



**BY SPEED POST**

**J-13012/86/2010-IA.II (T)**  
**Government of India**  
**Ministry of Environment & Forests**

Paryavaran Bhawan  
CGO Complex, Lodi Road  
New Delhi-110 003  
Dated: March 21, 2011.

To

M/s Gama Infraprop Pvt. Ltd.  
M-3, First Floor, Aurobindo Marg  
Hauz Khas  
**New Delhi - 110 016.**

**Sub: 225 MW Gas Based Combined Cycle Power Plant in notified industrial area at village Mahuakherganj, in Kashipur Taluk, in Udham Singh nagar Distt., in Uttarakhand - reg. Environmental Clearance.**

Sir,

The undersigned is directed to refer to letters dated 20.01.2011 on the subject mentioned above.

2. The Ministry of Environment & Forests has examined the application. It has been noted that the proposal is for setting of 225 MW Gas Based Combined Cycle Power Plant M/s Gama Infraprop (P) Ltd. at village Mahuakherganj, in Kashipur Taluk, in Udham Singh Nagar Distt., in Uttarakhand. Land requirement will be 25 acres, which is in notified industrial area. The co-ordinates of the site are at Latitude 29°08'21.92" N to 29°08'37.96"N and Longitude 78°57'44.21"E to 78°58'03.17"E. Natural gas requirement will be 0.90 MMSCMD. Water requirement will be 600 m<sup>3</sup>/day and will be sourced from ground water within the plant. There are no national parks, wildlife sanctuaries, heritage sites, tiger/biosphere reserves etc. within 10 km of the site. Public hearing is not required as the unit is located in the notified industrial area. Cost of the project will be Rs. 850 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 2.0 above and others and presentation made by you and your consultant before the Expert Appraisal Committee (thermal Power) in its 17<sup>th</sup> Meeting held during February 7-8, 2011, the Ministry of Environment and Forests hereby accords environmental clearance 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 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 such a change in environmental clearance along with necessary documents as required under EIA notification, 2006 (and its amendments). In such a case the necessity for holding public hearing again or otherwise will be determined by the Ministry in consultation with the Expert Appraisal Committee (Thermal Power).
- (iii) The project proponent shall submit **within three months** to the Ministry a certificate / confirmation from the Office of the Chief Wildlife Warden to the effect that the area does not fall in the corridor of migratory route of elephants.
- (iv) The project proponent shall in association with other Gas Based Thermal Power Plants coming up in the District, initiate a study through a reputed institution to assess the cumulative impact of the power plants on the AAQ of the area and submit its report to the Ministry within two years. The study shall in particular assess the impact of emission of the gas power plant on the chemistry of upper troposphere and stratosphere of the atmosphere and the impact on radiation budget. It shall be ensured that the study takes into account the worst seasonal atmospheric conditions. The project proponent shall ensure that the Ministry is informed of the commissioning of the study and shall submit status report every quarterly. The report of the study shall be submitted to the Ministry for further action as may be necessary.
- (v) 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.
- (vi) Additional soil for leveling of the proposed site shall be generated within the sites (to the extent possible) so that natural drainage system of the area is protected and improved.
- (vii) Hydro geological study of the area shall be reviewed annually and report submitted to the Ministry. No water bodies including natural drainage system in the area shall be disturbed due to activities associated with the setting up / operation of the power plant.
- (viii) COC of 5.0 shall be adopted.

- (ix) A well designed rainwater harvesting shall be constructed. Central Groundwater Authority/ Board shall be consulted for finalization of appropriate rainwater harvesting technology within a **period of three months** from the date of issue of clearance and details shall be furnished to the Regional Office of the Ministry. Subsequently water requirement for running the plant shall be met from harvested rain water and use ground water shall be dispensed with thereafter.
- (x) Regular monitoring of ground water level shall be carried out by establishing a network of existing wells and constructing new piezometers. Monitoring shall also be carried out particularly for heavy metals (Cr,As,Pb) and records maintained and submitted to the Regional Office of this Ministry. The data so obtained should be compared with the baseline data so as to ensure that the ground water quality is not adversely affected due to the project.
- (xi) Monitoring surface water quantity and quality (if any nearby) 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.
- (xii) The treated effluents conforming to the prescribed standards only shall be re-circulated and reused within the plant. There shall be no discharge outside the plant boundary except during monsoon. Arrangements shall be made that effluents and storm water do not do not get mixed.
- (xiii) A sewage treatment plant shall be provided (as applicable) and the treated sewage shall be used for raising greenbelt/plantation.
- (xiv) The project proponent shall set up permanent monitoring stations for measurement of PAN, NMHC besides criteria pollutants.
- (xv) Dry Low NO<sub>x</sub> Burners shall be installed.
- (xvi) A stack of 40 m height shall be provided with continuous online monitoring equipments for ambient air quality parameters notified by the Ministry including NO<sub>x</sub>. Exit velocity of flue gases shall not be less than 22 m/sec.
- (xvii) Green Belt consisting of three tiers of plantations of native species around plant constituting 33% of total area. Tree density shall not less than 2500 per ha with survival rate not less than 80 %.
- (xviii) In addition to development of green belt, social forestry measures shall be taken up in close consultation with the District Forests Department. The project proponent shall accordingly identify blocks of degraded forests and generation of degraded forests shall be

undertaken at a large scale. In pursuance to this the project proponent shall formulate time bound action plan along with financial allocation and shall submit status of implementation to the Ministry every six months.

- (xix) The project proponent shall also adequately contribute in the development of the neighbouring villages. Special package with implementation schedule for free potable drinking water supply in the nearby villages and schools shall be undertaken in a time bound manner.
- (xx) An amount of Rs 3.4 Crores shall be earmarked as one time capital cost for CSR programme. Subsequently a recurring expenditure of Rs 0.68 Crores per annum shall be earmarked as recurring expenditure for CSR activities. Details of the activities to be undertaken shall be submitted **within three month** along with road map for implementation.
- (xxi) While identifying CSR programme the company shall conduct need based assessment for the nearby villages to study economic measures with action plan which can help in upliftment of poor section of society. Income generating projects consistent with the traditional skills of the people besides development of fodder farm, fruit bearing orchards, vocational training etc. can form a part of such programme. Company shall provide separate budget for community development activities and income generating programmes. This will be in addition to vocational training for individuals imparted to take up self employment and jobs.
- (xxii) 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.

**B. General Conditions:**

- (i) Adequate safety measures shall be provided in the plant area to check/minimize fires and other hazards. 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.
- (ii) 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. Disaster Management Plan shall be prepared to meet any eventuality in case of an accident taking place due to storage of oil.
- (iii) First Aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.

- (iv) Noise levels emanating from turbines shall be so controlled such that the noise in the work zone shall be limited to 75 dBA. 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.
- (v) Regular monitoring of ground level concentration of NO<sub>x</sub> & PM<sub>10</sub> 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 reports shall be submitted to the Regional Office of this Ministry. The data shall also be put on the website of the company.
- (vi) 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.
- (vii) 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>.
- (viii) 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.
- (ix) 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. The status report on the functioning of the Cell shall be submitted to the regional office of the Ministry periodically.

- (x) 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 RSPM, SO<sub>2</sub>, NO<sub>x</sub> (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 31<sup>st</sup> 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 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 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.
- (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<sub>x</sub> (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 at Bangalore / CPCB/ SPCB who would be monitoring the compliance of environmental status.

4. 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.

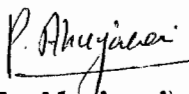
5. The environmental clearance accorded **shall be valid for a period of 5 years** to start operations by the power plant.

6. 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.

7. 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.

8. 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.


Yours faithfully,

  
(Dr. P.L. Ahujara)  
Director

Copy to:

1. The Secretary, Ministry of Power, Shram Shakti Bhawan, Rafi Marg, New Delhi 110001.
2. The Secretary (Environment), Forests and Environment Department Government of Uttarakhand.
3. The Chairman, Central Electricity Authority, Sewa Bhawan, R.K. Puram, New Delhi-110066.
4. The Chairman, Uttarakhand Environment Protection & Pollution Control Board, Paryavaran Bhavan, E-115; Nehru Colony, Dehradun-248001.
5. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi- 110032.

6. The Chief Conservator of Forests, Ministry of Environment and Forests, Regional Office(CZ), Kendriya Bhawan, 5<sup>th</sup> Floor, Sector "H", Aliganj, Lucknow-226020.
7. The District Collector, Udham Singh Nagar District, Govt. of Uttarakhand.
8. Guard file/Monitoring file.

  
**(Dr. P.L. Ahujarai)**  
**Director**