

MAHARASHTRA POLLUTION CONTROL BOARD

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RED/LSI

Consent No. BO/JD(APC)/EIC No.CH-0721-11/R/CC- 560 Date 07/09/2012.

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 & Trans Boundary Movement) Rules 2008. [To be referred as Water Act, Air Act and H W (M, H & TM) Rules respectively].

CONSENT is hereby granted to

**M/s. Steel Authority of India Ltd.,
Chandrapur Ferro Alloy Plant ,
(Formerly Know as M/s Maharashtra Elektros melt Limited),
Mul Road Chandrapur, Taluka & Dist. – Chandrapur.**

located in the area declared under the provisions of the Water Act, Air act and Authorization under the provisions of H W (M, H & TM) Rules 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 – 31.12.2012.
2. The Consent is valid for the manufacture of –

<u>Sr. No.</u>	<u>Product</u>	<u>Maximum Quantity</u>
1)	High Carbon Ferro Manganese	4930 MT/Month
2)	Silico Manganese	3795 MT/Month
3)	Mn Ore Sinter SP-I	1170 MT/Month
4)	Mn Ore Sinter SP-II	1335 MT/Month
5)	Lime Through Lime Kiln	165 MT/Month
6)	Furnace Gas	12000 MT/Month
7)	Nitrogen Gas	25 MT/Month
8)	Electric Power (Gas Based)	4.2 MW
9)	Medium Carbon Ferro Manganese Through EAF	200 MT/Month.

3. **CONDITIONS UNDER WATER (Prevention & Control of Pollution) ACT, 1974:**

- (i) The daily quantity of trade effluent from the factory shall not exceed 720.0 m³.
- (ii) The daily quantity of sewage effluent from the factory shall not exceed 144.0 m³.
- (iii) **Trade Effluent Treatment:** The applicant shall operate 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)	BOD 3 days 27 Deg. 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.
7)	Chlorides	Not to exceed	600 mg/l.
8)	Sulphates	Not to exceed	1000 mg/l.
9)	Iron(as Fe)	Not to exceed	5.0 mg/l.
10)	Manganese	Not to exceed	5.0 mg/l.
11)	Total Metal	Not to exceed	10.0 mg/l.
12)	Cyanide	Not to exceed	0.2 mg/l.

The industrial effluent arising from various sections of Power Plant shall be given suitable 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) **D.M. Plant Effluent:**
- 1) PH Between 5.5 to 9
 - 2) BOD 3 days 27 Deg. 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.

- (iv) **Trade Effluent Disposal:** The treated effluent shall be recycle /reused completely in the process. There shall not be any discharge outside the factory premises.
- (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 27° C. Not to exceed 30 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	Treatment & Disposal
1	High Carbon Ferro Manganese (HcFeMn) Sludge	2990 MT/month	100 % used in SiMn Production in their plant
2	Silico Manganese Slag	3416 MT/month	100 % Used for stowing in underground coal mines in place of sand

- (viii) **Other Conditions:** The industry shall 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 Rules there under:
The daily water consumption for the following categories is as under:
- (i) Domestic ... 445.0 CMD
 - (ii) Industrial Processing ... 720.0 CMD
 - (iii) Industrial Cooling ... 3701.0 CMD
 - (iv) Agriculture/Gardening 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 (Prevention & Control of Pollution) ACT, 1981:**

(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:**

- 1) Fume extraction system followed by scrubber provided to Pickling Section, Galvanizing section and any other source producing emissions shall operate and maintain properly so as to achieve the following air emission standards.
- 2) Fume inhibitor shall be used continuously as anti vapor in HCL pickling section to bring down the gaseous emission and scrubber provided to pickling section should operate and maintain properly.

B) **Conditions for DG Sets: -**

1. Noise from DG Sets shall be controlled by providing acoustic enclosure or by treating the room acoustically.
2. Applicant should provide acoustic enclosure for control of noise. The acoustic enclosure/ acoustic treatment of the room shall 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 shall be done at different points at 0.5 meters from acoustic enclosure/ room and their average.
3. The Applicant should make efforts to bring down noise level due to DG Set, outside the premises, with ambient noise level requirements by proper setting and control measures.
4. Installation of DG Set must be strictly in compliance with recommendations of DG set manufacturer.
5. A proper routine and preventive maintenance procedure for DG Set shall be set and followed in consultation with the DG manufacturers, which would help to prevent noise levels of DG Sets from deteriorating with use.
6. The DG set shall be operated only in case of power failure. The applicant shall make arrangement for regular electrical power.
7. The Applicant shall not cause any nuisance in the surrounding area due to operation of DG sets.
8. In case of problems, the D.G. set shall not be operated until it is set back to satisfactory position.

B) **Standards for Emissions of Air Pollutants:**

- | | | | |
|------|-----------------|---------------|------------------------|
| (i) | SPM/TPM | Not to exceed | 150 mg/Nm ³ |
| (ii) | SO ₂ | Not to exceed | 252 Kg / day. |

(ii) **The applicant shall observe the following fuel pattern**

<u>Sr. No.</u>	<u>Type of Fuel</u>	<u>Quantity</u>
1	Furnace Oil*	200 KL/annum
2	Electricity is used for SAF-I,II,EAF.	
3.	Clean Furnace gas used for Power Plant, Lime Kiln ,SP-I & II-2,40,000 m ³ /day (* FO used in Power Plant when SAF gas is not available)	

(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	SAF-I & SAF-II	45.0 each furnace
2	SP-I	15.0
3	SP-II	30.0
4.	Country Kiln-I	17.0
5.	Country Kiln-I	16.0
6.	4.2 MW PP	52.5

- (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.
6. **CONDITIONS UNDER HW (M&H) RULES, 1989 & AMENDMENT RULES:**

Sr. No.	Item No. as per H.W. Schedule-I	Type of Waste	Quantity	Disposal
1.	34.1	Gas Cleaning Plant Residue	8100 MT/Annum	CHWTSDF,Butibori
2.	5.1	Used/Waste Oil	20 KL/Annum	By Sale to MPCB Authorized reprocessor
3.		Mixed Non Ferrous Scrap	1.0 MT/Annum	CHWTSDF,Butibori

- (i) The applicant shall handle hazardous wastes as specified below:
7. Whenever due to any accident or other unforeseen act or even, such emissions occur or be 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.
8. **General conditions:**
- (i) The applicant shall bring minimum 33% of the available open land under green coverage plantation. The applicant shall submit a yearly statement by 30th September every year of available open plot area, no. of trees surviving as on 31st March of the year and no. of trees planted by September end.
- (ii) The applicant shall provide for an alternate electric power source sufficient to operate all pollution control facilities installed by he applicant and operate the same in case of power failure to maintain compliance with the terms and conditions of the consent. In the absence of same, the applicant shall stop, reduce or otherwise, control production to abide by terms & conditions of this consent regarding pollution levels.
- (iii) **The applicant shall make an application for renewal of the consent at least 60 days before the date of the expiry of the consent.** 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.
- (iv) The firm shall submit MPCB, 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 before 30th September every year.
- (v) The applicant shall install a separate 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. The applicant shall also submit a comparative statement of designed power and chemical consumptions vis-a-vis actual power and chemical consumption along with Environmental statement.

- (vi) 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. Neither storm water nor discharge from other premises shall be allowed to mix with the effluents from the factory.
- (vii) 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. An inspection book shall be opened and made available to the Board's officers during their visit to the applicant.
- (viii) The industry shall ensure that fugitive emissions from the activity are controlled so as to maintain clean and safe environment in and around the factory premises.
9. This Board reserves the right to amend or add any conditions in this consent and the same shall be binding on the Applicant.
10. This is issued pursuant to the decision of Consent Committee meeting of the Board held on 8th August, 2012 and with the approval of the Hon'ble Chairman of the Board.
11. The applicant shall submit the fresh irrevocable bank guarantee of Rs.24.0/- Lacs drawn in favour of RO MPCB Chandrapur within 15 days valid for one year period, towards compliance of the consent conditions and interim directions issued by the Board.
12. Total capital investment of the industry is Rs. 86.70/- Crores.

For and on Behalf of the
Maharashtra Pollution Control Board,

(Rajeev Kumar Mital, IAS)
Member Secretary

To:
M/s. Steel Authority of India Ltd.,
Chandrapur Ferro Alloy Plant,
(Formerly Know as M/s Maharashtra Elektros melt Limited),
Mul Road Chandrapur, Taluka & Dist. – Chandrapur.

Copy to:

1) Regional Officer, MPC Board, Chandrapur 2) Sub Regional Officer, MPC Board, Chandrapur.
They are directed to forfeit the existing BG of Rs. 12/- Lacs of the industry and obtain fresh BG of Rs.24.0/- Lacs as per consent condition no.11 and submit the compliance of consent conditions & directions issued to the industry within one month's period with all monitoring results.

3) CAO/Cess Branch/Master file

Received Consent fee of -

<u>Amount</u>	<u>D.D.No.</u>	<u>Date</u>	<u>Drawn on</u>
Rs. 6.25.000/-	416544	25-10-2011	Bank of Maharashtra

4) Cess Branch, MPC Board, Mumbai. 5) Master file.