

# MAHARASHTRA POLLUTION CONTROL BOARD

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RED/L.S.I (R53)  
No:- Format1.0/CAC/UAN No.MPCB-  
CONSENT-0000168682/CE/2307000509

Date: 10/07/2023

To,  
M/s. Lloyds Metals and Energy Ltd.,  
Plot No.A-1 & A-2, MIDC Industrial Area, Ghugus,  
Chandrapur.



**Sub: Consent to establish for expansion of 2 x 500 TPD Kiln for sponge Iron- 360000 Ton/Y & 60 MW WHRB+AFBC Power Plant under RED category**

**Ref:** 1. Consent granted by Board for existing plant vide Format1.0/CAC/ UAN-123174/CO/2203001536 dated 29.03.2022 valid up to 31.12.2023.  
2. Minutes of CAC meeting held on 03.07.2023.

Your application No.MPCB-CONSENT-0000168682 Dated 18.04.2023

For: grant of Consent to Establish under Section 25 of the Water (Prevention & Control of Pollution) Act, 1974 & under Section 21 of the Air (Prevention & Control of Pollution) Act, 1981 and Authorization under Rule 6 and Rule 18(7) of the Hazardous & Other Wastes (Management & Transboundary Movement) Rules 2016 is considered and the consent is hereby granted subject to the following terms and conditions and as detailed in the schedule I, II, III & IV annexed to this order:

- consent to establish is granted for the period up to Commissioning of the unit or 5 years whichever is earlier.**
- The capital investment of the project is Rs.300 Crs. (As per C.A Certificate submitted by industry CI of the proposed expansion project is Rs.300 cr. )**
- Consent is valid for the manufacture of:**

Sr No	Product	Maximum Quantity	UOM
Products			
1	Sponge Iron (DRI)	360000	MT/A
2	Power Generation (WHRB + AFBC)	60	MW

- Conditions under Water (P&CP), 1974 Act for discharge of effluent:**

Sr No	Description	Permitted (in CMD)	Standards to	Disposal Path
1.	Trade effluent	250	As per Schedule-I	Recycle for dust suppression & reused in cooling of cooler kiln

<b>Sr No</b>	<b>Description</b>	<b>Permitted</b>	<b>Standards to</b>	<b>Disposal</b>
2.	Domestic effluent	18.5	As per Schedule-I	On land for gardening

5. **Conditions under Air (P& CP) Act, 1981 for air emissions:**

<b>Sr No.</b>	<b>Stack No.</b>	<b>Description of stack / source</b>	<b>Number of Stack</b>	<b>Standards to be achieved</b>
1	S-1	Kiln (2 X 500 TPD)	1	As per Schedule -II
2	S-2	WHRB & AFBC	1	As per Schedule -II

6. **Non-Hazardous Wastes:**

<b>Sr No</b>	<b>Type of Waste</b>	<b>Quantity</b>	<b>UoM</b>	<b>Treatment</b>	<b>Disposal</b>
1	Char	53333	MT/A	Recycle/Reused	Reused in Power plant
2	Accretion	4055	MT/A	Landfill	Landfill
3	Dust from ESP	8111	MT/A	Recycle/Reused	Brick Manufacturing
4	Fly Ash	44205	MT/A	Recycle/Reused	Brick Manufacturing and Land Filling
5	Bottom Ash	10950	MT/A	Recycle/Reused	Brick Manufacturing and Land Filling

7. **Conditions under Hazardous & Other Wastes (M & T M) Rules 2016 for Collection, Segregation, Storage, Transportation, Treatment and Disposal of hazardous waste:**

<b>Sr No</b>	<b>Category No./ Type</b>	<b>Quantity</b>	<b>UoM</b>	<b>Treatment</b>	<b>Disposal</b>
1	5.1 Used or spent oil	5.0	KL/A	Reprocessing	Sale to authorized party for recycle

8. The Board reserves the right to review, amend, suspend, revoke this consent and the same shall be binding on the industry.
9. This consent should not be construed as exemption from obtaining necessary NOC/ permission from any other Government authorities.
10. PP shall not take any effective steps towards implementation of expansion project without obtaining Environment Clearance from MoEFCC,Gol.
11. PP shall submit the BG of Rs. 25.0 Lakh towards compliance of consent to establish conditions, EC conditions & compliance of conditional restart direction issued vide dated 22.02.2018.
12. This consent is issued pursuant to the decision of the 2nd Consent Appraisal Committee Meeting held on 03.07.2023.

13. The applicant shall obtain Consent to Operate from Maharashtra Pollution Control Board before actual commencement of the Unit/Activity
- . This consent is issued as per communication letter dated 03/11/2022 which is approved by competent authority of the board.

**Received Consent fee of -**

<b>Sr.No</b>	<b>Amount(Rs.)</b>	<b>Transaction/DR.No.</b>	<b>Date</b>	<b>Transaction Type</b>
1	600000.00	TXN2304002959	21/04/2023	Online Payment

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**Copy to:**

1. Regional Officer, MPCB, Chandrapur and Sub-Regional Officer, MPCB, Chandrapur  
- They are directed to ensure the compliance of the consent conditions.  
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2. Chief Accounts Officer, MPCB, Sion, Mumbai
3. CAC Desk - for record & updation purposes.



### **SCHEDULE-I**

#### **Terms & conditions for compliance of Water Pollution Control:**

- 1) A] As per your application, you are proposed to provide ETP of capacity 250 CMD.
- B] The Applicant shall operate the effluent treatment plant (ETP) to treat the trade effluent so as to achieve the following standards prescribed by the Board or under EP Act, 1986 and Rules made there under from time to time, whichever is stringent.

<b>Sr. No.</b>	<b>Parameters</b>	<b>Limiting concentration not to exceed in mg/l, except for pH</b>
(1)	pH	5.5 to 9.0
(2)	Oil & Grease	10
(3)	BOD (3 days 27 Deg. Celsius)	100
(4)	COD	250
(5)	Total Dissolved Solids	2100
(6)	Phenolics (C <sub>6</sub> H <sub>5</sub> OH)	1
(7)	Suspended Solids	100
(8)	Chloride	600
(9)	Sulphate	1000

#### **For Power Plants:**

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

<b>Sr. No.</b>	<b>Parameters</b>	<b>Limiting concentration not to exceed in mg/l, except for pH</b>
For Condenser Cooling Water		
(1)	pH	Between 6.5 to 8.5
(2)	Temperature	Not to exceed 5°C than that of intake water temp.
(3)	Free available chlorine	Not to exceed 0.5
Boiler Blow Down		
(1)	Suspended Solids	Not to exceed 100
(2)	Oil & Grease	Not to exceed 10
(3)	Copper (Total)	Not to exceed 1
(4)	Iron (Total)	Not to exceed 1
Cooling Tower Blow Down		
(1)	Free available chlorine	Not to exceed 0.5
(2)	Zinc	Not to exceed 1
(3)	Chromium (Total)	Not to exceed 0.2
(4)	Phosphate	Not to exceed 5

Sr. No.	Parameters	Limiting concentration not to exceed in mg/l, except for pH
D.M. Plant Effluent		
(1)	pH	5.5 to 9
(2)	Suspended Solids	Not to exceed 100
(3)	Oil & Grease	Not to exceed 10
(4)	BOD 3 days	Not to exceed 30
(5)	COD	Not to exceed 250
(6)	TDS	Not to exceed 2100

**C] The treated effluent shall be recycled in the process for coal washery sections & reused in cooling of kiln to the maximum extent and remaining shall be used on land of 100 Acres for gardening purposes.**

**D] The Applicant shall provide Specific Water Pollution control system as per the conditions of EP Act, 1986 and rule made there under from time to time.**

2) **A] As per your consent application, you are proposed to provide STP of designed capacity 25CMD.**

**B] The Applicant shall operate the sewage treatment system to treat the sewage so as to achieve the following standards/ prescribed under EP Act, 1986 and Rules made there under from time to time, whichever is stringent.**

1	Suspended Solids	Not to exceed	50
2	BOD 3 days (27°C)	Not to exceed	30
3	COD	Not to exceed	100

**C] The treated sewage shall be utilized for gardening. In no case, treated sewage shall be disposed of outside factory premises.**

3) **The Applicant shall comply with the provisions of the Water (Prevention & Control of Pollution) Act, 1974 and as amended, by installing water meters, and other provisions as contained in the said act:**

Sr. No.	Purpose for water consumed	Water consumption quantity (CMD)
1.	Industrial Cooling, spraying in mine pits or boiler feed	5665.00
2.	Domestic purpose	75.00
3.	Processing whereby water gets polluted & pollutants are easily biodegradable	0.00
4.	Processing whereby water gets polluted & pollutants are not easily biodegradable and are toxic	900.00
5.	Grandening	100

- 4) **Project proponent shall provide online continuous monitoring of effluent and flow meters in the channel /drain carrying effluent within the premises.**
- 5) **Prior permission shall be obtained from CGWA / irrigation department if ground Water/surface water is being used for industrial/Domestic purpose.**
- 6) **The Board reserves its right to review plans,specifications or other data relating to plant setup for the treatment of water works for the purification thereof & the system for disposal of sewage or trade effluent or in the connection with the grant of any consent conditions. The Applicant shall obtain prior consent of the board to take steps to establish the unit or establish any treatment or disposal system or and extension or addition thereto.**
- 7) **The Applicant shall provide specific water pollution control system as per the condition of EP Act,1986, and rules made there under from time to time/ Environmental Clearance/ CREP guidelines.**



## **SCHEDULE-II**

### **Terms & conditions for compliance of Air Pollution Control:**

- 1) As per your application, you have provided the Air pollution control (APC) system and erected following stack(s) and observe the following fuel pattern-

Stack No.	Stack Attached To	APC System	Height in Mtrs.	Type of Fuel	Quantity & UoM	S%	SO <sub>2</sub>
S-1	Kiln (2 x 500 TPD)	ESP	75	Non coking coal	26.0 MT/Hr	0.50	6240.00
S-2	AFBC	ESP	100	Non Coking Coal	14.2 MT/Hr	0.50	1540.00

- 2) The Applicant shall provide Specific Air Pollution control equipments as per the conditions of EP Act, 1986 and rule made there under from time to time/ Environmental Clearance / CREP guidelines.

<b>H1. Coal based Sponge Iron Plant -Kiln / WHR Boiler stack emission**</b>	
Particulate Matter (PM)	50 mg/Nm <sup>3</sup>
CO	1% (max.)
<b>H3. Sponge Iron Plants (Coal/Gas) - De-dusting /Fumes extraction System</b>	
Particulate Matter (PM)	50 mg/Nm <sup>3</sup>
<b>K. Fugitive emissions</b>	
PM 10 at 20 metre from sources	2000 µg/m <sup>3</sup>

- 3) The internal roads shall be cement concrete and shall be maintained with adequate green belt.
- 4) The industry shall not cause any nuisance in surrounding area.
- 5) Industry shall install 24\*7 online continuous emission monitoring system at process stack to monitor stack emissions as per CPCB guidelines and it's connectivity to CPCB & MPCB Servers. PP shall Calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.

- 6) A) Control Equipment

The industry 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.

- B) Noise Levels Standards

1.00 AM – 10.00 PM

Noise level Leq 75 dB (9A)

10.00 PM - 6.00 AM

Leq 70 dB (A)

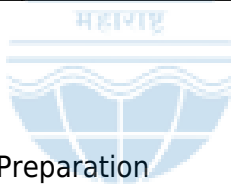
### C) Fugitive Emission Standards

The fugitive emissions level of suspended particulate matter (SPM) should not exceed 2000 µg/m<sup>3</sup>. The applicant shall install de-dusting system at the following locations & monitor the fugitive emissions levels and submit report to the board monthly.

- a. The existing industry shall comply with the standard of 2000 ug/m<sup>3</sup>
- b. Fugitive emission shall be monitored at a distance 10 meters from the source of fugitive emissions as per following.

Sr. No.	Area	Monitoring Location
1.	Raw material handling area	Wagon tippler, Screen area, Transfer Points, Stock Bin area.
2.	Crusher area	Crushing plant, vibrating screen, transfer points.
3.	Raw material feed area	Feeder area, Mixing area, transfer points, days bins
4.	Cooler discharge area	Over size discharge area, Transfer points.
5.	Product processing area	Intermediate stock bin area. Vibrating screens, Magnetic Separation unit. Transfer Points, Over Size discharge area, Product separation area, Bagging area, hoppers/storage bins.

### D) Other Conditions



### E) Raw Material handling and Preparation

- a. Enclosure should be provided for belt conveyors and transfer points of belt conveyors.

The above enclosures shall be rigid (and not of flexible/cloth type enclosures) and to be fitted with self-closing doors and close fitting entrances and exists. Where conveyors pass through the enclosures, flexible covers should be installed at entries and exit of the conveyors to the enclosures, minimizing the gaps around the conveyors. In wet system, provide water sprays/ sprinklers at following strategic location for dust suppression raw material transfer.

- Belt conveyors discharge / transfer point
- Crusher / screen discharge locations.

### F) Cooler Discharge and Product Separation Unit.

Enclosure should be provided for belt conveyors and transfer points of belt conveyors. Dust extraction cum control system to be installed preferably bag filter or ESP or equally effective method to arrest product loss in Cooler Discharge and Product Separation area, the stack emission not be exceed 100 mg/Nm<sup>3</sup>. (Particulate Matter).

- G) Extensive plantation/ Green belt shall be developed along the roads and boundary line of the industry.
- H) Stack, effluent, fugitive emission, noise monitoring shall be done as per CPCB regulation and MPCB's consent conditions.



- I) Pollution control system shall be operated as an integral part of production to ensure minimum emissions. Pollution Control System shall start before conveyor operation/ operation of plant. Similarly pollution control system shall be stopped only after completion of conveyor operation/operation of plant so that chances of settlement of dust in duct are avoided. Timely evacuation of dust (from Dust catchers, ESPs, Bag filter hopper etc.) shall be routinely organized.
- J) Kiln of gas treatment with efficient de-dusting shall be provided Waste heat utilization for power generation should be followed.
  - 1) Provisions of Gas conditioning Tower followed by Pollution Control system for small capacity Kiln (size 100 TPD and below).
  - 2) Entrepreneur having more than 100 TPD kilns shall use WHPB for generation of power.

Adequately designed ESP or Bag Filter or Wet scrubbing system or any other adequate air pollution control system / combination of system should be installed to achieve the prescribed stack emission standards.



### **SCHEDULE-III**

#### **Details of Bank Guarantees:**

<b>Sr. No</b>	<b>Consent (C2E/C2O/C2R)</b>	<b>Amt of BG Imposed</b>	<b>Submission Period</b>	<b>Purpose of BG</b>	<b>Compliance Period</b>	<b>Validity Date</b>
1	C2E	Rs. 25.0 Lakh	15 days	Towards compliance of consent to establish conditions	Regular	30.04.2026

#### **BG Forfeiture History**

<b>Srno.</b>	<b>Consent (C2E/C2O/C2R)</b>	<b>Amount of BG imposed</b>	<b>Submission Period</b>	<b>Purpose of BG</b>	<b>Amount of BG Forfeiture</b>	<b>Reason of BG Forfeiture</b>
NA						

#### **BG Return details**

<b>Srno.</b>	<b>Consent (C2E/C2O/C2R)</b>	<b>BG imposed</b>	<b>Purpose of BG</b>	<b>Amount of BG Returned</b>
NA				



**SCHEDULE-IV**  
**General Conditions:**

1. The Energy source for lighting purpose shall preferably be LED based
2. The PP shall harvest rainwater from roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial applications within the plant
3. 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) 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.
  - d) Installation of DG Set must be strictly in compliance with recommendations of DG Set manufacturer.
  - e) 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.
  - f) D.G. Set shall be operated only in case of power failure.
  - g) The applicant should not cause any nuisance in the surrounding area due to operation of D.G. Set.
  - h) The applicant shall comply with the notification of MoEFCC, India on Environment (Protection) second Amendment Rules vide GSR 371(E) dated 17.05.2002 and its amendments regarding noise limit for generator sets run with diesel.
4. The applicant shall maintain good housekeeping.
5. 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 of solid waste.
6. The applicant shall not change or alter the 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. The industry will not carry out any activity, for which this consent has not been granted/without prior consent of the Board.
7. 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.
8. The industry shall submit quarterly statement in respect of industries obligation towards consent and pollution control compliance's duly supported with documentary evidences (format can be downloaded from MPCB official site).
9. The industry shall submit official e-mail address and any change will be duly informed to the MPCB.
10. The industry shall achieve the National Ambient Air Quality standards prescribed vide Government of India, Notification No. B-29016/20/90/PCI-L dated. 18.11.2009 as amended.
11. The Board reserves its rights to review plans, specifications or other data relating to plant setup for the treatment of waterworks for the purification thereof & the system for the disposal of sewage or trade effluent or in connection with the grant of any consent conditions. The Applicant shall obtain prior consent of the Board to take steps to establish the unit or establish any treatment and disposal system or an extension or addition thereto.

12. The industry shall ensure replacement of pollution control system or its parts after expiry of its expected life as defined by manufacturer so as to ensure the compliance of standards and safety of the operation thereof.
13. The PP shall provide personal protection equipment as per norms of Factory Act
14. Industry should monitor effluent quality, stack emissions and ambient air quality monthly/quarterly.
15. 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.
16. The applicant shall provide an alternate electric power source sufficient to operate all pollution control facilities installed 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 and conditions of this consent.
17. The industry shall recycle/reprocess/reuse/recover Hazardous Waste as per the provision contain in the Hazardous and Other Wastes (M & TM) Rules 2016, which can be recycled /processed /reused /recovered and only waste which has to be incinerated shall go to incineration and waste which can be used for land filling and cannot be recycled/reprocessed etc. should go for that purpose, in order to reduce load on incineration and landfill site/environment.
18. An inspection book shall be opened and made available to the Board's officers during their visit to the applicant.
19. Industry shall strictly comply with the Water (P&CP) Act, 1974, Air (P&CP) Act, 1981 and Environmental Protection Act, 1986 and industry specific standard under EP Rules 1986 which are available on MPCB website ([www.mpcb.gov.in](http://www.mpcb.gov.in)).
20. Separate drainage system shall be provided for collection of trade and sewage effluents. Terminal manholes shall be provided at the end of the collection system with arrangement for measuring the flow. No effluent shall be admitted in the pipes/sewers downstream of the terminal manholes. No effluent shall find its way other than in designed and provided collection system.
21. Neither storm water nor discharge from other premises shall be allowed to mix with the effluents from the factory.
22. The industry should not cause any nuisance in surrounding area.
23. 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.
24. The industry shall create the Environmental Cell by appointing an Environmental Engineer, Chemist and Agriculture expert for looking after day to day activities related to Environment and irrigation field where treated effluent is used for irrigation.
25. 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.

26. The industry should comply with the Hazardous and Other Wastes (M & TM) Rules, 2016 and submit the Annual Returns as per Rule 6(5) & 20(2) of Hazardous and Other Wastes (M & TM) Rules, 2016 for the preceding year April to March in Form-IV by 30th June of every year.
27. 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.
28. 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 on available open plot area, number of trees surviving as on 31st March of the year and number of trees planted by September end.
29. The Board reserves its rights to review plans, specifications or other data relating to plant setup for the treatment of waterworks for the purification thereof & the system for the disposal of sewage or trade effluent or in connection with the grant of any consent conditions.
30. The firm shall submit to this office, the 30th day of September every year, the Environment 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.
31. The Applicant shall obtain necessary prior permission for providing additional control equipment with necessary specifications and operation thereof or alteration or replacement/alteration well before its life come to an end or erection of new pollution control equipment.
32. The Board reserves its rights to vary all or any of the condition in the consent, if due to any technological improvement or otherwise such variation (including the change of any control equipment, other in whole or in part is necessary).
33. The applicant shall provide facility for collection of environmental samples and samples of trade and sewage effluents, air emissions and hazardous waste to the Board staff at the terminal or designated points and shall pay to the Board for the services rendered in this behalf.

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This certificate is digitally & electronically signed.

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