

Government of the People's Republic of Bangladesh

**Department of Environment**

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Head Office, Paribesh Bhaban

E-16 Agargaon, Dhaka-1207

Memo No : DoE/Clearance/5062/2011/206

Date: 05/08/2013

**Subject: Approval of Environmental Impact Assessment (EIA) Report for Proposed Khulna 1320 MW Coal Based Thermal Power Plant Construction Project at Rampal Upazila under Bagerhat district..**

**Ref:** Your Application dated 27/10/2011, 28/11/2011, 29/04/2012, 15/07/2012, 05/08/2012, 05/09/2012, 16/01/2013, 02/06/2013 and 09/07/2013.

With reference to the above, the Department of Environment (DOE) is pleased to approve Environmental Impact Assessment (EIA) Report for Proposed Khulna 1320 MW Coal Based Thermal Power Plant Construction Project at Rampal Upazila under Bagerhat district. This approval authorizes and regulates the following activities:

1. This EIA Report is approved only for 1320 MW Khulna Coal Based Power Plant. Any expansion or extension of this power plant will require obtaining further Environmental Clearance with additional EIA Study.
2. The coal specification and power plant technology should be maintained as per EIA Report. In case of any changes in design the proponent must obtain consent from DoE.
3. Project Proponent may undertake activities for land development and infrastructural development of the project.
4. Project Proponent may open L/C (Letter of Credit) for importing machineries for the project which shall also include machineries relating to waste treatment plant and other pollution control devices.
5. The activity under Proposed Khulna 1320 MW Coal Based Thermal Power Plant Construction Project shall not release any pollutant that affect human health or will have damaging impact on the environment or natural resources.
6. Proper and adequate mitigation measures shall be ensured throughout preparation, construction and operation period of the proposed Khulna 1320 MW Coal Based Thermal Power Plant Project activities.
7. Any heritage sight, ecologically critical area, and other environmentally, religious and archeologically sensitive places shall be kept protected during project construction phase.
8. Environment friendly construction and development practices shall be followed that minimize loss of habitats and fish breeding, feeding & nursery sites.

9. Construction works shall be restricted to day time hours so as to avoid/mitigate the disturbance of local lives as well as implementation schedules of the works shall be notified in advance to nearby residents.
  10. Proper and adequate sanitation facilities shall be ensured in labor camps throughout the proposed project period.
  11. In order to control noise pollution, vehicles & equipment shall undergo regular maintenance; working during sensitive hours and locating machinery close to sensitive receptor shall be avoided.
  12. No solid waste can be burnt in the project area. An environment friendly solid waste management system should be in place during the whole period of the project in the field.
  13. Proper and adequate on-site precautionary measures and safety measures shall be ensured so that no habitat of any flora and fauna would be endangered or destructed.
  14. All the required mitigation measures suggested in the EIA report along with the emergency response plan are to be strictly implemented and kept operative/functioning on a continuous basis.
  15. To control dust, spraying of water over the earthen materials should be carried out from time to time.
  16. Storage area for soils and other construction materials shall be carefully selected to avoid disturbance of the natural drainage.
  17. Adequate considerations should be given to facilitate drainage system for run off water from rain/tidal surge.
  18. Adequate facilities should be ensured for silt trap to avoid clogging of drain/canal/water bodies.
  19. The entire coal handling system should be designed as an enclosed (and not only covered) conveyor system. There should be integrated dust control system with dust extraction and bag filters at unloading areas and at each transfer points on the conveyor system.
  20. Coal plant should have high-efficiency bag filter for arresting dust emissions.
  21. Coal should be stored in a covered storage yard.
  22. The entire coal stockyard should be covered with water sprinkler provided with automated moisture sensor to control self-combustion.
  23. 100% utilization of fly ash and bottom ash should be planned and implemented throughout the operation of the plant. There should only be a provision of small ash dyke that will not exceed 25 (twenty five) acres of land to store residual ash.
  24. Integrated dry ash handling, loading, unloading and transportation system should be established.
  25. There should be adequate and properly sized and designed dry ash silo with appropriate conveying system.
  26. Bottom ash should be extracted, crashed and stored in silos for utilization with proper collection and conveying system.
- 2



27. Resettlement and Rehabilitation of the displaced population (including those who do not own land) should be done properly.
28. Resettlement plan should be properly implemented and people should be adequately compensated.
29. Construction material should be properly disposed off after the construction work is over.
30. As described in the report environmental monitoring should be strictly followed and monitoring report should be shared with DOE to ensure the environmental management properly.
31. All activities (pre-construction, construction and post-construction stage) should be implemented according to EMP clearly listed in the EIA report.
32. A third party/independent monitoring bodies excluding JVC/BPDB should be engaged immediately for monitoring of all the activities during pre construction, construction and operation phases as per monitoring plan of EIA report and monitoring report must be submitted to Bagerhat District Office, Khulna Divisional Office and Headquarters of the Department of Environment simultaneously.
33. Regular monitoring of the susceptible places of Sundarbans for protecting ecosystem, biodiversity and forest coverage should be made using latest high resolution image for keeping ambient environment
34. Air, water, soil, biological and social data should be monitored regularly with a network monitoring system with a view to assess the natural quality of the Sundarbans and other fragile ecosystem and report of monitoring results should be submitted to Bagerhat District Office, Khulna Divisional Office and Headquarters of the Department of Environment simultaneously.
35. There should be regularly disclosure of the report through workshops and websites and responses should be taken care accordingly.
36. Online air and water quality monitoring system should be made functional throughout the life of the plant.
37. Management Information System (MIS) are to be developed for this coal based power plant. The scope of MIS services will obviously include representing the real time monitored data especially environmental parameters displaying at Bagerhat District Office, Khulna Divisional Office and Headquarters of the Department of Environment, BPDB and other concern agencies/Ministries. The MIS should be web based for accessing every individual to show the real time monitored records.
38. JVC should provide all sort of logistics support to DOE and other relevant agencies for monitoring environment related items/events
39. No ground water should be allowed to use for plant purposes.
40. Conduct stakeholder meetings on regular basis for better performance the project as a whole
41. Additional Environmental baseline data to be collected as suggested in the EIA report and conveyed to DOE and other concern authorities.

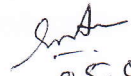




42. The Environmental Management Plan under the EIA study shall strictly be implemented and kept functioning on a continuous basis.
43. The project authority shall submit a detail work plan with time schedule of development activities at least 7 (seven) days ahead of the work commences in the field to the Bagerhat District Office, Khulna Divisional Office and Headquarters of the Department of Environment simultaneously.
44. Environmental Monitoring Reports according to specific format specified in the EIA Report shall be made available simultaneously to DOE Bagerhat District Office, Khulna Divisional Office and Headquarters on a monthly basis during the construction period of the project.
45. The following records must be kept in respect of any samples required to be collected for the purposes of environmental monitoring activities :
  - (a) the date(s) on which the sample was taken;
  - (b) the time(s) at which the sample was collected;
  - (c) the point at which the sample was taken; and
  - (d) the name of the person who collected the sample.
46. The results of any monitoring required to be conducted under this EIA report must be recorded.
47. In case of any emergency, the following information shall immediately be reported to Bagerhat District Office, Khulna Divisional office and Headquarters of the Department of Environment (DOE) simultaneously
  - a) Nature of incident (oil spill, fire, accident, collision, land slide etc.)
  - b) Personnel affected (injured, missing, fatalities, etc.)
  - c) Emergency support available and its location (standby transport, medical facilities, etc.)
  - d) Weather conditions
  - e) Current operations (abandoning the site, fire fighting, etc.)
48. The project authority or its employees must notify the Department of Environment of incidents causing or threatening material harm to the environment as soon as practicable after the person becomes aware of the incident.
49. All pollution incidents shall be reported immediately and simultaneously to the Bagerhat District Office, Khulna Divisional Office and Headquarters of the Department of Environment (DOE) in Dhaka.
50. Appropriate permission would require to be obtained from the Forest Department in favor of cutting/felling of any plant/tree/sapling forested by any individual or government before doing such type of activity.
51. Re-vegetation and replantation under green belt activities shall be undertaken in consultation with the Forest Department according to those mentioned in the EIA report.
52. Climate Change impacts and maximum storm surge height shall have to consider at the design and construction phase.
53. A separate EIA/morphological study shall have to be conducted for coal transportation and river dredging to develop sound environmental management plan towards conservation of ecosystems and biodiversity.



54. A full-fledged institutional setup for EHS and CSR must be put in place before operation of the power plant.
55. The project authority shall extend active cooperation to DOE officials to facilitate their visit to the site as and when necessary.
56. Violation of any of the above conditions shall render this approval void.
57. Any injunction on this project from the Honorable Supreme Court/High Court Division shall render this approval void.
58. Without installation of 275 Meter Height Chimney, Effluent Treatment Plant (ETP), Waste Water Treatment Plant (WWTP), Settling Pond, Desalinization Plant, API Oil Water Separator, High Efficiency Electro Static Precipitator (ESP), 'closed-loop' Flue Gas Desulfurization (FGD), Low NOx Burner, online air and water quality monitoring system and other pollution control equipment and obtaining Environmental Clearance Certificate the proponent shall not start operation of the project.
59. This EIA Approval has been issued with the approval of the appropriate authority.

  
05.08.2013

(Syed Nazmul Ahsan)  
Deputy Director (Environmental Clearance)  
&  
Member Secretary  
Environmental Clearance Committee  
Phone # 02-8181778

**Project Director (Additional Chief Engineer)**

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Bangladesh Power Development Board (BPDB)  
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1, Abdul Goni Road, Dhaka-1000, Bangladesh.

**Copy Forwarded to :**

- 1) Secretary, Ministry of Environment and Forests, Bangladesh Secretariat, Dhaka.
- 2) Secretary, Power Division, Ministry of Power, Energy & Mineral Resources, Bangladesh Secretariat, Dhaka.
- 3) Chairman, Bangladesh Power Development Board, Biddyt Bhaban, 1, Abdul Goni Road, Dhaka.
- 4) Director, Department of Environment, Khulna Divisional Office, Khulna.
- 5) Deputy Director, Department of Environment, Bagerhat District Office, Bagerhat.
- 6) Assistant Director, Office of the Director General, Department of Environment, Head Office, Dhaka.