## MAHARASHTRA POLLUTION CONTROL BOARD

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Consent order No:-BO/JD(APC)/EIC No: NG-12676-15/E/CC-5553 Date28 /04/2016

To.

M/s Manganese Ore (I) Ltd.

Mansar Mine, Post: Khari-Bijewada, al: Ramtek, Dist: Nagpur.

Subject: Consent to Operate (Renewal) - RED/ LSI category.

Ref: 1. Earlier Consent granted vide no: BO/JD(APC)/EIC No. NG-6075-12/R/CC-763, dt: 15/01/2013.

2. Minutes of CC meeting held on dt: 03/02/2016.

Your application No: CR1505000441, Dated: 13/04/2015.

For: 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 under Rule 5 of the Hazardous Wastes (MH & TM) Rules 2008 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:

- The Consent to Operate is granted for a period up to 30/06/2020.
- 2. The proposed and/or actual capital investment of the industry is <u>Rs. 35.35 Crs.</u> (As per CA certificate submitted by industry along with consent application).

3. The Consent is valid for the manufacture of -

Sr. No.	Product / By-Product Name	Maximum Quantity	
	Manganese Ore Mine	4166 Ton/Month	
	(Manganese Ore mining & Ore Crushing)		

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

Sr.	Description	Permitted quantity of discharge (CMD)	Standards to be achieved	Disposal
1.	Trade effluent	420.0	As per Schedule -I	land
2.	Domestic effluent	50.0	As per Schedule -I	land/Recycle

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

Sr. no.	Description of stack / source	Number of Stack	Standards to be achieved
1.			
2.		N.A.	

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6. Conditions about Non Hazardous Wastes:

Sr. no.	Type Of Waste	Quantity & UoM	Treatment	Disposal
1	Mud sludge	5.0 Ton/month		Land filling within mine lease area
2	Over burden	-	-	Backfilling or reclamation of the land within mine lease area

 Conditions under Hazardous Waste (MH & TM) Rules, 2008 for treatment and disposal of hazardous waste:

Sr. No.	Type Of Waste	Category	Quantity	Disposal
1	Used / Spent Oil	5.1 & 5.2		CPCB/SPCB authorized re-processors/recycler
2	Chemical sludge from waste water treatment	34.3	**	CHWTSDF Butibori

- 8. The Board reserves the right to review, amend, suspend, revoke etc. 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 Industry shall provide Sewage Treatment Plant (STP) for the treatment of domestic effluent within 6-months.

For and on behalf of the Maharashtra Pollution Control Board

> (Dr. P. Anbafagan, IAS) Member Secretary

Received Consent fee of -

Sr. No.	Amount	DD. No.	Date	Drawn On
1 6	Rs. 3,35,090/-	845460	13/03/2015	SBI Bank
2	Rs. 1,89,994/-	016284	16/04/2016	IDBI Bank

#### Copy to:

- Regional Officer, MPCB, Nagpur & Sub-Regional Officer-I, MPCB, Bhandara - They are directed to forfeit BG of Rs. 2.5 Lakhs for exceeds JVS reports top up with 5.0 Lakhs to make total BG of Rs. 7.5 Lakhs ensure the compliance of the consent conditions.
- 2. Chief Accounts Officer, MPCB, Mumbai.
- 3. CC/CAC desk- for record & website updation purposes.

## Schedule-I

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

- A] As per your application you have provided effluent treatment plant of design capacity -Not mentioned.
  - 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.

Sr No.	Parameters	Standards prescribed by Board
	I. Compulsory Parameters	Limiting Concentration in mg/l, except for pH
01	pH	5.5-9.0
02	Oil & Grease	10
03	BOD (3 days 27oC)	30
04	Total Dissolved Solids	2100
05	Bioassay Test	
Tale .	II Additional Parameters	
06	Mercury	••••
07	Arsenic	••••
08	Chromium (Hexavalent)	
09	Lead	
10	Cyanide	
11	Phenolics (C6H5OH)	1.0
12	Sulphide (as S)	
13	Phosphate(as P)	
14	Suspended Solids	100
15	COD	250
16	Chloride	600
17	Sulphate	1000
18	Nitrate Nitrogen	10

- C ) The treated effluent shall be used for spraying mine pits to the maximum extent & excess shall be used on land for gardening.
- A.] As per your consent application, you shall provide Sewage Treatment Plant (STP) of design capacity - Not mentioned.
  - 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

100 mg/l.

(2) BOD 3 days 27oC.

Not to exceed

100 mg/l.

C] The 100 % treated sewage shall be recycled for flushing, fire fighting, cooling etc

3) 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 and extension or addition thereto.

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- 4) 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.
- 5) The Applicant shall comply with the provisions of the Water (Prevention & Control of Pollution) Cess Act, 1977 and as amended, by installing water meters, filing water cess returns in Form-I 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	20.0
2.	Domestic purpose	190.0
3.	Processing whereby water gets polluted & pollutants are easily biodegradable	420.0
4.	Processing whereby water gets polluted & pollutants are not easily biodegradable and are toxic	

6) 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/ Environmental Clearance / CREP guidelines.

## Schedule-II

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

(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) Standards for Ambient Air Pollutants:

(i) Suspended Particulate Matter [SPM] Not to exceed 500 ug/m<sup>3</sup>

(ii) Respirable Particulate Matter [RSPM] Not to exceed 250 ug/m<sup>3</sup> [Size less than 10 micrometer]

(iii) Sulphur Dioxide (SO $_2$ ) Not to exceed 120  $ug/m^3$  (iv) Oxides of Nitrogen (NOx) Not to exceed 120  $ug/m^3$ .

#### (B) Standards for Emissions of Air Pollutants:

(i) TPM Not to exceed 150 mg/Nm³
(ii) SO<sub>2</sub> Not to exceed -- Kg/Day

#### (C) Control Equipment:

- Mineral handling plant will be provided with Dust Collector and Automatic Water Sprinkler.
- (ii) Scientific spraying of water on all working area, dump area, stock piles with the help of appropriate dust suppression system.
- (iii) Mineral metal shall be properly covered during transportation.
- (iv) The applicant shall carry out tree plantation along road side, around dumps or Compulsory a forestation as per proposal approved by Forest Department. The tree plantation programme shall be taken up well in advance of the actual mining activity, so that green belt of sufficient width and height is developed between mining area/road and surrounding environment.
- (v) Black topped metal led roads shall be provided and well maintained to prevent dust formation.
- (vi) Overloading of dumpers shall be avoided to prevent spillages.
- (vii)Correct type and quantity of explosive shall be used to avoid excess dust formation and vibration in the surrounding area.
- (viii) The slope of the over burden shall have slope but not more than 28 degree to the horizontal. The overburden shall be properly covered by vegetation for Stabilization.
- (ix) Coal/Mineral transportation shall be done by installing conveyors wherever possible & mechanically covered closed trucks shall be used for transportation.
- (x) The applicant shall provide minimum three ambient air quality monitoring stations within mining area which should be monitored for SPM, RSPM, SO<sub>2</sub>, NOx, HC, CO etc. The Annual Arithmetic Mean of minimum 104 measurements in a year taken twice a week 24 hourly at uniform interval shall conform to the National Ambient Air Quality Standards prescribed under Air (Prevention and Control of Pollution) Act, 1981 and Environment (Protection) Act, 1986. The records of results of continuous monitoring done shall be made available for inspection to the officers of the Board.

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Sr.No.	Location	Permissible Norms [in dB(a)]	Desired minimum thickness of Green Belt
1	Along road	65 (Commercial Area)	20
2	In Colonies	55 (Residential Area)	20
3	Near Opencast Mines	75 (Industrial Area)	10 (*40)
4	Near CHPs	75	30
5	Near Shaft	75	20
6	Near Mine exhaust fan	75	>50

(\* The Open Cast Mine needs to be surrounded by a green belt of sufficient width if the residential complexes are very close).

- The Applicant shall obtain necessary prior permission for providing additional control
  equipment with necessary specifications and operation thereof or alteration or
  replacemenalteration well before its life come to an end or erection of new pollution
  control equipment.
- 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).

# Schedule-III

## **Details of Bank Guarantees**

## BG Forfeited History:

Sr.No	Consent (C to E/O/R)	Amount of BG imposed	Amount of BG to be forfeited from BG imposed	Purpose of BG forfeiture
1	C to R (To be forfeited)	Rs. 5.0 Lakhs	Rs. 2.5 Lakhs	For exceeding JVS results

# Details of Bank Guarantees:

Sr.No.	Consent	Amt of BG Imposed	Submissi on Period	Purpose of BG	Compliance Period	Validity Date
1	C to O (1st)	Total BG of Rs. 7.5 Lakhs (Top up BG of Rs. 5.0 Lakhs + Remaining BG of Rs. 2.5 Lakhs)	15-Days	Operation & Maintenance of pollution control system	30/06/2020	31/10/2020
2	C to O (1st)	BG of Rs. 5.0 Lakhs	15-Days	Provision of STP within 6-months.	6-Months	31/10/2020

## Schedule-IV

#### **General Conditions:**

- 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.
- If the MIDC pipeline is broken/ overflowing chamber, in such cases industry shall not discharge their treated effluent into MIDC drain, it shall be sent to CETP by tanker.
- Industry should monitor effluent quality, stack emissions and ambient air quality monthly/quarterly.
- 4) 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.
- 5) 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.
- 6) 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.
- 7) 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.
- The industry shall recycle/reprocess/reuse/recover Hazardous Waste as per the provision contain in the HW(MH&TM) Rules 2008, which can be recycled
- 9) /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.
- 10) The industry should comply with the Hazardous Waste (MH & TM) Rules, 2008 and submit the Annual Returns as per Rule 5(6) & 22(2) of Hazardous Waste (MH & TM) Rules, 2008 for the preceding year April to March in Form-IV by 30<sup>th</sup> June of every year.
- 11) An inspection book shall be opened and made available to the Board's officers during their visit to the applicant.
- 12) The applicant shall make an application for renewal of the consent at least 60-days before the date of the expiry of the consent (in case of Renewal of consent).
- 13) The industry shall constitute an Environmental cell with qualified staff/personnel/agency to see the day to day compliance of consent condition towards Environment Protection.
- 14) 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.
- 15) Neither storm water nor discharge from other premises shall be allowed to mix with the effluents from the factory.

- 16) 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.
- 17) 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 sitting 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 MoEF dated 17.05.2002 regarding noise limit for generator sets run with diesel
- 18) The industry should not cause any nuisance in surrounding area.
- 19) 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.
- The applicant shall maintain good housekeeping.
- 21) The applicant shall bring minimum 33% of the available open land under green coverage/ plantation. The applicant shall submit a statement on available open plot area, number of trees surviving as on 31<sup>st</sup> March of the year and number of trees planted by September end, with the Environment Statement.
- 22) 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.
- 23) 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.
- 24) 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.
- 25) 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).
- 26) The industry shall submit official e-mail address and any change will be duly informed to the MPCB.

### 27) Specific Conditions-

 Industry shall obtain amended Environmental Clearance for expansion from Competent Authority shall not take any effective steps towards commissioning of the plant for expansion.

2) Transportation of Ore & minerals shall be by closed system, Conveyor system wherever possible.

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