

STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

Pranisampad Bhavan, Block 'LB'-2, 5th Floor, Sector – III, Salt Lake, Kolkata – 700 106

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Website : www.environmentwb.gov.in

No. 3224/ EN/T-II-1/001/2009

Date : 26 / 09 /2018

To

M/s. Hiranmaye Energy Limited,
Plot No. X 1, 2 & 3, 2nd floor, Block-EP,
Sector-V, Salt Lake, Kolkata- 700 091.

Subject: Environmental Clearance (as amended) for the proposed Coal based Thermal Power Plant (450 MW) by Hiranmaye Energy Limited (formerly known as M/s. India Power Corporation (Haldia) Ltd. at JL No.- 94, Mouza – Kismatshibrampur, JL. No.- 170, Mouza – Tentulberia, JL. No.- 147, Mouza – Sovarampur, JL. No.- 146, Mouza- Kashbere, PS. Bhabanipur, Haldia, Dist.- PurbaMedinipur, West Bengal.

Sir,

This has reference to your application no. Pres/HMEL/ENV/2018-19/007/14 dated 22.05.18 for amendment of Environmental Clearance and its amendments for the proposed Coal based Thermal Power Plant (450 MW) by M/s Hiranmaye Energy Limited (Formerly known as M/s. India Power Corporation (Haldia) Ltd.) at JL No.-94, Mouza – Kismatshibrampur, JL. No. - 170, Mouza – Tentulberia, JL. No.- 147, Mouza – Sovarampur, JL. No.146, Mouza- Kashbere, PS. - Bhabanipur, Haldia, Dist- PurbaMedinipur, West Bengal.

Hiranmaye Energy Limited (HEL) (formerly known as India Power Corporation (Haldia) Limited) had obtained Environmental Clearance (EC) bearing No. EN/1125/T-II-1/001/2009 dated 12.04.2010 from SEIAA, West Bengal. An amendment in EC for change configuration from 3x135 MW to 3x150 MW was received by the project proponent from MoEF&CC vide letter no. J-13012/16/2014-IA.I (T) dated 14.10.2014. Another amendment in EC for change in coal source to 100% Imported Coal and 30% domestic coal from e-auction in case of shortfall of imported coal was accorded by MoEF&CC vide memo no. J-13012/16/2014-IA.I (T) dated 17.10.16. Extension of validity of the EC was given by MoEF&CC from 12.04.2015 to 12.04.2017 vide memo no J-13012/16/2014-IA.I(T) dated 13.08.15 and again from 12.04.2017 to 30.10.2019 vide memo no.J-13012/16/2014-IA.I(T) dated 10.10.17. Change of name of the project proponent in the EC from M/s India Power Corporation (Haldia) Limited to M/s Hiranmaye Energy Limited was done by MoEF&CC vide its memo no J-13012/16/2014-IA.I (T) dated 04.04.2018.

It was observed that the project proponent has now applied for amendment in the EC for usage of domestic coal with the flexibility of use of imported coal so as to maintain continuous generation of power by the plant. The proposal has been examined in accordance with the EIA Notification, 2006. After appraising, SEAC has recommended the proposal to SEIAA with the condition for use of coal with ash content not exceeding 34% and to comply with the prevailing standards and environmental norms. SEIAA approved the recommendation of SEAC and decided to issue amended EC, incorporating all previous EC and amendments received for the project, in supersession of all previous EC and its amendments.

Environmental Clearance (as amended) for the proposed Coal based Thermal Power Plant (450 MW) by Hiranmaye Energy Limited (formerly known as M/s. India Power Corporation (Haldia) Ltd. at JL No.-94, Mouza – Kismatshibrampur, JL. No. - 170, Mouza – Tentulberia, JL. No. - 147, Mouza – Sovarampur, JL. No.- 146, Mouza - Kashbere, PS. Bhabanipur, Haldia, Dist.-- PurbaMedinipur, West Bengal by M/s Hiranmaye Energy Limited.

It is noted that the salient features of the project for which Environmental clearance has been considered are as follows:

- i) Location of the site - JL No.- 94, Mouza – Kismatshibrampur, JL. No. - 170, Mouza – Tentulberia, JL. No.- 147, Mouza – Sovarampur, JL. No. - 146, Mouza- Kashbere, PS. - Bhabanipur, Haldia, Dist.PurbaMedinipur, West Bengal.
- ii) Land area – 300 acres.
- iii) Proposed installation – 3 Nos. FBC Boiler (capacity 405 TPH each), 3 x150 MW Steam Turbine Generators.
- iv) Raw Materials – Coal 2.154 Million TPA, LDO 3350 KL/annum required for start-up operation.
- v) Emissions Control System – FBC Boilers to be provided with ESP and common stack of height 220 m from GL.
- vi) Water Requirement – 35952 m³/day (River Hooghly – 33744 m³/day, Guard Pond - 2208 m³/day)
- vii) Waste Water – Boiler blow down, Cooling Tower, DM Plant effluent etc. will be treated and stored in Guard Pond and reused, no effluent will be discharged outside the plant premises.
- viii) Solid Waste – Fly Ash to be used in Cement Plant and Brick Manufacturing units, Bottom Ash to be used for land filling.
- ix) Power Requirement – 5 MW, WBSEDCL (for construction and start-up power).

State Level Environment Impact Assessment Authority (SEIAA), examined the proposal and also perused the recommendations of the State Level Expert Appraisal Committee (SEAC). After due consideration of the project proposal, and after considering the recommendations of the State Level Expert Appraisal Committee (SEAC), the State Level Environment Impact Assessment Authority (SEIAA) accords Environmental Clearance to the project as per provisions of the EIA notification no. S.O.1533 (E) dt. 14th September, 2006 of Ministry of Environment & Forests, GOI in supersession of all previous EC and amendments, subject to strict compliance of terms and conditions as mentioned below:

A. SPECIFIC CONDITIONS:

- i) The gaseous and particulate emissions from various process units should conform to be load/mass based standards prescribed by the Ministry of Environment & Forests and the State Pollution Control Board from time to time. At no time the emission level should go beyond the prescribed standards.
- ii) The FBC boilers should be provided with dedicated high efficiency ESP and a tri-flue common stack of height 220 m from G.L. as proposed. Space provision shall be kept for retrofitting of FGD, if required at a later date. Stack emission (PM) should not exceed 50 mg/Nm³. Stack emissions should be monitored at regular intervals and records should be maintained.
- iii) Continuous on-line stack monitoring facility shall be installed for measurement of SPM, SO₂ and NO_x. Regular monitoring of ground level concentration of parameters such as PM₁₀, PM₂₅, NO_x, SO₂ per the National Ambient Air Quality Standards shall be carried out in the impact zone. At least three nos. ambient air quality monitoring stations should be installed for monitoring of ambient air quality as per the Emission Regulations Part-III of CPCB.
- iv) Prior permission from HDA and concerned authority to be obtained for sourcing of Hooghly river water.

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- v) Coal handling plant will be provided with Bag Filters for dust extraction. Coal crusher should be provided with dust suppression system. Regular cleaning of ducts should be carried out.
- vi) Covered storage yard for raw materials to be provided. Water sprinkling arrangement should be provided at Coal stockyard. Loading and unloading operations should not be carried out in open areas. Adequate measures should be adopted for controlling fugitive emission during transportation of raw materials and fly ash.
- vii) Adequate measures to be adopted for control of fugitive emission. All transfer points should be provided with Dry fogging system.
- viii) Process effluent discharge is not permitted. Overflow from ash pond if any, in case of emergency shall be recirculated in the system after necessary treatment. Cooling water and boiler blow down should be recycled after treatment. Acid effluent from DM Plant must be neutralised before discharge to the guard pond. "Zero discharge" of effluent should be ensured.
- ix) Fly ash shall be collected from various hopper like ESP, economizer, air pre-heater etc. in dry form and stored in silos by pneumatic conveying system. Silos must be provided with bag filter for controlling of dust emission.
- x) Bottom ash shall be collected in semi wet extraction system. Ash pond for temporary storage shall be lined with impervious lining viz. stone and Geo-Synthetic lining material to prevent leaching. Adequate safety measures shall be implemented to protect the ash dyke from getting breached.
- xi) Fly ash shall be used in a phased manner as per the provisions of the notification issued by MoEF on Fly ash utilisation vide no.S.O.2804 (E) dated 3rd November, 2009. The unit should install Fly ash brick manufacturing unit and should comply with the Order issued by the Department of Environment, Govt. of West Bengal vide Memo no. EN/1819/T-IV/I/001/ 2007 dated 22.08.2008. The unit also comply with the different directions issued by the State Fly Ash Management Committee time to time.
- xii) All possible measures should taken to ensure that no secondary emission of dust generated during loading and unloading and transportation of ash for ultimate disposal. Transportation of ash should be carried in closed vessels. If the same is not available ash should be transported in trucks covered with tarpaulin so that there is no spillage of ash during transportation.
- xiii) The industry must comply with the provisions of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.
- xiv) Adequate provisions should be made for harvesting rainwater. The unit may develop water body of adequate capacity to harvest rainwater. The harvested water should be used for plantation, firefighting, washing and cleaning etc. Recharging of Ground water is not permitted.
- xv) Storage facility for auxiliary liquid fuel such as LDO shall be made in the plant area where risk is minimum to the storage facilities. Mock drills shall be conducted regular basis and based on the same, modifications required, if any shall be incorporated in Disaster Management Plan.
- xvi) Ambient noise level should not exceed the permissible unit. The overall noise levels in and around the plant area 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 should conform to the standards prescribed under EPA Rules, 1989 viz. 75 db(A) Leq (daytime) and 70 dB(A) Leq. (night time) and its subsequent amendments.

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- xvii) Green belt shall be developed within and around the plant premises in consultation with DFO/West Bengal Wasteland Development Corporation Ltd./ West Bengal Biodiversity Board. Atleast 33% of the land area should be covered by plantation.
- xviii) All internal roads should be concreted/pitched. Proper lighting and proper pathway inside the factory premises should be constructed to ensure safe vehicular movement. Provision of separate pathway for entry and exit of vehicle should be considered. Vehicles should conform to pollution under control (PUC) norms. Proper housekeeping shall be maintained within the premises. Solar lighting should be used as far as practicable.
- xix) Health and safety of workers should be ensured. Workers should be provided with adequate personnel protective equipment and sanitation facilities. Occupational Health Surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- xx) Adequate measures to be adopted to ensure industrial safety. Proper fire detection and protection systems to be provided to control fire and explosion hazards.
- xxi) Corporate Social Responsibility programmes should be carried out, as proposed.
- xxii) The implementation and monitoring of Environmental Management Plan should be carried out, as proposed.
- (xxiii) The project proponent will use domestic coal with the flexibility of use of imported coal so as to maintain continuous generation of power by the plant subject to the condition of use of coal with ash content not exceeding 34% and compliance of prevailing standards and environmental norms. Use of domestic coal/ blend of domestic and imported coal is subject to the following additional conditions-
 - a) Provisions of MoEF&CC's Notification No. G.S.R. 02(E) dated 02.01.2014 should be strictly adhered to and the project proponent should submit its compliance report to the Regional Office of MoEF&CC and WBPCB.
 - b) The use of imported or blended coal shall be done only after PG test with the design domestic coal and strictly in compliance with all other recommendations/ conditions of BHEL.
 - c) The Sulphur and ash contents in the imported coal shall not exceed 0.6% and 20% respectively any given time. The Sulphur and ash contents in the blended coal shall not exceed 0.5% (maximum as per EIA/EMP) and 30% respectively any given time as indicated in the PP's presentation. In case of variation of coal quality at any given point of time, prior approval of MoEF&CC shall be obtained. Ash % in domestic coal shall be governed by the MoEF&CC policy/Guidelines.
 - d) The CSR Budget for the construction phase be suitably enhanced by Rs. 20 to 25 Lacs per annum as agreed to during the deliberations with MoEF&CC. However, the budget for operation phase cannot be less than that or the amount as per the CSR policy of GOI till the operation of the plant.
 - e) The standards stipulated by the Ministry vide notification dated 07.12.2015 (as amended from time to time) for Thermal Power Plants shall be duly complied.
- (xxiv) The coal transportation shall be by rail to the extent feasible and the transportation by road shall be through mechanically covered trucks, if feasible, else through tarpaulin covered trucks.
- (xxv) Avenue plantation of 2/3 rows all along the road shall be carried out by the project proponent at its own expenses in consultation with the State Government Authorities.
- (xxvi) Periodic maintenance of the road shall be done by the project proponent at its own expenses and shall facilitate the traffic control on the road in consultation with the State Government Authorities.
- (xxvii) The Action Plan formulated by CPCB/ SPCB for Haldia shall be complied with.

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- (xxviii) The PP shall advertise in the newspaper and place on the website, the EC and its amendments issued to the project for public information.
- (xxix) Vision document specifying prospective plan for the site shall be formulated and submitted to the Regional Office of the Ministry within six months.
- (xxx) Harnessing solar power within the premises of the plant particularly at available roof tops shall be undertaken and status of implementation shall be submitted periodically to the Regional Office of MoEF&CC.
- (xxxi) A long term study on radio activity and heavy metals contents on coal to be used shall be carried out through a reputed institute. Thereafter mechanism for an in-built continuous monitoring for radioactivity and heavy metals in coal and fly ash (including bottom ash) shall be put in place.
- (xxxii) Mercury emissions from stack shall also be monitored on periodic basis.
- (xxxiii) 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.
- (xxxiv) Fly Ash shall not be used for agricultural purpose. No mine void filling will be undertaken as an option for ash utilization without adequate lining of mine with suitable media such that no leachate shall take place at any point of time. In case, the option of mine void filling is to be adopted, prior detailed study of soil characteristics of the mine area shall be undertaken from an institute of repute and adequate clay lining shall be ascertained by the State Pollution Control Board and implementation done in close co-ordination with the State Pollution Control Board.
- (xxxv) Green belt shall also be developed around the Ash Pond over and above the Green belt around the plant boundary.
- (xxxvi) An Environmental Cell comprising of at least one expert in environmental science/ project engineering, ecology, occupational health and social science, 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 Plant who would be accountable for implementation of environmental regulations and social impact improvement/mitigation measures.
- (xxxvii) The project proponent shall formulate a well laid Corporate Environment Policy and identify and designate responsible officers at all levels of its hierarchy for ensuring adherence to the policy and compliance with the conditions stipulated in this clearance letter and other applicable environmental laws and regulations.
- (xxxviii) CSR schemes identified based on Public Hearing issues and 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.
- (xxxix) For proper and periodic monitoring of CSR activities, a CSR committee or a Social Audit committee or a suitable credible external agency shall be appointed. CSR activities shall also be evaluated by an independent external agency. This evaluation shall be both concurrent and final.

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B. GENERAL CONDITIONS:


- i) The project proponent shall comply with all the environmental protection measures and safeguards recommended. Further, the unit must undertake socio-economic development activities in the surroundings villages like community development programmes, educational programmes, drinking water supply and health care etc.
- ii) All the conditions, liabilities and legal provisions contained in the EC shall be equally applicable to the successor management of the project in the event of the project proponent transferring the ownership, maintenance of management of the project to any other entity.
- iii) Provision should be made for the supply of kerosene or cooking gas to the labourers during construction phase. All the labourers to be engaged for construction works should be screened for health and adequately treated before issue of work permits.
- iv) The project proponent should make financial provision in the total budget of the project for implementation of the environmental safeguards. The project authorities will provide requisite funds both recurring and non-recurring to implement the conditions stipulated by the SEIAA along with the implementation schedule for all the conditions stipulated herein. The funds so provided should not be diverted for any other purpose.
- v. No further expansion or modifications in the plant should be carried out without prior approval of the State Level Environment Impact Assessment Authority.
- vi. The West Bengal Pollution Control Board, who would be monitoring the implementation of environmental safeguards, should be given full cooperation, facilities and documents/ data by the project proponents during their inspection. A six monthly compliance report and the monitored data along with statistical interpretation shall be submitted to the WBPCB regularly. A complete set of all the documents should also be forwarded to the State Level Environment Impact Assessment Authority and to the Regional Office of MoEF&CC, Bhubaneswar.
- vii. In case of any violation of the conditions laid down in this Environmental Clearance, Section 16 of The Environment (Protection) Act, 1986, will be applicable.
- viii. In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by the SEIAA.
- ix. The State Level Environment Impact Assessment Authority reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environment (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time-bound and satisfactory manner.
- x. The Project Proponent should inform the public that the project has been accorded environmental clearance by the SEIAA and copies of the clearance letter are available with the State Pollution Control Board/Committee and may also be seen at website of the SEIAA (<http://environmentwb.gov.in>). This should be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned.

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- xi. The Project Authorities should inform the State Pollution Control Board as well as the SEIAA, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work/project implementation.
- xii. Prior Consent- to- English (NOC) must be obtained from WBPCB for the proposed expansion project. All other statutory clearances should be obtained by project proponent from the competent authorities.
- xiii. The environmental clearance accorded shall be valid up to 30.10.2019 for the proposed project.
- xiv. The above stipulations would be enforced along with those under the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, the Public Liability Insurance Act, 1991, the Environmental Impact Assessment Notification, 2006 and their amendments.
- xv. The contact details of the proponent and the name of the consultant are given below –

Name of the Contact person with Designation	Mr. Somesh Dasgupta, President
Address	M/s Hiranmaye Energy Limited, Plot No. X-1,2 & 3, Block EP, Sector – V, Salt Lake City, Kolkata – 700 091.
Email	Somesh.dasgupta@indiapower.com
Telephone Number, Fax Number	(033)266094305; 91-9831054524

Yours faithfully,


(Niraj Singhal, IFS)
Chief Environment Officer &
Member Secretary, SEIAA

No. 3224 / EN/T-II-1/001/2009/1(4)

Date: 26 / 09 /2018

Copy forwarded to :-

1. Secretary, SEAC & M.S. WBPCB
2. Officer-in-Charge, Regional Office (Eastern Zone), Ministry of Environment & Forests, Government of India, A-3, Chandrashekharapur, Bhubaneswar – 751 023, Orissa.
3. Member Convener, Monitoring Committee for Environmental Clearance, WBPCB.
4. Guard file / Record file.

Sd/-
(Niraj Singhal, IFS)
Chief Environment Officer &
Member Secretary, SEIAA

