

Ref: **VSL/MOEF & CC/2024-2025/**016 1<sup>st</sup> June 2024

#### To,

The Ministry of Environment Forest and Climate Change Regional Office (EZ), A/3, Chandrsekharpur, Bhubaneswar – 751023, Odisha

Sub: Half Yearly compliance status of Environmental Clearance for the period Of October – 2023 to March – 2024.

Ref: (a) Environment Clearance No.: F. No J-11011/33/2007-IA II (I), dtd.12.06.2007.

- (b) Environment Clearance No. : F. No J-11011/1000/2007-IA II (I), dtd.03.07.2008.
- (c) Environment Clearance No. : F. No J-11011/491/2009-IA II (I), dtd.26.02.2021.

#### Dear Sir,

With reference to the subject mentioned above, please find enclosed herewith six monthly compliance status of Environmental Clearances (F. No J-11011/33/2007-IA II (I), dtd.12.06.2007, F. No J-11011/1000/2007-IA II (I), dtd.03.07.2008 & F. No J-11011/491/2009-IA II (I), dtd.26.02.2021) for the period of October 2023 to March 2024 along with monitoring report of Ambient Air Quality, Stack Emission, Effluent Quality and Noise Monitoring for your kind information and record please.

Thanking You, Yours Faithfully,

For, Visa Steel Limited

### Bharat Chandra Sahoo (Factory Manager)

Cc:

- 1. To the Member Secretary, State Pollution Control Board, Nilakantha Nagar, Unit-VIII, Bhubaneswar.
- 2. To The Member Secretary, Central Pollution Control Board, Southern Conclave, Block-502, 5<sup>th</sup> & 6<sup>th</sup> Floors, 15802 Rajdanga Main Road, Kolkatta 700107, West Bengal.
- 3. To The Regional Officer, Regional Office SPCB, Near OMC Office, P.O- Ferro Chrome Plant, Jajpur Road, Dist-Jajpur, Odisha 755109

### COMPLIANCE STATUS OF ENVIRONMENTAL CLEARANCE MoEF Letter No.: F No. J-11011/33/2007-IA II (I) Dated 12<sup>th</sup> June,2007

SI. No.	CONDITIONS	COMPLIANCE STATUS
	FIC CONDITIONS:	
1.	The gaseous emission from various process units shall conform to the load/mass based standards notified by this Ministry on 19 <sup>th</sup> May, 1993 and standards prescribed from time to time. The Orissa State Pollution Control Board (OSPCB) 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. Interlocking facilities shall be provided so that process can be automatically stopped in case emission level exceeds the limit.	<ul> <li>Regular monitoring of stack emission (PM &amp; gaseous) is being carried out for all stacks by NABL Certified and State Pollution Control Board (SPCB) empanelled Laboratory. The report for the same is also attached herewith as Annexure-1.</li> <li>Monitoring reports are being submitted to SPCB, Central Pollution Control Board (CPCB) &amp; Ministry of Environment, Forest &amp; Climate Change (MOEF&amp;CC) on the regular basis. The monitoring results are well within the prescribed norms.</li> <li>Monitoring results for the period from October-2023 to March-2024 are enclosed herewith as Annexure-2.</li> <li>Interlocking facilities provided at Direct Reduced Iron (DRI) Plant, Ferrochrome (Fe-Cr) Plant and Captive Power Plant (CPP) to stop the process automatically in case of emission level exceeds the limit.</li> </ul>
2.	Continuous Stack monitoring facilities for all the major stacks and adequate air pollution control systems shall be provided to keep emission levels below 50 mg/Nm³ and reports submitted to the OSPCB & CPCB.	<ul> <li>8 Nos. of Continuous stack monitoring facilities have been installed at stacks of Waste Heat Recovery Boiler (WHRB) 1 &amp; 2, CPP and Fe-Cr Plant and Coke Oven plant.</li> <li>Air pollution control systems are provided at Mini Blast Furnace (MBF), Direct Reduced Iron (DRI), CPP, Fe-Cr &amp; Coke Oven plant.</li> <li>Emission levels have been maintained well within the prescribed norms.</li> <li>Installed 03 nos. of ESP at CPP, 17 nos. of DES/bag filter, 02 nos. of Gas Cleaning Plant (GCP) &amp; 02 nos. of Fume Extraction System (FES) in different operating units as per the requirement of the process to control air pollution.</li> </ul>
3.	In-plant control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Gas cleaning system in MBF, Fume and dust extraction system to BF stock house, DRI kiln, DRI EAF, Ore and Coal crushing & Screening section, Coke oven etc. and bag filter in SMS, pulse jet type bag filter system in raw material	GCP at MBF has of dust catcher, thickener, scrapper & settling tank with 15 nos. of Dry Fog System (DFS) at ground hopper & belt conveyor and 16 nos. of Dust Suppression System (DSS) at raw material yard, internal road and other areas to control the fugitive emission. In addition FES and Dust Extraction Systems (DES) are also installed to abate the

SI. No.	CONDITIONS	COMPLIANCE STATUS
	handling area will be provided to control fugitive emissions. ESP to WHRB to control emissions within 100 mg/Nm³ and bag filters to DRI kiln, EAF, BF, Submerged Arc Furnace (SAF), Coke oven plant, Lime plant, Dolo plant will also be provided to control air emissions within 50 mg/Nm³. further, specific measures like water sprinkling around the coal stockpiles and asphalting or concreting of the roads shall be done to control fugitive emissions.	<ul> <li>secondary fugitive emissions at MBF.</li> <li>20 Nos. of fixed type water sprinklers have been installed at raw material storage yard for suppression of dust generated during transportation of raw material.</li> <li>Further in addition to that we have deployed 03 mist canon machines for suppression of fugitive dust emissions.</li> <li>7 Nos. of rain gun type sprinklers are installed near main gate to control fugitive dust emissions.</li> <li>Each GCP at Fe-Cr plant has heat exchangers, cyclones &amp; bag houses.</li> <li>DSS at internal roads; water spraying nozzles are installed at belt conveyors and ground hopper for suppression of fugitive dust generation at Fe-Cr plant.</li> <li>Additional 16 nos. of DFS and 11 nos. of DSS are provided at CPP area for water sprinklers through pipe for suppression of fugitive emissions.</li> <li>Fixed type water spraying nozzles at belt conveyor, 36 nos. DFS at ground hopper of coal feeding point and 131 Nos. DSS at belt conveyor, raw material yard and internal road at DRI unit and iron ore crusher plant are installed for suppression of fine dust particles generated during material transfer of DRI Plant.</li> <li>Adequate DFS and DSS have been installed at Ground Hopper of Briquette Plant, raw material yard and conveyor belt of Fe-Cr Plant.</li> <li>There are de-dusting systems (approx. 100 nos. of hoods and dampers) attached with different junction houses of Kiln Cooler Discharge, Intermediate Bins and Product Hopper circuit of Sponge Iron Unit to suppress fugitive dust generation.</li> <li>At DRI Pug Mill is attached with dust storage silo for appropriate moisture addition during unloading of dust in the Hyvas.</li> <li>O5 Nos. of telescopic type unloading spout have been installed at Product Separation Building of Sponge Iron Plant, for unloading of Sponge Iron lumps, fines and Dolochar without</li> </ul>

SI. No.	CONDITIONS	COMPLIANCE STATUS
		<ul> <li>creating fugitive dust generation at DRI Plant unit.</li> <li>Adequate DES are installed at different operating process of DRI.</li> <li>Installed 03 nos. of ESP at CPP, 17 nos. of DES/bag filter, 02 nos. of GCP &amp; 02 nos. of FES in different operating units as per the requirement of the process to control the air pollution.</li> <li>03 Nos. of telescopic type unloading spout have been installed at Fly-ash Silo of CPP, for unloading the Fly-ash without creating any</li> </ul>
		<ul> <li>dust nuisance at CPP.</li> <li>03 Nos. of telescopic type unloading spout have been installed at GCP Silo of Steel Melting Shop (SMS) for unloading of GCP dust without fugitive dust generation at SMS.</li> </ul>
		O2 Nos. of telescopic type unloading spout have been installed at GCP silo of Fe-Cr plant for unloading of GCP dust without fugitive dust generation at Fe-Cr plant.
		<ul> <li>02 Nos. of DES have been installed at hammer Crusher-1&amp;2 of Coal delivery circuit of Coke Oven Plant.</li> </ul>
		<ul> <li>08 nos. of rain gun type water sprinklers with 360 degree rotation are installed at coal yard &amp; coke yard. 08 nos. of impact sprinklers are installed at other area of coke oven. Another 29 nos. of impact sprinklers are installed starting from hammer crusher road to learning center. 03 nos. of impact type sprinkler are installed at ground hopper.</li> </ul>
		03 nos. of water tankers have been engaged for water sprinkling on internal roads of the Plant for suppression of fugitive dust emission at Coke Oven unit. Further, 29 no. of fixed type impact sprinkler are installed along the internal road.
		<ul> <li>Regular water sprinkling is being carried out in dust generating areas.</li> </ul>
		03 nos. of mist canons have been installed having 180 degree rotation with 30 m radius of water spraying capacity at raw material yard.
4.	Secondary fugitive emission shall be controlled within the prescribed limits, regularly monitored and records maintained. Guidelines/Code of practice issued by the CPCB in this regard shall be followed.	<ul> <li>Adequate FES and DES are installed to abate secondary fugitive emissions at different units i.e. Blast furnace, Ferrochrome, SMS and DRI.</li> <li>Further, work zone air quality monitoring is carried out on the regular basis and required</li> </ul>

SI. No.	CONDITIONS	COMPLIANCE STATUS
		corrective actions are being taken care.
5.	Total requirement of water from River Bramhani/Kharsuan shall not exceed 39,600 m³/day and prior 'Permission' for the total water requirement shall be obtained from the Department of water resources, Govt. of Orissa before commissioning the project. Effluent Treatment Plant (ETP) shall be installed for the treatment of process water. Cooling tower and boiler blow down water will be used for coke quenching. All the waste water generated shall be treated, recycled and reused either in the process or for dust suppression or green belt development. No waste water shall be discharged outside the factory premises and 'Zero' discharge shall be adopted. Domestic effluent shall be treated in septic tanks by soak pits.	<ul> <li>We have an agreement with IDCO, Govt. of Odisha for drawl of 250 m3/hr of water from Brahmani River for phase-1.</li> <li>Blow down from cooling tower, boiler water generated from De-Mineralization (DM) Plant are collected and treated in the ETP followed by Reverse Osmosis (RO) Plant of capacity 1000 KLD; and this water is utilized in CPP process. Thus, there is no waste water discharge from CPP unit.</li> <li>The reject water from RO is used for cake/coke quenching and in dust suppression on internal roads.</li> <li>Three numbers of Sewage Treatment Plants (STP'S) have been established for treatment of sewage generated at Graduate Trainee (GT) Hostel, Colony (township) and Canteen Building inside plant premises. Treated water (100%) is reused in gardening and dust suppression on internal roads.</li> <li>Apart from that we have installed a 4400 m3/d for treatment of Surface Runoff Water during rainy season.</li> </ul>
6.	All the Iron skull, scrap from CCM and char shall be used in EAF. Semi-burnt coke dust and coke breeze shall be reused in the power plant. Iron ore fines shall be sold to sinter plant for reuse. BF slag (granulated) shall be sold to cement plants. BF dust, Thickener mud, EAF/LRF dust, fines from ESPs, EAF slag shall be used for land filling, road construction etc. Slag from Ferro chrome unit shall be disposed off in a suitably designed landfill as per CPCB guidelines to prevent leaching to the sub-soil and underground aquifer. Used oil shall be sold to recyclers and re-processors only.	<ul> <li>Presently iron skull, scrap, iron ore fines, coke fines and blast furnace slag are sold to other users.</li> <li>Char (100%) generated at DRI is used at Circulating Fluidized Bed Combustion (CFBC) boiler.</li> <li>Bag filter dust, thickener sludge are being used for land filling and in road construction. Ash from ESP is being supplied to brick manufacturing units.</li> <li>We have installed Metal Recovery Plant (MRP) (jigging plant) for chromium recovery from ferro-chrome slag. After recovery, ferro-chrome slag is reused for internal road making &amp; building construction; etc.</li> <li>Whatever used oil generated from different units is sold to authorized recyclers as per Hazardous waste (Management, Handling and Trans-boundary Movement) Rule, 2016.</li> </ul>
7.	The company shall develop rain water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table.	<ul> <li>We have already installed a pressure recharge rain water harvesting system at our GT hostel and we also have a Rain Water Reservoir for storing the rain water.</li> </ul>

SI. No.	CONDITIONS	COMPLIANCE STATUS
		<ul> <li>At rain water reservoir another RO of capacity 50 m3/hr, this RO water being utilized in production process as per requirement.</li> </ul>
8.	Out of total 448 ha, green belt shall be developed in 181 ha. Area within and around the plant premises as per the CPCB guidelines in consultation with DFO	<ul> <li>Total Area of plant premises: 525 Acre(s).</li> <li>Area covered by plantation: 173.5 Acre(s).</li> <li>No. of saplings planted: 1,64,856 (approx.)</li> </ul>
9.	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the factories Act.	<ul> <li>We have established a well-equipped First Aid Centre with all necessary facilities and manned round the clock.</li> <li>Periodical health checkup of employees and contractual workers is conducted on the regular basis and records are maintained as per the Factories Act (1948).</li> </ul>
10.	Recommendations made in the CREP guidelines issued for the steel plants shall be implemented.	We are adhering to CREP guidelines.
GENE	RAL CONDITIONS:	
1.	The project authorities must strictly adhere to the stipulations made by the Orissa Pollution Control Board (OSPCB) and the State Government.	We are regularly complying with all the conditions stipulated by SPCB/ CPCB.
2.	No further expansion or modifications in the plant should be carried out without prior approval of the Ministry of Environment and Forests.	<ul> <li>No expansion or modernization has been carried out without prior approval of Ministry of Environment Forest &amp; Climate Change.</li> </ul>
3.	At least four ambient air quality monitoring stations shall be established in the downward direction as well as where maximum ground level concentrations of SPM, SO2, NOx are anticipated in consultation with the OSPCB. Data on ambient air quality and stack emission should be regularly submitted to this Ministry including its Regional Office at Bhubaneswar and the OSPCB/CPCB once in six months.	<ul> <li>We have established four Ambient Air Quality Monitoring Stations (AAQMS) after consultation with Regional Officer; OSPCB.</li> <li>Ambient air quality, stack emission monitoring is being carried out as per SPCB, Odisha prescribed norms.</li> <li>Monitoring results are being submitted regularly to SPCB, CPCB &amp; MOEF &amp; CC. The online data is being transferred on real time basis. The six monthly monitoring report is attached herewith as Annexure-1</li> </ul>
4.	Industrial waste water shall be properly collected, 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 waste water shall be utilized for plantation purpose.	<ul> <li>All the industrial waste water is being re-cycled back by closed circuit system after adequate treatment in the unit.</li> <li>Domestic waste water after treatment at STP'S is reused in gardening &amp; dust suppression on internal roads.</li> </ul>

SI. No.	CONDITIONS	COMPLIANCE STATUS
5.	The overall noise levels in and around the plant are shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules,1989 viz. 75 dBA (daytime) and 70 dBA (nighttime)	<ul> <li>Adequate noise control measures have been installed and are also considered in the designing parameters.</li> <li>Ambient noise levels are being measured at various locations and noise level are well within the prescribe norms.</li> <li>Monitoring results for the period from October-2023 to March-2024 are enclosed herewith as Annexure-1</li> </ul>
6.	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report. Further, the company must undertake socioeconomic development activities in the surrounding villages like community development programmes, educational programmes, drinking water supply and health care etc.	<ul> <li>Environment protection measurements proposed in the EIA &amp; EMP report have been implemented.</li> <li>Activities related to socio-economic development are ongoing in surrounding villages.</li> <li>In surrounding the plant areas focus on community development programs, educational programs, drinking water supply and health care etc.; are implemented. Dedicated skilled CSR team is working for above said activities.</li> </ul>
7.	As mentioned in the EIA/EMP, Rs.100.00 Crores earmarked towards capital cost and recurring cost/annum for environment pollution control measures shall be judiciously utilized 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.	<ul> <li>We have complied with all those stipulated conditions proposed in our EIA/EMP report.</li> <li>The fund earmarked for Environmental Protection is not diverted in any other purposes.</li> </ul>
8.	The Regional Office of this Ministry at Bhubaneswar / CPCB / OSPCB shall monitor the stipulated conditions. A six monthly compliance report and the monitored data along with statistical interpretation shall be submitted to them regularly.	We are adhering to the schedule and accordingly reports are being submitted to Regional Offices of OSPCB, CPCB and MoEF regularly.
9.	The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the OSPCB / Committee and may also be seen at website of the Ministry of Environment and Forest at http:/www.envfor.nic.in. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local	The same has been followed and complied with.

SI. No.	CONDITIONS	COMPLIANCE STATUS
	newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the Regional office at Bhubaneswar.	
10.	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 commencing the land development work.	Will ensure for the same.

### COMPLIANCE STATUS OF ENVIRONMENTAL CLEARANCE MoEF Letter No.: F No. J-11011/1000/2007-IA II (I) Dated 3rd July, 2008

SI. No.	CONDITIONS	COMPLIANCE STATUS
A.	SPECIFIC CONDITIONS:	
1.	On-line stack monitoring facilities for all the stacks and sufficient air pollution control equipments viz. Electrostatic precipitators (ESPs) shall be provided to Captive Power Plant to control particulate matter from AFBC boilers within 100 mg/Nm³ and reports submitted to the Ministry's Regional Office at Bhubaneswar OSPCB & CPCB.	<ul> <li>The following compliances are being made for the Power Plant installed under earlier EC.</li> <li>We have installed of 03 Nos. of stack emission monitoring (gaseous &amp; dust emissions) analyzers at 75 MW Power Plant at the stacks of WHRB-I &amp; II &amp; CFBC Power Plant.</li> <li>Adequate pollution control equipment/ devices are like ESP, Bag filters have been installed at CPP to keep the particulate matter (PM) emission within the prescribed limits.</li> <li>Monthly monitoring reports are being submitted to SPCB, and six monthly compliance reports are being submitted to Regional Office of MoEF&amp;CC &amp; CPCB regularly.</li> </ul>
2.	Bag filters shall be provided to the reheating furnace and electric arc furnace to control the particulate emissions below 50 mg/Nm <sup>3</sup> . Stack of adequate height shall be provided to the reheating furnace in rolling mill section. The hood for fume extraction and spark arrestor, bag filters etc. shall be provided to control particulate matter from the stack attached to the induction furnace in Steel melting Shop (SMS).	<ul> <li>The Air pollution Control measures adopted at Steel Melting Shop are encapsulated water jacket in the duct line of the flue gas, hair pin cooler system, bag filter, ID fans and the chimney with a height of 50 M above the ground level. Hood/ canopy have been made to extract the dust from the work floor area. Finally all the duct lines are connected with main flue gas duct line of EAF &amp; LRF before hair</li> </ul>

SI. No.	CONDITIONS	COMPLIANCE STATUS
		<ul> <li>pin cooling system.</li> <li>The stack attached with the reheating furnace in rolling mill section is of 72 m height.</li> </ul>
3.	Gaseous emissions including secondary fugitive emissions from all the sources shall be controlled within the latest permissible limits issued by the Ministry and regularly monitored. Guidelines/ Code of Practice issued by the CPCB shall be followed.	<ul> <li>Gaseous emissions including secondary fugitive emissions from all the sources are being monitored regularly and the results are well within the latest permissible limits.</li> </ul>
4.	Dust suppression and extraction system shall be provided to raw material handling areas crusher house, junction towers, feed point, conveyors and transfer points. Water sprinkling shall be done in stockyard.	<ul> <li>Water sprinklers and dry fog systems are installed at different junction towers, conveyors and transfer points.</li> <li>03 nos. 12 KL capacity truck mounted water tanker engaged for water sprinkling (6AM to 10PM) in stockyards and raw material storage yards on regular basis for suppression of dust.</li> <li>Further in addition to that we have deployed 03 nos. of mist canon for suppression of fugitive dust.</li> </ul>
5.	Vehicular pollution due to transportation of raw material and finished product shall be controlled. Proper arrangements shall also be made to control dust emissions during loading and unloading of the raw material and finished product.	<ul> <li>03 nos. water tankers sprinkling is being done from 6 AM to 10 PM on regular basis on internal roads of the plant premises to suppress the dust due to vehicular movement and raw material and product storage yards being taken care of.</li> </ul>
6.	Total water requirement from River Kharsua shall not exceed 1,498 m³/hr. Closed circuits circulating/cooling water system shall be used. The wastewater from the demineralization (DM) plant shall be neutralized in neutralization pit. All the treated wastewater shall be recycled and reused either in the process or for dust suppression, green belt development and various other activities at the site. 'Zero' effluent discharge shall be strictly followed and no wastewater shall be discharged outside the premises. Domestic effluent shall be treated in septic tank followed by soak pit and used for green belt development.	<ul> <li>We have obtained permission from IDCO, Govt. of Odisha for drawl of 250 m³/hr of water from Brahmani River for phase-1.</li> <li>The total Cooling tower &amp; boiler blow down water and DMP generated water is collected in a common drain and sent to ETP followed by RO of capacity 1000 KLD and water being utilized in production process as per requirement. Thus, there is no waste water discharge from CPP unit.</li> <li>The reject water from RO is used for cake/coke quenching and dust suppression system at internal road.</li> <li>Domestic waste water is being used for Horticultural activities. No waste water discharged to outside premises. "Zero" discharge is being maintained.</li> <li>Three number of Sewage Treatment</li> </ul>

SI. No.	CONDITIONS	COMPLIANCE STATUS
		Plant have been established for treatment of domestic waste water at GT Hostel, colony and canteen building. Treated water is being reused for plantation purpose.  • Runoff water is not being discharged outside the plant premises. however as per SPCB guide line we had constructed Surface runoff treatment System (SRTS) for treatment of surface runoff water of factory premises, coal & raw material stack yard and utilized inhouse for Quenching, dust suppression and plantation activities.
7.	Prior permission for the drawl of 1,498 m³/hr from River Kharsua shall be obtained from the concern department. No effluent shall be discharged outside the plant premises and 'Zero' discharge should be adopted.	<ul> <li>Necessary permission already obtained for drawl of water.</li> <li>No effluent is being discharged to outside the plant premises maintaining Zero discharge.</li> </ul>
8.	Metallic scrap, scales and mill cuttings shall be recycled and reused in the process. Slag and refractory waste shall be properly disposed off in environment friendly manner. All the char from DRI plant and coke fines shall be utilized in AFBC boiler of power plant and no char shall be disposed off anywhere else. Mill scale and dust from Rolling mill shall be used in sinter plant. Scrap shall be used in SMS; Broken refectories shall be disposed off in environment friendly manner. Used oil shall be sold to authorized recyclers/ reprocessors only.	<ul> <li>100% char is being utilized in CFBC boiler.</li> <li>Used oil is sold to the authorized recycler/reprocesses only.</li> <li>SMS, Rolling Mill and BF are under Shut Down.</li> </ul>
9.	All the SMS Slag shall also be properly utilized or disposed off in environment friendly manner. Slag shall be used for road making only after passing through Toxic Chemical Leachability Potential (TCLP) test. Toxic slag shall also be disposed off in secured landfill as per CPCB guidelines All the other solid waste including broken refractory mass shall be disposed off in environmental friendly manner.	Complied as recommended. The TCLP analysis report is also attached herewith as Annexure-3.
10.	Proper utilization of fly ash shall be ensured as per Fly ash Notification, 1999 subsequently amended in 2003. Fly ash and bottom ash shall be disposed off to ash pond through high concentration slurry disposal	<ul> <li>100 % Fly-ash is being utilized as per the fly ash notification, 2009.</li> <li>100 % utilisation of fly ash is being made for the period from October-2023</li> </ul>

SI. No.	CONDITIONS	COMPLIANCE STATUS
	system (HCSD) and utilized as per Fly ash Notification.	to March-2024.
11.	As proposed, green belt shall be developed in 33% area in and around the plant as per the CPCB guidelines in consultation with DFO.	<ul> <li>Thick green belt of 33% has already being developed and the plantation is also being carried out along the peripheral boundary, raw material storage yard and at all the probable dust generation area in side the plant premises.</li> <li>Further, status of green belt has been regularly submitted to your good office</li> </ul>
12.	All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Steel plants shall be implemented.	We are adhering to CREP guidelines.
В.	GENERAL CONDITIONS:	
1.	The project authorities must strictly adhere to the stipulations made by the Orissa Pollution Control Board (OPCB) and the State Government.	The stipulation as prescribed by the OSPCB are adhered by the company.
2.	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests.	Noted.
3.	The gaseous emissions from various process units shall conform to the load/mass based standards notified by this Ministry on 19 <sup>th</sup> May, 1993 and standards prescribed from time to time. The Orissa Pollution Control Board (OPCB) may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and it size and location. At no time, the emission level shall go beyond the prescribed standards. Interlocking facilities shall be provided so that process can be automatically stopped in case emission level exceeds the limit.	<ul> <li>Regular monitoring of stack emission (PM &amp; gaseous) is being carried out for all stacks by NABL Certified and SPCB empanelled Laboratory. The report for the same is attached herewith as Annexure-1.</li> <li>Monitoring reports are being submitted to State Pollution control Board, CPCB &amp; Ministry of Environment &amp; Forest on regular basis. The monitoring results are well within the prescribed norms.</li> <li>Monitoring Results for the period from October-2023 to March-2024 is enclosed in the Annexure-2</li> <li>Interlocking facilities provided at DRI, Ferrochrome, CPP for stopping the process automatically incase emission level exceeds the limit.</li> </ul>
4.	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 <sub>2</sub> and NOx are anticipated in consultation with the OPCB. Data on ambient air quality and stack emissions shall	<ul> <li>We have established four Ambient Air Quality Monitoring Stations after consultation with Regional Officer OSPCB.</li> <li>Ambient air quality, stack emission monitoring is being carried out as per SPCB, Odisha prescribed norms.</li> <li>Monitoring results are being submitted</li> </ul>

SI. No.	CONDITIONS	COMPLIANCE STATUS
	be regularly submitted to this Ministry including it Regional Office at Bhubaneswar and OPCB, CPCB once in six month.	regularly to SPCB, CPCB & MOEF & CC. The online data is being transferred on real time basis. The monitoring report of six month is herewith attached in the Annexure-2
5.	In-plant control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Further, specific measures like water sprinkling around the coal stockpiles and asphalting or concreting of the roads shall be done to control fugitive emissions.	To control the fugitive emission we have deployed 03 nos. of water tanker as well as we have also installed 03 nos. of mist canon for the suppression of fugitive dust emission around the coal stockpile area as well as in the raw material yard.
6.	Industrial wastewater shall be properly collected, 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.	<ul> <li>All the industrial waste water is being recycled back by closed circuit system after adequate treatment in the unit.</li> <li>Domestic waste water from STP is reused for plantation &amp; dust suppression on roads.</li> </ul>
7.	The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).	<ul> <li>Adequate noise control measures have been installed and are also considered in the designing parameters.</li> <li>Ambient noise levels are being measured at various locations and noise level are well within the prescribe norms.</li> <li>Monitoring Results for the period from October-2023 to March-2024 is enclosed in the Annexure-2</li> </ul>
8.	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	<ul> <li>We have established a well-equipped First Aid Centre with all necessary facilities and manned round the clock.</li> <li>Periodical health checkup of employees and contractual workers are carried out regularly and records are being mentioned and records are maintained as per the Factories Act (1948).</li> </ul>
9.	The company shall develop rain water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water tables.	<ul> <li>We have already installed a pressure recharge rain water harvesting system at our GT hostel and have a Rain Water Reservoir for storing the rain water.</li> <li>At rain water reservoir another Reverse Osmosis process (Cap. 50 M³/hr), and this R.O. water being utilized in production process as per requirement.</li> </ul>
10.	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in	Environment protection measurement proposed in the EIA & EMP report has been implemented.

SI. No.	CONDITIONS	COMPLIANCE STATUS
	the EIA / EMP report. Further, the company must undertake socio-economic development activities in the surrounding villages like community development programmes, educational programmes. Drinking water supply and health care etc. Suggestions made during the public hearing shall be implemented	<ul> <li>Activities related to socio-economic development are ongoing in surrounding villages.</li> <li>In surrounding the plant areas focus on community development programs, educational programs, drinking water supply and health care etc.; are implemented. Dedicated skilled CSR team is working for above said activities.</li> </ul>
11.	As mentioned in the EIA/EMP, Rs. 100.00 Crores and Rs. 100.00 Crores earmarked towards the capital cost and recurring cost towards the environmental pollution control measures shall be judiciously utilized 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.	<ul> <li>We have complied with all those stipulated conditions proposed in our EIA/EMP report.</li> <li>The fund earmarked for Environmental Protection is not diverted in any other purposes.</li> </ul>
12.	The Regional Office of this Ministry at Bhubaneswar/ CPCB/OSPCB shall monitor the stipulated conditions. A six monthly compliance report and the monitored data along with stastical interpretation shall be submitted to them regularly.	We are adhering to the schedule and accordingly reports are being submitted to Regional Offices of OSPCB, CPCB and MoEF regularly.
13.	The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the OPCB and may also be seen at Website of the ministry of Environment and Forests at http://envfor.nic.in. This shall be advertised within seven days from the date of issue of the clearance later, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locally concerned and a copy of the same shall be forwarded to the Regional Office at Bhubaneswar.	The same has been followed and complied with.
14.	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 commencing the land development work.	Will ensure for the same.

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### COMPLIANCE STATUS OF ENVIRONMENTAL CLEARANCE MoEF Letter No.: F No. J-11011/491/2009-IA II (I) Dated 26<sup>th</sup> February 2021

SI.No.	CONDITIONS	COMPLIANCE STATUS
SPECIF	FIC CONDITIONS:	
1.	Continuous monitoring facilities for all the stacks and sufficient air pollution control equipments viz. fume extraction system with bag house/filters, I D fan and stack of adequate height to submerged arc furnace shall be provided to control emissions below 100 mg/Nm3. Monitoring of total Chromium (Cr) and Carbon monoxide (CO) shall also be ensured. Standards for Nickel (Ni), Chromium (Cr) and Lead (Pb) shall be within permissible limit. The Orissa Pollution Control Board (OPCB) 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. Interlocking facilities shall be provided so that process can be automatically stopped in case emission level exceeds the limit.	Adequate pollution control equipment/devices are like GCP, Bag filters, system along with chimneys of required height are already installed at different location to keep the particulate matter emission within the prescribed limits.  Monthly monitoring results are being submitted to SPCB, Odisha and six monthly compliance reports are being submitted to Regional Office of MoEF & CPCB regularly.
2.	In-plant control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Fugitive dust emissions from the stock pile of raw materials and fines dump in the open area shall be controlled by dust suppression system by routine water sprinkling. Dust extraction system with bag filters shall be provided to control the fugitive dust from raw material handling, screening and conveying section alongwith product handling section, transfer and feeding points to control fugitive dust emission to meet the OPCB norms. Internal roads shall be made black topped and asphalted. Water spraying shall also be done to prevent the dust emanation due to vehicular movement.	<ul> <li>Gas cleaning plant consisting of dust catcher, thickener, scrapper &amp; settling tank is being operated at MBF unit and additional 15 nos. of DFS at ground hopper, belt conveyor and 16 nos. of DSS have been installed at raw material yard, internal road and other areas to control the fugitive emission. In addition to that there are FES and DES installed to abate the secondary fugitive emission at Blast furnace.</li> <li>20 Nos. of fixed type water sprinklers have been installed at raw material storage yard for suppression of dust generated during transportation of raw material.</li> <li>Further in addition to that we have deployed 03nos of mist canon for suppression of fugitive dust emission.</li> <li>7 Nos. of Rain gun type sprinklers installed near main</li> </ul>

SI.No.	CONDITIONS		COMPLIANCE STATUS
			gate to control fugitive dust emission.
		•	Gas cleaning Plant consisting of heat exchangers, cyclones & bag houses have been installed in Ferro-chrome Plant.
		•	DSS at internal roads and Water spraying nozzles installed at over the belt conveyors and ground hopper for suppression of fugitive dust generation in Ferro-chrome Plant.
		•	Additional 16 nos. of Dry Fog System (DFS) and 11 Nos. of Dust Suppression System (DSS) provided at Power Plant area for water sprinkler through pipe for suppression of fugitive emission.
		•	Fixed type water spraying nozzles at belt conveyor, 36 Nos. DFS at Ground Hopper of coal feeding point and 131 Nos. DSS at belt conveyor, raw material yard and internal road at DRI unit and iron ore crusher for suppression of fine dust particles generated during material transfer of DRI Plant.
		•	Adequate Dry Fog System and DSS has been installed at Ground Hopper Briquette Plant, raw material yard and conveyor belt of Ferro-chrome units.
		•	There are De-dusting systems (approx. 100 nos. of hoods and dampers) attached with different junction houses of Kiln Cooler Discharge, Intermediate Bins and Product Hopper circuit of Sponge Iron unit to suppression fugitive dust generation.
		•	Pug Mill is attached with dust storage silo for appropriate moisture addition during

SI.No.	CONDITIONS		COMPLIANCE STATUS
			unloading of dust in the Hyvas.
		•	O5 Nos. of telescopic type unloading spout have been installed at Product Separation Building of Sponge Iron Plant, for unloading of Sponge Iron lumps, fines and Dolochar without creating fugitive dust generation at DRI Plant unit.
		•	Adequate DES installed at different operating process of DRI.
		•	Installed 03 nos. of ESP at Captive Power Plant, 17 nos. of DES/bag filter, 02 nos. of GCP & 02 nos. of FES in different operating units as per the requirement of the process to control the air pollution.
		•	03 Nos. of telescopic type unloading spout have been installed at Fly-ash Silo of Power Plant, for unloading the Fly-ash without creating any dust nuisance at Power Plant.
		•	03 Nos. of telescopic type unloading spout have been installed at GCP Silo of SMS for unloading of GCP dust without creating fugitive dust generation at SMS.
		•	O2 Nos. of telescopic type unloading spout have been installed at GCP silo of Ferrochrome unit for unloading of GCP dust without creating fugitive dust generation at Ferro-chrome unit.
		•	O2 Nos. of Dust extraction systems have been installed at hammer Crusher-1&2 of Coal delivery circuit of Coke Oven Plant
		•	360 degree rotational 08 no. of Rain gun type water sprinkler are installed at coal yard & Coke yard 08nos. of Impact sprinkler installed at other area of coke oven. Another 29 no. of impact sprinkler are installed

SI.No.	CONDITIONS		COMPLIANCE STATUS
		•	from hammer crusher Road to learning center.3nos of impact type sprinkler installed at ground hopper.  O3 nos. of water tanker engaged for water sprinkling on internal roads of the plant premises for suppression of fugitive dust emission at Coke Oven unit. And also 29 no. of fixed type impact sprinkler are installed along the internal road.
		•	Regular water sprinkling is being carried out at dust generating areas.  Three number of mist canon have been installed with having
			30 m. radius and 1800 movement at raw material yard.
3.	Data on ambient air quality stack emission and fugitive emission shall be uploaded on the Company's website and also regularly submitted on-line to the Ministry's Regional Office at Bhubaneswar, OPCB and SPCB as well as hard copy once in six months. Data on SPM, SO2 and NOx shall also be displayed prominently outside the premises at the appropriate place for the information of general public.	•	Monitoring data on ambient air quality and stack emission are submitted to the statutory authorities on regular basis.
4.	Secondary fugitive emission from all sources shall be controlled within the latest permissible limits issued by the Ministry and regularly monitored. Guidelines/Code of practice issued by the CPCB shall be followed.	•	Secondary fugitive emissions are controlled within the prescribed limits. Guidelines/Code of practice issued by the CPCB in this regard is being followed.
5.	Vehicular pollution due to transportation of raw material and finished product shall be controlled. Proper arrangements shall also be made to control dust emission during loading and unloading of the raw material and finished product.	•	Three numbers water tankers sprinkling is being done from 6 AM to 10 PM on regular basis on internal roads of the plant premises to suppress the dust due to vehicular movement and raw material and product storage yards being taken care of.
6.	Total water requirement from River Kharsuan and IDCO shall not exceed 375 m3/day. However, make-up water requirement for the proposed	•	We have an agreement with IDCO, Govt. of Odisha for drawl of 250 m3/hr. of water from

SI.No.	CONDITIONS	COMPLIANCE STATUS
	Ferro alloy plant shall be met from water allotted to M/s Visa Steel Limited (VSL). Closed circuit cooling system shall be adopted i.e. cooling water shall be recycled/reused in the process to reduce water consumption. The blow down and other discharges including DM effluents shall be collected in a common pond, treated and recycled back to the process and/or used for ash handling, dust suppression and green belt development. Domestic waste water shall be treated in septic tank followed by soak pits system and used for green belt development.	Brahmani River for phase -1.  Blow down water from cooling tower & boiler blow down water and DMP generated water are collected and treated in the ETP followed by RO of capacity having 1000 KLD and this water is being utilized in CPP process. Thus, there is no waste water discharge from CPP unit.  The reject water from RO is
		used for cake/coke quenching and dust suppression system at internal road.  Three number of Sewage Treatment Plant have been established for treatment of domestic waste water at GT Hostel, colony and canteen building. Treated water is being 100% reused for plantation purpose and dust suppression on roads.  Apart from that we have installed a 4400 cum/day for treatment of Surface Runoff Water during rainy season.
7.	Prior permission for the drawl of 375 m3/day water from river Kharsuan/ Bramhani/IDCO from the concerned department shall be obtained. Actual source of water shall be finalized and informed to the Ministry's Regional Office at Bhubaneswar. OPCB and CPCB along with the permission letter.	<ul> <li>Necessary permission already obtained for drawl of water.</li> <li>No effluent is being discharged to outside the plant premises maintaining Zero discharge.</li> </ul>
8.	'Zero' effluent discharge shall be strictly followed and no waste water shall be discharged outside the premises.	<ul> <li>No waste water discharge is being discharged to outside the plant premises. "Zero Effluent" discharge is being maintained all the time.</li> </ul>
9.	Regular monitoring of influent and effluent surface, sub-surface and ground water shall be ensured and treated wastewater shall meet the norms prescribed by the State Pollution Control Board or described under the E(P) Act whichever are more stringent.	Being complied.
10.	Metal recovery plant shall be installed to recover maximum metal through hydraulic jigging process.	Metal recovery plant installed and it is being operated with a

SI.No.	CONDITIONS	COMPLIANCE STATUS
	Discharge from metal recovery plant shall be monitored for the Chromium content and maintained within the permissible limit before recycling and reuse. SAF slag tailing shall be dumped in own premises in secured land fill constructed as per CPCB guidelines after recovery of the metal. Used oils/lubricants shall be sold to authorized recyclers / re processors.	resourceful recovery of metals. Regular monitoring is being carried out.
11.	Chromate slag shall be used for road making only after passing through Toxic Chemical leachability Potential (TCLP) test otherwise ferrochrome shall be recovered from the slag and output waste shall be disposed in secured landfill as per SPCB guide lines. All the other solid waste shall be properly disposed off in environment-friendly manner. No hazardous material shall be spilled out and good housekeeping practices shall be adopted. Hazardous waste shall be handled as per the hazardous waste (Management & Handling) Rules, 1989and subsequent amendment.	TCLP test report is attached as Annexure-3.
12.	Flue dust from the bag house shall not be dumped anywhere but reused in the process. Chrome ore fines shall be reused in briquetting plant. Dolomite shall also be reused.	<ul> <li>The flue dust from the bag house is reused in the briquette making.</li> </ul>
13.	Proper handling, storage, utilization and disposal of all the solid waste shall be ensured and regular toxic metal content in the waste material and its composition, end use of solid/hazardous waste shall be submitted to the Ministry's Regional Office at Bhubaneswar, SPCB and CPCB.	<ul> <li>Information regarding handling, storage, utilization and disposal of solid waste is being submitted to the board from time to time.</li> </ul>
14.	As proposed, green belt shall be developed in at least 17 acres (33%) out of 50 acres land within and around the plant premises as per the CPCB guidelines in consultation with DFO.	Already complied with.
15.	All the recommendation made in the charter on Corporate Responsibility for Environment Protection (CREP) for the Ferro chrome units shall be strictly implemented.	The recommendations made in the charter on CREP for the Fe- Cr units are implemented.
16.	All the commitments made to the public during the public hearing /Public consultation meeting shall be satisfactory implemented.	NA
17.	The company shall provide housing for construction labor within the site with all necessary infrastructure and facilities such as fuel for cooking , mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	Complied with.
GENEK	AL CONDITIONS:	

SI.No.	CONDITIONS	COMPLIANCE STATUS
1.	The project authorities must strictly adhere to the stipulations made by the Orissa Pollution Control Board (OSPCB) and the State Government.	The same is being implemented.
2.	No further expansion or modifications in the plant should be carried out without prior approval of the Ministry of Environment and Forests.	<ul> <li>We agree to the condition and assure you that no further expansion or modification shall be carried out without the prior approval of MoEF.</li> </ul>
3.	At least four ambient air quality monitoring stations shall be established in the downward direction as well as where maximum ground level concentrations of SPM, SO2, & NOx are anticipated in consultation with the OSPCB. Data on ambient air quality and stack emission should be regularly submitted to this Ministry including its Regional Office at Bhubaneswar, OSPCB and CPCB once in six months.	<ul> <li>Four numbers of CAAQMS (Continuous Ambient Air Quality Monitoring Station) has been installed at 4 different locations of the plant premises and the data is being uploaded to the Board's server in real time basis.</li> </ul>
4.	In-plant control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Fume and dust extraction system with bag filters shall be provided at the transfer and discharge points to control fugitive emissions. Further, specific measures like water sprinkling around the raw material storage areas and asphalting or concreting of the roads shall be done to control fugitive emissions.	<ul> <li>Gas cleaning plant consisting of dust catcher, thickener, scrapper &amp; settling tank is provided to take care of the emissions.</li> <li>We have also provided water tankers and fixed type sprinklers to suppress the fugitive dust emissions.</li> </ul>
5.	Industrial waste water shall be properly collected, 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 waste water shall be utilized for plantation purpose.	<ul> <li>All the industrial waste water is being re-cycled back to the process by closed circuit system after adequate treatment.</li> <li>Domestic waste water is being reused for plantation &amp; dust suppression on roads.</li> </ul>
6.	The company shall develop rain water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table.	<ul> <li>We have constructed a rain water harvesting structure near our GT Hostel for recharging the ground water table.</li> <li>Besides this, we have also a rain water harvesting pond with a capacity of 500000 m3. To utilize its water. Further a reverse osmosis plant of Capacity–1400 m3/day has also been installed.</li> <li>Additionally the stored water is used for dust suppression through water tanker.</li> </ul>
7.	The overall noise levels in and around the plant are	We are monitoring the noise

SI.No.	CONDITIONS	COMPLIANCE STATUS
	shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules,1989 viz. 75 dBA (daytime) and 70 dBA (nighttime).	level regularly and reports are being submitted.
8.	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the factories Act.	<ul> <li>Health check-up of all the employees are done and records are maintained.</li> </ul>
9.	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report. Further, the company must undertake socioeconomic development activities in the surrounding villages like community development programmes, educational programmes, drinking water supply and health care etc.	We have complied with the directions for taking environmental protection and socio economic development.
10.	As proposed Rs. 13.10 Crores shall be earmarked towards capital cost and recurring cost/annum for the environment pollution control measures and utilized 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.	We have earmarked the capital cost and recurring cost/annum for the environmental pollution control measures and utilize judiciously to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government.
11.	A copy of clearance letter shall be send by the proponent to concerned Panchayat, Zila Parishad/ Municipal Corporation, Urban Local Body and the local NGO, if any, from whom suggestions / representations, if any, were received while processing the proposal. The clearance letter shall also be put on the web site of the company by the proponent.	Already complied
12.	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MOEF at Bhubaneswar, the respective zonal office of CPCB and the OPCB. The criteria pollutant levels namely; SPM, RSPM, SO2, NOx (ambient levels as well as stack emissions) or critical sectorial parameters Carbon monoxide (CO), Chromium (Cr), Nickel (Ni) Lead (Pb), indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	As per the requirement, we are regularly submitting all the relevant information to the Ministry as per the stipulated environment clearance conditions, including results of monitoring data on their website and shall update the same periodically.

SI.No.	CONDITIONS		COMPLIANCE STATUS
13.	The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MOEF, The respective Zonal Office of CPCB and the SPCB. The Regional Office of this Ministry at Bhubaneswar / CPCB / OPCB shall monitor the stipulated conditions.		We are submitting six-monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MOEF, The respective Zonal Office of CPCB and the SPCB.
14.	The environmental statement of each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental conditions and shall also be sent to the respective Regional Office of the MOEF at Bhubaneswar by email.	-	We have submitted the environmental statement of each financial year ending 31st March in Form-V as it is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986.
15.	The project proponent shall inform the public 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 of Environment and Forest at http:/www.envfor.nic.in.This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the Regional office at Bhubaneswar.		The same has been followed and complied with.
16.	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 commencing the land development work.		Will ensure for the same.

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### **Ambient Air Quality Monitoring Results**

#### $PM_{10}$ :

Month	CAAQMS -1 (Behind GET Hostel)		CAAQMS -2 (Near WTP)			CAAQMS -3 (Near Learning Center)			CAAQMS -4 (Near DM Plant)			
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg
Oct 2023	135.14	21.2	73.03	130.83	19.68	70.25	83.33	19.9	61.11	86.19	13.89	45.54
Nov 2023	130.48	22.87	60.94	152.34	34.34	79.22	84.24	40.73	63.67	93.65	34.93	65.72
Dec 2023	78.29	9.51	46.08	107.60	6.54	58.01	85.96	17.54	63.65	87.48	17.21	78.78
Jan 2024	105.33	17.87	47.07	87.87	22.38	57.38	82.81	38.21	66.09	138.55	27.91	72.20
Feb 2024	46.13	827	21.9	93.86	29.88	61.00	73.50	6.94	51.56	72.10	34.10	50.29
Mar 2024	44.53	4.59	21.48	69.19	10	32.82	53.86	22.39	36.9	78.6	24.43	40.37

### $PM_{2.5}$ :

Month	CAAQMS -1 (Behind GET Hostel)			CAAQMS -2 (Near WTP)				CAAQMS - Learning (		CAAQMS -4 (Near DM Plant)		
	Max	Min	Avg	Max	Max Min Avg		Max	Min	Avg	Max	Min	Avg
Oct 2023	163.63	13.72	31.98	45.48	6.16	27.19	55.25	0	36.37	49.9	0.18	29.36
Nov 2023	140.28	14.24	29.49	49.55	11.77	33.01	67.56	17.94	44.69	56.78	16.01	35.39
Dec 2023	79.88	5.65	29.97	52.25	8.76	32.18	61.34	10.29	42.60	53.35	9.83	35.29
Jan 2024	78.45	20.58	46.43	65.78	24.91	44.73	70.50	27.29	51.16	65.00	16.21	38.60
Feb 2024	50.61	12.07	26.15	51.24	19.17	33.21	59.81	19.95	37.00	36.01	14.90	27.15
Mar 2024	48.82	7.53	20.25	27.8	5.57	18.35	39.61	7.26	27.46	28.16	11.94	19.95

#### $SO_2$ :

Month	CAAQMS -1 (Behind GET Hostel)		CAAQMS -2 (Near WTP)		CAAQMS -3 (Near Learning Center)			CAAQMS -4 (Near DM Plant)				
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg
Oct 2023	43.64	31.81	34.13	21.35	19.17	19.69	13.3	13.07	13.19	15.49	13.68	14.39
Nov 2023	38.09	23.18	28.97	33.42	14.85	19.67	15.73	13.12	13.35	17.74	13.94	14.45
Dec 2023	33.22	20.96	26.58	17.21	16.29	16.73	13.58	12.96	13.25	15.00	13.97	14.40
Jan 2024	35.30	23.53	27.23	18.61	16.91	17.71	14.69	13.26	14.26	14.32	13.83	14.02
Feb 2024	47.65	2.90	27.87	19.41	18.41	18.77	14.19	13.16	13.64	14.45	13.81	13.99
Mar 2024	42.96	14.5	21.14	19.62	18.35	19.04	14.11	13.5	13.74	14.4	13.83	14.09

#### NOx:

Month	CAAQMS -1 (Behind GET Hostel)		CAAQMS -2 (Near WTP)		CAAQMS -3 (Near Learning Center)			CAAQMS -4 (Near DM Plant)				
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg
Oct 2023	13.58	12.89	13.48	17.08	9.13	13.11	33.07	27.63	29.69	17.41	16.46	17.21
Nov 2023	13.60	13.27	13.53	29.59	16.16	21.79	36.03	27.83	30.53	17.29	16.48	17.10
Dec 2023	13.59	13.49	13.55	21.33	7.33	10.52	35.26	27.07	30.41	17.40	17.26	17.30
Jan 2024	13.67	13.55	13.59	7.60	7.06	7.41	55.82	29.15	37.87	17.71	17.34	17.41
Feb 2024	14.11	13.53	13.65	17.61	10.30	17.11	32.48	9.39	13.77	17.68	16.19	16.92
Mar 2024	13.95	13.65	13.77	21.97	12.6	15.39	22.39	9.07	13.98	17.08	16.3	16.77

#### co:

Month	CAAQMS -1 (Behind GET Hostel)		CAAQMS -2 (Near WTP)		CAAQMS -3 (Near Learning Center)			CAAQMS -4 (Near DM Plant)				
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg
Oct 2023	1.98	1.39	1.72	1.24	0.89	1.08	1.72	1.42	1.56	1.93	1.2	1.57
Nov 2023	2.12	0.54	1.29	1.82	0.72	1.11	1.65	0.51	1.06	1.72	0.75	1.16
Dec 2023	1.12	0.37	0.76	1.47	0.76	1.10	1.08	0.20	0.69	1.72	0.94	1.29
Jan 2024	1.59	1.08	1.29	1.69	0.55	0.99	1.56	0.34	1.05	1.85	1.08	1.36
Feb 2024	2.27	1.06	1.44	1.35	0.48	0.75	1.15	0.06	0.81	1.75	1.02	1.45
Mar 2024	1.67	0.98	1.2	3.07	0.74	1.28	1.21	0.26	0.82	1.86	0.02	1.19

### **Emissions from Point Source**

Name of the Stack		Oct-2023			Nov-2023			Dec-2023	
	PM (mg/Nm <sup>3</sup> )	SO <sub>2</sub> (mg/Nm <sup>3</sup> )	NO <sub>x</sub> (mg/Nm <sup>3</sup> )	PM (mg/Nm³)	SO <sub>2</sub> (mg/Nm <sup>3</sup> )	NO <sub>x</sub> (mg/Nm <sup>3</sup> )	PM (mg/Nm³)	SO <sub>2</sub> (mg/Nm <sup>3</sup> )	NO <sub>x</sub> (mg/Nm <sup>3</sup> )
Ferrochrome Stack (Complex-1)	49.31	216.77	NA	19.17	8924	NA	0	90.94	NA
Ferrochrome Stack-1 (Complex-2)	18.71	186.82	NA	NA	NA	NA	27.39	168.88	NA
Ferrochrome Stack -2 (Complex-2)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Power Plant(CFBC) Stack – 3	36.21	243.96	140.56	32.81	375.52	194.55	24.77	206.71	149.06
Blast Furnace Stack	NA	NA	NA	NA	NA	NA	NA	NA	NA
Power Plant Stack (WHRB #1)	22.24	295.88	NA	20.59	656.94	NA	13.99	320.48	NA
Power Plant Stack (WHRB #2)	24.40	314.61	NA	19.67	248.78	NA	14.95	277.96	NA
Coke Oven Stack -1 CEMS#1	24.1	164.67	NA	24.1	164.67	NA	27.13	163.37	NA
Coke Oven Stack -2 CEMS#2	27.4	369.56	NA	27.4	369.56	NA	24.01	412.78	NA

N.A – Not available due to shutdown

Name of the Stack		Jan-2024			Feb-2024			Mar-2024	
	PM (mg/Nm³)	SO <sub>2</sub> (mg/Nm <sup>3</sup> )	NO <sub>x</sub> (mg/Nm³)	PM (mg/Nm³)	SO <sub>2</sub> (mg/Nm <sup>3</sup> )	NO <sub>x</sub> (mg/Nm <sup>3</sup> )	PM (mg/Nm³)	SO <sub>2</sub> (mg/Nm <sup>3</sup> )	NO <sub>x</sub> (mg/N m <sup>3</sup> )
Ferrochrome Stack (Complex-1)	8.77	45.88	NA	30.53	20.24	NA	15.18	46.08	NA
Ferrochrome Stack-1 (Complex-2)	17.29	64.23	NA	23.61	105.56	NA	12.62	91.29	NA
Ferrochrome Stack -2 (Complex-2)	NA	NA	NA	NA	NA	NA	15.99	12.61	NA
Power Plant(CFBC) Stack – 3	33.57	192.44	159.83	33.65	172.37	172.58	21.54	278.62	184.4
Blast Furnace Stack	NA	NA	NA	NA	NA	NA	NA	NA	NA
Power Plant Stack (WHRB #1)	17.7	232.84	NA	20.71	31.76	NA	19.41	35.31	NA
Power Plant Stack (WHRB #2)	20.13	78.58	NA	25.29	34.45	NA	9.89	16.99	NA
Coke Oven Stack -1 CEMS#1	14.73	150.44	NA	18.3	150.66	NA	15.21	160.64	NA
Coke Oven Stack -2 CEMS#2	22.79	313.96	NA	25.25	251.38	NA	25.35	496.3	NA

N.A – Not available due to shutdown

### **Results of Noise level Monitoring**

#### Oct-2023:

		Day	Time (dB	B(A))	Night	: Time (d	B(A))
SI. No.	Location	6	AM- 10P	M	1	0PM -6A	M
		Max.	Min.	Avg.	Max.	Min.	Avg.
1	Security Gate -1	70.48	52.41	64.24	55.6	51.0	53.3
2	Security Gate - 2	69.75	50.72	62.79	52.6	49.9	51.25
3	Canteen Building	60.42	48.59	54.32	50.4	45.2	47.8
4	Arc- Furnace (Fe-Cr)	73.45	65.41	70.42	65.5	59.3	62.4
5	Briquetting Plant (Fe- Cr)	74.83	68.42	72.33	64	61.5	62.75
6	FeCr- II, Office Building	54.89	50.72	51.82	47.4	45.9	46.65
7	33Kv MRSS	53.95	48.19	50.24	49.1	47.3	48.2
8	TG Building (CPP)	74.25	40.18	73.59	67.7	65.1	66.4
9	Pump House (CPP)	73.9	70.46	72.50	66.6	60.4	63.5
10	Administrative Building (1 <sup>st</sup> Floor)	54.86	49.63	51.21	50.2	49.6	49.9
11	Administrative Building (2 <sup>nd</sup> Floor)	50.47	44.72	48.15	46.8	46.2	46.5
12	Quenching Tower (Coke Oven)	63.0	54.0	58.5	56.5	51.0	53.75
13	Pusher Car (Coke Oven)	63.0	56.0	59.5	59.0	54.0	56.5
14	Workshop (at Coke Oven)	67.0	58.0	62.5	55.0	52.0	53.5
15	Coke Oven office Building (1st Floor)	53.5	49.0	51.25	46.0	41.0	43.5

16	Coke Oven office Building (2 <sup>nd</sup> Floor)	52.0	48.0	50.00	45.0	40.0	42.5
17	Coke Yard	67.0	60.0	63.5	58.0	52.0	55.0
18	Coal Yard	64.0	58.0	61.0	55.5	50.0	52.75
19	Coke Screen Building	68.0	61.0	64.5	67.0	61.5	64.25

#### Nov-2023

		Day	Time (dB	8(A))	Night Time (dB(A))			
SI. No.	Location	6	AM- 10P	M	10PM -6AM			
		Max.	Min.	Avg.	Max.	Min.	Avg.	
1	Security Gate -1	71.42	51.72	61.57	56.82	52.47	54.65	
2	Security Gate - 2	68.42	50.78	59.60	54.67	50.14	52.41	
3	Canteen Building	57.14	43.48	50.49	50.34	44.79	47.57	
4	Arc- Furnace (Fe-Cr)	72.81	60.79	66.80	63.57	58.92	61.25	
5	Briquetting Plant (Fe- Cr)	74.23	66.95	70.59	68.42	60.82	64.62	
6	FeCr- II, Office Building	53.19	51.48	52.34	46.13	44.75	45.44	
7	33Kv MRSS	54.18	49.37	51.78	48.21	45.77	46.99	
8	TG Building (CPP)	74.36	60.52	67.44	68.92	66.13	67.53	
9	Pump House (CPP)	73.60	69.81	71.71	67.28	61.22	64.25	
10	Administrative Building (1 <sup>st</sup> Floor)	53.67	50.27	51.97	48.15	44.75	46.45	
11	Administrative Building (2 <sup>nd</sup> Floor)	51.24	46.72	48.98	47.62	40.56	44.09	
12	Quenching Tower	63.0	54.0	58.5	56.5	51.0	53.75	

	(Coke Oven)						
13	Pusher Car (Coke Oven)	63.0	56.0	59.5	59.0	54.0	56.5
14	Workshop (at Coke Oven)	67.0	58.0	62.5	55.0	52.0	53.5
15	Coke Oven office Building (1 <sup>st</sup> Floor)	53.5	49.0	51.25	46.0	41.0	43.5
16	Coke Oven office Building (2 <sup>nd</sup> Floor)	52.0	48.0	50.00	45.0	40.0	42.5
17	Coke Yard	67.0	60.0	63.5	58.0	52.0	55.0
18	Coal Yard	64.0	58.0	61.0	55.5	50.0	52.75
19	Coke Screen Building	68.0	61.0	64.5	67.0	61.5	64.25

#### Dec-2023

SI. No.	Location	_	Time (dB		Night Time (dB(A))			
		Max.	Min.	Avg.	Max.	Min.	Avg.	
1	Security Gate -1	57.60	53.20	55.40	54.70	50.30	52.50	
2	Security Gate - 2	56.90	52.10	54.50	53.80	49.60	51.70	
3	Canteen Building	53.50	51.30	52.40	51.00	48.90	49.95	
4	Arc- Furnace (Fe-Cr)	64.40	59.80	62.10	63.30	58.90	61.10	
5	Briquetting Plant (Fe- Cr)	65.10	58.70	61.90	62.60	57.60	60.10	
6	FeCr- II, Office Building	51.30	48.90	50.10	48.50	46.30	47.40	

7	33Kv MRSS	52.60	50.20	51.40	49.20	47.40	48.30
8	TG Building (CPP)	73.62	66.40	70.01	69.34	65.80	67.57
9	Pump House (CPP)	67.90	62.50	65.20	66.70	62.30	64.50
10	Administrative Building (1 <sup>st</sup> Floor)	54.70	52.30	53.50	50.80	48.40	49.60
11	Administrative Building (2 <sup>nd</sup> Floor)	52.20	50.00	51.10	48.60	46.40	47.50
12	Quenching Tower (Coke Oven)	63.0	52.5	57.75	55.5	50.0	52.75
13	Pusher Car (Coke Oven)	63.0	53.0	58.0	57.0	52.0	54.5
14	Workshop (at Coke Oven)	67.0	55.0	61.0	55.0	50.0	52.5
15	Coke Oven office Building (1 <sup>st</sup> Floor)	53.0	47.0	50.00	45.0	41.0	43.0
16	Coke Oven office Building (2 <sup>nd</sup> Floor)	52.0	47.0	49.5	44.0	40.0	42.0
17	Coke Yard	67.0	60.0	63.5	58.0	53.0	55.5
18	Coal Yard	67.0	59.0	63.0	57.0	52.0	54.5
19	Coke Screen Building	67.0	61.5	64.25	65.0	59.0	62. 0

#### Jan-2024

SI.	Location		Time (dE		Night Time (dB(A))			
No.			API 101		-			
		Max.	Min.	Avg.	Max.	Min.	Avg.	
1	Security Gate -1	56.1	52.7	5404	53.9	51.1	52.5	
2	Security Gate - 2	55.4	51.6	53.5	52.7	49.9	51.3	
3	Canteen Building	51.7	49.3	50.5	49.8	48	48.9	
4	Arc- Furnace (Fe-Cr)	66.5	60.7	63.6	64.9	59.5	62.2	
5	Briquetting Plant (Fe- Cr)	65.4	59.6	62.5	63.1	58.3	60.7	
6	FeCr- II, Office Building	50.9	48.3	49.6	48.2	46.6	47.4	
7	33Kv MRSS	50.6	49.2	49.9	48.7	47.1	47.9	
8	TG Building (CPP)	68.2	66.8	67.5	67.4	65.6	66.5	
9	Pump House (CPP)	66.8	61.8	64.3	66	60.6	63.3	
10	Administrative Building (1 <sup>st</sup> Floor)	52.6	51.2	51.9	51.4	49.8	50.6	
11	Administrative Building (2 <sup>nd</sup> Floor)	51.9	50.5	51.2	49	47.2	48.1	
12	Quenching Tower (Coke Oven)	63.0	52.0	57.5	55.0	49.0	52.00	
13	Pusher Car (Coke Oven)	63.0	53.0	58.0	57.0	52.5	54.75	
14	Workshop (at Coke Oven)	67.0	56.0	61.5	55.0	50.0	52.5	

15	Coke Oven office Building (1 <sup>st</sup> Floor)	53.0	47.0	50.00	45.0	40.0	42.5
16	Coke Oven office Building (2 <sup>nd</sup> Floor)	52.0	47.0	49.5	44.0	38.0	41.0
17	Coke Yard	66.0	60.0	63.0	58.0	53.0	55.5
18	Coal Yard	67.0	59.0	63.0	57.0	53.0	55.0
19	Coke Screen Building	67.0	61.5	64.25	65.0	58.0	61. 5

#### Feb-2024

		Day Time (dB(A)) 6AM- 10PM			Night Time (dB(A))		
SI. No.	Location				10PM -6AM		
		Max.	Min.	Avg.	Max.	Min.	Avg.
1	Security Gate -1	60.34	55.24	57.79	60.52	54.85	57.69
2	Security Gate - 2	63.24	53.17	58.21	66.37	59.24	62.81
3	Canteen Building	58.24	53.32	55.78	51.33	49.62	50.48
4	Arc- Furnace (Fe-Cr)	66.27	60.78	63.53	64.28	60.37	62.33
5	Briquetting Plant (Fe- Cr)	68.27	65.27	66.77	60.78	59.48	60.13
6	FeCr- II, Office Building	53.24	50.87	52.06	50.32	47.18	48.75
7	33Kv MRSS	54.27	50.39	52.33	50.78	46.27	48.53
8	TG Building (CPP)	74.21	68.52	71.37	71.27	64.38	67.83
9	Pump House (CPP)	70.39	64.85	67.62	68.79	60.88	64.84
10	Administrative Building (1 <sup>st</sup> Floor)	55.74	51.96	53.85	50.44	48.16	49.30

11	Administrative Building (2 <sup>nd</sup> Floor)	53.67	51.72	52.70	50.32	47.85	49.09
12	Quenching Tower (Coke Oven)	64.0	52.0	58.0	56.0	48.5	52.25
13	Pusher Car (Coke Oven)	63.0	52.0	57.5	57.0	52.0	54.5
14	Workshop (at Coke Oven)	67.0	56.0	61.5	55.0	50.5	52.75
15	Coke Oven office Building (1 <sup>st</sup> Floor)	53.0	47.0	50.00	45.0	40.0	42.5
16	Coke Oven office Building (2 <sup>nd</sup> Floor)	52.0	47.0	49.5	44.0	38.0	41.0
17	Coke Yard	66.0	58.0	62.0	58.0	52.0	55.0
18	Coal Yard	68.0	59.0	63.5	59.0	53.5	55.25
19	Coke Screen Building	67.0	61.5	64.25	65.0	59.0	62. 0

#### Mar-2024

SI. No.	Location	Day Time (dB(A)) 6AM- 10PM			Night Time (dB(A))		
		Max.	Min.	Avg.	Max.	Min.	Avg.
1	Security Gate -1	63.80	57.40	60.60	53.10	51.40	52.25
2	Security Gate - 2	59.90	55.30	57.60	52.40	50.80	51.60
3	Canteen Building	52.40	51.60	52.00	50.80	49.00	49.90
4	Arc- Furnace (Fe-Cr)	67.70	62.30	65.00	58.60	55.50	57.05

5	Briquetting Plant (Fe- Cr)	65.80	61.40	63.30	62.70	58.50	60.60
6	FeCr- II, Office Building	54.60	51.80	53.20	52.10	51.00	51.55
7	33Kv MRSS	50.20	48.80	49.50	48.80	47.00	47.90
8	TG Building (CPP)	68.10	66.70	67.40	66.80	65.10	65.95
9	Pump House (CPP)	66.30	63.30	64.80	65.50	62.70	64.10
10	Administrative Building (1 <sup>st</sup> Floor)	51.70	49.50	50.60	50.10	48.90	49.50
11	Administrative Building (2 <sup>nd</sup> Floor)	50.60	48.40	49.50	48.40	47.20	47.80
12	Quenching Tower (Coke Oven)	65.0	52.0	58.5	57.0	47.0	52.00
13	Pusher Car (Coke Oven)	63.0	52.0	57.5	57.0	51.0	54.00
14	Workshop (at Coke Oven)	66.0	57.0	61.5	55.0	50.5	52.75
15	Coke Oven office Building (1 <sup>st</sup> Floor)	53.0	47.0	50.00	45.0	40.0	42.5
16	Coke Oven office Building (2 <sup>nd</sup> Floor)	52.0	47.0	49.5	44.0	38.0	41.0
17	Coke Yard	64.0	57.0	60.5	60.0	54.0	57.0
18	Coal Yard	65.0	58.0	61.5	60.0	54.5	57.25
19	Coke Screen Building	62.0	57.0	59.5	64.0	58.0	61.0

### **Effluent Analysis Report**

#### Oct-2023

Sl. No.	Parameter	Unit	Prescribed Limits	Boiler blow down	Cooling Tower Blow Down
1	рН	-	5.5-9.0	7.58	7.31
2	Suspended Solids	mg/l	100	53.00	42.97
3	Total Dissolved Solids	mg/l	2100	149.86	118.75
4	Oil & Grease	mg/l	10	1.30	BDL
5	Bio Chemical Oxygen Demand	mg/l	30	8.2	7.6
6	Chemical Oxygen Demand	mg/l	250	26.4	23.8

#### Nov-2023

Sl. No.	Parameter	Unit	Prescribed Limits	Boiler blow down	Cooling Tower Blow Down
1	рН	-	5.5-9.0	7.41	7.22
2	Suspended Solids	mg/l	100	48.17	39.75
3	Total Dissolved Solids	mg/l	2100	143.62	102.66
4	Oil & Grease	mg/l	10	BDL	BDL

# VISA STEEL LIMITED KALINGANAGAR INDUSTRIAL COMPLEX, JAJPUR ROAD MONITORING REPORT FOR THE PERIOD FROM October, 2023 TO March, 2024

5	Bio Chemical Oxygen Demand	mg/l	30	7.8	8.5
6	Chemical Oxygen Demand	mg/l	250	24.1	28.4

## Dec-2023:

Sl. No.	Parameter	Unit	Prescribed Limits	Boiler blow down	Cooling Tower Blow Down
1	рН	-	5.5-9.0	7.50	7.22
2	Suspended Solids	mg/l	100	17.20	34.10
3	Total Dissolved Solids	mg/l	2100	117.60	204.51
4	Oil & Grease	mg/l	10	BDL	BDL
5	Bio Chemical Oxygen Demand	mg/l	30	6.3	7.9
6	Chemical Oxygen Demand	mg/l	250	22.7	27.1

# VISA STEEL LIMITED KALINGANAGAR INDUSTRIAL COMPLEX, JAJPUR ROAD MONITORING REPORT FOR THE PERIOD FROM October, 2023 TO March, 2024

## Jan-2024:

Sl. No.	Parameter	Unit	Prescribed Limits	Boiler blow down	Cooling Tower Blow Down
1	рН	-	5.5-9.0	7.60	7.40
2	Suspended Solids	mg/l	100	14.62	24.91
3	Total Dissolved Solids	mg/l	2100	197.24	201.35
4	Oil & Grease	mg/l	10	BDL	BDL
5	Bio Chemical Oxygen Demand	mg/l	30	8.1	9.2
6	Chemical Oxygen Demand	mg/l	250	26.8	31.2

## Feb-2024:

Sl. No.	Parameter	Unit	Prescribed Limits	Boiler blow down	Cooling Tower Blow Down
1	рН	-	5.5-9.0	7.62	7.44
2	Suspended Solids	mg/l	100	19.8	27.8
3	Total Dissolved Solids	mg/l	2100	168.4	207.5
4	Oil & Grease	mg/l	10	BDL	BDL

# VISA STEEL LIMITED KALINGANAGAR INDUSTRIAL COMPLEX, JAJPUR ROAD MONITORING REPORT FOR THE PERIOD FROM October, 2023 TO March, 2024

5	Bio Chemical Oxygen Demand	mg/l	30	8.7	8.1
6	Chemical Oxygen Demand	mg/l	250	22.8	30.6

## Mar- 2024:

Sl. No.	Parameter	Unit	Prescribed Limits	Boiler blow down	Cooling Tower Blow Down
1	рН	-	5.5-9.0	7.38	7.54
2	Suspended Solids	mg/l	100	23.41	31.57
3	Total Dissolved Solids	mg/l	2100	128.40	188.55
4	Oil & Grease	mg/l	10	BDL	BDL
5	Bio Chemical Oxygen Demand	mg/l	30	7.6	7.1
6	Chemical Oxygen Demand	mg/l	250	28.9	23.4

NA: Not available due to CPP shutdown.

**BDL: Below Detective Limit** 

Certified for: ISO 9001:2015, ISO 14001:2015, ISO 45001:2018

Accredited by : NABET-A Grade, MOEF & CC/CPCB & SPCB-A Grade

Surface & Sub-Surface Investigation Water Resource Management

Quality Control & Project Management

· Renewable Energy

 Agricultural Development Public Health Engineering

• Mine Planning & Design Mineral/Sub-Soil Exploration • Information Technology

Waste Management Services

Laboratory Services Environment Lab Food Lab Material Lab Soil Lab Mineral Lab Microbiology Lab

Ref: Envlab/23-24/TR-13558

Infrastructure Enginering

Environmental & Social Study

Date: 20.02.2024

# **TCLP STUDY TEST REPORT**

1. Name of the Industry : VISA Steel Limited, Kalinganagar, Jajpur

2. Sampling Location : Ferrochrome slag from both complex 1 & 2 composite sample

3. Sample Type : Chrome slag

4. Sample Collected By : VCSPL Representative in front of VISA Steel Representative

5. Sampling Date : 09.02.2024 6. Receiving Date : 10.02.2024

SI No	Parameter	Testing Method	Unit		ent / Limit DULE II	Analysis Results
				Max	Min	Results
1	Arsenic	USEPA 1331 & 200.7	mg/L	5.0	5.0	
2	Barium	USEPA 1331 & 200.7	mg/L	100		< 0.05
3	Cadmium	USEPA 1331 & 200.7	mg/L	1.0		< 0.05
4	Chromium/ Cr(III) Compounds	USEPA 1331 & 200.7	mg/L	5.0		< 0.05
5	Lead	USEPA 1331 & 200.7	mg/L	5.0		< 0.05
6	Manganese	USEPA 1331 & 200.7	mg/L	10		< 0.05
7	Mercury	USEPA 1331 & 200.7	mg/L	0.20		< 0.05
8	Selenium	USEPA 1331 & 200.7	mg/L	1.0		< 0.05
	Silver	USEPA 1331 & 200.7	mg/L	5.0		< 0.05
10	Ammonia as NH₃	USEPA 1331 & APHA 4500 C	mg/L	50		1.46
11	Cyanide	USEPA 1331 & APHA 4500 F	mg/L	20		< 0.05
12	Nitrate (Nitrate- Nitrogen)	USEPA 1331 & IS 3025 (Part 34)	mg/L	1000		0.34
13	Sulphide as H <sub>2</sub> S	USEPA 1331 & APHA 4500 S F	mg/L	5.0		2.14
14	1,1- Dichloroethylene	USEPA 1331 + 5030 C & 8260 B	mg/L	0.70		< 0.01
15	1,2- Dichloroethane	USEPA 1331 + 5030 C & 8260 B	mg/L	0.5		< 0.01
16	1,4- Dichlorobenzene	USEPA 1331 + 5030 C & 8260 B	mg/L	7.5		< 0.01
17	2,4,5- Trichlorophenol	USEPA 1331 + 3510 C + 8041 A & 8270 D	mg/L	400		<0.05
18	2,4,6- Trichlorophenol	USEPA 1331 + 3510 C + 8041 A & 8270 D	mg/L	2.0		<0.05
19	2,4- Dinitrotoluene	USEPA 1331 + 3510 C + 8041 A & 8270 D	mg/L	0.13		<0.01
20	Benzene	USEPA 1331 + 5030 C & 8260 B	mg/L	0.5		< 0.01
21	Benzo (a) pyrene	USEPA 1331 + 5030 C & 8260 B	mg/L	0.001		< 0.0001
22	Bromodichloromethane	USEPA 1331 + 5030 C & 8260 B	mg/L	6.0		< 0.01
23	Bromoform	USEPA 1331 + 5030 C & 8260 B	mg/L	10.		< 0.01
24	Carbontetrachloride	USEPA 1331 + 5030 C & 8260 B	mg/L	0.50		< 0.01
25	Chlorobenezene	USEPA 1331 + 5030 C & 8260 B	mg/L	100		<0.01
26	Chloroform	USEPA 1331 + 5030 C & 8260 B	mg/L	6.0		0.02
27	Cresol (ortho + meth + para)	USEPA 1331 + 5030 C & 8260 B	mg/L	200		< 0.05
	Dichlorobromomethane	USEPA 1331 + 5030 C & 8260 B	mg/L	10		< 0.01
29	Hexachlorobenzene	USEPA 1331 + 5030 C & 8260 B	mg/L	13		< 0.01
30	Hexachlorobutadiene	USEPA 1331 + 5030 C & 8260 B	mg/L	0.5		< 0.01



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31	Hexachloroethane	Qualitative	mg/L	3.0	 Absent
32	Methylethylketon	USEPA 1331 + 5030 C & 8260 B	mg/L	200.0	 <0.01
33	Naphthalene	USEPA 1331 + 5030 C & 8260 B	mg/L mg/L	5.0	 <0.01
34	Nitrobenzene	USEPA 1331 + 5030 C & 8260 B	mg/L	2.0	 <0.01
35	Pentachlorophenol	USEPA 1331 + 5030 C & 8260 B	mg/L	100	 <0.05
36	Pyridine	USEPA 1331 + 5030 C & 8260 B	mg/L	5.0	 <0.01
37	Tetrachloroethylene	USEPA 1331 + 5030 C & 8260 B	mg/L	0.7	 <0.01
38	Trichloroethylene	USEPA 1331 + 5030 C & 8260 B	mg/L	0.5	 <0.01
39	Vinylchloride	USEPA 1331 + 5030 C & 8260 B	mg/L	0.2	 < 0.01
40	2,4,5- TP (Silvex)	Qualitative	mg/L	1.0	 Absent
41	2,4- Dichlorophenoxyacetic acid	USEPA 1311 & + 5030 C & 8260 B	mg/L	10.0	 < 0.01
42	Alachlor	USEPA 1311 & + 5030 C & 8081 A	mg/L	2.0	 < 0.005
43	Alpha HCH	USEPA 1311 & + 5030 C & 8081 A	mg/L	0.001	 < 0.0005
44	Atrazine	USEPA 1311 & + 5030 C & 8141 A	mg/L	0.20	 < 0.001
45	Beta HCH	USEPA 1311 & + 5030 C & 8081 A	mg/L	0.004	 < 0.001
46	Butachlor	USEPA 1311 & + 5030 C & 8081 A	mg/L	12.5	 < 0.001
47	Chlordane	USEPA 1311 & + 5030 C & 8081 A	mg/L	0.03	 < 0.001
48	Chloropyriphos	USEPA 1311 & + 3510 C & 8141 A	mg/L	9.0	 < 0.001
49	Delta HCH	USEPA 1311 & + 3510 C & 8081 A	mg/L	0.004	 <0.001
50	Lead	USEPA 1311 + 200.7 / 200.8	mg/L	5.0	 < 0.05
51	Endosulfan (alpha + beta + Sulphate)	USEPA 1311 & + 3510 C & 8081 A	mg/L	0.04	 <0.001
52	Endrin	USEPA 1311 & + 3510 C & 8081 A	mg/L	0.02	 < 0.001
53	Ethion	USEPA 1311 & + 3510 C & 8141 A	mg/L	0.30	 < 0.001
54	Heptachlor & its Epoxide	USEPA 1311 & + 3510 C & 8081 A	mg/L	0.008	 < 0.001
55	Isoproturon	USEPA 1311 & + 3510 C & 8081 A	mg/L	0.9	 < 0.001
56	Lindane	USEPA 1311 & + 3510 C & 8081 A	mg/L	0.4	 < 0.001
57	Malathion	USEPA 1311 & + 3510 C & 8141 A	mg/L	19	 < 0.001
58	Methoxychlor	USEPA 1311 & + 3510 C & 8081 A	mg/L	10	 < 0.001
59	Methylparathion	USEPA 1311 & + 3510 C & 8141 A	mg/L	0.70	 < 0.001
60	Monocrotophos	USEPA 1311 & + 3510 C & 8141 A	mg/L	0.10	 < 0.001
61	Phorate	USEPA 1311 & + 3510 C & 8141 A	mg/L	0.2	 < 0.001
62	Toxaphene	Qualitative	mg/L	0.50	 Absent
63	Antimony	USEPA 1310 & 200.7	mg/L	15.0	 < 0.05
64	Beryllium	USEPA 1310 & 200.7	mg/L	0.75	 < 0.05
65	Cobalt	USEPA 1310 & 200.7	mg/L	80.0	 < 0.05
66	Copper	USEPA 1310 & 200.7	mg/L	25.0	 < 0.05
67	Molybdenum	USEPA 1310 & 200.7	mg/L	350.0	 < 0.05
68	Nickel	USEPA 1310 & 200.7	mg/L	20.0	 < 0.05
69	Thallium	USEPA 1310 & 200.7	mg/L	7.0	 < 0.05
70	Vanadium	USEPA 1310 & 200.7	mg/L	24.0	 < 0.05
71	Zinc	USEPA 1310 & 200.7	mg/L	250.0	 < 0.05
72	Fluoride	USEPA 1310 & APHA 4500 F C	mg/L	180.0	 17.2
73	Aldrin	USEPA 1310 & 8081A	mg/L	0.14	 < 0.001
74	DDT, DDE, DDD	USEPA 1310 & 8081A	mg/L	0.10	 < 0.001
75	Dieldrin	USEPA 1310 & 8081A	mg/L	0.80	 < 0.001
76	Kepone	Qualitative	mg/L	2.1	 Absent
77	Mirex	Qualitative	mg/L	2.1	 Absent



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78	Polychlorinated biphenyls	USEPA 1310 + 3510 C & 8082	mg/L	5.0	 < 0.5
79	Dioxin (2,3,7,8- TCDD)	HRGC/HRMS:ECO/AV/IAC/012	ng/kgdm	1000	 <8.7
80	Hexavalent Chromium as Cr <sup>6+</sup>	APHA 3500	mg/L	5.0	 < 0.02





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Ref: Envlab/23-24/TR-13559

Date: 20.02.2024

# **TEST REPORT**

Name & address of the Industry

: VISA Steel Limited, Kalinganagar, Jajpur

### SAMPLE DETAILS

Sample Location & Code	WW: Culvert-1	Sampled by	VCSPL'S Representative
Sample Name	Waste Water	Sampling Procedure	APHA 1060
Sample Source	M/s VISA Steel Limited	Sample Received on	10.02.2024
Sample Condition	Sealed Plastic & Sterilized Bottle		
Sampling Date	09.02.2024	Test Completed on	16.02.2024

Sl. No	Parameters	Unit	Standard (Inland Surface water) Part-A	Test methods	ww	
1	pH value at 25°C	-	6.0-9.0	APHA 4500H <sup>+</sup> B	7.41	
2	Total Suspended Solids	mg/l, max	100	APHA 2540 D	64	
3	Total Dissolved Solids	mg/l, max	2100.0	APHA 2540 C	274	
4	Oil & grease	mg/l, max	10.0	APHA 5520-B	2.1	
5	Biochemical Oxygen Demand (as BOD),3 Days at 27°C	mg/l, max	30	IS 3025(P- 44) :1993 RA 1999	5.1	
6	Chemical Oxygen Demand (as COD)	mg/l, max	250	APHA 5220-B	21.8	
7	Phenolic Compound (as C <sub>6</sub> H <sub>5</sub> OH)	mg/l, max	1.0	APHA 5530 B,D	< 0.05	
8	Cyanide (as CN)	mg/l, max	0.2	APHA 4500 CN C,D	<0.01	
9	Hexavelent Chromium as (Cr <sup>+6</sup> )	mg/l, max	0.1	APHA3500 Cr B	< 0.01	
10.	Total Chromium	mg/l, max	2.0	APHA 3111 B	0.23	
Any ı	Any unusual feature observed during determination Nil					

#### Remarks:

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Laboratory Services

Ref: Envlab/23-24/TR-13560

• Infrastructure Enginering

• Water Resource Management

· Environmental & Social Study

Date: 20.02.2024

# **TEST REPORT**

Name of the Industry	:	M/s Visa steel Limited, Jajpur, Odisha					
Date of Monitoring	:	09.02.2024	D.02.2024 Sample Received on : NA				
Sample Description	:	Source Noise Level	ource Noise Level Sampling Procedure : IS: 9989:2020				
Identification by Customer	:	N-1 to N-16	Sampling done by	:	VCSPL Representative		

Location ID	Date of Monitoring	Location	Noise Level in dB(A) leq	Noise Level in dB(A) leq
			Day	Night
N-1	09.02.2024	Security Gate -1	62.2	56.1
N-2	09.02.2024	Security Gate - 2	60.5	55.6
N-3	09.02.2024	Canteen Building	52.9	48.1
N-4	09.02.2024	Arc- Furnace (Fe-Cr)	70.6	68.1
N-5	09.02.2024	Briquetting Plant (Fe-Cr)	69.8	63.9
N-6	09.02.2024	Kiln Platform (DRI Plant)	60.2	54.6
N-7	09.02.2024	33Kv MRSS	52.1	47.8
N-8	09.02.2024	Raw Material Yard (Mini Blast Furnace)	62.4	56.6
N-9	09.02.2024	Cast House (Mini Blast Furnace)	68.3	63.2
N-10	09.02.2024	Blower House (Mini Blast Furnace)	54.9	50.9
N-11	09.02.2024	TG Building (CPP)	71.7	68.4
N-12	09.02.2024	Pump House (CPP)	69.6	67.4
N-13	09.02.2024	Administrative Building (1st Floor)	54.4	49.8
N-14	09.02.2024	Coke Yard	60.4	55.1
N-15	09.02.2024	Coke Oven Cutter Building	54.9	49.2
N-16	09.02.2024	Coke Oven (Quenching Tower)	70.2	66.7
	Standard as per	CPCB 2000 rule	75	70

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Waste Management Services

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Food Lab
Material Lab
Soil Lab
Mineral Lab
Microbiology Lab

Ref: Envlab/23-24/TR-13561

Date: 20.02.2024

# **TEST REPORT**

Name of the Industry	:	M/s Visa steel Limited, Jajpur, Odisha					
Sample Description	:	<b>Fugitive Emission</b>	Sampling Procedure	:	IS: 5182 (Part-23)		
Identification by Customer	:	S-1 to S-11	Sampling done by	:	VCSPL Representative		
Monitoring Instruments	:	Atmospheric Temp.: 23 – 33°C: Barometric Pressure 758 mm of Hg					

SL. No	Sample ID	Date of Sampling	Sampling Locations	Test Method	PM <sub>10</sub> (μg/m <sup>3</sup> )
1	S-1	09.02.2024	CFBC Boiler	IS 5182: Part 23	1235
2	S-2	09.02.2024	Ash Handling Plant CPP	IS 5182: Part 23	1331
3	S-3	09.02.2024	Ferrochrome Complex-1, Furnace Building	IS 5182: Part 23	1157
4	S-4	09.02.2024	Ferrochrome Complex-2, Furnace Building	IS 5182: Part 23	1232
5	S-5	09.02.2024	Wet Scrubber of Kiln- 1	IS 5182: Part 23	1347
6	S-6	09.02.2024	Near Pug Mill Area (DRI)	IS 5182: Part 23	1204
7	S-7	09.02.2024	Near Briquette Plant (FeCr)	IS 5182: Part 23	1212
8	S-8	09.02.2024	CHP Area (CPP)	IS 5182: Part 23	1431
9	S-9	09.02.2024	Near hammer crusher	IS 5182: Part 23	1828
10	S-10	09.02.2024	Near coke cutter building	IS 5182: Part 23	1908
11	S-11	09.02.2024	Near wharf	IS 5182: Part 23	1814

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BBSR Approved By:

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Ref: Envlab/23-24/TR-13562

Infrastructure Enginering

Water Resource Management

● Environmental & Social Study

Date: 20.02.2024

# **TEST REPORT**

Name of the Industry	M/s Visa Steel Limited, Kalinganagar, Jajpur					
Sample Location & Code	RW: Rain Water Reservoir	Sampled by	VCSPL'S Representative			
Sample Name	Water	Sampling Procedure	APHA 1060			
Sample Source	M/s VISA STEEL LIMITED	Sample Received on	10.02.2024			
Sample Condition	Sealed Plastic & Sterilized Bottle	Sample Collected By	VCSPL Representative			
Sampling Date	09.02.2024	Test Completed on	16.02.2024			

SI. No	Parameters	Unit	Standard (Inland Surface water) Part-A	Test methods	Water
1	pH value at 25°C	-	6.0-9.0	APHA 4500H <sup>+</sup> B	7.09
2	Total Suspended Solids	mg/l, max	100	APHA 2540 D	2
3	Oil & grease	mg/l, max	10.0	APHA 5520-B	4.3
4	Biochemical Oxygen Demand (as BOD),3 Days at 27°C	mg/l, max	30	IS 3025(P- 44) :1993 RA 1999	6.2
5	Chemical Oxygen Demand (as COD)	mg/l, max	250	APHA 5220-B	29.8
6	Phenolic Compound (as C <sub>6</sub> H <sub>5</sub> OH)	mg/l, max	1.0	APHA 5530 B,D	0.12
7	Cyanide (as CN)	mg/l, max	0.2	APHA 4500 CN C,D	<0.01
8	Hexavalent Chromium as (Cr <sup>+6</sup> )	mg/l, max	0.1	APHA3500 Cr B	<0.01
9.	Total Chromium	mg/l, max	2.0	APHA 3111 B	0.28
Any	unusual feature observed during de		Nil		

#### Remarks.

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Laboratory Services

Environment Lab Food Lab

Microbiology Lab

Ref: Envlab/23-24/TR-13563

Environmental & Social Study

Date: 20.02.2024

# **TEST REPORT**

Customer Name & Address	VISA STEEL LIMITED, Jakhapura, Jajpur, Odisha-755026					
Sample Location & Code	S1: Near AQMS DM Plant S2: Near Ferrochrome Complex-2	VCSPL'S Representative				
Sample Description	Ambient Air	Sampling Procedure	IS 5182.			
Sample Source	Visa Steel Ltd	Sample Received on	10.02.2024			
Sample Condition	Gaseous Sample Solution Refrigerated					
Sampling Date	09.02.2024	Test Completed on	16.02.2024			

SI.	Parameters	Unit	Test Method	CPCB, New Delhi AAQ	Analysis	Result
No				Standard	S-1	S-2
1	Particulate matter as PM <sub>10</sub>	(μg/m <sup>3</sup> )	IS 5182 : Part 23: 2006, RA 2017	100	58.6	81.8
2	Particulate matter as PM <sub>2.5</sub>	(μg/m³)	IS 5182 (Part 24):2019	60	36.2	42.3
3	Sulphur Oxides as SO <sub>2</sub>	(μg/m <sup>3</sup> )	IS 5182 (Part 2): 2001, RA 2017	80	21.2	9.8
4	Nitrogen Oxides as NOx	(μg/m³)	IS 5182 (Part 6): 2006, RA 2017	80	18.8	7.4
5	Carbon monoxide as CO	(mg/m <sup>3</sup> )	IS 5182(Part 10):2019	2	0.94	0.34
6	Ozone as O <sub>3</sub>	(μg/m³)	IS 5182 (Part-09):2019	180	<4.0	<4.0
7	Ammonia as NH <sub>3</sub>	(μg/m³)	IS 5182 (Part 25): 2018	400	<20.0	<20.0
8	Lead as Pb	(μg/m³)	IS 5182(Part -22):2019	1	< 0.02	< 0.02
9	Nickel as Ni	(ng/m³)	IS 5182(Part -22):2019	20	<2.5	<2.5
10	Arsenic as As	(ng/m³)	IS 5182(Part -22):2019	6	<1.0	<1.0
11	Benzene as C <sub>6</sub> H <sub>6</sub>	(μg/m³)	IS 5182 (Part 11):2006	5	<4.0	<4.0
12	Benzo-a-pyrine as BaP	(ng/m³)	IS 5182 (Part 12):2017	1	<0.5	<0.5

**BDL Values**:  $SO_2 \le 4 \mu g/m^3$ ,  $NO_X \le 6 \mu g/m^3$ ,  $O_3 \le 4 \mu g/m^3$ ,  $NH_3 \le 20 \mu g/m^3$ ,  $Ni \le 2.5 \text{ ng/m}^3$ ,  $As \le 1.0 \text{ ng/m}^3$ ,  $C_6H_6 \le 4.0 \mu g/m^3$ ,  $BaP \le 0.5 \text{ ng/m}^3$ ,  $C_6H_6 \le 4.0 \mu g/m^3$ ,  $C_6H_6 \le$ Pb<0.02 μg/m<sup>3</sup>, CO-<0.1 mg/m<sup>3</sup>

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Ref: Envlab/23-24/TR-13564

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Date: 20.02.2024

# **TEST REPORT**

Customer Name & Address	Customer Name & Address VISA STEEL LIMITED, Jakhapura, Jajpur, Odisha-755026						
Sample Location & Code	S3: Near Main Gate S4: Near Learning Center	Sampled By	VCSPL'S Representative				
Sample Description	Ambient Air	Sampling Procedure	IS 5182.				
Sample Source	Visa Steel Ltd	Sample Received on	10.02.2024				
Sample Condition	Gaseous Sample Solution Refrigerated						
Sampling Date	09.02.2024	Test Completed on	16.02.2024				

SI.	Parameters	Parameters Unit Test Method		CPCB, New Delhi AAQ	Analysis Result	
No				Standard	S-3	S-4
1	Particulate matter as PM <sub>10</sub>	(μg/m³)	IS 5182 : Part 23: 2006, RA 2017	100	63.5	84.2
2	Particulate matter as PM <sub>2.5</sub>	(μg/m³)	IS 5182 (Part 24):2019	60	35.2	41.8
3	Sulphur Oxides as SO <sub>2</sub>	(μg/m³)	IS 5182 (Part 2): 2001, RA 2017	80	36.4	18.4
4	Nitrogen Oxides as NOx	(μg/m³)	IS 5182 (Part 6): 2006, RA 2017	80	15.2	12.6
5	Carbon monoxide as CO	(mg/m³)	IS 5182(Part 10):2019	2	0.84	1.4
6	Ozone as O <sub>3</sub>	(μg/m³)	IS 5182 (Part-09):2019	180	<4.0	<4.0
7	Ammonia as NH <sub>3</sub>	(μg/m³)	IS 5182 (Part 25): 2018	400	<20.0	<20.0
8	Lead as Pb	(μg/m³)	IS 5182(Part -22):2019	1	< 0.02	< 0.02
9	Nickel as Ni	(ng/m³)	IS 5182(Part -22):2019	20	<2.5	<2.5
10	Arsenic as As	(ng/m³)	IS 5182(Part -22):2019	6	<1.0	<1.0
11	Benzene as C <sub>6</sub> H <sub>6</sub>	(μg/m <sup>3</sup> )	IS 5182 (Part 11):2006	5	<4.0	<4.0
12	Benzo-a-pyrine as BaP	(ng/m³)	IS 5182 (Part 12):2017	1	<0.5	<0.5

BDL Values: SO<sub>2</sub>< 4 μg/m<sup>3</sup>, NO<sub>X</sub>< 6 μg/m<sup>3</sup>, O<sub>3</sub>< 4 μg/m<sup>3</sup>, NH<sub>3</sub><20 μg/m<sup>3</sup>, Ni<2.5 ng/m<sup>3</sup>, As < 1.0 ng/m<sup>3</sup>, C<sub>6</sub>H<sub>6</sub><4.0 μg/m<sup>3</sup>, BaP<0.5 ng/m<sup>3</sup>, Pb<0.02 μg/m<sup>3</sup>, CO-<0.1 mg/m<sup>3</sup>

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Date: 20.02.2024

# **TEST REPORT**

Customer Name & Address

VISA STEEL LIMITED, Jakhapura, Jajpur, Odisha-755026

A. Sample Particulars

Date of Sampling

Sampling Location

Sampling Method 3.

**Stack Information** 

1. Stack Connected to 2. Material Construction of Stack

3. Shape of Stack

Whether Stack is Provided With Permanent Platform & Ladder

: CPCB Stack Sampling Method

: 09.02.2023

: WHRB-1, Stack

: WHRB-1

: RCC : Circular

· Yes

### **Test Results**

SL. No.	Name of the Parameters	Unit	Testing Methods	Revised CPCB Standard(2018) for Steel Plant	WHRB-1
1.	Temperature of Emission in Stack	°C	IS 11255: 1985(Part 3)		166
2.	Velocity of Gas	m/sec	IS 11255: 1985(Part 3)		11.5
3.	Concentration of Particulate Matter (as PM)	mg/Nm³	IS 11255: 1985 (Part 1)	50.0	20.4
4.	Concentration of Sulphur Dioxide (as SO <sub>2</sub> )	mg/Nm³	IS 11255: 1985 (Part 2)		331.4
5.	Concentration of Oxides of Nitrogen (as NO <sub>X</sub> )	mg/Nm³	IS 11255: 2005 (Part 7)		26.8
6.	Concentration of Carbon Monoxide (as CO)	ppm	VCSPL/SOP/01Issue No:01 dt 19.08.2018		3.2
7.	Lead as Pb	ppm	VCSPL/SOP/02Issue No:01 dt 19.08.2018		<0.002
8.	Nickel as Ni	ppm	VCSPL/SOP/03Issue No:01 dt 19.08.2018		<0.001

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Ref: Envlab/23-24/TR-13566

• Infrastructure Enginering

Water Resource Management

· Environmental & Social Study

Date: 20.02.2024

# **TEST REPORT**

Customer Name & Address

VISA STEEL LIMITED, Jakhapura, Jajpur, Odisha-755026

A. Sample Particulars

**Date of Sampling** : 09.02.2024 **Sampling Location** : WHRB-2, Stack

Sampling Method : CPCB Stack Sampling Method

**B.** Stack Information

1. Stack Connected to : WHRB-2 2. **Material Construction of Stack** : RCC 3. Shape of Stack : Circular Whether Stack is Provided With : Yes Permanent Platform & Ladder

**Test Results** 

SL.No.	Name of the Parameters	Unit	Testing Methods	Revised CPCB Standard(2018) for Steel Plant	WHRB-2
1.	Temperature of Emission in Stack	°C	IS 11255: 1985(Part 3)		152
2.	Velocity of Gas	m/sec	IS 11255: 1985(Part 3)		9.24
3.	Concentration of Particulate Matter (as PM)	mg/Nm³	IS 11255: 1985 (Part 1)	50.0	39.8
4.	Concentration of Sulphur Dioxide (as SO <sub>2</sub> )	mg/Nm³	IS 11255: 1985 (Part 2)		182.4
5.	Concentration of Oxides of Nitrogen (as NO <sub>X</sub> )	mg/Nm³	IS 11255: 2005 (Part 7)		27.2
6.	Concentration of Carbon Monoxide (as CO)	ppm	VCSPL/SOP/01 Issue No:01 dt 19.08.2018		3.5
7.	Lead as Pb	ppm	VCSPL/SOP/02 Issue No:01 dt 19.08.2018		<0.002
8.	Nickel as Ni	ppm	VCSPL/SOP/03 Issue No:01 dt 19.08.2018		<0.001

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Ref: Envlab/23-24/TR-13567

Infrastructure Enginering

Water Resource Management

Environmental & Social Study

Date: 20.02.2024

# **TEST REPORT**

1. Customer Name & Address

VISA STEEL LIMITED, Jakhapura, Jajpur,

Odisha-755026

A. Sample Particulars

Date of Sampling

: 09.02.2024 : CFBC, Stack

**Sampling Location** 3. Sampling Method

: CPCB Stack Sampling Method

**Stack Information** 

Stack Connected to

: RCC

Material Construction of Stack 2.

: Circular

3. Shape of Stack

: Yes

Whether Stack is Provided With Permanent Platform & Ladder

## C. Test Results

SL. No.	Name of the Parameters	Unit	Testing Methods	Revised CPCB Standard(2018) for Steel Plant	CFBC
1.	Temperature of Emission in Stack	°C	IS 11255: 1985(Part 3)		138
2.	Velocity of Gas	m/sec	IS 11255: 1985(Part 3)		11.44
3.	Concentration of Particulate Matter (as PM)	mg/Nm³	IS 11255: 1985 (Part 1)	50.0	31.04
4.	Concentration of Sulphur dioxide (as SO <sub>2</sub> )	mg/Nm³	IS 11255: 1985 (Part 2)		154.7
5.	Concentration of Oxides of Nitrogen (as NO <sub>X</sub> )	mg/Nm³	IS 11255: 2005 (Part 7)		130.2
6.	Concentration of Carbon Monoxide (as CO)	ppm	VCSPL/SOP/01 Issue No:01 dt 19.08.2018		3.2
7.	Mercury	mg/Nm³	EPA Method-29		<0.1
7.	Lead as Pb	ppm	VCSPL/SOP/02 Issue No:01 dt 19.08.2018		<0.002
8.	Nickel as Ni	ppm	VCSPL/SOP/03 Issue No:01 dt 19.08.2018		<0.001

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Ref: Envlab/23-24/TR-13568

Infrastructure Enginering

• Water Resource Management

· Environmental & Social Study

Date: 20.02.2024

## **TEST REPORT**

1. Customer Name & Address

VISA STEEL LIMITED, Jakhapura, Jajpur,

Odisha-755026

A. Sample Particulars

Date of Sampling

: 09.02.2024

Sampling Location

: Ferrochrome complex-1

Sampling Method

: CPCB Stack Sampling Method

**Stack Information** Stack Connected to

: Stack connected to furnace 1 & 2

Material Construction of Stack 2.

: MS : Circular

3. Shape of Stack

: Yes

Whether Stack is Provided With Permanent Platform & Ladder

## C. Test Results

SL. No.	Name of the Parameters	Unit	Testing Methods	Revised CPCB Standard(2018) for Steel Plant	Furnace 1&2
1.	Temperature of Emission in Stack	оС	IS 11255: 1985(Part 3)		86
2.	Velocity of Gas	m/sec	IS 11255: 1985(Part 3)		9.58
3.	Concentration of Particulate Matter (as PM)	mg/Nm³	IS 11255: 1985 (Part 1)	50.0	27.62
4.	Concentration of Sulphur dioxide (as SO <sub>2</sub> )	mg/Nm³	IS 11255: 1985 (Part 2)		145.2
5.	Concentration of Oxides of Nitrogen (as $NO_X$ )	mg/Nm³	IS 11255: 2005 (Part 7)		21.4
6	Concentration of Carbon Monoxide (as CO)	ppm	VCSPL/SOP/01 Issue No:01 dt 19.08.2018		2.2
7.	Lead as Pb	ppm	VCSPL/SOP/02 Issue No:01 dt 19.08.2018		<0.002
8.	Nickel as Ni	ppm	VCSPL/SOP/03 Issue No:01 dt 19.08.2018		<0.001

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 Mineral/Sub-Soil Exploration Waste Management Services

Laboratory Services Environment Lab Food Lab Material Lab Soil Lab Mineral Lab Microbiology Lab

Ref: Envlab/23-24/TR-13569

Date: 20.02.2024

# **TEST REPORT**

1. Customer Name & Address

VISA STEEL LIMITED, Jakhapura, Jajpur,

Odisha-755026

A. Sample Particulars

**Date of Sampling** 

: 09.02.2024

2. **Sampling Location**  : Ferrochrome complex-2

Sampling Method B. Stack Information

: CPCB Stack Sampling Method : Stack connected to furnace 3 & 4

1. Stack Connected to 2. **Material Construction of Stack** 

: MS

3. Shape of Stack

: Circular : Yes

Whether Stack is Provided With

Permanent Platform & Ladder

## C. Test Result

SL. No.	Name of the Parameters	Unit	Testing Methods	Revised CPCB Standard(2018) for Steel Plant	Furnace- 3& 4
1.	Temperature of Emission in Stack	°C	IS 11255: 1985(Part 3)		83.3
2.	Velocity of Gas	m/sec	IS 11255: 1985(Part 3)		11.41
3.	Concentration of Particulate Matter (as PM)	mg/Nm³	IS 11255: 1985 (Part 1)	50.0	27.7
4.	Concentration of Sulphur dioxide (as SO <sub>2</sub> )	mg/Nm³	IS 11255: 1985 (Part 2)		152.5
5.	Concentration of Oxides of Nitrogen (as NO <sub>X</sub> )	mg/Nm³	IS 11255: 2005 (Part 7)		23.8
6.	Concentration of Carbon Monoxide (as CO)	ppm	VCSPL/SOP/01 Issue No:01 dt 19.08.2018		1.7
7.	Lead as Pb	ppm	VCSPL/SOP/02 Issue No:01 dt 19.08.2018		<0.002
8.	Nickel as Ni	ppm	VCSPL/SOP/03 Issue No:01 dt 19.08.2018		<0.001

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Waste Management Services

Laboratory Services Environment Lab Food Lab Material Lab Soil Lab Mineral Lab & Microbiology Lab

Ref: Envlab/23-24/TR-13570

Infrastructure Enginering

Water Resource Management

· Environmental & Social Study

Date: 20.02.2024

# TEST REPORT

1. Customer Name & Address

VISA STEEL LIMITED, Jakhapura, Jajpur,

Odisha-755026

A. Sample Particulars

1. **Date of Sampling**  : 09.02.2024

2. **Sampling Location** 

: Ferrochrome complex-2 : CPCB Stack Sampling Method

3. Sampling Method **Stack Information** 

1. Stack Connected to : Stack connected to furnace 5 : MS

2. **Material Construction of Stack** 3.

: Circular

Shape of Stack

: Yes

Whether Stack is Provided With Permanent Platform & Ladder

## C. Test Results

SL. No.	Name of the Parameters	Unit	Testing Methods	Revised CPCB Standard(2018) for Steel Plant	Furnace 5
1.	Temperature of Emission in Stack	°C	IS 11255: 1985(Part 3)		83.1
2.	Velocity of Gas	m/sec	IS 11255: 1985(Part 3)		11.34
3.	Concentration of Particulate Matter (as PM)	mg/Nm³	IS 11255: 1985 (Part 1)	50.0	24.2
4.	Concentration of Sulphur dioxide (as SO <sub>2</sub> )	mg/Nm³	IS 11255: 1985 (Part 2)		126.4
5.	Concentration of Oxides of Nitrogen (as NO <sub>X</sub> )	mg/Nm³	IS 11255: 2005 (Part 7)		23.4
6.	Concentration of Carbon Monoxide (as CO)	ppm	VCSPL/SOP/01 Issue No:01 dt 19.08.2018		2.1
7.	Lead as Pb	ppm	VCSPL/SOP/02 Issue No:01 dt 19.08.2018		<0.002
8.	Nickel as Ni	ppm	VCSPL/SOP/03 Issue No:01 dt 19.08.2018		<0.001

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Ref: Envlab/23-24/TR-13571

• Infrastructure Enginering

Water Resource Management

Environmental & Social Study

Date: 20.02.2024

## **TEST REPORT**

1. Customer Name & Address

VISA STEEL LIMITED, Jakhapura, Jajpur,

Odisha-755026

A. Sample Particulars

**Date of Sampling** 1.

: 09.02.2024 : Coke Oven, Stack-1

**Sampling Location** 

: CPCB Stack Sampling Method

Sampling Method **B.** Stack Information

: Stack connected to Boiler 1& 2

1. Stack Connected to 2. **Material Construction of Stack** 

: RCC : Circular

3. Shape of Stack

: Yes

Whether Stack is Provided With Permanent Platform & Ladder

## C. Test Results

SL. No.	Name of the Parameters	Unit	Testing Methods	Revised CPCB Standard(2018) for Steel Plant	Boiler 1&2
1.	Temperature of Emission in Stack	°C	IS 11255: 1985(Part 3)		184
2.	Velocity of Gas	m/sec	IS 11255: 1985(Part 3)		10.24
3.	Concentration of Particulate Matter (as PM)	mg/Nm³	IS 11255: 1985 (Part 1)	50.0	17.9
4.	Concentration of Sulphur dioxide (as SO <sub>2</sub> )	mg/Nm³	IS 11255: 1985 (Part 2)		153.2
5.	Concentration of Oxides of Nitrogen (as NO <sub>X</sub> )	mg/Nm³	IS 11255: 2005 (Part 7)		34.2
6.	Concentration of Carbon Monoxide (as CO)	ppm	VCSPL/SOP/01 Issue No:01 dt 19.08.2018		2.2
7.	Lead as Pb	ppm	VCSPL/SOP/02 Issue No:01 dt 19.08.2018		<0.002
8.	Nickel as Ni	ppm	VCSPL/SOP/03 Issue No:01 dt 19.08.2018		<0.001

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- Mine Planning & Design
- Mineral/Sub-Soil Exploration Waste Management Services

Mineral Lab & Microbiology Lab

Laboratory Services

Environment Lab Food Lab

Material Lab

Ref: Envlab/23-24/TR-13572

• Infrastructure Enginering

Water Resource Management

Environmental & Social Study

Date: 20.02.2024

## **TEST REPORT**

1. Customer Name & Address

VISA STEEL LIMITED, Jakhapura, Jajpur,

Odisha-755026

A. Sample Particulars

1. **Date of Sampling**  : 09.02.2024

2. **Sampling Location** 

: Coke Oven, Stack-2 : CPCB Stack Sampling Method

3. Sampling Method B. **Stack Information** 

: Stack connected to Boiler 3 & 4

Stack Connected to Material Construction of Stack

: RCC : Circular

3. Shape of Stack Whether Stack is Provided With

: Yes

Permanent Platform & Ladder

## C. Test Results

SL. No.	Name of the Parameters	Unit	Testing Methods	Revised CPCB Standard(2018) for Steel Plant	Boiler 3 & 4
1.	Temperature of Emission in Stack	°C	IS 11255: 1985(Part 3)		172
2.	Velocity of Gas	m/sec	IS 11255: 1985(Part 3)		12.12
3.	Concentration of Particulate Matter (as PM)	mg/Nm³	IS 11255: 1985 (Part 1)	50.0	24.6
4.	Concentration of Sulphur dioxide (as SO <sub>2</sub> )	mg/Nm³	IS 11255: 1985 (Part 2)		212.2
5.	Concentration of Oxides of Nitrogen (as NO <sub>X</sub> )	mg/Nm³	IS 11255: 2005 (Part 7)		32.1
6.	Concentration of Carbon Monoxide (as CO)	ppm	VCSPL/SOP/01 Issue No:01 dt 19.08.2018		3.2
7.	Lead as Pb	ppm	VCSPL/SOP/02 Issue No:01 dt 19.08.2018		<0.002
8.	Nickel as Ni	ppm	VCSPL/SOP/03 Issue No:01 dt 19.08.2018		<0.001