



NI- 11 /Korba/08

Date: - 09/04/08

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CHHATTISGARH ENVIRONMENT CONSERVATION BOARD

1-Tilak Nagar, Shiv Mandir Chowk, Main Road,

Avanti Vihar, Raipur (C.G.)

No. 1836/TS/CECB/2008

Raipur, Dated: 09/04/2008

To,

M/s. S.V. Power Private Limited,

Village-Renki

Tahsil-Pali

District-Korba (C.G.)

Sub: Permission to Establish for Coal Washery Rejects based Thermal Power Plant of capacity 2x60 MW and Coal Washery of capacity 2x2.5 Millions Tonnes/Year.

- Ref.: 1. Environmental Clearance issued by Ministry of Environment and Forests, Government of India vide letter no. J-13011/57/2007-IA.II (T), dated: 08/02/2008.
2. Your application No. SVPL/MoEF, dated: 25/02/2008 and subsequent correspondence ending dated: 19/03/2008.

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Without prejudice to the powers of this Board under the Water (Prevention and Control of Pollution) Act, 1974, and the Air (Prevention and Control of Pollution) Act, 1981 and without reducing your responsibilities under the said Acts and after going through your proposal for achieving the effluent and gaseous emission standards, it is to inform you that this Board grants you permission only for establishment of Coal Washery Rejects based Thermal Power Plant of capacity 2x60 MW and Coal Washery of capacity 2x2.5 Millions Tonnes/Year at Patwari Halka No. 13, Village-Renki, Rajswa Nirikshan Mandal-Hardibazar, Tahsil-Pali, District-Korba (C.G.) subject to the fulfillment of the following terms and conditions.

Terms & Conditions: -

1. Industry shall comply with all the conditions stipulated in the environmental clearance issued by the Ministry of Environment and Forests, Government of India vide letter no. J-13011/57/2007-IA.II (T), dated: 08/02/2008.

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2. The land requirement shall be restricted to 219.91 acres for all the activities/facilities of the Coal Washery and Power Plant.

3. Adequate facility for treatment of industrial and domestic effluent shall be provided before commissioning of the plant. Closed circuit cooling system with cooling towers shall be installed. Industry shall provide equalization and neutralization cum sedimentation tank of adequate capacity for treatment of boiler blow down, cooling tower blow down, effluent from demineralization plant/resin re-generation etc. Industry shall install appropriate wastewater treatment system for coal washery. Wastewater generated from various units of power plant and coal washery shall be recycled/re-used after adequate treatment. In case of any failure of effluent treatment plant, it shall be immediately rectified or some alternate arrangement shall be made by the industry. Industry shall ensure the treated effluent quality within standard prescribed by Chhattisgarh Environment Conservation Board published in Gazette notification Dated 25.03.1988. The major parameters of treated effluent shall be conform the following limits :-

a	pH	5.5 - 9.0
b	BOD	30 mg/L
c	COD	250 mg/L
d	Oil and Grease	10 mg/L
e	Suspended Solids	100 mg/L

Chhattisgarh Environment Conservation Board may further stipulate stringent limit depending upon environmental conditions. Industry shall also ensure the treated effluent quality within standard prescribed by Ministry of Environment and Forests, Government of India/ Central Pollution Control Board.

4. Any liquid effluent what so ever generated from industrial activities shall not be discharged into the river or any surface water bodies under any circumstances, and it shall be reused wholly in the process/plantation. The un-treated/treated domestic effluent shall not be discharge into the river or any surface water bodies. The treated domestic effluent shall be used for plantation purpose. Industry shall make proper arrangements of suitable drains/pipe networks to ensure adequate flow for utilization of treated effluent inside the premises. Industry shall not discharge any effluent out of active premises under any circumstances. The concept of zero discharge shall be maintained all the time.

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5. Adequate measuring arrangement for the measurement of water utilized in different categories and effluent generated shall be provided before commissioning of the plant.
 6. Industry shall provide adequate air pollution control arrangements at all points and non point sources of emission before commissioning of the plant. Industry shall install Electro Static Precipitator having efficiency of not less than 99.9% with particulate matter emission not more than 50 mg/Nm³ from the stack before commissioning of the plant. Industry shall also install suitable & effective air pollution control equipments for the control of fugitive emissions of air pollutants and for the control of pollution (emission of air pollutants) during the handling & transportation of raw materials, fuel (Rejected Coal), products and fly ash/bottom ash etc. before commissioning of the plant. The emission of particulate matter from all point sources shall not be more than 50 mg/Nm³ all the time. Chhattisgarh Environment Conservation Board may further stipulate stringent particulate matter emission limit depending upon environmental conditions.
 7. Sulphur contains of washery rejects to be use as fuel shall not exceed 0.7%.
 8. Stack of height as per formulae $H=14(Q)^{0.3}$ (Where Q is emission rate of SO₂ in Kg/hr and H is stack height in meters) or as per notification/guidelines of Ministry of Environment & Forests, Government of India/Central Pollution Control Board or 114 meters (whichever will be more) with arrangement of stack monitoring shall be provided with power plant. Height of other stacks shall not be less than 30 meters.
 9. Dust extraction and dust suppression system and water sprinklers shall be provided for controlling fugitive dust during rejects coal transportation in coal storage and handling area and other vulnerable areas of the plant. covered to avoid fugitive emission before start of any production activities.
 10. Continuous monitoring system shall be installed for monitoring of emissions level in the stack before commissioning of the plant.
 11. Ambient air quality within the factory premises shall not exceed the standards prescribed by Chhattisgarh Environment Conservation Board in Gazette Notification dated 25.03.1988. The ambient air quality within the premises shall not exceed the following limits: -

a	Suspended Particulate Matter	500 Micrograms/ m ³
b	Sulphur Dioxide	120 Micrograms/ m ³
c	Oxides of Nitrogen	120 Micrograms/ m ³

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control measures and finally emitted through a stack of minimum height of 30 meters conforming particulate matter emission standard of 50 mg/Nm³ or provided with adequate water sprinkling arrangement.

- c. Water sprinkling by using fine atomizer nozzles arrangement shall be provided on the coal heaps and on around the crushers/pulverisers.
 - d. Area, in and around the coal washery shall be pucca either asphalted or concreted.
 - e. Green belt shall be developed along the roadside, coal handling plants, residential complex, office building and all around the boundary line of the coal washery.
 - f. Storage bunkers, hoppers, rubber decks in chutes and centrifugal chutes shall be provided with proper rubber linings.
 - g. Vehicles movement in the coal washery area shall be regulated effectively to avoid traffic congestion. High-pressure horn shall be prohibited. Smoke emission from heavy-duty vehicle operating in the coal washeries should conform the standards prescribed under Motor Vehicle Rules, 1989.
 - h. Water consumption in the coal washery shall not exceed 1.5 cubic meter per tonne of coal.
 - i. The efficiency of the wastewater treatment system of the coal washery shall not be less than 90%.
18. Adequate arrangement shall be provided for proper storage, handling etc. of all solid wastes generated to avoid any fugitive emission. All internal roads shall be made pucca before commissioning of the plant. Good house keeping practices shall be adopted by industry.
19. Industry shall provide safe and scientific arrangement for handling and disposal of all solid wastes such as coal sludge, meddling/rejects etc. Industry shall store meddling/rejects, coal sludge or any other solid wastes inside the premises for few days only and not for longer period. Industry shall not store/dump solid wastes such as: coal sludge, meddling/rejects etc. outside the factory premises in any circumstances. Safe and scientific arrangement for temporary storage of meddling/rejects shall be provided in the premises.

20. Industry shall submit characterization report of all the wastes generated. As per characterization report, if any waste comes under the purview of Hazardous Wastes (Management and Handling) Rules, 1989 (as amended), industry shall obtain authorization from Board for management and handling of hazardous wastes as per Hazardous Wastes (Management and Handling) Rules, 1989 (as amended).
21. Industry shall adopt dry ash extraction system and dry ash disposal system. Industry shall incorporate total fly ash utilization as integral part of the project. Ash generated from plant shall not be stored on land in open areas in any circumstances. The ash generated shall be stored in closed silos only. Fly ash and bottom ash generated shall be collected in dry form in storage silos as temporary storage and it shall be utilized 100% for other beneficial uses such as brick making, fly ash based products manufacturing, road construction, cement manufacturing, abandoned mines filling, low lying areas filling etc. Industry shall provide ash storage silos of sufficient capacity so that total storage capacity of silos shall not be less than 7 days. If at any point of time all the storage silos completely filled with ash, then in that case industry shall shut down the power plant till such time the ash disposed to other beneficial uses. Industry shall install at least two fly ash brick/block manufacturing machine of capacity 1000 bricks per hour each for utilization of fly ash before commissioning of the plant. Industry shall use ash dyke for the disposal of bottom ash only. The ash pond shall be lined with impervious lining. Industry shall follow the guidelines, notification, direction etc. for utilization of fly ash/bottom ash issued by Ministry of Environment and Forests, Government of India/ Central Pollution Control Board/ Government of Chhattisgarh / Chhattisgarh Environment Conservation Board from time to time. Industry shall abide by the decisions taken by Ministry of Environment and Forests, Government of India/ Central Pollution Control Board/ Government of Chhattisgarh / Chhattisgarh Environment Conservation Board from time to time regarding use of fly ash /bottom ash.
22. Industry shall provide proper arrangement to control the noise pollution. Industry shall install appropriate noise barriers/control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation to control the noise. The ambient noise level shall not exceed 75 dB (A) during daytime and 70 dB (A) during nighttime within factory premises. Adequate measures shall be taken for control of noise levels below 85 dB (A) in the work environment.

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23. Extensive tree plantation shall be carried out in and around the project area. A thick green belt of local species shall be developed all along the plant premises covering at least 85 acres area. Industry shall abide by the decisions taken by Ministry of Environment and Forests, Government of India/ Central Pollution Control Board/ Government of Chhattisgarh / Chhattisgarh Environment Conservation Board from time to time in this regard.
 24. Garland drains with appropriate check dams shall be provided all along the raw material, fuel (Reject Coal) / solid wastes storage areas to avoid any possibility of erosion during rain. Garland drain (size, gradient & length) and sump capacity shall be designed keeping 50% safety margin over and above the peak sudden rainfall and maximum discharge in the area adjoining the project site. Sump capacity shall also provide adequate retention period to allow proper settling of silt material. Sedimentation pits shall be constructed at the corners of the garland drains. The surface run-off shall be de-silted through a series of check dams and drains of adequate size before the use. Storm water flowing over plant premises shall not be allowed to join near by nallah or any river. The treated storm water shall be used either in process or for land application.
 25. Industry shall adopt rainwater-harvesting technique in the project area and residential area (if any) for recharge of ground water. Industry shall develop rainwater-harvesting structures to harvest the rainwater for utilization in the lean season as well as to recharge the ground water table.
 26. Industry shall establish an environmental management cell to carryout function relating to environmental management under the supervision of senior executive who will directly report to the head of organization.
 27. Industry shall use fly ash bricks, fly ash blocks or fly ash based products for their construction/repairing activities. Industry shall also utilize fly ash/bottom ash for filling low lying within premises as per notification/direction/guideline of the Ministry of Environment and Forests, Government of India/ Central Government/Central Pollution Control Board/ Government of Chhattisgarh / Chhattisgarh Environment Conservation Board.
 28. Space provision shall be provided in the layout and retrofitting of the Flue Gas De-Sulphurization (FGD) shall be carried out without delay, if 98th percentile values for SO₂ exceed the prescribed permissible limit for sensitive areas, rural, residential and other

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areas, based on actual monitored field data, after commissioning of the plant. 35

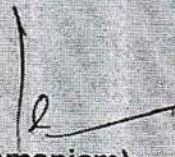
- ✓ 29. Industry shall monitor ground water quality, surface water quality around the project area regularly and report shall be submitted to the Board quarterly.
- ✓ 30. Necessary fund shall be provided for implementation of the above conditions and the conditions to be incorporated in the 'consent to operate' of the Board and for environmental safeguards. The funds earmarked for environmental protection measures shall be kept in separate account and not diverted for any other purpose.
- ✓ 31. Industry shall follow the action points mentioned in 'Charter on Corporate Responsibility for Environmental Protection' of Thermal Power Plant issued by ministry of Environment & Forest, Government of India.
- ✓ 32. Industry shall obtain statutory clearances/licenses from concerned Central Government/State Government Departments, Boards, Bodies and Corporations etc. before establishment of the plant. Industry shall follow direction issued by Ministry of Environment and Forests, Government of India/ State Government/ Central Pollution Control Board/Chhattisgarh Environment Conservation Board from time to time regarding control of water & air pollution and for environmental conservation.
- ✓ 33. The issuance of permission to establish of Board does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Central, State or local laws or regulations.
- ✓ 34. Industry shall follow any other conditions given at the time of grant of consent under the Water (Prevention & Control of Pollution) Act 1974 and the Air (Prevention & Control of Pollution) Act, 1981.
- ✓ 35. Any change in production capacity, process, raw materials used project profile etc. shall be intimated to the Board and prior permission of the Board shall be obtained for the same.
- ✓ 36. Board reserves the right to amend/cancel any of the above conditions, stringent the emission/effluent limits stipulated above and add new conditions as and when deemed necessary in the interest of environmental protection, change in the project profile or non-satisfactory implementation of the stipulated conditions etc.

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The consent (for operation) as required under the Water (Prevention & Control of Pollution) Act, 1974 and the Air (Prevention & Control of Pollution) Act, 1981 shall be granted to your industry after fulfillment of all the conditions mentioned above. For this purpose you shall have to make an application to this Board in the prescribed Proforma at least two months before the expected date of commissioning of the plant. The applicant shall not without valid consent (for operation) of the Board bring into use any out let for the discharge of effluent and particulate matter/gaseous emission.

For & on behalf of
Chhattisgarh Environment Conservation Board

o/c


(K. Subramaniam)

Member Secretary

Chhattisgarh Environment Conservation Board

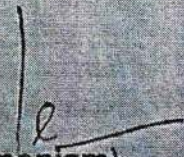
Raipur (C.G.)

Endt. No. 1837 /TS/CECB/2008

Raipur, Dated: 09/4/2008

Copy to: -

- 1- Chief Engineer (Commercial), Chhattisgarh State Electricity Board, Bilaspur for information and necessary action please. The power supply to the unit shall be released only after submission of the copy of "Consent to Operate" issued by Chhattisgarh Environment Conservation Board, Raipur.
- 2- Regional Officer, Regional Office, Chhattisgarh Environment Conservation Board, Korba.


(K. Subramaniam)

Member Secretary

Chhattisgarh Environment Conservation Board

o/c

Raipur (C.G.)