# State Level Environment Impact Assessment Authority, Uttar Pradesh

**Directorate of Environment, U.P.**
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**Ref. No.** 1074 **/SEAC/365/2009/AD(Y)** **Date..9.July, 2010**

To,

**Dr. A. V. Singh,**
**Head (Distillery Business & EHS)**
**M/s Bajaj Hindusthan Ltd.,**
**B-10, Sector-03,**
**NOIDA.**

**Sub: Regarding the Environmental Clearance for 90 MW Indpendent Coal based Thermal Power Plant at Village- Kundarkhi, Tehsil Sadar, Block- Jajheri, District- Gonda, M/s Bajaj Hindusthan Ltd..**

Dear Sir.

Please refer to your letter dated 10-06-2010 addressed to the Secretary, State Level Expert Appraisal Committee, Govt. of Uttar Pradesh, Vineet Khand-1, Gomti Nagar, Lucknow on the subject as above. The State Level Expert Appraisal Committee has considered your application in its meeting dated 30/06/2010.The Committee noted that terms of reference for the proposed project were issued vide letter No. 34/Parya/SEAC/365/09 dated 6th January, 2010. The Committee also observed the decision taken by the SEIAA in its meeting dated 30/04/2010 on the request made by the project proponents through letter dated 19/03/2010. Public Hearing for the project was held on 29-5-2010 and the Public Hearing Report was communicated to Directorate of

Environment through letter No.G-08760/C-6/NOCV/Public Hearing/ Kundarkhi/ Faz. Dated 7.6.10. The Committee was given to understand by the representatives of project proponents present in the meeting that:

1. The Environmental Clearance is sought for proposed 90 MW Independent coal based Thermal Power Plant at Village Kundarkhi, Tehsil Sadar, Block- Jajheri, District-Gonda, M/s Bajaj Hindusthan Ltd..

2. The total land requirement is 51 acres out of which 16.0 acres is for plant and machinery,25.0 acres is for green area and 10 acres is for ash pond.

3. Proposed Water consumption is 6984 kld which shall be sourced from ground water.

4. Coal requirement for the proposed project is 1600MT/day.

5. The project proposal is covered under category "1d" of the EIA notification dated 14/09/06.

Based on the recommendations of the State Level Expert Appraisal Committee (meeting held on 30-06-2010) on the aforesaid project the State Level Environment Impact Assessment Authority (meeting held on 08-07-2010) has decided to grant the Environmental Clearance to the project subject to the effective implementation of all general conditions prescribed by the Committee earlier and following specific condition:

1. Consent for establishment shall be obtained from U.P.Pollution Control Board and a copy shall be furnished to the SEIAA, U.P. before taking up any construction activity at the site.
2. Compliance regarding all the issues raised at the Public Hearing shall be ensured and communicated.
3. The commitments as proposed by the project proponents through letter dated 3.6.2010 addressed to District Collector, District Gonda shall be duly complied with.
4. A stack of 110 metres height shall be provided with stack monitoring facility (sampling code etc.) for NOX and particulate matter. Exit velocity

of flue gases shall not be less than 15 metres per second. The data collected shall be analysed and submitted regularly to the Ministry.

5 High efficiency electro-static precipitator (ESP) shall be installed to ensure that particulate emission does not exceed 100 mg/$Nm^3$.

6. Adequate dust extraction and dust separation system in dusty areas such as in fuel handling and ash handling points, transfer areas and other vulnerable dusty areas shall be provided.

7. Water requirement of 6984 $metre^3$ /day shall be met from ground water. Necessary prior permission for drawl of requisite quantity of ground water for the project shall be obtained from the competent authority.

8. Close cycle cooling system with cooling towers shall be provided.

9. The treated effluents conforming to the prescribed standards shall be recalculated and re-used within the plant. There shall be no discharge outside the plant boundary except during monsoon for storm water. Arrangements shall be made that effluents and storm water do not get mixed.

10. A suitable sewage treatment facility shall be provided and the treated sewage shall be used for raising green belt/plantation.

11. Rain water harvesting should be adopted. Central Ground Water Authority/Board shall be consulted for finalization of appropriate rain water harvesting technology.

12. Regular monitoring of ground water in and around the project area shall be carried out; records maintained and six-monthly reports shall be submitted to the competent authorities.

13. Leq. of noise levels emanating from turbines shall be limited to 75 dBA. For people working in the high noise areas. Requisite protective equipments like ear plugs/ear muffs etc shall be provided. Workers engaged in noisy areas such as turbines, air compressors etc shall be periodically examined to maintain audio metric record and for treatment for any hearing loss including shifting to non-noisy/less noisy areas.

14. Fly ash management shall be done as per fly ash notification of Govt. of India.

15. Appropriate safeguard measures to guard against fire hazards shall be undertaken.

16. A green belt of adequate width and density shall be developed around the plant periphery covering at least 33% of the project area.

17. First aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.

18. Regular monitoring of ground level concentration of SO2, NOX and RSPM (PM10 and PM2.5) including chlorine at work zone shall be carried out in the impact zone and records maintained. In addition, the new parameters mentioned in new NAAQS should also be taken into account. 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. Six-monthly reports shall be submitted to the Government of India also.
19. A separate Environment Management Cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.
20. Half-yearly report on the status of implementation of the stipulated conditions and environmental safeguards shall be submitted to the MoEF, Govt of India/CPCB/SPCB and to this authority.
21. A separate plan for the treatment of DM plant waste should be prepared.
22. Plantation at the point of maximum impact should be undertaken.
23. Separate funds shall be allocated for implementation of environmental protection measures along with item wise breakup. These costs shall be included as part of the project cost. The funds earmarked for the environmental protection measures shall not be diverted for any other purposes and year wise expenditure should be reported to the Govt. of India/CPCB/SPCB and to this authority.
24. The project authorities shall inform 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.
25. In case of any deviation or alteration in the project proposed from those submitted to this authority, a fresh Reference should be made to the authority to assess the adequacy of the conditions imposed and to add additional environmental protection measures required, if any.

The project proponent will have to submit approved plans and proposals incorporating the conditions specified in the Environmental Clearance within 03 months of issue of the clearance. Failing this the environmental Clearance shall be deemed to be cancelled.

Necessary statutory clearances should be obtained and submitted before start of any construction activity. In the event of the violation of the condition the environmental clearance shall be automatically deemed to have been cancelled.

These stipulations would be enforced among others under the provisions of Water (Prevention and Control of Pollution) Act. 1974, the Air (Prevention and Control of Pollution) Act. 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification, 2006 including the amendments and rules made thereafter.

This is to request you to take further necessary action in matter as per provision of Gazette Notification No. S.O. 1533(E) dated 14.9.2006 and send regular compliance reports to the authority as prescribed in the aforesaid notification.

(Dr. C.S. Bhatt)
Member Secretary, SEIAA

Copy for necessary action to:

1. The Principal Secretary, Environment, U.P. Govt., Lucknow.
2. Dr. Nalini Bhatt, Director, Ministry of Environment & Forests,'Govt. of India, Paryavaran Bhavan, CGO Complex, Lodhi Road, New Demi.
3. Regional Office, Ministry of Environment & Forests, (Central Region), Kendriya Bhawan, 5th Floor, Sector-H, Aliganj, Lucknow.
4. The Member Secretary, U.P. Pollution Control Board, PICUP Bhawan, Gomti Nagar, Lucknow.
5. Administrative Officer, Directorate of Environment for monitoring & Web Updation.

(Dr. Yashpal Singh)
Secretary, SEAC &
Director, Environment Directorate,
Govt. of U.P.

**Annex-1**

**General Conditions :**

1. It shall be ensured that all standards related to ambient environmental quality and the emission/effluent standards as prescribed by the MoEF are strictly complied with.
2. It shall be ensured that obtain the no objection certificate from the U P pollution control board before start of construction.
3. It shall be ensured that no construction work or preparation of land by the project management except for securing the land is started on the project or the activity with out the prior environmental clearance.
4. The proposed land use shall be in accordance to the prescribed land use. A land use certificate issued by the competent authority shall be obtained in this regards.
5. All trees felling in the project area shall be as permitted by the forest department under the prescribed rules. Suitable clearance in this regard shall be obtained from the competent authority.
6. Impact of drainage pattern on environment should be provided.
7. Surface hydrology and water regime of the project area within 10 km should be provided.
8. A suitable plan for providing shelter, light and fuel, water and waste disposal for construction labour during the construction phase shall be provided along with the number of proposed workers.
9. Measures shall be undertaken to recycle and reuse treated effluents for horticulture and plantation. A suitable plan for waste water recycling shall be submitted.
10. Obtain proper permission from competent authorities regarding enhanced traffic during and due to construction and operation of project.
11. Obtain necessary clearances from the competent authority on the abstraction and use of ground water during the construction and operation phases.
12. Hazardous/inflammable/Explosive materials likely to be stored during the construction and operation phases shall be as per standard procedure as prescribed under law, Necessary clearances in this regards shall be obtained.
13. Solid wastes shall be suitably segregated and disposed. A separate and isolated municipal waste collection center should be provided. Necessary plans should be submitted in this regards.
14. Suitable rainwater harvesting systems as per designs of groundwater department shall be installed. Complete proposals in this regard should be submitted.
15. The emissions and effluents etc. from machines, Instruments and transport during construction and operation phases should be according to the prescribed standards. Necessary plans in this regard shall be submitted.
16. Water sprinklers and other dust control measures should be undertaken to take care of dust generated during the construction and operation phases. Necessary plans in this regard shall be submitted.
17. Suitable noise abatement measures shall be adopted during the construction and operation phases in order to ensure that the noise emissions do not violate the prescribed ambient noise standards. Necessary plans in this regard shall be submitted.
18. Separate stock piles shall be maintained for excavated top soil and the top soil should be utilized for preparation of green belt.
19. Sewage effluents shall be kept separate from rain water collection and storage system and separately disposed. Other effluents should not be allowed to mix with domestic effluents.

20. Hazardous/Solid wastes generated during construction and operation phases should be disposed off as prescribed under law. Necessary clearances in this regard shall be obtained.
21. Alternate technologies for solid waste disposals (like vermin-culture etc.) should be used in consultation with expert organizations.
22. No wetland should be infringed during construction and operation phases. Any wetland coming in the project area should be suitably rejuvenated and conserved.
23. Pavements shall be so constructed as to allow infiltration of surface run-off of rain water. Fully impermeable pavements shall not be constructed. Construction of pavements around trees shall be as per scientifically accepted principles in order to provide suitable watering, aeration and nutrition to the tree.
24. The Green building Concept suggested by Indian Green Building Council, which is a part of CII-Godrej GBC, shall be studied and followed as for as possible.
25. Compliance with the safety procedures, norms and guidelines as outlined in National Building Code 2005 shall be compulsorily ensured.
26. Ensure usage of dual flush systems for flush cisterns and explore options to use sensor based fixtures, waterless urinals and other water saving techniques.
27. Explore options for use of dual pipe plumbing for use of water with different qualities such as municipal supply, recycled water, ground water etc.
28. Ensure use of measures for reducing water demand for landscaping and using xeriscaping, efficient irrigation equipments & controlled watering systems.
29. Make suitable provisions for using solar energy as alternative source of energy. Solar energy application should be incorporated for illumination of common areas, lighting for gardens and street lighting in addition to provision for solar water heating. Present a detailed report showing how much percentage of backup power for institution can be provided through solar energy so that use and polluting effects of DG sets can be minimized.
30. Make separate provision for segregation, collection, transport and disposal of e-waste.
31. Educate citizens and other stake-holders by putting up hoardings at different places to create environmental awareness.
32. Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized.
33. Prepare and present disaster management plan.
34. The project proponents shall ensure that no construction activity is undertaken without obtaining pre-environmental clearance.
35. A report on the energy conservation measures confirming to energy conservation norms finalize by Bureau of Energy efficiency should be prepared incorporating details about building materials and technology, R & U Factors etc.
36. Fly ash should be used as building material in the construction as per the provision of fly ash notification of September, 1999 and amended as on August, 2003 (The above condition is applicable only if the project lies within 100 km of Thermal Power Station).
37. The DG sets to be used during construction phase should use low sulphur diesel type and should conform to E.P. rules prescribed for air and noise emission standards.
38. Alternate technologies to Chlorination (for disinfection of waste water) including methods like Ultra Violet radiation, Ozonation etc. shall be examined and a report submitted with justification for selected technology
39. The green belt design along the periphery of the plot shall achieve attenuation factor conforming to the day and night noise standards prescribed for residential land use. The open spaces inside the plot should be suitably landscaped and covered with vegetation of indigenous variety.

40. The construction of the building and the consequent increased traffic load should be such that the micro climate of the area is not adversely affected.
41. The building should be designed so as to take sufficient safeguards regarding seismic zone sensitivity.
42. High rise buildings should obtain clearance from aviation department or concerned authority of
43. Suitable measures shall be taken to restrain the development of small commercial activities or slums in the vicinity of the complex. All commercial activities should be restricted to special areas earmarked for the purpose.
44. It is suggested that literacy program for weaker sections of society/women/adults (including domestic help) and under privileged children could be provided in a formal way.
45. The use of Compact Fluorescent lamps should be encouraged. A management plan for the safe disposal of used/damaged CFLs should be submitted.
46. It shall be ensured that all Street and park lighting is solar powered. 50% of the same may be provided with dual (solar/electrical) alternatives.
47. Solar water heater shall be installed to the maximum possible capacity. Plans may be drawn up accordingly ad submitted with justification.
48. Treated effluents shall be maximally reused to aim for zero discharge. Where ever not possible, a detailed management plan for disposal should be provided with quantities and quality of waste water.
49. The treated effluents should normally not be discharged into public sewers with terminal treatment facilities as they adversely affect the hydraulic capacity of STP. If unable, necessary permission from authorities should be taken.
50. Construction activities including movements of vehicles should be so managed so that no disturbance is caused to nearby residents.
51. All necessary statutory clearances should be obtained and submitted before start of any construction activity and if this condition is violated the clearance, if and when given, shall be automatically deemed to have been cancelled.
52. Parking areas should be in accordance with the norms of MOEF, Government of India. Plans may be drawn up accordingly and submitted.
53. The location of the STP should be such that it is away from human habilitation and does not cause problem of odor. Odorless technology options should be examined and a report submitted.
54. The Environment Management plan should also include the break up costs on various activities and the management issues also so that the residents also participate in the implementation of the environment management plan.
55. Detailed plans for safe disposal of STP sludge shall be provided along with ultimate disposal location, quantitative estimates and measures proposed.
56. Status of the project as on date shall be submitted along with photographs from North ,South, West and East side facing camera and adjoining areas should be provided.
57. Specific location along with dimensions with reference to STP, Parking, Open areas and Green belt etc. should be provided on the layout plan.
58. The DG sets shall be so installed so as to conform to prescribed stack heights and regulations and also to the noise standards as prescribed. Details should be submitted.
59. E-Waste Management should be done as per MoEF guidelines.
60. Electrical waste should be segregated and disposed suitably as not to impose Environmental Risk.
61. The use of suitably processed plastic waste in the construction of roads should be considered.
62. Displaced persons shall be suitably rehabilitated as per prescribed norms.
63. Dispensary for first aid shall be provided.

64. Health impacts, Socio-economic impacts, soil degradation factors and biodiversity indices should also be included in E.I.A. reports.
65. Safe disposal arrangement of used toiletries items in Hotels should be ensured. Toiletries items could be given complementary to guests, adopting suitable measures.
66. Diesel generating set stacks should be monitored for CO and HC.
67. Ground Water downstream of Rain Water Harvesting pit nearest to STP should be monitored for bacterial contamination. Necessary Hand Pumps should be provided for sampling. The monitoring is to be done both in pre and post monsoon, seasons.
68. A Separate electric meter shall be provided to monitor consumption of energy for the operation of sewage/effluent treatment in tanks.
69. The green belt shall consist of 50% trees, 25% shrubs and 25% grass as per MoEF norms.
70. Rapid EIA status should be undertaken for three months during the non monsoon period and the monitoring should be as per the latest norms of MoEF.