

NOC NO124870

# WEST BENGAL POLLUTION CONTROL BOARD

Paribesh Bhawan 10A, Block-LA, Sector-III Bidhannagar, Kolkata-700 098

Memo No. 895-2N-123/2008(E)

Dated 12.11.2014

From : Member Secretary, West Bengal Pollution Control Board



To: M/s.INDIA power corporation(Haldia) LTD.
plot=X1=2&3.Block Ep. Sector=V.
Salt Lake City, Kolkata=700 091.

Sub: Consent to Establish (NOC) from Environmental Point of View

Ref: i Your letter No Pres(CA)/PC(H)L/ENV/007/44 Dated 31.10.2014
ii. NOC issued by the Board vide Memo no.550-2N-123/2008(E)dtd.
22.06.2012.
iii. Amendment of EC issued by MOEF vide no.J-13012/16/2014-IA.I(1)
dtd. 14.10.2014.

Dear Sirs.

In response to the application for Consent to Establish (NOC) for proposed Unit of M/s ...India....

Power Corporation (Haldia) Ltd.

for manufacturing sterage installation of 3X150MW Coal fired thermal power plant in cancellation with earlier NOC issued by the Board vide no.550-2N-123/2008(2) atd.22.06.2012 for installation of 3X135MW captive power plant at total land area - 198.32acres as per possession certificate of HDA vill-Kasbere P.O. Shib rammacar ps. Bhabaning Faldia, Purba this is to inform you that this Board hereby grants the Consent to Establish (NOC) from the environmental point of the above subject to the following conditions and special conditions annexed. \*Medinipur-721635.

- The quality of sewage and trade effluent to be discharged from your factory shall satisfy the permissible limits as prescribed in IS: 2490 (Pt. I) of 1974, and/or its subsequent amendment and Environment (Protection) Rules 1986.
- Suitable measures to treat your effluent shall be adopted by you in order to reduce the pollutional load so that the quality of the effluent satisfies the standards mentioned above.
- You shall have to apply to this Board for its consent to operate and discharge of sewage and trade effluent according to the provisions of the water (Prevention & Control of Pollution) Act, 1974. No sewage or trade effluent shall be discharged by you without prior consent of this Board.
- 4. All emission from your factory shall conform to the standards as laid down by this Board.
- No. emission shall be permitted without prior approval of this Board and you shall apply to this Board for its consent to operate and atmospheric emission as per provision of the Air (Prevention & Control Pollution) act, 1981.
- 6. No industrial plant, furnace, flues, chimneys, control equipment, etc. shall be constructed/reconstructed/ erected/re-erected without prior approval of this Board.

W B Pollution Control Board Dept. of Environment, GoWB

#### NOC NO124870

- You shall comply with
  - Water (Prevention and Control of Pollution) Cess Act, 1977, if applicable.
  - Water (Prevention and Control of Pollution ) Cess Act, 1978, if applicable.
  - (iii) Environment (Protection) Act, 1986
  - (iv) Environment (Protection) Rules, 1986
  - Hazardous Wastes (Management and Handling) Rules, 1989 and Amended Rules, 2000 (v)
  - Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 and Amended Rules, 2000 (vi)
  - Manufacture, Use, Import and Storage and Hazardous Micro-Organisms, Genetically Engineered Organisms (vii) or Cell Rules, 1989
  - (viii) The Public Liability Insurance Act, 1991 and Amended Act, 1992
  - The Public Liability Insurance Rules, 1991 and Amended Rules 1993 (ix)
  - Biomedical Wastes (Management & Handling) Rules, 1998 and Amended Rules 2000 if applicable. (x)
  - (xi) Recycled Plastics Manufacture and Usage Rules 1999, if applicable and
  - (xii) Ozone Depleting Substances (Regulation & Control) Rules, 2000, if applicable
- You will have to abide by any other stipulations as may be prescribed by any authority/local bodies/Government Departments etc.

#### SPECIAL CONDITION:

Gross capital investment of the project: Rs. 24990.59 Million. please refer to annexure attached herewith.

Any violation of the aforesaid conditions shall entail cancellation of this Consent to Establish (NOC)

Yours faithfully,

1) why 2/11/204 Member Secretary, / SR. ENV. ENGR.
West Bengal Pollution Control Board
(EIM CELL)

Memo No. 895 - 2N-123/2008(E) Jd. 12.11.2014. Copy forwarded for information to:

Dateduironmental Engineer B Pollution Control Board

- Chief Inspector of Factories, Government of West Bengal, N. S. Building, Kolkata-700 001ment, Gown 1.
- 2. Director of Industries/Director of Cottage & Small Scale Industries, Government of West Bengal, N. S. Building, Kolkata-700 001
- 3. Guard file, West Bengal Pollution Control Board.
- Environmental Engineer, I/II/Alipur R.O./Howrah R.O./Hooghly R.O./B.R.O./D.R.O./Haldia R.O./S.R.O./ 4

Asansol/ Sub-R.O./WBPC Board

Himalaya Bhawan Delhi Road, Dankuni

Dist. Hooghly

Vill, Panpur Kalyani Expressway

P.O. Narayanpur Dist. 24 Pgs. (N)

Sahid Khudiram Sarani City Centre, Durgapur-16 Dist. Burdwan

10, Camac Street 2nd Floor Kolkata-700 017

Paribesh Bhawan 10A, LA-Block, Sector-III Salt Lake City, Kolkata - 700 098

Block-05 at 40 Flats Complex Adjacent to Priyambada Housing Estate

Paribahan Nagar Matigara, Siliguri Dist.-Darjeeling

P.O.: Khanjanchak, P.S. Durgachak Haldia-721602 Dist.: Purba Medinipur

Satya Chowdhury Indoor Stadium Balurchar Bandh Road Malda-732101

Asansol Sub-Regional Office ADDA Commercial Market (2nd Floor) Opposite Asansol Fire Station G.T. Road, Asansol-713 301

12/11/2014 Member Secretary/SR.E.E. West Bengal Pollution Control Board Ironmental (EIM CELL)

W B Pollution Control Board Dept. of Environment, GoWR

### Annexure to NOC Sl. No. NO124870

Special Conditions issued to M/s. India Power Corporation (Haldia) Ltd.

for the proposed 3x150 MW Coal based Thermal Power Plant instead of 3x135 MW Captive power plant at Vill-Kashbere, Haldia, PS - Bhabanipur, PO - Shibramnagar, Pin - 721635, Dist. - Purba Medinipur, West Bengal.

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#### A) Emission :-

- 1) Boilers 3x505 TPH, (Power Generation Capacity: 3x150 MW).
- 2) Stack for Boilers tri-flue common stack of height 220 m from G.L. to be provided with individual 2 nos. 7 field ESP having adequate specific collection area. The unit should comply with the emission standard of PM 50 mg/Nm³.
  Stacks should have sampling port, platform and ladder as per the Emission Regulation Part-III of

CPCB.

## B) Effluent :-

- 1) Cooling Tower Blowdown will be sent to Guard Pond and recycled.
- 2) Boiler Blowdown will be sent to Guard Pond and recycled .
- 3) DM Plant effluent will be sent to Guard Pond after neutralization.
- 4) Other wastes from process including clarifier sludge and back wash from filtration rejects will be sent to Sludge Pond and overflow shall be reused or sent to guard pond.
- 5) Oil Water Separator (OWS) shall be provided for Fuel Oil storage & handling area.
- 6) The unit shall maintain zero discharge. No process waste water shall be discharged out side the plant premises. If any excess water from guard pond is required to be discharged, it should be discharged in conformity with Environmental Standards for discharge of effluent from Thermal Power Plants.
- Domestic effluent will be sent to Guard Pond after proper treatment in STP and reused for landscaping, dust suppression, coal handling plant etc.

## C) Solid Waste :-

- 1. Coal ash to be utilised / disposed of as per MoEF Guidelines.
- 2. Hazardous waste to be disposed as per the provisions of Hazardous Waste (Management ,Handling and Transbondry Movement) Rules,2008.
- 3. Non-hazardous waste to be disposed of environment friendly manner.

## D) General :-

- Noise Control Ambient noise level and equipment noise level not to exceed the permissible limit.
  Provision of acoustic enclosures/ barriers/ shield to be made to reduce noise level.
- 2. No additional machinery / equipment can be installed without prior permission from this Board.
- 3. The unit should obtain 'Consent to Operate' from this Board before commissioning the power plant.
- 4. As proposed, raw water requirement of will be met from Haldia Development Authority. Groundwater shall not be abstracted without prior permission of competent authority as per The West Bengal Ground Water Resources (Management, Control and Regulation) Act, 2005. Regular monitoring of groundwater shall be carried out.
- 5. Covered storage yard for raw materials to be provided. Loading and unloading operations should not be carried out in open areas.
- Two stage combustion process to be adopted to ensure complete combustion of coal and to reduce formation of thermal NO<sub>x</sub>. Low NO<sub>x</sub> combustion and firing system should be adopted to control NO<sub>x</sub> emission from the power plant.
- Proper dust extraction, collection (cyclone / bag filter) and dust suppression systems (water spray) shall be provided in Coal handling plant (CHP), Ash handling plant (AHP) and Transfer points to control fugitive emission.
- Fly ash shall be collected from various hoppers 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.
- 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.

Sr. Environmental Engineer
W B Pollution Control Board
Dept. of Environment, GoWB

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- 10. Fly ash shall be used in a phased manner as per the provisions of the notification issued by MoEF on Fly ash utilization vide no. S.O. 2804(E) dated 3<sup>rd</sup> November,2009. The unit should install Fly ash brick manufacturing unit and should comply with the letter issued by the MoEF for amendment of EC vide no. J-13012/16/2014-IA(T) dated 14.10.2014.
- 11. Stack Opacity Meter and Continuous on-line stack monitoring system shall be provided for criteria pollutants. Concentration of criteria pollutants RSPM (PM<sub>10</sub> and PM<sub>2.5</sub>), SO<sub>x</sub>, NO<sub>x</sub> from stack monitoring as well as ambient air quality monitoring shall be displayed in the website and the display board at the main gate of the plant.
- 12. Ambient air quality monitoring should be carried out in at least three locations.
- 13. Space provision shall be kept for retrofitting FGD, if required.
- 14. Adequate safety measures shall be provided for storage facilities for auxiliary liquid fuel.
- 15. Proper fire detection & protection systems to be provided for controlling fire and explosion hazards.
- 16. The turbine shall be provided with acoustic enclosure. Necessary noise control and abatement measures should be adopted to minimize noise generation during construction and operation phase. Provision of personnel protective equipments like ear plug, ear muffs etc. to be made for people working in high noise area to ensure occupational health and safety of workers. The unit shall conduct health survey.
- 17. Green belt shall be developed within and around the plant premises in consultation with DFO. Atleast 33% of the land area should be covered by plantation. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
- 18. Adequate provisions should be made for harvesting rainwater. Water bodies must be developed for storing of harvested rainwater. The harvested water should be used for plantation, firefighting, washing and cleaning etc. Recharging of Groundwater is not permitted.
- 19. All internal roads will be asphalted to reduce fugitive dust emission during transportation. In case, dredged material is used for landfilling, should not contain any heavy metals.
- 20. Good house keeping shall be maintained. Proper lighting and proper pathway should be constructed inside the plant premises.
- 21. The Environmental Management Plan, Disaster Management Plan, Safety and Emergency Plan and the post project Environmental Monitoring Programme should be implemented as proposed.
- As proposed, the proponent should implement Corporate Social Responsibility Plan with specific financial commitment.
- 23. The unit should comply with the CREP recommendations for power projects.
- 24. After commissioning the unit should submit the Annual Environmental Audit Statement for every calendar year by 30<sup>th</sup> September of the following year to the Planning Cell of the State Board.
- 25. The proponent should strictly abide by the conditions stipulated in the Environmental Clearance accorded by the SEIAA, Govt. of West Bengal issued vide memo no. EN/1125/T-II-1/001/2009 dated 12.04.2010 and amendment of EC issued by MoEF vide no. J-13012/16/2014-IA(T) dated 14.10.2014.
- 26. No further expansion or modifications in the plant should be carried out without prior approval of the State Environmental Impact Assessment Authority & the State Board.
- 27. The project proponent shall upload the status of compliance of Environmental Clearance conditions in their website and periodically update the same.
- 28. This NOC is valid up to 31.10.2019 for setting up 3x150 MW Coal based Thermal Power Plant in cancellation with earlier NOC issued by the Board vide memo no. 550-2N-123/2008(E) dated 22.06.2012.
- 29. The unit should use beneficiated coal (not containing ash content more than 34%) as per notification issued by MoEF vide G.S.R no 560(E) dated 19th September, 1997.

Member Secretary
West Bengal Pollution Control Board

Sr. Environmental Engineer
W B Pollution Control Board
Dept. of Environment, GoWB