


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.

Consent No:BO/JD(APC)/EIC No. RD-2503-13/CC-CAC-1588 Date: 22/02/2013.

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 Authorization / Renewal of Authorization under Rule 5 of the Hazardous Wastes (Management, Handling & Transboundary Movement) Rules 2008

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

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CONSENT is hereby granted to

**M/s JSW ISPAT Steel Limited
(Sponge Iron Plant)
Pen, Geetapuram-Dolvi
Tal: Pen, Dist: Raigad, Maharashtra
India.**

Located in the area declared under the provisions of the Water Act, Air act and Authorization 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 up to: 31.12.2017.
2. The Consent is valid for the manufacture of -

Sr. No.	Product Name	Maximum Quantity	UOM
1	Direct Reduced Iron [Gas based mega module]	2.0	Million Ton Per Year [MTPA]

3. CONDITIONS UNDER WATER ACT:

- (i) The daily quantity of trade effluent from the factory shall not exceed 3624M3.
- (ii) The daily quantity of sewage effluent from the factory shall not exceed 65M3.

(iii) **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:

1	pH	Between	5.5 to 9.0
2	Temperature	Should not exceed 5 c above the ambient temperature of the receiving body	
3	Free available chlorine	Not to exceed	0.5 mg/l
4	Zinc (as Zn)	Not to exceed	1.0 mg/l
5	Free Chromium	Not to exceed	0.1 mg/l
6	Phosphate	Not to exceed	5 mg/l.
7	BOD ₃ at 27°C	Not to exceed	100 mg/l.
8	COD	Not to exceed	250 mg/l.
9	Oil & Grease	Not to exceed	10 mg/l
10	Suspended Solids	Not to exceed	100 mg/l.
11	Phosphorous	Not to exceed	5 mg/l.
12	Iron (as Fe)	Not to exceed	3.0 mg/l.

(iv) **Trade Effluent Disposal:** The metal bearing industrial effluent shall be segregated and reused back into process and remaining treated effluent shall use on land for gardening. There shall not be any discharge outside the factory premises and in no case trade effluent shall find its way into nearby stream / water body.

(v) **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 27o C. Not to exceed 100 mg/l.

(vi) **Sewage Effluent Disposal:** The treated domestic effluent shall be soaked in a soak pit, which shall be got cleaned periodically. Overflow, if any, shall be used on land for gardening / plantation only.

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

Sr. No.	Type Of Waste	Quantity	UOM	Treatment	Disposal
1	ETP Sludge [Iron Oxide]	80	T/D	----	Recycle to sinter plant for sinter making
2	Iron Oxide Fines / Sludge	1200	T/D	-----	Recycle for Briquetting and sinter making

(viii) **Other Conditions:** Industry should monitor effluent quality regularly.

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 amendment Rules, 2003 there under

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

I	Domestic purpose	100.00 CMD
ii	Water gets Polluted & Pollutants are Biodegradable	0.00 CMD
iii	Water gets Polluted, Pollutants are not Biodegradable & Toxic	0.00 CMD
iv	Industrial Cooling,	8000.00CMD

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:

a. Control Equipment:

- I. Adequately designed ESP or bag filter or wet scrubbing system or other suitable and adequate air pollution control system/Combination of system should be installed to achieve the prescribed stack emissions.
- II. Kiln of gas treatment with efficient de dusting system shall be provided. The plant having more than 100 TPD shall use waste heat recovery boiler for generation of power.
- III. Interlocking facility to be provided to ensure stoppage of plant in case of failure of pollution control systems.
- IV. Fumes collection systems followed by dust removal system shall be provided to the induction furnace to achieve
- V. Industry shall provide dust collector of sufficient capacity to control the emissions.
- VI. There shall not be any secondary fugitive emission from the plant.

6. Conditions for D.G. Set

- a. Noise from the D.G. Set should be controlled by providing an acoustic enclosure or by treating the room acoustically.
- b. Industry should provide acoustic enclosure for control of noise. The acoustic enclosure/ acoustic treatment of the room should be designed for minimum 25 dB (A) insertion loss or for meeting the ambient noise standards, whichever is on higher side. A suitable exhaust muffler with insertion loss of 25 dB (A) shall also be provided. The measurement of insertion loss will be done at different points at 0.5 meters from acoustic enclosure/room and then average.
- c. The industry shall take adequate measures for control of noise levels from its own sources within the premises in respect of noise to less than 55 dB(A) during day time and 45 dB(A) during the night time. Day time is reckoned between 6 a.m. to 10 p.m. and night time is reckoned between 10 p.m to 6 a.m.
- d. Industry should make efforts to bring down noise level due to DG set, outside industrial premises, within ambient noise requirements by proper siting and control measures
- e. Installation of DG Set must be strictly in compliance with recommendations of DG Set manufacturer.
- f. A proper routine and preventive maintenance procedure for DG set should be set and followed in consultation with the DG manufacturer which would help to prevent noise levels of DG set from deteriorating with use
- g. D.G. Set shall be operated only in case of power failure
- h. The applicant should not cause any nuisance in the surrounding area due to operation of D.G. Set

7. Standards for Stack Emissions:

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

Sr. No.	Type Of Fuel	Quantity	UOM
1	Natural Gas	4,86,00,000.00	M ³ /M

- (ii) Standards for Emissions of Air Pollutants:

i	SPM/TPM	Not to exceed	100 mg/Nm ³
ii	SO ₂	Not to exceed	40.5 Kg/D

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

Sr. No.	Chimney Attached To	Height in Mtrs.
1	Flue Gas Ejector	40.00
2	Furnace Dust Collector	30.00
3	Screen Dust Collector-I	30.00
4	Product Silo Dust Collector	30.00
5	Screen Dust Collector-II	30.00
6	D.G.set(1000 KVA)	6.5 above roof level
7	D.G.set(500 KVA)	5.5 above roof level

- (iv) 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.
- (v) 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 10 p.m. and 6 a.m.
- (vi) **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.

8. CONDITIONS UNDER HAZARDOUS WASTE (MANAGEMENT, HANDLING & TRANSBOUNDARY MOVEMENT) RULES, 2008:

- (i) The Industry shall handle hazardous wastes as specified below.

Sr. No.	Type Of Waste	Quantity	UOM	Disposal
1	5.1 Used /spent oil	20	MT/Y	Sale to authorized recycler/Reprocessor approved by CPCB/SPCB or at CHWTSDF.
2	5.2 Wastes/residue containing oil	150	Kg/M	Sale to authorized recycler/Reprocessor approved by CPCB/SPCB or at CHWTSDF.
3	Nickel Compound B-6	180	MT/ 5 years	Sale to authorized Vendor approved by CPCB/SPCB or at CHWTSDF.

4	Zinc Compound C-14	28	M ³ / 3 years	Sale to authorized Vendor approved by CPCB/SPCB or at CHWTSDF.
5	A-4070 Empty Containers	500	Kg/Year	Sale to authorized Vendor approved by CPCB/SPCB or at CHWTSDF.
6	Oil filter	40	Kg/Year	At CHWTSDF.
7	B-1110 ,E-Waste	100	Kg/Year	Sale to authorized Vendor approved by CPCB/SPCB or at CHWTSDF.

(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 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.
 - b. Industry shall obtain registration from CPCB as a re-refiner of Used oil having environmentally sound technology as per the provisions of Hazardous Waste (Management & Handling) Rules 1989 & Amendment Rules 2003 before commencement of production.
 - c. 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.
 - d. 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.

9. 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 pre 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.
- x. 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.

10. This Board reserves the right to amend or add any conditions in this consent and the same shall be binding on the Applicant.
11. The applicant shall comply with the conditions of the Environmental Clearance granted by MoEF, Gol vide letter No. J-11011/166/2011-1A-II(I) dtd. 21.11.2012.
12. Industry shall submit the Bank Guarantee of Rs. 10 Lakhs validity of one year period in the Board within one month period towards operational and maintenance of pollution control systems.
13. This consent is issued with the approval of Consent Appraisal Committee Meeting of the Board in its meeting held on 31.01.2013.
14. The total Capital investment of the industry is Rs.608.66 Crores.

For and On Behalf of the
Maharashtra Pollution Control Board,

(Rajeev Kumar Mital, IAS)
Member Secretary

To,
M/s JSW ISPAT Steel Limited,
(Sponge Iron Plant)
Pen, Geetapuram-Dolvi,
Tal: Pen, Dist: Raigad, Maharashtra,
India.

Copy to:

- 1) Regional Officer, Raigad, MPCB, Navi Mumbai. – He is instructed to submit the Compliance report of the industry within one month period.
- 2) Sub-Regional Officer, Raigad-II, MPCB, Navi Mumbai .-
- 3) Chief Accounts Officer, MPCB, Mumbai
- 4) Cess Branch/Master File

Industry has paid the consent fees as per the Environment Department O.R.dated 25.08.2011.

No.	Amount(Rs.)	DD. No.	Date	Drawn On
	60,86,700	196314	25 Oct 2012	ICICI Bank
	2,15,320	190738	06 Nov 2007	ICICI Bank