

MB POWER (MADHYA PRADESH) LIMITED

Corporate Office: 239, Okhla Industrial Estate, Phase-III, New Delhi- 110020
Tel: +91 11 47624100 Fax: +91 11 47624229

Letter No. MBPMPL/PCB/2017-18/..1.66

Date: 26/09/2017

To

The Member Secretary
Madhya Pradesh Pollution Control Board,
Paryavaran Parisar, E-5, Arera Colony,
Bhopal, Madhya Pradesh

Sub. Submission of Environment Statement for 2X600 MW Thermal Power Plant at Anuppur in Madhya Pradesh

Dear Sir,

Please find attached herewith the Environment Statement for the year 2016-17 ended on 31st March 2017, for our 2x600 MW Thermal Power Plant at Anuppur in Madhya Pradesh.

This is for your information and record please.

For MB Power (Madhya Pradesh) Ltd.



(Kishor Bhardwaj)
Corporate Head-EHS&S



- 1. The Principal Chief Conservator of Forest**
Regional Office, Western Region
Ministry of Environment, Forest and Climate Change
Kendriya Paryavaran Bhawan
Link Road-3, Ravishankar Nagar,
Bhopal-462016.
- 2. The Regional Office**
MPPCB, Regional Office Shahdol,
Madhya Pradesh

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ENVIRONMENTAL STATEMENT 2016-17

INTRODUCTION

MB Power (Madhya Pradesh) Limited has entered into MOU with Government of MP to set up a 2520 MW coal based power plant. MB Power (Madhya Pradesh) Limited is already implementing 2 X 600 MW subcritical coal based power plant at District Anuppur and Tehsil Jaitahari. An area of 403 Ha (996 acre) has been acquired for phase-1 and coal will be sourced from SECL/CIL. The Project has been granted Consent to establish for 2 x 600 MW TPP from M.P. Pollution control board.

It is now proposed to expand the capacity by adding 2 x 660 MW supercritical unit at same location, as per the terms of the MOU/ Implementation Agreement already signed with Government of Madhya Pradesh.



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SALIENT FEATURES OF THE PROJECT

Item	Main Design Parameters
Location of the Plant	Murra, Guwari, Belia, Jaithari Village Dist- Anuppur (MP)
Longitude	81°47'28.68" E
Latitude	23°04' 5.16" N
Net Capacity	1200 MW
No. of units and configuration	2 X 600 MW
Technology	Conventional
Steam Generator	Sub critical
Pressure at SH outlet	175 KG/cm ²
Temperature at SH outlet	540°C
Turbo generator	Turbine 167 KG/ cm ² (a), 535 °C, 3000 RPM, Generator-600 MW each
Main Fuel : Coal	Annual requirement 6.6 MTP at 85% PLF Source - SECL mines Grade - E/F, Avg. GCV - 3280 Kcal/KG
No. of stack	01
Stack height (meter)	275
No. of flue	02
Additional equipment	ESP
Manpower utilization	Aprox 850 Nos
Water requirement (Annual)	48 MCM
Water Source	Son river
Cooling System	Induced draft cooling system proposed
Total discharge of water	Minimum discharge guideline will be followed
Pollution level	Within the prescribed norms



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ENVIRONMENTAL STATEMENT 2016-17

ANEXURE

ENVIRONMENTAL STATEMENT FORM – V

(See rule 14)

Environmental Statement For The Financial Year, Ending March - 2017

PART – A

- i. Name and address of owner / occupier of the industry : Sri Rajendra Kumar Anand
:MB Power (Madya Pradesh) Ltd.
Jaithari, Thermal Power Plant,
Village- Laharpur, PO- Laharpur-484330
District- Anuppur (M.P.)

Operation or process.

- ii Industry category :
Primary-(stc code) : Large scale industry
Secondary-(stc code) : (Thermal Power Plant)
- iii. Production Capacity : 1200 MW
- iv. Year of establishment : 2015
- v. Date of last environment Statement submitted : 30.09.2016

PART- B

Water and Raw Material Consumption for the year 2016-17

- i. Water consumption in m3/d
- | | | |
|----------|---|----------|
| Process | : | 17335.66 |
| Cooling | : | 15419.45 |
| Domestic | : | 123.35 |



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Name of Products	Process water consumption per unit of products	
	During the previous financial year 2015-16	During the current financial year 2016-17
1. NA	1.38	0.80

i. Raw material consumption

Name of raw materials	Name of Products	Consumption of raw material per unit of output	
		During the previous financial year 2015-16	During the current financial year 2016-17
Coal	Electricity	0.746 KG/KWH	0.70 KG/KWH

PART-C

Pollution discharged to environment/unit of output:

(Parameter as specified in the consent issued)

Pollutants	Quantity of Pollutants discharged (mass/day)	Concentration of pollutants discharged (mass/volume)	Percentage of variation from prescribed standards with reasons
(a) Water	0.00	NA	NA

(b) Ambient Air Quality report

Parameters	Average value	Permissible limit	Remarks
PM10 ($\mu\text{g}/\text{m}^3$)	86.11	100	Value is under limit
PM2.5 ($\mu\text{g}/\text{m}^3$)	44.84	60	Value is under limit
SO ₂ ($\mu\text{g}/\text{m}^3$)	13.63	80	Value is under limit
NO _x ($\mu\text{g}/\text{m}^3$)	7.93	80	Value is under limit



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PART - D

HAZARDOUS WASTES

As specified under the hazardous wastes (management, handling and trans boundary movement) rule 2008 and amendment as on 2016

Hazardous Wastes	Total Quantity (KL)	
	During the previous financial year (2015 - 2016)	During the current financial year (2016 - 2017)
From Process	3.6	35.41
From pollution control facility.	Nil	Nil

PART-E

SOLID WASTE

Solid Wastes (Ash)	Total quantity (MT/Annum)	
	During the previous financial year (2015 - 2016)	During the current financial year (2016 - 2017)
a. From process	Nil	Nil
b. From pollution control facility	677400	961620.5
c. Quantity recycled or reutilized within the unit	Nil	Nil

PART - F

Please specify the characteristics (in terms of concentration and quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.

- The hazardous waste, used oil 35.41KL generated at site in the year 2016-17. Out of total generation 14.56 MT supplied to authorized recycler and and balance 20.85 has been stored in designated place at our company and will be supplied to authorized recycler shortly.



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- Fly ash is being utilized by cement industries and brick manufacturer etc. and only remaining quantity is sent to ash pond.

PART-G

Impact of pollution control measures taken on conservations of natural resources and consequently on the cost of production.

- ETP installed for treatment of industrial effluent and treated water is being used for dust suppression and ash slurry disposal system.
- STP installed for treatment of domestic effluent and treated water is being used for irrigation in green belt and landscaping area.
- Ash water recovery system installed at plant for recycling and reuse of water.
- Rain water harvesting system installed at plant and township area to recharge the groundwater table.
- Thick greenbelts have been developed in the plant areato control dust and reduce noise level.

Total cost incurred for the installation of water treatment plant (STP & ETP) is approx. Rs. 19.76 Crores.

PART - H

Additional measures / investment proposals for environmental protection including abatement of pollution.

- Bi-flue stack of 275 meter height has been constructed with an expenditure of approximate Rs.39.28 Crores for the proper dispersion of particulate matter and to maintain the ground level concentration of air.
- To control air pollution. 02 nos of ESP have been installed for both the unites with an expenditure of approximate Rs. 243.25 Crores.
- To control water pollution, water treatment plant i.e STP and ETP have been installed for treatment of industrial and domestic effluent respectively with and expenditure of approximate 19.76 Crores.



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- Induced draft cooling tower (IDCT) to maintain minimum 5 COC of water (natural resource conservation) with an expenditure of Rs. 143.91 Crores.
- We have installed ash handling system for dry ash collection and disposal, wet ash collection and disposal with an expenditure of approximate of approximate 97.74 Crores.
- We have constructed ash dyke with lining of HDP and concrete flooring inside the ash dyke, also turfing done on outer wall of ash dyke with an expenditure approximate Rs. 76.91 Crores.
- Green belt developed in 152 acres of land and environmental monitoring done with an expenditure of approximate 1.50 Crores.

PART - I

Miscellaneous

OTHER PARTICULARS OF IMPROVING OF QUALITY OF THE ENVIRONMENT

ONLINE AMBIENT AIR QUALITY MONITORING SYSTEM (AAQMS)

We have installed 04 Nos online ambient air quality monitoring system in the plant premises. Data of all the four air monitoring systems are being transmitted online to state pollution control board as well as central pollution control board. Monitoring result help us to improve the quality of environment.

CONTINUOUS EMISSION MONITORING SYSTEM (CEMS)

We have installed continuous emission monitoring system in our both stacks to know the emission level of stacks. This monitoring system helps us to reduce the emission level and maintain within the norms. Monitoring data are being transmitted online to State and central pollution control board.

HOUSE KEEPING

Good house keeping contributes greatly to efficient operations, improved employee morale, better productivity and reduction of accidents. House keeping standards reflect an organization's work culture. Good house keeping can only be achieved by proper planning. This includes a well-planned process layout, orderly arrangement of equipment; systematic material storage stacking and movement with day-to-day maintenance of cleanliness and tidiness. Water tanker has engaged for water spraying round the clock on all the internal roads.



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PLANTATION

Plantation efforts are being carried-on to the maximum possible extend in and around MB Power (Madhya Pradesh) Limited campus. In this direction, we are making efforts for avenue plantation from, near by villages and their school, community building etc. which shows our sincerity in making efforts for continual improvement in quality of environment not only inside the MB Power (Madhya Pradesh) Limited campus, but also in the adjacent area. Our effort is not only economical, but also viable and easily adoptable as the saplings are well familiar to survive and grown in the same atmosphere prevailing in the campus. We have planted around 1, 52,000 sapling of indigenous species i.e. neem, sirish, amla, karanj, teak. Khamhar, arjun, ashok, gulmohar, shisham, bamboo, sitafal, cassia, acasia, peltaforam, mango, anar. Amrood, lemon, lichi, bargad, tikoma, kaner, bel etc. Also we are taking care of around 22000 natural grown trees in side the plant premises. We have covered more than 152 acres land of green belt area under trees cover.

ENVIRONMENT CELL

We have Environment Cell which monitor all the activities related to environment on regular basis and findings used to be discussed in *daily* meeting on regular basis.

