


MAHARASHTRA POLLUTION CONTROL BOARD

Tel: 24010437/24020781/24014701		Kalpataru Point, 2 nd - 4 th Fl.
Fax: 24024068 / 24023516		Opp. Cine Planet Cinema,
Website: http://mpcb.gov.in		Near Sion Circle, Sion (E)
E-mail: mpcb@vsnl.net		Mumbai-400 022.

Red/L.S.I

Date: 14/05/2012

Consent No: BO/JD(APC)/TB-4/EIC No. TN-3453-12/RCC-385

Consent to Operate under Section 26 of the Water (Prevention & Control of Pollution) Act, 1974 & under Section 21 of the Air (Prevention & Control of Pollution) Act, 1981 and Authorisation / Renewal of Authorisation under Rule 5 of the Hazardous Wastes (Management, Handling & Trans Boundary Movement) Rules 2008.

[To be referred as Water Act, Air Act and H W (M. H & T M) Rules respectively].

CONSENT is hereby granted to
M/s. JSW Steel Ltd.,
Plot No. B-71, MIDC Tarapur,
Navapur Road, Boisar,
Tal- Palghar, Dist – Thane.

located in the area declared under the provisions of the Water Act, Air act and Authorisation under the provisions of HW(M&H) Rules and amendments thereto subject to the provisions of the Act and the Rules and the Orders that may be made further and subject to the following terms and conditions:

1. The Consent to Operate is granted for a period upto --- 31/03/2015.

2. The consent is valid for the manufacture of –

<u>Sr.No.</u>	<u>Product</u>	<u>Maximum Quantity</u>
1.	Captive Power Generation	30 MW

3. CONDITIONS UNDER WATER ACT :

(i) The daily quantity of trade effluent from the factory shall not exceed 666.0 m³/Day

(ii) The daily quantity of sewage effluent from the factory shall not exceed 4.5 m³.

Trade Effluent:

Treatment : The applicant shall provide comprehensive treatment system consisting of primary / secondary and/or tertiary treatment as is warranted with reference to influent quality and operate and maintain the same continuously so as to achieve the quality of the treated effluent to the following standards :

The industrial effluent arising from various sections of power plant shall be given such treatment either collective or individually as the site condition permits that the final quality of effluent shall have following character standards :-

a) Condenser Cooling Water :

1) pH	Between	6.5 to 8.5
2) Temperature	Not to exceed	5 degree C Higher than the intake water temperature
3) Free available Chlorine	Not to exceed	0.5 mg/l.

b) Boiler Blow down:-

1) Suspended Solids	Not to exceed	100	mg/l.
2) Oil & Grease	Not to exceed	20	mg/l.
3) Copper (Total)	Not to exceed	1	mg/l.
4) Iron (Total)	Not to exceed	1	mg/l.

c) Cooling Tower Blow down :-

1) Free available Chlorine	Not to exceed	0.5	mg/l.
2) Zinc	Not to exceed	1	mg/l.
3) Chromium (Total)	Not to exceed	0.2	mg/l.
4) Phosphate	Not to exceed	5	mg/l.

d) DM Plant Effluent :-

1) pH	Between	5.5 to 9.0	
2) BOD 3 days 27 C	Not to exceed	30	mg/l.
3) COD	Not to exceed	250	mg/l.
4) Suspended Solids	Not to exceed	100	mg/l.
5) Oil & Grease	Not to exceed	10	mg/l.
6) TDS	Not to exceed	2100	mg/l.

Trade Effluent Disposal : The treated effluent (out of 666 M3/D) shall be recycled / reused (90 M3/D) for dust suppression and ash quenching. (116 M3/D) from RO rejects for dust suppression and (400 M3/D) for cooling tower etc and industry shall achieve ZERO discharge.

(iii) **Sewage Effluent Treatment :** The applicant shall provide comprehensive treatment system as is warranted with reference to influent quality and operate and maintain the same continuously so as to achieve the quality of treated effluent to the following standards.

(1) Suspended Solids	Not to exceed	100	mg/l.
(2) BOD 3 days 27 Deg. C.	Not to exceed	100	mg/l.

(iv) **Sewage Effluent Disposal :** The treated domestic effluent shall be recycled /reused for the gardening/irrigation in no case effluent shall find its way to any other water body.

(v) **Non-Hazardous Solid Wastes :**

<u>Type of waste</u>	<u>Quantity</u>	<u>Treatment</u>	<u>Disposal</u>
Boiler Coal Ash	40 MT/D		Should be sent to cement manufacturer dispose as per GOI Guideline/ Notification vide No.SO763(E).

dtd 14/09/1999.

(i) **Other conditions :**

- (1) Continuous monitoring system shall be installed on all units for monitoring Sulphur Dioxide, Suspended Particulate Matter and results submitted to the Board every fortnight. The results for continuous monitoring done on daily basis shall be submitted after every 15 days to Regional Officer, Thane with a copy to Member Secretary, Mumbai. In the event of difficulty in providing the continuous monitoring system, monitoring shall be done and results be submitted as stated above.
- (2) The coal handing system shall be covered with proper hooding and ventilation arrangements connected to dust suppress agent so as not to allow any fugitive emissions.
- (3) There shall not be any fugitive emission.
- (4) The factory authorities shall install a separate meter showing the consumption of energy for operation of domestic and industrial effluent treatment plants. The quarterly returns of the energy/consumption shall be submitted to Board Office under intimation to respective Regional and Sub-Regional Officer on each 10th of January, April, July and October.
- (5) The firm should provide continuous flow meter for the measurement of the flow of the effluent.
- (6) The industry should not cause any nuisance in surrounding area.
- (7) The industry should monitor stack emissions & ambient air quality regularly.
- (8) The industry should monitor effluent quality regularly.
- (9) Green Belt a forestation shall be done up to 33% on available open space land.
- (10) Industry shall adopt clean technology like ozonization for cooling water treatment.
- (11) Industry shall provide dry fly ash handling & collection system and utilize the fly ash as per the fly ash notification of the Govt. of India
- (12) Fly ash shall be 100 % utilized within six years as per fly ash notification.

4. The applicant shall comply with the provisions of the Water (Prevention & Control of Pollution) Cess Act, 1977 (to be referred as Cess Act) and Rules thereunder :

The daily water consumption for the following categories is as under:

(i) Domestic	...	05	CMD
(ii) Industrial Processing	...	}	CMD
(iii) Industrial Cooling/Boiler	...	}	
(iv) Boiler Blow Down, DM Plant, Softening	...	}	2471 CMD

The applicant shall regularly submit to the Board the returns of water consumption in the prescribed form and pay the Cess as specified under Section 3 of the said Act.

5. **CONDITIONS UNDER AIR ACT :**

- (i) The applicant shall install a comprehensive control system consisting of control equipments as is warranted with reference to generation of emission and operate and maintain the same continuously so as to achieve the level of pollutants to the following standards :

Control Equipment :

- 1) Electrostatic precipitator to be provided to Boiler and shall operate and maintain regularly so as to ensure that TPM emission do not exceed 80 mg/NM3.
- 2) Dust collection system and automatic water sprinkler system shall be provided to coal handling plant.
- 3) Dust collector of sufficient capacity shall be provided to coal crusher and any other sources of SPM.
- 4) There shall not be any fugitive emission from coal storage yard.
- 5) The industry shall make necessary provisions for installing FGD with sufficient efficiency in its design and layout, and sufficient floor space so that it can be installed in future as and when directed by Board.
- 6) The applicant shall provide ports in the chimney(s) and facilities such as ladder, platform etc. for monitoring the air emissions and the same shall be open for inspection to / and for use of the Board's staff. The chimney (s) vents attached to various sources of emission shall be designated by numbers such as S-1, S-2 etc. and these shall be painted/ displayed to facilitate identification.
- 7) The industry shall take adequate measures for control of noise levels from its own sources within the premises so as to maintain ambient air quality standard in respect of noise to less than 75 db(A) during day time and 70 db(A) during night time. Day time is reckoned in between 6 a.m. and 10 p.m. and night time is reckoned between 10p.m. an 6 a.m.
- 8) The industry shall provide Environmental Friendly road transportation by adopting mechanical type closed truck for transportation of minerals and metals as well as Ash

Standards for Emissions of Air Pollutants :

- | | | | |
|------|---------|---------------|------------|
| (i) | SPM/TPM | Not to exceed | 50 mg/Nm3. |
| (ii) | SO2 | Not to exceed | 4.0 TPD |

- (ii) The applicant shall observe the following fuel pattern :-

<u>Sr.No.</u>	<u>Type of Fuel</u>	<u>Quantity</u>
1	Coal	400 T/D

(* The quantity mentioned above is as per the existing consent conditions and hence the fuel consumption (Coal) will remain unchanged)

- (iii) The applicant shall erect the chimney(s) of the following specifications :-

<u>Sr.No.</u>	<u>Chimney attached to</u>	<u>Height in Mtrs.</u>
1	Coal fired Boiler	80

- (iv) The applicant shall provide ports in the chimney/(s) and facilitates such as ladder, platform etc. For monitoring the air emissions and the same shall be open for inspection to/and for use of the Board's Staff. The chimney(s) vents attached to various sources of emission shall be designated by numbers such as S-1, S-2, etc. and these shall be painted/displayed to facilitate identification.

- (v) The industry shall take adequate measures for control for noise levels from its own sources within the premises so as to maintain ambient air quality standard in respect of noise to less than 75 dB(A) during day time and 70 dB(A) during night time. Day time is reckoned in between 6 a.m. and 10 p.m. and night time is reckoned between 10 p.m. and 6 a.m.

Other Conditions :

- 1) The industry should not cause any nuisance in surrounding area.
- 2) The industry should monitor stack emissions and ambient air quality regularly.
- 3) The coal handling system shall be covered with proper handling and ventilation arrangements connected to dust suppress agent so as not to allow any fugitive emissions.
- 4) A separate environment monitoring cell with suitable coalfield staff should be set up for implementation of the stipulated environmental safeguards.
- 5) Industry shall provide opacity meter.
- 6) The applicant shall install continuous monitoring equipments for stack emission analysis and submit a report on fortnightly basis to the respective Regional Office/ Sub Regional Office.
- 7) You shall operate and maintain the three continuous ambient air and micrometeorological monitoring stations properly with the necessary provision of networking to the air quality monitoring network of MPCB.
- 8) If due to any technological improvements or otherwise this Board is of opinion that all or any other condition referred above require variation (including the change of any control equipment either in whole or in part) this Board shall after giving the applicant an opportunity of being heard very all or any of such conditions and thereupon the applicant shall be bound to comply with the conditions so varied.

6. CONDITIONS UNDER HW(M, H T & M) RULES, 2008.

The applicant shall handle hazardous wastes as specified below:

Sr. No	Item No. Of process substance generating HW as per Schedule-I/II	Type of waste	Quantity	Disposal
1	5.1 Used/spent oil	0.08	MT/Yr.	Sale to MPCB/CPCB authorized reprocessor

(ii) Treatment: - NIL

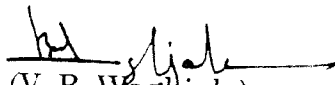
1. The authorization is hereby granted to operate a facility for collection, storage, transport & disposal of hazardous waste.
2. The industry should comply with the Hazardous Waste (M&H) Rules, 2003.
 - a. Whenever due to any accident or other unforeseen act or event, such emissions occur or is apprehended to occur in excess of standards laid down, such information shall be forthwith Reported to Board, concerned Police Station, office of Directorate of Health Services, Department of Explosives, Inspectorate of

- Factories and Local Body. In case of failure of pollution control equipments, the production process connected to it shall be stopped.
- b. The unit has to display and maintain the data online outside the factory main gate in Marathi & English both on a 6'x4' display board in the manner and the report of the compliance along with photograph shall be submitted to this office & concerned Regional Office/ Sub Regional Office.
 - c. It shall be ensured that the Hazardous waste is handled, managed & disposed of strictly in accordance with the Hazardous Waste (Management & Handling) Rules, 1989 as amended on 2003 and shown & submitted to the Board as & when asked for.

7. Industry shall comply with following additional conditions:

- i. The applicant shall maintain good housekeeping and take adequate measures for control of pollution from all sources so as not to cause nuisance to surrounding area / inhabitants.
- ii. The applicant shall bring minimum 33% of the available open land under green coverage/ tree plantation.
- iii. Solid waste – The non hazardous solid waste arising in the factory premises, sweepings, etc., be disposed of scientifically so as not to cause any nuisance/ pollution. The applicant shall take necessary permissions from civic authorities for disposal to dumping ground.
- iv. The applicant shall provide for an alternate electric power source sufficient to operate all pollution control facilities installed by he applicant to maintain compliance with the terms and conditions of the consent. In the absence, the applicant shall stop, reduce or otherwise, control production to abide by terms & conditions of this consent regarding pollution levels.
- v. The applicant shall not change or alter quantity, quality, the rate of discharge, temperature or the mode of the effluent / emissions or hazardous wastes or control equipments provided for without previous written permission of the Board.
- vi. The applicant shall provide facility for collection of environmental samples and samples of trade and sewage effluents, air emissions and hazardous wastes to the Board staff at the terminal or designated points and shall pay to the Board for the services rendered in this behalf.
- vii. The applicant shall make an application for renewal of the consent at least 60 days before the date of the expiry of the consent.
- viii. The firm shall submit to this office, the 30th day of September every year, the Environmental Statement Report for the financial year ending 31st March in the prescribed Form-V as per the provisions of rule 14 of the Environment (Protection) (Second Amendment) Rules, 1992.
- ix. An inspection book shall be opened and made available to the Board's officers during their visit to the applicant.
- ix. The applicant shall install a separate electric meter showing the consumption of energy for operation of domestic and industrial effluent treatment plants and air pollution control system. A register showing consumption of chemicals used for treatment shall be maintained.

- xi. Separate drainage system shall be provided for collection of trade and sewage effluents. Terminal manholes shall be provided at the end of collection system with arrangement for measuring the flow. No effluent shall be admitted in the pipes / sewers down- stream of the terminal manholes. No effluent shall find its way other than in designed and provided collection System.
- xii. Neither storm water nor discharge from other premises shall be allowed to mix with the effluents from the factory.
8. Whenever due to any accident or other unforeseen act or even, such emissions occur or is apprehended to occur in excess of standards laid down, such information shall be forthwith reported to Board, concerned Police Station, office of Directorate of Health Services, Department of Explosives, Inspectorate of Factories and Local Body. In case of failure of pollution control equipments, the production process connected to it shall be stopped.
9. This is issued with the approval of Consent Committee of the Board in its meeting held on 02/04/2012 and approval of Hon'ble Chairman of the Board.
10. The industry shall submit the Bank Guarantee of Rs.5/- Lakhs at Regional Office, Thane within 15 days period towards Operation and Maintenance of pollution control system.
11. The industry shall comply with conditions of Environmental Clearance granted by GOM vide No.EC(JSW)-2009/139/CR 40/TCI, dated 10/06/2009.
12. The Capital investment of the industry is Rs.91.64/- Crs.


(V. B. Waghjale)
Member Secretary

To,
M/s. JSW Steel Ltd.,
Plot No. B-71, MIDC Tarapur,
Navapur Road, Boisar,
Tal- Palghar, Dist – Thane.

Copy to:

RO- MPCB Thane/SRO-MPCB Tarapur-I They are directed to ensure the compliance of consent conditions & obtain BG of Rs.5/- Lakhs from the industry.
CAO/Cess Branch/Master File

Received Consent fee of -

Sr. No.	Amount(Rs.)	DD. No.	Date	Drawn On
1	Rs.3,75,000 /-	989253	25/01/2012	State Bank of India