#### Short Narrative of the Proposal and Project for which the Forest Land is Required

The M/s SreeMetaliks Ltd is a Private Limited company, was commissioned for a multi-product unit of manufacturing of sponge iron and steel since 1995. With a vast network of professionals and well-equipped plants in India, Sree Metaliks Limited is one of the leading TMT bars manufacturers in India. It possesses a state-of-the-art manufacturing facility and the highest quality testing controls. The Company produces TMT bars under the brand name SML TITAN at its Loidapada, Odisha Plant using an in-house hot Billet process. With dedicated team of subject matter experts and our high-quality standards, SML have strived to become the best TMT bar company in India.

Subsequently the Company has signed MOU on dt.- 27<sup>th</sup> November 2004 with Govt. of Odisha [(Annexure II(B))] for setting of 0.25MTPA Steel Plant along with other manufacturing facilities at the same complex at village Loidapada as follows:

PROJECT CONFIGURATION	CAPACITY
Coal based Sponge Iron	0.30 MTPA
MBF	0.09 MTPA
Steel Billets	0.25 MTPA
Captive Power Plant	28 MW
TMT Bar	0.045 MTPA

The cost of the project has been estimated to be Rs. 190.44 Crores. The plant has is running with valid permission from all concern authorities.

There are about 1950 nos of direct employee and 800 nos indirect employee working in the unit.

The Company has its Captive mines namely Khandbandh Iron Ore Mines at Khandbandh, Dist.- Keonjhar, and carry out mining operation since 2018 .The required raw material for the plant has been sourced from the captive mines and also procuring /purchasing raw materials from local mines of Keonjhar and Sundargarh district.

The Water requirements of the steel plant is 661 KLD out of which 25 KLD is for domestic purpose and 636 KLD is for Plant operation. We have obtained NOC from withdrawal of CGWA for ground through bore well vide CGWA/NOC/IND/ORIG/2020/9655 valid upto 23.11.2023(Annexure-II.C) . Water required for operation of plant has been drawn form karo River with due permission from Water Resource Department, Government of Odisha vide Letter No. 22886/Dt. 22.07.05[Annexure-II .D)]. Based on allocation order agreement has been done with Supertending Engineer Baitarni Division, Salapada, Anandapur, dist Keonjhar, Odisha. (Copy of agreement attached as Annexure-II.E)

The power requirement of the plant is met from state electricity department with due permission vide no FC/CO/180/7366(6) Date 01.09.2021.. Based on permission agreement has been done with state electricity Department.

The project proponent proposes to draw the said water by installing a pump house in the banks of river Karo and laying underground pipe line of 300mm dia along with 11KV underground power cable. The total land requirement is 0.6138Ha including forest land of 0.472Ha.

The project proponent proposes to draw the said water by installing a pump house in the banks of River Karo and lying underground pipeline of 300mm dia along with 11 KV underground power cable. The total land requirement for pipeline is 0.6138 Ha including forest land of 0.472 Ha.

While selecting the site for the proposed project, three alternative routes have been considered depending on the water intake points in the River Karo. All the alternate route are shown in Plate-1.

- 1. Route No.1 (Option-1):- The length of the route is 6.30 kms out of which 4.30 km is inside Sidhamatha RF. This route covers more forest area.
- 2. Route No.2 (Otion-2):- The length of this route is 4.74 km out of which 2.73 km is inside Sidhamath RF.
- 3. Route No.3 (Option-3):- The length of this route 4.15 km out of which 3.15 km is in Forest Land (Sidhamath RF 1.95 KM,Topadihi Village 0.23 Km, Rugudihi Village 0.63 Km and Loidapad Village 0.34 Km) and rest 1.0 Km in Non-forest land at Loidapada Village.

This (Option-3) alignment has been selected due to the following reasons:

- a. It involves less RF area as well as other Forest land area in comparison to other options, so there will be less use of Forest Land.
- b. This alignment is along the side of the existing road and along the boundary of existing Mining Lease area, causing minimum destruction of Forest and Forest land.

The route selected for installation of pipeline falls in three villages namely Loidapada (plot no 114,116,118,119,386,387,389), Rugudihi (plot no 137,138,140) & Topadihi (Plot no 452,610,303)

भारत सरकार

## पर्यावरण एवं वन मंत्रालय GOVERNMENT OF INDIA

MINISTRY OF ENVIRONMENT & FORESTS

BY SPEED POST

Telefax: 011-24360488 E-mail: sansom j@gmail.com sansom\_2859@yahoo.co.in

Date: 28th June 2007

File No. J-11011/169/2006-IA-II (I)

Shri Mahesh Kumar Agrawal Managing director Shree Metaliks Limited Gurudwara Road Barbil, Keonjhar Orissa

Subject: Modernization of Sponge Iron Plant by way of Waste Heat Recovery Boiler and No Increase in Pollution Load Basis at Loidapada, Guali, Keonkjar, Orissa by M/s Sree Metaliks Ltd. - TORs Regarding.

Sir,

Kindly refer to your application No. SML/EC/MoEF/2007 dated 24th January 2007 seeking environmental clearance for the above-mentioned project.

- The Ministry of Environment and Forests has examined the proposal. It is noted that proposed project is for Modernization of existing Sponge Iron manufacturing plant (DRI) at Loidapada, near Barbil in Guali, Keonkjar, Orissa by installing a Waste Heat Recovery Boiler for producing 20 MW Power for Captive use. The existing kilns are connected to waste heat recovery boilers and producing 8 MW of Power for its captive consumption. The flue gases generated from the present 300 TPD kiln will be utilized for energy production. A 38 TPH capacity WHRB will be installed to generate 2.7 MW. In addition, an AFBC Boiler of 41 TPH will also be installed to utilize the char and coal fines generated from the Sponge Iron Plant. The power thus available will be utilized for captive consumption. The modernization will be undertaken at the existing site and no tree felling is involved.
- The Project was received under EIA Notification, 2006. The Project activity is listed at 3(a) in the Schedule of EIA Notification 2006 and attracts the provisions under Para 2 (ii) of this Notification.
- Based on the information submitted by you, the Ministry of Environment and Forests hereby accords environmental clearance to the above project under the

Secretarias and the second

प्रयावरण भवन, सी.जी.ओ काम्प्रलेक्स, लोदी रोड, नई दिल्ली-110 003 PARYAVARAN BHAWAN, C.G.O. COMPLEX, LODHI ROAD, NEW DELHI - 110 003 provisions of EIA Notification, 2006, subject to the compliance of the following Specific and General conditions:

## A. SPECIFIC CONDITIONS:

- (i) The gaseous emissions from various process units shall conform to the load/mass based standards notified by this Ministry on 19th May, 1993 and standards prescribed from time to time. The State Board may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location. At no time the emission level shall go beyond the prescribed standards. On-line Continuous monitoring system for particulate emissions, SO2 and NOx shall be provided with sponge iron unit and CPP and shall make necessary arrangements for submission of On-line real time emission data to CPCB website. Interlocking facility shall be provided between pollution control equipment and the process operation so that in the event of the pollution control equipment not working, the respective unit (s) is shut down automatically.
  - (ii) The environmental standards and guidelines prescribed by CPCB for sponge iron plants shall be followed.
  - (iii) The modernization project will reduce particulate emission load by 78 % and solid waste by 48%. There will be no additional pollution source from the proposed new units of CPP.
  - (iv) AFBC boiler will be based on Char and Coal fines. Air emissions from the boiler will be controlled using ESPs to limit the SPM to 50 mg/Nm³. Height of the Stack will be as per the prevailing norms.
  - (v) In plant control measures for checking fugitive emissions from all the vulnerable sources like spillage/raw materials/coal handlings etc. shall be provided. Further, specific measures like provision of dust extraction and suppression system consisting of water sprinkling, suction hoods, fans, cyclones, bag filters, ventury scrubber etc. shall be installed at material transfer points, furnace stock house and other enclosed raw material handling areas. Centralized dedusting system i.e. collection of fugitive emissions through suction hood and subsequent treatment through bag filter or any other device and finally emitted through a stack of appropriately designed height, as prescribed above, shall be provided for kiln and waste heat recovery boiler.
    - (vi) Fugitive emissions, especially in the work zone area shall be regularly monitored and records be maintained as per CPCB guidelines.
    - (vii) Raw material will be stored in covered yards. Water sprinkling arrangement should be made in the raw material stock yard to control fugitive emissions.

Gal

Materials will be transported in tippers, covered trucks, covered containers, covered rail wagons etc.

- (viii) Windbreakers will be installed to restrict fugitive dust.
- (ix) The total water requirement will not exceed than 241 m3/hr.
- (x) There will be no wastewater discharge from the unit and 'Zero' discharge shall be followed strictly.
- (xi) Char produced from the DRI kiln and Coal rejects and fines will be utilized in AFBC Boiler. Coal Washery Rejects and Fines will be stored in the premises for use in the AFBC Boiler. These will be stored properly to avoid any fugitive dust and impact to the environment.
- (xii) The fly ash shall be utilized by making bricks for which an additional brick manufacturing unit will be installec. Fly ash utilization shall be as per the Fly Ash Unitilisation Notification of the Ministry.
- (xiii) Acoustic enclosures will be installed to limit the noise levels below 85 dBA.
- (xiv) Minimum Cycle of Concentration (COG) for the CPP will be 5.0.
- (XV) 33% of the total area shall be developed as green belt.
- (xvi) The company shall harvest surface as well as rainwater from the rooftops of the buildings proposed in the expansion project and storm water drains to recharge the ground water and use the same water for the various activities of the project to conserve fresh water.

#### B. GENERAL CONDITIONS:

- i. The project authorities must strictly adhere to the stipulations made by the concerned State Pollution Control Board and the State Government.
- ii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests.
- iii. Regular Ambient Air Quality Manitoring shall be carried out. The monitoring stations will be set up in consultation with the SPCB. At least four ambient air quality monitoring stations shall be established in the downward direction as well as where maximum ground level concentration of SPM,  $SO_2$  and  $NO_X$  are anticipated in consultation with the SPCB. It will be ensured that at least one monitoring station is set up in up-wind & in down-wind direction along with those in other directions. On-line data for air emissions shall be transferred to the

BY

CPCB and SPCB once in six months. The instruments used for ambient air quality monitoring shall be calibrated regularly.

- iv. Adequate number of influent and effluent quality monitoring stations shall be set up in consultation with the SPCB. Regular monitoring shall be carried out for relevant parameters.
- v. Industrial wastewater shall be properly collected and treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May 1993 and 31st December, 1993 or as amended from time to time. The treated wastewater shall be utilized for plantation purpose.
- vi. The overall noise levels in and around the plant area shall be limited within the prescribed standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation.
- vii. Proper House keeping and adequate occupational health programs shall be taken up. Regular Occupational Health Surveillance Programme for the employees and contract workers shall be carried as per the Factories Act and records shall be maintained properly for at least 30-40 years.
- viii. A separate environment management cell with full fledge laboratory facilities to carry out various management and monitoring functions shall be set up under the control of a Senior Executive.
- ix. Rs. 07.00 Crores shall be earmarked for the environmental protection measures and shall be used judiciously to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government. The funds so provided shall not be diverted for any other purpose.
- x. The concerned Regional Office of this Ministry /SPCB/ Central Pollution Control Board shall monitor the implementation of the stipulated conditions. Six monthly compliance status report and monitoring data along with statistical interpretation shall be submitted to them regularly.
- The Project Proponent should advertise in at least two local newspapers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned informing that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at Website of the Ministry and Forests at http://envfor.nic.in. The advertisement should be made within 7 days from the date of issue of the clearance letter and a copy of the same should be forwarded to the Ministry's Regional Office at Bhopal.

Spal

- xii. The Project Authorities shall inform the Regional Office as well as the Ministry the date of financial closure and final approval of the project by the concerned authorities and the date of start of land development work.
- 6. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- 7. The Ministry reserves the right to stipulate additional conditions if found necessary. The company will implement these conditions in a time bound manner.
- 8. The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Public Liability Insurance Act, 1991, Hazardous Waste (Management & Handling) Rules, 1989 and Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 along with their amendments and rules.

(Sanchita Jindal)
Additional Director

#### Copy to :

- The Secretary, Environment & Forests Department, Government of Orissa, Bhubaneshwar- 751 001, Orissa.
- 2. Chief Conservator of Forests, Ministry of Environment & Forests, Regional Office (EZ), A/3, Chandra Shekharpur, Bhubaneswar- 751 023, Orissa.
- 3. The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi 110 032.
- 4. The Chairman, Orissa State Pollution Control Board, A-118, Nilkantha Nagar, Unit-8, Bhubaneshwar- 751 012, Orissa.
- 5. Joint Secretary (CCI-I) Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
- 6. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
- 7. Guard File/Monitoring File/Record File.

(Sanchita Jindal)
Additional Director

भारत सरकार

### पर्यावरण एवं वन मंत्रालय GOVERNMENT OF INDIA

BY SPEED POST

MINISTRY OF ENVIRONMENT & FORESTS Telefax: 011-24360488

E-mail: sansom\_2859@yahoo.co.in -

File No. J-11011/169/2007-IA-II (I)

Date: 1" February 2008

M/s Sree Metaliks Limited Gurudwo - Road Baroil Keenihar Orista

Subject: Expansion and Diversification of Existing Sponge Iron Plant by Installation of 4X4 TPH Induction Furnace at Loidapada, Guali, Keonkjar, Orissa by M/s Sree Metaliks Ltd. - Environment Clearance regarding.

Sir.

Kindly refer to your application No. SML/2007/102 dated 24th September 2007 seeking environmental clearance for the above-mentioned project.

- The Ministry of Environment and Forests has examined the proposal. It is noted that proposed project is to expand the present Sponge Iron and Steel Billets manufacturing capacities at the existing plant at Loidapada, Koenkjar, Orissa by installing four (4) additional Induction Furnaces of 4 Ton/heat (4x4 Ton/heat) in the existing premises. This will increase the Steel Production from 550 TPD to 1050 TPD. Sponge Iron produced with in the plant will be used in conjunction with Cast Iron produced in the plant. No metal iron scrap will be melted. The cooling water shall be completely recycled and shall not be discharged outside. The unit will be 'Zero Discharge unit. Slag from the Induction Furnace shall be used in the existing slag crusher and the sand shall be used in civil construction and development of road after separation of the metallic portion, State Pollution Control Board, Bhubaneswar, vide ietter no.8797Ind-II-NOC-4545 dated April 17, 2007 had granted the Consent to Establish, subject to clearance from MoEF.
  - The project activity is listed at 5 (k) and is of '8' Category project in the Schedule of EIA Notification, 2006, however, was considered at the Central level in the absence of the SEIAA for the State of Orissa. The preparation of EIA/EMP Report and Public Hearing was dispensed with under Para 7 (11) of EIA Notification,
  - Based on the information submitted by you, the Ministry of Environment and 2006. Forests hereby accords environmental clearance to the above project under the provisions of EIA Notification, 2006, subject to the compliance of the following Contd. conditions:



जहाँ है हिर्माली। वहाँ हे खुशहाली।।

पर्यावरण भवन, सी.जी.ओ. कॉम्पलैक्स, लोदी रोड, नई दिल्ली - 110 003 PARYAVARAN BHAWAN, E.G.O. COMPLEX, LODHI ROAD, NEW DELHI - 110 003

#### A. SPECIFIC CONDITIONS:

- the gaseous emissions from various process units shall conform to the load/mass based standards notified by this Ministry on 19th May, 1993 and standards prescribed from time to time. The State Board may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location. At no time the emission level shall go beyond the prescribed standards. On-line Continuous monitoring system for particulate emissions, SO2 and NOx shall be provided with sponge iron unit and CPP and shall make necessary arrangements for submission of On-line real time emission data to CPCB website. Interlocking facility shall be provided between pollution control equipment and the process operation so that in the event of the pollution control equipment not working, the respective unit (s) is shut down cutomatically.
- (ii) The relevant environmental standards and guidelines prescribed by CPCB for Sponge Iron and Steel plants shall be followed.
- (iii) Sponge Iron produced with in the plant shall be used in conjunction with Cast Iron produced in the plant.
- (iv) No metal iron scrap will be melted.
- (v) Bag filters shall be installed to arrest the dust particles discharged from the furnaces. Swiveling hoods of adequate size shall also be installed to collect fumes, which shall be routed through bag filters. Reverse Pulse Jet arresting system shall be provided and SPM emission from the stack shall be limited below 50 mg/nm3. Stack of minimum 30 m shall be provided.
- (vi) The total water requirement will not exceed than the permitted 241 m3/hr.
- (vii) The cooling water shall be completely recycled and shall not be discharged outside and 'Zero Discharge' shall be followed strictly.
- (viii) Slag from the Induction Furnace shall be used in the existing slag crusher and the send shall be used in civil construction and development of road, after separation of the metallic portion.
- (ix) In plant control measures for checking fugitive emissions from all the vulnerable sources like spillage/raw materials/coal handlings etc. shall be provided. Further, specific measures like provision of dust extraction and suppression system consisting of water sprinkling, suction hoods, fans, cyclones, bag filters, ventury scrubber etc. shall be installed at material transfer points, furnace stock house.

  Contd.

84

EBOW : MOS (BD)

and other enclosed raw material handling areas. Centralized de-dusting system i.e. collection of fugitive emissions through suction hood and subsequent treatment through bag filter or any other device and finally emitted through a stack of appropriately designed height, as prescribed above, shall be provided for kiln and waste heat recovery boiler.

- (x) Fugitive emissions, especially in the work zone area shall be regularly manitored and records be maintained as per CPCB guidelines.
- (xi) Raw material will be stored in covered yards. Water sprinkling arrangement should be made in the raw material stock yard to control fugitive emissions. Materials will be transported in tippers, covered trucks, covered containers, covered rail wagons etc.
- (xii) Windbreakers will be installed to restrict fugitive dust.
- (Xiii) Acoustic enclosures will be installed to limit the noise levels below 85 dBA.
- (xiv).33% of the total area shall be developed as green belt.
- (xv) The company shall harvest surface as well as rainwater from the rooftops of the buildings proposed in the expansion project and storm water drains to recharge the ground water and use the same water for the various activities of the project to conserve fresh water.

#### B. GENERAL CONDITIONS:

- The project authorities must strictly adhere to the stipulations made by the concerned State Pollution Control Board and the State Government.
- ii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests.
- ii. Regular Ambient Air Quality Monitoring shall be carried out. The monitoring stations will be set up in consultation with the SPCB. At least four ambient air quality monitoring stations shall be established in the downward direction as well as where maximum ground level concentration of SPM, SO2 and NOx are anticipated in consultation with the SPCB. It will be ensured that at least one monitoring station is set up in up-wind & in down-wind direction along with those in other directions. On-line data for air emissions shall be transferred to the CPCB and SPCB once in six months. The instruments used for ambient air quality monitoring shall be calibrated regularly.

Contd.

- iv. Industrial wastewater shall be properly collected and treated so as to conform to the standards prescribed under GSR 422 (E) dated 19<sup>th</sup> May 1993 and 31<sup>st</sup> December, 1993 or as amended from time to time. The treated wastewater shall be utilized for plantation purpose.
- v. The overall noise levels in and around the plant area shall be limited within the prescribed standards by providing noise control measures including acoustic noods, silencers, enclosures etc. on all sources of noise generation.
- vi. Proper House keeping and adequate occupational health programs shall be taken up. Regular Occupational Health Surveillance Programme for the employees and contract workers shall be carried as per the Factories Act and records shall be maintained properly for at least 30-40 years.
- vii. A separate environment management cell with full fledge laboratory facilities to carry out various management and monitoring functions shall be set up under the control of a Senior Executive.
- viii. Adequate funds shall be earmarked for the environmental protection measures and shall be used judiciously to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government. The funds so provided shall not be diverted for any other purpose.
- ix. The concerned Regional Office of this Ministry /SPCB/ Central Pollution Control Board shall monitor the implementation of the stipulated conditions. Six monthly compliance status report and monitoring data along with statistical interpretation shall be submitted to them regularly. Six Monthly compliance report shall be displayed by the Proponent at its web-site.
- The Project Proponent should advertise in at least two local newspapers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned informing that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at Website of the Ministry and Forests at http://envfor.nic.in. The advertisement should be made within 7 days from the date of issue of the clearance letter and a copy of the same should be forwarded to the Ministry's Regional Office at Bhopal.
- xi. The Project Authorities shall inform the Regional Office as well as the Ministry the date of financial closure and final approval of the project by the concerned authorities and the date of start of land development work.

Contd.

- 5. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- 6. The Ministry reserves the right to stipulate additional conditions if found necessary. The company will implement these conditions in a time bound manner.
- 7. The above conditions will be enforced, inter-alia under the previsions of the Water (Prevention & Control of Pollution) Act, 1974. Air (Prevention & Control of Pollution) Act, 1981, Environment (Protection) Act, 1986, Public Liability Insurance Act, 1991, Hazardous Waste (Management & Handling) Rules, 1989 and Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 along with their amendments and rules.

(Sanchita Jindal)
Additional Director

#### Copy to:

- The Secretary, Environment & Forests Department, Government of Orissa, Bhybaneshwar-751001, Orissa.
- Chief Conservator of Forests, Ministry of Environment & Forests, Regional Office (EZ), A/3, Chandra Shekharpur, Bhubaneswar- 751 023, Orissa.
- The Chairman, Central Pollution Conirol Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi - 110 032.
- The Chairman, Orissa State Pollution Control Board, A-118, Nilkantha Nagar, Unit-8, Bhubaneshwar-751 012, Orissa.
- Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
- 6. Guard File
- 7. Monitoring File
- 8. Record File.

(Sanchita Jindal)
Additional Director





SPEED POST

## STATE POLLUTION CONTROL BOARD, ODISHA

(DEPARTMENT OF FOREST & ENVIRONMENT, GOVERNMENT OF ODISHA)
A/118, Nilakantha Nagar, Unit-VIII, Bhubaneswar-751012
Phone-2561909/ EPABX: 2561909/2562847

E-mail: paribesh1@ospcboard.org / Website: www.ospcboard.org

No	4700	/ IND-I-CON-2134	Dt. 23-03.2021
_			

#### **CONSENT ORDER**

Sub: Consent for Existing / New operation of the plant under Section 25 of the Water (Prevention & Control of Pollution) Act, 1974 and under Section 21 of the Air (Prevention & Control of Pollution) Act, 1981.

Ref: Your online application ID No. 3232814 dtd. 26-11-2020

Consent is hereby granted under section 25/26 of Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of Air (Prevention & Control of Pollution) Act, 1981 and rules framed there under to

Name of the I	ndustry: M/s. SREE METALIKS LIMITED
	At- Loidapada, Po- Guali, Barbil, Dist – Keonjhar
Name of the C	Occupier & Designation; Mr. Mahesh Kumar Agarwal, M.D
Address:	SML House, Main Road, Barbil, Keonjhar 758035

This consent order is valid for the period from 01.04.2021 to 31.03.2023

This consent order is valid for the product quantity, specified outlets, discharge quantity and quality, specified chimney/stack, emission quantity and quality of emissions as specified below. This consent is granted subject to the general and special conditions stipulated therein.

#### A. Details of Products Manufactured

SI. No.	Product	Quantity		
1.	Sponge Iron - DRI Kiln (I & II)	2x50 TPD		
2.	Sponge Iron - DRI Kiln (III, IV,V, & VI)	4x100 TPD		
3.	Sponge Iron - DRI Kiln (VII)	1x300 TPD		
Captive Power Plant		28 MW (9.7 MW WHRB +8 MV WHRB + 10.3 MW FBC boiler)		
5.	Induction Furnace (MS Ingots)- 4x 4 T/H, 4x 6 T/H & 1x12 T/H	15000 TPM		
6.	Rolling Mill (TMT Bar)	3750 TPM		
7.	Blast furnace (Pig Iron)	36,000 TPA		
8.	Fly Ash Brick	5 Lakh Nos./Month		



## B. Discharge permitted through the following outlet subject to the standard

Outlet No.	Description of outlet	Point of discharge	Quantity of discharge	Prescribed standard
1.	Domestic effluent	Treated in STP and will be reused for green belt development.	No discharge	pH - 6.5-9.0, BOD - less than 30mg/l TSS - less than 100mg/l and Fecal Coliform (FC) MPN/100ml<100
2.	Cooling water	To be completely recycled	No discharge	-

C. Emission permitted through the following stack subject to the prescribed standard

Chimney / Stack No.	Description of Stack	Stack height (m)	Quantity of emission (Nm³/hr)		Pres		d Sta /Nm	andard
1.	Stack attached to ESP of				P	М		CO (Vol/Vol)
a)	DRI Kiln - I & II	34	46,000		10	00		
b)	DRI Kiln - III & IV	30	92,000		10	00		1%
c)	DRI Kiln - V & VI	30	92,000		10	00		
d)	DRI Kiln – VII and its WHRB	34	1,40,000		10	00		
e)	AFBC Boiler	55	1,75,000	PM	SO2	NOx	Hg	-
				50	600	300	0.03	-
2.	Bag filter attached to DRI Kiln- I, II, III, IV, VI, VI & VII							-
a)	Coal Circuit (Common to all the kilns)	12	25,000 20,000 3,000 10,000	100		-		
b)	Iron Ore Circuit (Common to all the kilns)	08	7,000 3,000 15,000	100		-		
c)	Common cooler discharge for Kiln-I & II	20	8,700 25,000	100			-	
d)	Common cooler discharge for Kiln-III & IV	20	8,700 25,000		10	0		-
e)	Common cooler discharge for Kiln-V & VI	20	8,700 30,000	100		-		
f)	Cooler discharge Kiln –VII	07	15,000 30,000					-
g)	Product House (Kiln –I & II)	09	8,700		10	0		-
h)	Product House (Kiln -III & IV)	13	14,000		100		-	
i)	Product House (Kiln V & VI)	10	20,000		10	0		-
j)	Product House (Kiln –VII)	15	20,000 25,000		10	0		-



k)	Product House (Addl. Bag Filter common to all the Kilns)	10	90,000	100	-
I)	Transfer House (Kiln –III, IV, V & VI)		7,000 15,000	100	-
m)	Intermediate Bin (Kiln –VII)	15	30,000	100	-
3.	Bag filter of Induction furnaces (4x6 T/H)		50,300	100	-
4.	Bag filter of Induction furnaces (4x4 T/H)	20	30,000	100	-
5.	Bag filter of Induction furnaces (1x12 T/H)		30,000	100	-
6.	Stack attached to the bag filer of Rolling mill	30	10,000	100	-
7.	Stack attached to ventury scrubber of Blast Furnace	30		100	

#### D. Disposal of solid waste permitted in the following manner

SI.No.	Type of Solid waste	Quantity generated (TPD)	Quantity to be reused on site(TPD)	Quantity to be reused off site(TPD)	Quantity disposed off (TPD)	Description of disposal site.
1.	Dolochar & dust from APC devices	560 TPD	-	-	5600 TPD	To be dumped at designated dump site inside the factory premises.
2.	SMS Slag	130 TPD	-	-	130 TPD	To be dumped at designed solid waste disposal site
3.	Fly and bottom ash of AFBC Boiler	72300 TPA	-	-	72300 TPA	To be dumped at designed solid waste disposal site.
4.	Granulated Slag from BF		-	-	-	Shall be used in cement making.

#### E. GENERAL CONDITIONS FOR ALL UNITS

- 1. The consent is given by the Board in consideration of the particulars given in the application. Any change or alternation or deviation made in actual practice from the particulars furnished in the application will also be the ground liable for review/variation/revocation of the consent order under section 27 of the Act of Water (Prevention & Control of Pollution) Act, 1974 and section 21 of Air (Prevention & Control of Pollution) Act, 1981 and to make such variations as deemed fit for the purpose of the Acts.
- The industry would immediately submit revised application for consent to operate to this Board in the event of any change in the quantity and quality of raw material / and products / manufacturing process or quantity /quality of the effluent rate of emission / air pollution control equipment / system etc.
- The applicant shall not change or alter either the quality or quantity or the rate of discharge or temperature or the route of discharge without the previous written permission of the Board.
- 4. The application shall comply with and carry out the directives/orders issued by the Board in this consent order and at all subsequent times without any negligence on his part. . In case of non-compliance of any order/directives issued at any time



- and/or violation of the terms and conditions of this consent order, the applicant shall be liable for legal action as per the provisions of the Law/Act.
- The applicant shall make an application for grant of fresh consent at least 90 days before the date of expiry of this consent order.
- The issuance of this consent does not convey any property right in either real or personal property or any exclusive privileges
  nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Central, State
  laws or regulation.
- This consent does not authorize or approve the construction of any physical structure or facilities or the undertaking of any work in any natural water course.
- The applicant shall display this consent granted to him in a prominent place for perusal of the public and inspecting officers of this Board.
- 9. An inspection book shall be opened and made available to Board's Officers during their visit to the factory.
- 10. The applicant shall furnish to the visiting officer of the Board any information regarding the construction, installation or operation of the plant or of effluent treatment system / air pollution control system / stack monitoring system any other particulars as may be pertinent to preventing and controlling pollution of Water / Air.
- 11. Meters must be affixed at the entrance of the water supply connection so that such meters are easily accessible for inspection and maintenance and for other purposes of the Act provided that the place where it is affixed shall in no case be at a point before which water has been taped by the consumer for utilization for any purposes whatsoever.
- 12. Separate meters with necessary pipe-line for assessing the quantity of water used for each of the purposes mentioned below:
  - a) Industrial cooling, spraying in mine pits or boiler feed,
  - b) Domestic purpose
  - c) Process
- 13. The applicant shall display suitable caution board at the lace where the effluent is entering into any water-body or any other place to be indicated by the Board, indicating therein that the area into which the effluents are being discharged is not fit for the domestic use/bathing.
- 14. Storm water shall not be allowed to mix with the trade and/or domestic effluent on the upstream of the terminal manholes where the flow measuring devices will be installed.
- 15. The applicant shall maintain good house-keeping both within the factory and the premises. All pipes, valves, sewers and drains shall be leak-proof. Floor washing shall be admitted into the effluent collection system only and shall not be allowed to find their way in storm drains or open areas.
- 16. The applicant shall at all times maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems install or used by him to achieve with the term(s) and conditions of the consent.
- 17. Care should be taken to keep the anaerobic lagoons, if any, biologically active and not utilized as mere stagnation ponds. The anaerobic lagoons should be fed with the required nutrients for effective digestion. Lagoons should be constructed with sides and bottom made impervious.
- 18. The utilization of treated effluent on factory's own land, if any, should be completed and there should be no possibility of the effluent gaining access into any drainage channel or other water courses either directly or by overflow.
- 19. The effluent disposal on land, if any, should be done without creating any nuisance to the surroundings or inundation of the lands at any time.
- 20. If at any time the disposal of treated effluent on land becomes incomplete or unsatisfactory or create any problem or becomes a matter of dispute, the industry must adopt alternate satisfactory treatment and disposal measures.
- The sludge generated from treatment units shall be dried in sludge drying beds and the drained liquid shall be taken to
  equalization tank of treatment plant.
- 22. The effluent treatment units and disposal measures shall become operative at the time of commencement of production.
- 23. The applicant shall provide port holes for sampling the emissions and access platform for carrying out stack sampling and provide electrical outlet points and other arrangements for chimneys/stacks and other sources of emissions so as to collect samples of emission by the Board or the applicant at any time in accordance with the provision of the Act or Rules made therein.
- 24. The applicant shall provide all facilities and render required assistance to the Board staff for collection of samples / stack monitoring / inspection.
- 25. The applicant shall not change or alter either the quality or quantity or rate of emission or install, replace or alter the air pollution control equipment or change the raw material or manufacturing process resulting in any change in quality and/or quantity of emissions, without the previous written permission of the Board.
- 26. No control equipment or chimney shall be altered or replaced or as the case may be erected or re-erected except with the previous approval of the Board.
- 27. The liquid effluent arising out of the operation of the air pollution control equipment shall be treated in the manner to the meet the prescribed standards by the Board in accordance with the provisions of Water (Prevention and Control of Pollution) Act,



1974 (as amended).

- 28. The stack and ambient monitoring system installed by the applicant shall be opened for inspection to this Board at any time.
- 29. There shall not be any fugitive or episodal discharge from the premises.
- 30. In case of such episodal discharge/emissions the industry shall take immediate action to bring down the emission within the limits prescribed by the Board in conditions/stop the operation of the plant. Report of such accidental discharge /emission shall be brought to the notice of the Board within 24 hours of occurrence.
- 31. The applicant shall keep the premises of the industrial plant and air pollution control equipment clean and make all hoods, pipes, valves, stacks/chimneys leak proof. The air pollution control equipment, location, inspection chambers, sampling port holes shall be made easily accessible at all times.
- 32. Any upset condition in any of the plant/plants of the factory which is likely to result in increased effluent discharge/emission of air pollutants and / or result in violation of the standards mentioned above shall be reported to the Headquarters and Regional Office of the Board by fax / speed post within 24 hours of its occurence.
- 33. The industry has to ensure that minimum three varieties of indigenous species of trees are planted at the density of not less than 1000 trees per acre. The trees may be planted along boundaries of the industries or industrial premises. This plantation is stipulated over and above the bulk plantation of trees in that area.
- 34. The solid waste such as sweeping, wastage packages, empty containers residues, sludge including that from air pollution control equipment collected within the premises of the industrial plants shall be disposed off scientifically to the satisfaction of the Board, so as no to cause fugitive emission, dust problems through leaching etc., of any kind.
- 35. All solid wastes arising in the premises shall be properly classified and disposed off to the satisfaction of the Board by :
- Land fill in case of inert material, care being taken to ensure that the material does not give rise to leachate which may percolate into ground water or carried away with storm run-off.
- ii) Controlled incineration, wherever possible in case of combustible organic material.
- iii) Composting, in case of bio-degradable material.
- 36. Any toxic material shall be detoxicated if possible, otherwise be sealed in steel drums and buried in protected areas after obtaining approval of this Board in writing. The detoxication or sealing and burying shall be carried out in the presence of Board's authorized persons only. Letter of authorization shall be obtained for handling and disposal of hazardous wastes.
- 37. If due to any technological improvement or otherwise this Board is of opinion that all or any of the conditions referred to above requires 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, vary all or any of such condition and thereupon the applicant shall be bound to comply with the conditions so varied.
- 38. The applicant, his/heirs/legal representatives or assignees shall have no claim whatsoever to the condition or renewal of this consent after the expiry period of this consent.
- The Board reserves the right to review, impose additional conditions or condition, revoke change or alter the terms and conditions of this consent.
- 40 Notwithstanding anything contained in this conditional letter of consent, the Board hereby reserves to it the right and power under section 27(2) of the Water (Prevention & Control of Pollution) Act, 1974 to review any and/or all the conditions imposed herein above and to make such variations as deemed fit for the purpose of the Act by the Board.
- 41. The conditions imposed as above shall continue to be in force until revoked under section 27(2) of the Water (Prevention & Control of Pollution) Act, 1974 and section 21 A of Air (Prevention & Control of Pollution) Act, 1981.
- 42. The industry shall comply to all the conditions stipulated under Charter on Corporate Responsibility for Environmental Protection (CREP) guidelines in a time bound manner as envisaged there in. (if applicable)
- 43. The industry shall comply to the conditions stipulated in CTE order issued by ODISHA State Pollution Control Board and conditions stipulated in Environmental Clearances issued by MoEF, Govt of India.
- 44. The industry shall abide by E(P) Act, 1986 and Rules framed there-under
- 45. In case the consent fee is revised upward or the fees paid is found to be inadequate for any reason during this period, the industry shall pay the differential fees to the Board (for the remaining years) to keep the consent order in force. If they fail to pay the adequate amount within the period stipulated by the Board the consent order will be revoked without prior notice.
- 46. The Board reserves the right to revoke/refuse consent to operate at any time during period for which consent is granted in case any violation is observed and to modify/ stipulate additional conditions as deemed appropriate

## GENERAL CONDITIONS FOR UNITS WITH INVESTMENT OF MORE THAN Rs 50 CRORES, AND 17 CATEGORIES OF HIGHLY POLLUTING INDUSTRIES (RED A).

- The applicant shall analyze the effluent / emissions and Ambient Air Quality every month through approved laboratory for the parameters indicated in TABLE- 'B', 'C' & Part - 'B' as mentioned in this order and shall furnish the report thereof to the Board on monthly basis.
- 2. The following information shall be forwarded to the Member Secretary on or before 10<sup>th</sup> of every month.
  - a) Performance / progress of the treatment plant.



#### CONSENT ORDER

- b) Monthly statement of daily discharge of domestic and/or trade effluent.
- 3. Non-compliance with effluent limitations
- a) If for any reason the applicant does not comply with or is unable to comply with any effluent limitations specified in this consent, the applicant shall immediately notify the consent issuing authority by telephone and provide the consent issuing authority with the following information in writing within 5 days of such notification.
  - i) Causes of non-compliance
  - ii) A description of the non-compliance discharge including its impact on the receiving waters.
  - iii) Anticipated time of continuance of non-compliance if expected to continue or if such condition has been corrected the duration or period of non-compliance.
  - iv) Steps taken by the applicant to reduce and eliminate the non-complying discharge and
  - v) Steps to be taken by the applicant too prevent the condition of non-compliance.
- b) The applicant shall take all reasonable steps to minimize any adverse impact to natural waters resulting from non-compliance with any effluent limitation specified in this consent including such accelerated or additional monitoring as necessary to determine the nature and impact of the non-complying discharge.
- c) Nothing in this consent shall be construed to relieve the applicant from civil or criminal penalties for non-compliance whether or not such non-compliance is due to factors beyond his control, such as break-down, electric failure, accident or natural disaster.
- Proper housekeeping shall be maintained inside the factory premises including process areas by a dedicated team.
- 5. The industry must constitute a team of responsible and technically qualified personnel who will ensure continuous operation of all pollution control devices round the clock (including night hours) and should be in a position to explain the status of operation of the pollution control measures to the inspecting officers of the Board at any point of time. The name of these persons with their contact telephone numbers shall be intimated to the concerned Regional Officer and Head Office of the Board and in case of any change in the team it shall be intimated to the Board immediately.
- 6. The industry shall engage dedicated qualified manpower to ensure continuous and effective operation of online stack / Ambient Air Quality / Effluent monitoring stations for maintenance of database, real time data transfer to SPCB server, data analysis and co-ordination with concerned personnel of process units for taking corrective measures in case of non-compliances and to respond to the instructions of SPCB in this matter.
- 7. All employees of the industry including officers, staff, workers, contract workers involved in operation/maintenance/ supervision of process area, pollution control areas, raw material and waste handling areas shall undergo short term training at least twice in a year in the field of pollution control and environment protection to create awareness and develop green skill. This shall be conducted by 3rd party expert agency and report on the activities along with details and photographs shall be submitted to the Board on annual basis by end of June for previous financial year.
- ISO auditing reports of the industry in the field of environment shall be submitted to the Board every year on annual basis.
- 9. The environmental cell shall be established and upgraded effectively to guide, monitor the pollution control and environmental protection activities inside the industries on day to day basis to ensure that the conditions stipulated in the consent to establish/operate order of the SPCB and conditions imposed in EC and provisions of various environmental acts and rules are complied with and the report returns, compliances are submitted to the Board in due time.
- 10. Adequate numbers of scientific / technical persons having qualification in environmental engineering/ environmental science from recognized institution/ university must be engaged or appointed along with other interdisciplinary qualified persons to effectively implement and monitor different areas of environment management and regulatory compliances including air pollution control, water pollution control, online monitoring, real time data transmission, management of solid waste, hazardous waste, E-waste, plastic waste etc. The Head of the environmental cell should be a senior level official, who will directly report to the plant head to ensure that environmental management is performed effectively to ensure compliance to the environmental norms on priority basis.



- 11. Energy consumption data of different pollution control devices like ESP/ Bag filter/ Scrubber/ Cyclone/ Gas cleaning plant/ Fume treatment plant/ ETP/STP/Flow meters (treated effluent recycling) shall be collected online on real time centralized platform/ dashboard with data storage facility and generate tamperproof monthly / periodic reports, which shall be analysed by Energy Auditor, certified by Bureau of Energy Efficiency and accordingly the Energy Management / preventive maintenance of Pollution Control equipment shall be adopted. The energy management of process and pollution control devices shall be practiced to record the progressive achievements to minimize energy consumption in order to reduce greenhouse gas emission.
- 12. The post EIA monitoring schedule should be strictly followed for different parameters around the plant for the units is covered under EIA notification. The industry shall also conduct noise level study in the core zone and buffer zone of the industry and submit 6 monthly report to the Board.

#### F. SPECIAL CONDITIONS:

#### AIR POLLUTION CONTROL

- All the air pollution control devices like ESPs / GCPs / Bag filters installed at various process units shall be maintained, operated efficiently and continuously so that particulate matter emission from the stack shall meet the prescribed standard of the Board as indicated in 'Table-C'. The industry shall ensure continuous and effective operation of all the APC devices through preventive maintenance.
- All the potential fugitive dust generating areas of all the process units shall be covered with the adequate suction points. Fume generated from the induction furnaces shall be collected through adequately designed swiveling hoods. The collected dust / fumes shall be treated in the GCPs / Bag filters/ Scrubbers.
- 3. There shall be no leakage of flue gas through the emergency caps, slip rings or any other process areas of DRI kilns except during exigencies.
- 4. All the online continuous stack emission monitoring systems (CEMS) for measurement of particulate matter and gaseous pollutants shall be operated effectively & uninterruptedly and real time monitoring data so generated shall be transmitted directly to RT-DAS server of the Board without passing through any local PC or server.
- 5. The industry shall strictly follow the guidelines for continuous Emission Monitoring Systems dtd. August, 2018 for PM and other gaseous pollutants.
- The industry shall ensure tamper proof real time transmission of online monitoring data to the server of CPCB and SPCB and maintain the health of the analyzers and data connectivity through valid AMC.
- Online monitoring system for PM, SO2, NOX for thermal power plants as per CPCB guideline for OCEMS August, 2018 and Standards prescribed for these parameters by MoEF & CC Dt 7.12.2015 shall be complied.
- 8. Appropriate air pollution control devices shall be installed to collect and treat the secondary emissions from tapping area and casting areas of the blast furnace.
- The unit has to provide adequate number of water sprinklers at raw material stock yard of Blast furnace.
- 10. There shall not be any leakages from flanges and pipes and gas conveyance system of blast furnace. Such leakages if any shall be immediately attended to and action shall be taken in accordance with onsite and offsite emergency plan.
- 11. The Pneumatic Dust Handling system installed at the hoppers of all the ESPs and BFs shall be operated continuously and effectively so that no fugitive dust nuisance is created.



- 12. The performance evaluation of ESP, bag filter, air pollution control devices, online CEMS, AAQMS & surveillance cameras shall conducted by a 3rd party expert agency and annual report shall be submitted to the Board by end of June for the previous financial year.
- 13. The digital display board installed at the main gate shall be of minimum size of 6ft x 4ft as stipulated by CPCB with provision of display of real time data online analysers (CEMS, CAAQMS & CEQMS), so that the public can visualize the actual emission and the values of parameters displayed at the gate. Outdoor LED video screens should be preferred for digital display of environmental parameters, CTO and authorization conditions and awareness clippings on environment at the main gate, colony area and process area.
- 14. Online analysers for measuring flow, temperature and velocity of flue gas shall be installed at the stacks and integrated with online CEMS data.
- 15. Online CO / Ammonia/ Chlorine and such other gas monitoring system shall be installed in every process area where such toxic gas are expected to be generated and in the plant premises along with alarm system to avoid accidental hazards due to gas leakage.
- 16. Green belt shall be properly designed and developed with plantation of suitable local species and species prescribed by CPCB.
- 17. Telescopic chute shall be installed at the bottom of hoppers/silo wherever applicable to prevent emission of fugitive dust during material transfer/unloading.
- 18. Steps shall be taken for regular monitoring of Mercury (Hg) in the stack of AFBC boiler and submit data to the Board.
- The unit shall provide low NOx burners to reduce NOx emission to keep the level within the prescribed standard by MoEF & CC vide Notification dtd. 07.12.2015.
- 20. Steps shall be taken for installation of Flue Gas Desulpurisation (FGD) system in future if required to keep the SO<sub>2</sub> level within 600mg/Nm3 to confirm the MoEF & CC Notification dtd. 07.12.2015. This shall also include management and disposal of effluent / solid waste to be generated from FGD system.
- 21. Iron ore and coal used in the plant shall be stored under covered shed. Material storage area of the plant and approach roads shall be covered with adequate sprinkling facility. The water sprinkling system shall be kept operational all the time to avoid any fugitive dust nuisance.
- 22. The unit shall submit fly ash utilization status to the Board annually and shall comply to the provisions of revised fly ash Notification No. SO.254(E),dt. 25.01.2016 of MOEF, Govt. of India.
- 23. Dust suppression facilities by provision of adequate water sprinkling shall be made at the active dumping area and roads to prevent dust nuisance in the area.
- 24. The industry shall comply with all the stipulations contained in the Gazette Notification of Govt. of India vide No. 155, dtd. 31.03.2012 (copy enclosed). For emission standard, the details of 'Table-C' of this order is applicable.
- 25. Accumulation of dust and other solid waste in the work zone and non-dumping areas inside the factory premises shall be avoided. The work zone shall be properly cleaned either manually or mechanically every day and the dust so collected shall be disposed off in the designated dump site.
- 26. The approach roads and all the internal roads shall be fully concreted / blacktopped. All the roads shall be cleaned periodically to avoid accumulation of dust. Adequate sprinkling



facility, preferably by fixed water sprinklers shall be provided alongside all the internal roads to prevent generation of fugitive dust during vehicular movement.

- 27. D.G. sets should be acoustically enclosed with anti-vibration measures and equipped with A.M.F. (Auto Mains Failure Device) for auto changeover of power supply from grid to D.G. in the event of power failure. The AMF Panel should preferably be PLC (Programmable Logic Control) based. Dedicated D.G. sets of adequate capacity shall be installed to ensure adequate standby power supply to run all pollution control devices of the plant in the event of power failure.
- 28. The industry shall put up sign Boards at appropriate places with nomenclature of the stacks in consultation with Regional Officer of the Board. It shall install electronic display Board in front of main gate to display the monitoring data, prescribed standard for public information.
- 29. The ambient air quality shall confirm to the National Ambient Air Quality standard as per the notification of MoEF dated 16 Nov 2009 (Annexed).

#### WATER POLLUTION CONTROL

- Specific water consumption shall be limited within 3.5m<sup>3</sup>/MWh as per MoEF & CC vide Notification dtd. 07.12.2015.
- Under no circumstances there shall be discharge of any effluent to outside the factory premises. Water used for cooling purposes shall be fully recycled. Water used in various processes shall be suitably treated and recycled in those processes.
- 3. Waste water generated from raw water treatment system and back wash of filtration plant shall be properly treated and taken to guard pond and reused.
- Blow down from WHRB boiler / AFBC boilers and all the cooling towers shall meet the following standards before it is discharged to the common monitoring basin and shall be used for dust suppression;
  - a. For boiler blow down: SS-100mg/l,O&G-20mg/l,Cu(Total)-1.0mg/l,Fe(Total)-1.0mg/l
  - b. For cooling tower blow down: Free available chlorine-0.5mg/l, Zn-1.0mg/l, Cr (Total)-2.0mg/l, Phosphate-2.0mg/l.
- Waste water generated from ventury scrubber shall be treated and recycled with make-up water in scrubbing. Underflow shall be taken to settling tank for dewatering of sludge and water shall be used for dust suppression.
- The domestic effluent generated from colony, office and canteen shall be treated in STP and shall meet the standards prescribed by MoEF & CC vide notification G.S.R 1265(E) dtd.13th October 2017 as follows; pH - 6.5-9.0, BOD - less than 30mg/l TSS - less than 100mg/l and Fecal Coliform (FC) MPN/100ml<100.</li>
- 7. The runoff water from the whole factory premises including solid waste dumping area shall be collected through dedicated garland drains and shall be adequately treated in the surface run-off treatment system so as to meet the prescribed standard of the Board before discharge to outside / reused.
- 8. The performance evaluation of ETP, STP, online CEQMS & Web cameras, flow meter shall conducted by a 3rd party expert agency and annual report shall be submitted to the Board by end of June for previous financial year.
- Flow meter and level sensors with telemetry system should be installed in the bore wells as stipulated by Central Ground Water Authority/ Water Resources Department.
- 10. The industry shall conduct surface run off management study and develop rain water harvesting structures and surface runoff treatment systems inside the premises



- 11. Dumping of solid waste shall be made at designated locations in a systematic manner with proper engineering applications by providing proper slope, angle, berms, height, toe wall, retaining wall and road network. The active dumping area shall be kept at minimum. The exhausted dump area shall be technically reclaimed by spreading a layer of soil with proper compaction and consolidation. Biological reclamation of the same shall be made by planting saplings of appropriate species. Adequate provision for watering of plants and protection of trees shall be made.
- 12. The industry shall operate mechanized wheel washing system along with effluent treatment and recycling facilities for the raw material / product /solid waste transport vehicles at the exit point of the industry.
- 13. The industry shall have adequate space at point of time for waste disposal at least for a period of next two years. Before using any new patch of land / site for solid waste dumping, the industry shall obtain prior consent to establish of the Board.
- 14. Consent to operate is subject to availability of all other statutory clearances required under relevant Acts / Rules and fulfillment of required procedural formalities.

#### G) Additional Conditions:

The industry shall adhere the date line for compliance of jobs stipulated as follows:

- 1) Industry shall connect the HD IP (Internet Protocol) surveillance camera with the server of the Board within one month.
- 2) Installation of STP and runoff treatment system shall be completed within one month.
- 3) The industry shall install a CO detector with an alarm system at the Gas Cleaning Plant area of Blast Furnace within **3 months**.

The occupier must comply with the conditions stipulated in section A, B, C, D, E F & G to keep this consent order valid.

To,

The Managing Director, M/S. Sree Metaliks Limited SML House, Main Road, Barbil, Keonjhar 758035

Encl: As above

MEMBER SECRETARY

STATE POLLUTION CONTROL BOARD, ODISHA

Memo No.\_\_\_\_\_/Dt.

Copy forwarded to:

- Regional Officer, State Pollution Control Board, Keonjhar.
- ii) District Collector, Keonjhar
- iii) D.F.O, Keonjhar
- iv) Director of Mines, Odisha, Bhubaneswar
- v) Director Factories & Boiler, Bhubaneswar
- vi) Consent Register



CHIEF ENV. ENGINEER
STATE POLLUTION CONTROL BOARD, ODISHA



# General Standards for discharge of environment pollutants PART-A:EFFLUENTS

SI.No.	Parameters	Standards			
		Inland surface	Public sewers	Land for irrigation	Marine Costal Areas
		(a)	(b)	(c)	(d)
1.	Colour & odour	Colourless/Odou rless as far as practible		See 6 of Annex-1	See 6 of Annex-1
2.	Suspended Solids (mg/l)	100	600	200	For process wastewater – 100 b. For cooling water effluent 10% above total suspended matter of influent.
3.	Particular size of SS	Shall pass 850			
5.	pH value	5.5 to 9.0	5.5 to 9.0	5.5 to 9.0	5.5 to 9.0
6.	Temperature	Shall not exceed 5°C above the receiving water temperature			Shall not exceed 5°C above the receiving water temperature
7.	Oil & Grease mg/l max.	10	20	10	20
8.	Total residual chlorine	1.0			1.0
9.	Ammonical nitrogen (as N) mg/l max.	50	50		50
10.	Total Kajeldahl nitrogen (as NH <sub>3</sub> ) mg/1 max.	100			100
11.	Free ammonia (as NH <sub>3</sub> ) mg/1 max.	5.0			5.0
12.	Biochemical Oxygen Demand (5 days at (20°C) mg/1 max.	30	350	100	100
13.	Chemical Oxygen Demand, mg/1 max.	250			250
14.	Arsenic (as As) mg/1 max.	0.2	0.2	0.2	0.2
15.	Mercury (as Hg) mg/1 max.	0.01	0.01		0.001
16.	Lead (as pb) mg/1 max.	01.	1.0		2.0
17.	Cardmium (as Cd) mg/1 max.	2.0	1.0		2.0



#### CONSENT ORDER

18.	Hexavalent Chromium (as Cr + 6) mg/l max.	0.1	2.0		1.0
19.	Total Chromium (as Cr) mg/l max.	2.0	2.0		2.0
20.	Copper (as Cu) mg/l max.	3.0	3.0		3.0
21.	Zinc (as Zn) mg/l max.	5.0	15		15
22.	Selenium (as Sc) mg/l max.	0.05	0.05		0.05
23.	Nickel (as Nil) mg/l max.	3.0	3.0		5.0
24.	Cyanide (as CN) mg/l max.	0.2	2.0	0.2	0.02
25.	Fluoride ( as F) mg/l max.	2.0	15		15
26.	Dissolved Phosphates (as P) mg/l max.	5.0			
27.	Sulphide (as S) mg/l max.	2.0			5.0
28.	Phennolic compounds as (C <sub>6</sub> H <sub>5</sub> OH) mg/l max.	1.0	5.0		5.0
29.	Radioactive materials  a. Alpha emitter micro curle/ml. b. Beta emitter micro curle/ml.	10 <sup>7</sup>	10 <sup>7</sup>	10 <sup>8</sup>	10 <sup>7</sup> 10 <sup>6</sup>
30.	Bio-assay test	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent
31	Manganese (as Mn)	2 mg/l	2 mg/l		2 mg/l
32.	Iron (Fe)	3 mg/l	3 mg/l		3 mg/l
33.	Vanadium (as V)	0.2 mg/l	0.2 mg/l		0.2 mg/l
34.	Nitrate Nitrogen	10 mg/l		***************************************	20 mg/l



## PART-B: NATIONAL AMBIENT AIR QUALITY STANDARDS

Sl.	Pollutants	Time Weighed	Concentrate of Am	bient Air	<del></del>
No.		Average	Industrial Residential, Rural and other Area	Ecologically Sensitive Area (notified by Central Government)	Methods of Measurement
(1)	(2)	(3)	(4)	(5)	(6)
1.	Sulphur Dioxide (SO <sub>2</sub> ), μg/m <sup>3</sup>	Annual *	50	20	-Improved west and Gaeke
		24 Hours **	80	80	- Ultraviolet fluorescence
2.	Nitrogen Dioxide (NO <sub>2</sub> ), µg/m <sup>3</sup>	Annual *	40	30	- Modified Jacob & Hochheiser (Na-Arsenite)
		24 Hours **	80	80	- Chemiluminescence
3.	Particulate Matter (size less than 10µm) or	Annual *	60	60	-Gravimetric - TOEM
	$PM_{10}\mu g/m^3$	24 Hours **	100	100	- Beta Attenuation
4.	Particulate Matter (size less than 2.5µm) or	Annual *	40	40	-Gravimetric - TOEM
	$PM_{2.5} \mu g/m^3$	24 Hours **	60	60	- Beta Attenuation
5.	Ozone (O <sub>3</sub> ) $\mu$ g/m <sup>3</sup>	8 Hours **	100	100	- UV Photometric - Chemiluminescence
		1 Hours **	180	180	- Chemical Method
6.	Lead (Pb) µg/m³	Annual *	0.50	0.50	-AAS/ICP method after sampling on EMP 2000 or
		24 Hours **	1.0	1.0	equivalent filter paper ED-XRF using Teflon filter
7.	Carbon Monoxide (CO) mg/m <sup>3</sup>	8 Hours **	02	02	- Non Dispersive Infra Red (NDIR)
		1 Hours **	04	04	Spectroscopy
8.	Ammonia (NH <sub>3</sub> ) μg/m <sup>3</sup>	Annual*	100	100	-Chemiluminescence - Indophenol Blue Method
		24 Hours**	400	400	
9.	Benzene (C <sub>6</sub> H <sub>6</sub> ) μg/m <sup>3</sup>	Annul *	05	05	-Gas Chromatography based continuous analyzer - Adsorption and Desorption followed by GC analysis
10.	Benzo (a) Pyrene (BaP)-Particulate phase only, ng/m <sup>3</sup>	Annual*	01	01	-Solvent extraction followed by HPLC/GC analysis
11.	Arsenic (As), ng/m <sup>3</sup>	Annual*	06	06	-AAS/ICP method after sampling on EPM 2000 or equivalent filter paper
12.	Nickel (Ni),ng/m <sup>3</sup>	Annual*	20	20	-AAS/ICP method after sampling on EPM 2000 or equivalent filter paper

<sup>\*\*</sup> Annual arithmetic mean of minimum I04 measurements in a year at a particular site taken twice a week 24 hourly at uniform intervals.

<sup>\*\* 24</sup> hourly or 08 hourly or 0I hourly monitored values, as applicable, shall be complied with 98% of the time in a year, 2% of the time, they may exceed the limits but not on two consecutive days of monitoring.