Leq of Noise level shall be maintained as per standards. For people working in the high noise area, requisite personal protective equipment like earplugs etc. shall be provided.
- (xi) Proper House keeping programmes shall be implemented.
- (xii) The overall noise levels in and around the plant are 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 confirm to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989.
- (xiii) Green belt shall be developed & maintained around the plant periphery. Green Belt Development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the local DFO/ Agriculture Dept.
- (xiv) Adequate safety measures shall be provided to limit the risk zone within the plant boundary, in case of an accident. Leak detection devices shall also be installed at strategic places for early detection and warning.
- (xv) Occupational health surveillance of the workers shall be done on a regular basis and record maintained as per Factories Act.
- (xvi) The company shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling.
- (xvii) 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 Waste (Management and Handling) Rules, 2003 (amended). Authorization from the MPCB shall be obtained for collections/treatment/storage/disposal of hazardous wastes.
- (xviii) The company shall undertake following Waste Minimization Measures :
 - a. Metering of quantities of active ingredients to minimize waste.
 - b. Reuse of by- products from the process as raw materials or as raw material substitutes in other process.
 - c. Maximizing Recoveries.
 - d. Use of automated material transfer system to minimize spillage.
 - e. Use of "Closed Feed" system into batch reactors.



- (xix) Regular mock drills for the on-site emergency management plan shall be carried out. Implementation of changes / improvements required, if any, in the on-site management plan shall be ensured.
- (xx) A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.
- (xxi) Transportation of ash will be through closed containers and all measures should be taken to prevent spilling of the ash.
- (xxii) Separate silos will be provided for collecting and storing bottom ash and fly ash.
- (xxiii) Separate funds shall be allocated for implementation of environmental protection measures/EMP along with item-wise breaks-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 reported to the MPCB & this department
- (xxiv) The project management shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the marathi language of the local concerned within seven days of issue of this letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the Maharashtra Pollution Control Board and may also be seen at Website at <http://envis.maharashtra.gov.in>
- (xxv) Project management should submit half yearly compliance reports in respect of the stipulated prior environment clearance terms and conditions in hard & soft copies to the MPCB & this department, on 1st June & 1st December of each calendar year.
- (xxvi) A copy of the clearance letter shall be sent by proponent to the concerned Municipal Corporation 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.
- (xxvii) The proponent shall upload the status of compliance of the stipulated EC 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, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
- (xxviii) The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.
- (xxix) 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 along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.
- (xxx) The environmental clearance is being issued without prejudice to the court case pending in the court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision of the Hon'ble court will be binding on the project proponent. Hence this clearance does not give immunity to the project proponent in the case filed against him.

4. The Environment department reserves the right to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the department or for that matter, for any other administrative reason.

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5. **Validity of Environment Clearance:** The environmental clearance accorded shall be valid for a period of 5 years to start of production operations.
6. In case of any deviation or alteration in the project proposed from those submitted to this department for clearance, a fresh reference should be made to the department to assess the adequacy of the condition(s) imposed and to incorporate additional environmental protection measures required, if any.
7. 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.
8. Any appeal against this environmental clearance shall lie with the National Environmental Appellate Authority, if preferred, within 30days as prescribed under Section 11 of the National Environmental Appellate Act, 1997.



(Valsa R Nair Singh)
Secretary, Environment
department & MS, SEIAA

Copy to:

1. Shri. Ashok Basak, IAS (Retd.), Chairman, SEIAA, 502, Charleville, 'A' Road, Churchgate, Mumbai- 400 020, Maharashtra.
2. Shri. P.M.A Hakeem, IAS (Retd.), Chairman, SEAC, 'Jugnu' Kottaram Road, Calicut- 673 006 Kerla.
3. The Secretary, Energy department, Govt. of Maharashtra, Mantralaya, Mumbai - 400032., Maharashtra
4. Member Secretary, Maharashtra Pollution Control Board, with request to display a copy of the clearance.
5. The CCF, Regional Office, Ministry of Environment and Forest (Regional Office, Western Region, Kendriya Paryavaran Bhavan, Link Road No- 3, E-5, Ravi-Shankar Nagar, Bhopal- 462 016). (MP).
6. Regional Office, MPCB, Raigad.
7. Collector, Raigad.
8. IA- Division, Monitoring Cell, MoEF, Paryavaran Bhavan, CGO Complex, Lodhi Road, New Delhi-110003.
9. Director(TC-1), Dy. Secretary(TC-2), Scientist-1, Environment department
10. Select file (TC-3).