

**20 MW HFO BASED DG THERMAL POWER PLANT AT BAIRABI
ENVIRONMENTAL CLEARANCE STATUS OF COMPLIANCE AS ON JUNE 2015**

Sl.No	Terms & conditions	Job to be done	Compliance
1	2	3	4
	All the condition stipulated by Mizoram pollution control Board listed below should be strictly implemented. a) No air and water polluting shall be created by the Industry beyond the prescribed permissible limits.	Air and water samples to be analyzed at the time of trial running of the there after at regular interval	1) For air : Instruments like stack monitoring kits, high volume sampler are already procured 2) For water : Water sample with tested at either MPCB of PHE laboratory
	b) To maintain the environment and ecology of the area, provision of green belt of about 15 (Fifteen) meters width by planting selected species of trees, the 3 meters when mature and at a spacing of 1 meter all around the plant site shall have to be invariably	Planting of trees	Trees are planted within the project area and are now at 5 meters height.
	c) It shall be the prime responsibility of the Industry that the nearby pollution; vegetation any other assets etc. shall not be affected due to emission/effluent emanating out of the Industry	Same as g (1) g (2) below	
	d) All effort should be made by the industry authority to maintain the ambient-air quality of the area to the lowest possible limits well below the prescribed permissible limits by utilizing the best available technologies in their regards.	Technology used to be clarify	Latest technology is use which confirms to international marine organization standard.
	e) Effort shall have to be made by the Industry for recycle and recovery of waste to the maximum extent possible	To be noted for compliance	Efforts are being made to utilize the sludge for Brick industries for burning brick.
	(f) Infrastructure facilities should be provided for monitoring of stack emission and ambient air quality including meteorological data by installing appropriate air pollution monitoring instrument and establishment – of-well-equipped laboratory before Commissioning of the plant	1) Procurement of Instrument 2) Establishment of Laboratory or utilizing well established laboratory on payment of fees	Installation of instruments: 1) Stack monitoring kit 2) Envirotech AMP 620 3) Envirotech Fluorine kit 3) Envirotech Differential Density Monometer already procured are utilize for monitoring stack emission and ambient air quality. The instruments have not shown proper functioning. Technician from the authorized dealer are expected to come very soon. The existing laboratory of MPCB and PHE will be utilized for testing water sample etc. Action being taken from BSNL for on line continuous monitoring system.

	<p>g) With regards to different individual unit of the plants, appropriate pollution control devices as listed at below should be adopted installed to ensure that the emission/effort are within the prescribed standard.</p> <p>1) Stack of height 50 meters should be installed with continuous on lines monitoring</p>	Construction of 50 M height & stack and monitoring of particulars matter emission	The height of the stack is 80 Meter which is well beyond the requirement.
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	2) Effluent treatment system to ensure that no untreated effluent i.e. discharged.	Providing water treatment plant & analyzed of effluent characteristic.	As the coaling system is closed cycle there will not be noticeable effluent.
	3) Housing all noise producing equipment acoustic enclosure to bring the noise level not to exceed 90 dB (A) at 1 meter from the source	Lining of noise producing equipment with acoustic enclosure monitoring of noise level	Acoustic enclosure is provided in the system and the noise level will be less than 70 dB (A) from 1 meter distance
	h) The Industry shall have to submit a detailed report on compliance on compliance to the terms & conditions as laid down in this No. objection certificate and to apply for consent to operate before Commissioning of the plant. No. operation of the plant shall be allowed unless the industry fulfilled all the stipulated terms & conditions of this certificate.	Submission of 1) Compliance Report	Submitted
2	A stack of height 50 Meters. Should be installed with continuous on line monitoring system.		The height of the stack of 80 M and Provision is made in every stuck for measuring the emission. There is no on line monitoring system, but the required monitoring instrument as suggested by MPCD are kept at site and ready for use by the competent personal as and when desired.
3	The water to the tune of 1584M3 /d will be drawn from the Tlawng (Dhaleshwari) River.		The cooling system is closed cycle and the water requirement/day varies depending on the use of the set. As the DG sets are not operated daily hence the water requirement is very minimal and will be drawn from the near by stream.
4	Noise level should be limited to 75 d BA and regular Maintenance of equipment be undertaken. For people working in the area of generator halls and other high noise areas, earplug should be provided.	<p>1) Lining of noise producing equipments with acoustic enclosure</p> <p>2) Monitoring of noise level at the time of testing and subsequently at regular interval</p>	Acoustic enclosure is provided noise level is less than 70 dB(A)and earplug is also provided.

5	Land acquisition should be restricted to 3.57 ha only.	Acquiring land not more than 3.57 ha	Land acquired is less than 3.75ha for the plant alone but the total land acquired including land for accommodation of staff quarter is more than 3.75 ha. There is no proper record of land acquisition as some portion of land are donated by the local people
6	A forestation should be under taken covering an area of 0.46 ha around the plant. A norm of 1500-2000 trees per ha. Should be followed as per CPCB guidelines. Compensatory a forestation should also be carried out in lieu of diversion of forest land as per the proposal approved by Forest Department.	1) Planting of seeding and maintain during 2003 to 2004 and around the plant	Planting of seedlings of about 800 No's done at present which are about 4-5mtrs. Compensatory a forestation is not required as the site is previously utilized for cultivation.
7	Heavy fuel oil should be used as main feedstock @ 106.56TPD. The sulphur contents, in the fuel should not exceed 0.75%		Analysis of sulphur content of HFO (Heavy fuel oil) submitted by Indian Oil Corporation Ltd is enclosed herewith.
8.	All effluents generated in various plant activities should be collected in the central effluent Treatment plant central monitoring Basin and treated to ensure adherence to specified standards of usage for the green belt development and other proposed activities.	Same as No 1(g) Sub No (2)	As mentioned above the system is enclosed circuit cooling system and the effluent will be negligible.
9	Regular monitoring for SPM,502 and Nox around the Power plant may be carried out and records maintained. Monitoring stations should be established in consultation with the state pollution control Board.	1) Identification of station. 2) Regular monitoring	High volume sampler, stack monitoring kit (Handy stack samples and stack velocity monitor) and noise meter are already purchase and kept at the plant site we have already inform the arrival of those instrument but not yet make programme for installation of monitoring station.
10	Total debris generated to the tune of 75,000m3 should be fully utilized for filling low lying area within core zone and for filling to create levels for construction.	Collection and deposition of all debris at the specified location.	All the debris generated are negligible which are properly utilized for filling the low lying area. Therefore there further debris once the land is leveled.
11.	Risk analysis report should be prepared and the disaster management plan should incorporate emergency plan. This report should be submitted in this ministry within two months of the issue of this letter		Risk Analysis Report and Disaster management plant submitted via letter No M.27024/1/03-CE(PM)/6 Dt 28.4.08

12	The Project proponent should advertise at least in two local news papers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned, informing that the project has been accorded environmental clearance and copies of clearance letters are available with the state pollution control board/committee and may also be seen at website of the ministry of environmental and forests at http:// www.nic.in .	Submission of Report & Plan	This is already advertised in local news paper, but the coming up of the project it was frequently published by almost all paper in the whole state.
13	A Monitoring Committee should be Constituted for reviewing the compliance or various safeguards measures by involving recognized local NGO'S, Pollution Control Board, Institution, Expert etc.	Constitution of monitoring committee.	Monitoring Committee formed and copies of the same is attached herewith.
14	The project Authorities should inform the regional office as well as the ministry the date of financial closer and final approval of the project by the concerned authorities and the date of start of land development work.		The project is approved and completed.
15	Full Co-operation should be extended to the Scientists/Officers from the Regional Office of the ministry at Shillong /the CPCB/the SPCB who would be monitoring the compliance of environmental status. Complete set of impact assessment report and the management plans should be forwarded to the Regional Office for their use during monitoring.		Copy of impact assessment report and management plans (Environmental Impact Assessment for proposed 20MW HFO Power plan at Village Bairabi, Tehsil & District-Kolasib Mizoram) already submitted.

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Chief Engineer (Distribution)
Power & Electricity Department