
Six Monthly (DECEMBER-2023) Compliance Report for Period April 2023 to September 2023 for Expansion of Integrated Steel Plant (1.2 to 2.0 Million TPA Finished Steel) with 270 MW Captive Power Plant

1 message

ORISSA ALLOY <orissaalloysteelprivateltd@gmail.com>

Wed, Nov 29, 2023 at 5:55 PM

To: ms@wbpcb.gov.in, ms.wbpcb-wb@bangla.gov.in, zokolkatta.cpcb@nic.in, Dr Soma Das <iro.kolkata-mefcc@gov.in>, "roez.bsr-mef@nic.in" <roez.bsr-mef@nic.in>

Bcc: environment.rml3@rashmigroup.co.in, biswanath@rashmigroup.com, Bijayen Srivastava <bijayen.srivastava@rashmigroup.com>

Dear Sir,

With reference to the above, we are here by submitting the six monthly compliance report for the period from April 2023 to September 2023 of EC Identification no- EC22A008WB114687 issued vide letter No. J-11011/169/2017-IA. II (I) dated 10.08.2022 for Expansion of Integrated Steel Plant (1.2 To 2.0 Million TPA Finished Steel) with 270 MW Captive Power Plant located at Mouza – Nandarchalk, Bargai, Shyamraipur & Kanjarichak, Village- Gokulpur, P.O.- Shyamraipur, P.S.-Kharagpur (L), Dist. Paschim Medinipur, W.B. by M/s. Orissa Alloy Steel Pvt. Ltd.

Here, we would like to state that conditions mentioned in earlier EC issued vide File No- J-11011/169/2017-IA.II(I); dated on 3rd April, 2019, 28th January, 2020 and 19th March 2021 is already incorporated in latest EC issued on 10th August 2022.

We assure that we will comply with all the conditions laid down in the consent letter and also abide to follow all the Rules & Regulations.

Hope you will find the same in order.

Yours Faithfully,

Authorised Signatory

For, **M/s Orissa Alloy Steel Private Limited**

1, Garstin Place, 'Orbit House', Room No-3B, Kolkata-700001

Tel : 91 33-22894255/ 56

Fax : 91 33-22894254

Mbl. No-07044070948

**COMPLIANCE-DEC-2023.pdf**

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ORISSA ALLOY STEEL PRIVATE LIMITED

CORPORATE ADDRESS: PREMLATA BUILDING, 39 SHAKESPEARE SARANI, 6TH FLOOR, ROOM NO. 3 & 4, KOLKATA - 700 017
CIN:U27320WB2019PTC234383

Ref:-OASPL/ENV COMPL/DEC 2023

Date: 29 .11.2023

To,

- a) **Regional Office,**
Ministry of Environment, Forests & Climate Change, Bhubaneswar
A/3 Chandrasekharpur,
Bhubaneswar – 751023, Odisha
- b) **Sub Office, Kolkata**
(Under Regional Office, MoEF&CC, Bhubaneswar)
Kolkata IB – 198, Sector-III, Salt Lake City– 700106,
West Bengal

Sub. Six Monthly (DECEMBER-2023) Compliance Report for Period April 2023 to September 2023 for Expansion of Integrated Steel Plant (1.2 to 2.0 Million TPA Finished Steel) with 270 MW Captive Power Plant

Ref: - EC Identification no- EC22A008WB114687 issued vide letter no. J-11011/169/2017-IA. II (I) dated 10.08.2022.

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Yours Faithfully,

For, **M/s Orissa Alloy Steel Private Limited**


Authorized Signatory

C.C:-

1. The Member Secretary, West Bengal Pollution Control Board, Parivesh Bhawan, 10A Block – LA, Sector – III, Kolkata – 700 91
2. The Regional Director, Central Pollution Control Board, (Eastern Zonal Office), 'Southend Conclave', 502, 5th Floor 1582, Rajdanga Main Road, Kolkata- 700 107, West Bengal

Enclosures:-

1. Compliance Report for EC;
2. Detail of Green belt development as Annexure-I.
3. OCEMS data as Annexure-II.
4. Stack Monitoring report as Annexure-III.
5. OHS Record as Annexure-IV.
6. CAAQMS report from all the stations as Annexure-V.
7. Ambient Air Quality Monitoring Report as Annexure-VI.
8. Fugitive Emission Monitoring Report as Annexure-VII.
9. TCLP Test report as Annexure-VIII.
10. Effluent Water quality report as Annexure-IX.
11. Ground Water analysis report as Annexure-X.
12. Ambient & Source Noise Monitoring Report as Annexure-XI.

SIX MONTHLY COMPLIANCE REPORT
(DECEMBER-2023)
FOR

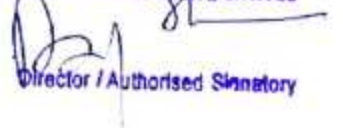
Project Name-

**Expansion of Integrated Steel Plant (1.2 to
2.0 Million TPA Finished Steel)
With 270 MW CPP**

**EC Identification no- EC22A008WB114687 issued vide
letter No. J-11011/169/2017-IA. II (I) dated
10.08.2022**

**Location: Mouza- Nandarchalk, Bargai, Shyamraipur &
Kanjarichak, Village-Gokulpur, P.O.- Shyamraipur, P.S.-
Kharagpur(L), Dist. Paschim Medinipur, West Bengal**

For ORISSA ALLOY STEEL PRIVATE LIMITED


Director / Authorised Signatory

M/s ORISSA ALLOY STEEL PRIVATE LIMITED

**1, GRASTIN PLACE, ORBIT HOUSE
3rd FLOOR, ROOM NO- 3B KOLKATA - 700 001
WEST BENGAL**

Ph No.-033 - 22438518

Email id- orissaalloysteelprivatelt@gmail.com

Your application has been **Submitted** with following details

Proposal No	IA/WB/IND/261449/2021
Compliance ID	26084634
Compliance Number(For Tracking)	EC/M/COMPLIANCE/26084634/2023
Reporting Year	2023
Reporting Period	01 Dec(01 Apr - 30 Sep)
Submission Date	29-11-2023
IRO Name	ARTATRANA MISHRA
IRO Email	jhk109@ifs.nic.in
State	WEST BENGAL
IRO Office Address	Budgam

Note:- SMS and E-Mail has been sent to ARTATRANA MISHRA, WEST BENGAL with Notification to Project Proponent.


[Back](#)

View Compliance Report at Project Proponent

Proposal Details

Proposal No	IA/WB/IND/261449/2021	Category	Industrial Projects - 1
Proposal Name	Expansion of Integrated Steel Plant (1.2 to 2.0 Million TPA Finished Steel) with 270 MW Captive Power Plant		
Plot / Survey/ Khasra No.		Village(s)	
Sub-District(s)			
State	WEST BENGAL	District	MEDINIPUR?WEST
MoEF File No	J-11011/169/2017-IA.II(I)	Name of the Entity/ Corporate Office	Expansion of Integrated Steel Plant (1.2 to 2.0 Million TPA Finished Steel) with 270 MW Captive Power Plant
Entity's PAN	NA	Entity details mentioned above is correct ?	Agree
Entity Name as per PAN	NA		

Covering Letter

Covering Letter [Click to View](#)

Compliance Reporting Details

Reporting Year	2023	Reporting Period	01 Dec(01 Apr - 30 Sep)
Remark(if any)	Six Monthly (DECEMBER-2023) Compliance Report for Period April 2023 to September 2023 for Expansion of Integrated Steel Plant (1.2 to 2.0 Million TPA Finished Steel) with 270 MW Captive Power Plant for Expansion of Integrated Steel Plant (1.2 To 2.0 Million TPA Finished Steel) with 270 MW Captive Power Plant located at Mouza ? Nandarchalk, Bargai, Shyamraipur & Kanjarichak, Village- Gokulpur, P.O.- Shyamraipur, P.S.-Kharagpur (L), Dist. Paschim Medinipur, W.B. by M/s. Orissa Alloy Steel Pvt. Ltd.		

Details of Production and Project Area

Date of 29-05-2020

**Commencement
of
Project/Activity**

	Project Area as per EC Granted(ha.)	Actual Project Area in Possession(ha.)
Private	145.69	145.69
Revenue Land	0	0
Forest	0	0
Others	0	0
Total	145.69	145.69

PRODUCTION CAPACITY

Sr.No.	Name of the Product	Units	As per EC Granted	As per CTO Granted	CTO ID	Valid Up To	Production during last financial year
1	FERRO ALLOY (FeMn, FeSi, FeCr & SiMn)	Tons per Annum (TPA)	78000	78000	CO128946; CO-132139; CO-144054	31-07-2024	40972
2	FINISHED DUCTILE IRON PIPE	Tons per Annum (TPA)	200000	200000	CO-131937	31-07-2024	0
3	SPONGE IRON	Million Tons per Annum (MTPA)	1.8	1.8	CO131937; CO-132139; CO-141024; CO-144054	31-07-2024	0.77
4	Iron Ore Pellet with matching Beneficiation Plant	Tons per Annum (TPA)	11000000	3000000	CO131949; CO-144054	31-07-2024	1631651.128
5	Producer Gas Plant	Cu.M/Hr	195000	150000	CO131949	31-07-2024	--
6	M.S. BILLETS	Tons per Annum (TPA)	180000	297000	CO141024	31-07-2024	10519.07
7	CAPTIVE POWER PLANT (WHRB)	MW	180	178	CO131937; CO-132139; CO-141024; CO-144054; CO141003	31-07-2024	--
8	METALLURGICAL COKE	Tons per Annum (TPA)	550000	550000	CO141003; CO-141024	31-07-2024	97927.86

PRODUCTION CAPACITY

Sr.No.	Name of the Product	Units	As per EC Granted	As per CTO Granted	CTO ID	Valid Up To	Production during last financial year
9	PIG IRON/ HOT LIQUID METAL	Tons per Annum (TPA)	770000	-	-		--
10	SINTER	Tons per Annum (TPA)	840000	-	-		--
11	OXYGEN	Tons per Day (TPD)	600	-	-		--
12	LIME & DOLOMITE	Tons per Day (TPD)	200	-	-		--
13	TMTM BAR, WIRE & WIRE ROD	Million Tons per Annum (MTPA)	1.8	-	-		--
14	POWER PLANT (CFBC)	MW	90	-	-		--
15	RAILWAY SIDING	Others:NUMBER	1	1	CO132105	31-07-2024	--

Conditions

Specific Conditions

Sr.No.	Condition Type	Condition Details	Status of Compliance,Remarks/Reason and Supporting Documents	
1	MISCELLANEOUS	This Environmental clearance is granted subject to final outcome of Hon?ble Supreme Court of India, Hon?ble High Court, Hon?ble NGT and any other Court of Law, if any, as may be applicable to this project.	PPs Submission	Agreed Agreed to Comply Attachment: NA
2	Statutory compliance	The project proponent shall comply with all the environmental protection measures and safeguards	PPs Submission	We are complying all the environmental protection measures and safeguards proposed in the documents (EIA/EMP) submitted to the Ministry.

		proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.		Being Complied Attachment: NA
3	Statutory compliance	The project proponent shall utilize modern technologies for capturing of carbon emitted and shall also develop carbon sink/carbon sequestration resources capable of capturing more than emitted. The implementation report shall be submitted to the IRO, MoEF&CC in this regard.	PPs Submission	The project is still in implementation phase. The flue gas generated from Coke Oven Plant, DRI plant is utilized in power generation. In order to reduce carbon emission dependency on WHRB based power plant is being practiced and currently 136 MW WHRB DRI based CPP & 42 MW from Coke Oven gas, in total 178 MW is in operation and in future capacity will be increased to 180 MW. Plantation is a suitable method to sequester carbon and 33% of the plant area being developed under greenbelt. An area of around 47.72 hectare has already been covered under greenbelt @ 2500 trees per hectare (1, 19,288 nos.) till September 2023. In addition to this 5000 Nos. of saplings on occasion of environment day (5th June 2023) were distributed to nearby school children/ villagers for green belt development. Being Complied Attachment: Click to View
4	PUBLIC HEARING	The activities and the action plan proposed by the project proponent to address the issues raised during public hearing and socio-economic issues in the study area shall be completed as per the schedule presented before the Committee and as described in the EIA report in letter and spirit.	PPs Submission	Noted and will be complied in time bound manner. In financial year 2023-24 Rs. 1,20,92,243 is spent under CSR/CER head on various activities in nearby villages to address the issues raised during public hearing and socio-economic issues in the study area. Being Complied Attachment: Click to View

5	WATER QUALITY MONITORING AND PRESERVATION	Water bodies exist within the study area from the project site. The water bodies shall not be disturbed. Landscaping shall be done on both embankments, with green belt covering 10 m land on both sides. This shall be in addition to the 33% green belt development.	PPs Submission	No water body will be disturbed which exists within the study area from the project site. Complied Attachment: NA
6	WASTE MANAGEMENT	Tailings from Iron Ore washing plant shall be dewatered in filter press and no slime /tailing pond shall be permitted.	PPs Submission	The recovered water is reused and return back to the process Being Complied Attachment: NA
7	WASTE MANAGEMENT	Iron ore slimes shall be dewatered and disposed dry. The recovered water shall be reused in the process. Ponding of tailings shall not be permitted. Maximum storage for tailings in the plant shall not exceed 90 days.	PPs Submission	The recovered water is reused and return back to the process Being Complied Attachment: NA
8	WASTE MANAGEMENT	Rejects from coal washery shall only be used either in the captive power plant (or) in the Thermal Power Plants meeting emission standards.	PPs Submission	Rejects from coal washery will be used in the captive power plant (or) in the Thermal Power Plants meeting emission standards. Agreed to Comply Attachment: NA
9	WASTE MANAGEMENT	Solid waste utilization ? PP shall install a slag crusher to convert steel slag into aggregate for use in construction industry, fine sand for use as flux in steel plant, sand in brick making and as lime in cement making. ? PP shall recycle/reuse 100	PPs Submission	? Dolochar generated from operational DRI kilns are used in CFBC Boilers of the Group Companies. ? SMS Slag used for road construction/ Land levelling purpose after recovering metal from Slag Crushing unit. ? Slag generated during Ferro Manganese production will be used as a raw material for Silico Manganese production. ? Slag generated during Silico Manganese production will be

		% solid waste generated in the plant. ? Used refractories shall be recycled as far as possible.		used for road construction/land filling. ? Dust from APC devices are used in Sinter Plant of associate companies of the Group and Brick Manufacturing, Pelletisation mix. Being Complied Attachment: NA
10	ENERGY PRESERVATION MEASURES	Sinter Plant shall be equipped with Sinter cooler waste recovery system and suitable technology for control of dioxins and furans emissions from the plant.	PPs Submission	Prior to the commencement of the plant operation activity. Agreed to Comply Attachment: NA
11	WASTE MANAGEMENT	Tar shall be recovered from producer gas and shall be sold to registered processors and phenolic water shall be incinerated in After Burn Chamber (ABC) of DRI kilns.	PPs Submission	Tar recovered from producer gas being is sold to registered processors and used as a fuel in pellet plant and phenolic water incinerated in After Burn Chamber (ABC) of DRI kilns. Being Complied Attachment: NA
12	Statutory compliance	Coke oven plant shall be equipped with modified wet quenching system.	PPs Submission	Coke oven plant equipped with modified wet quenching system and water is recycled post primary settlement. Being Complied Attachment: NA
13	AIR QUALITY MONITORING AND PRESERVATION	Coke Oven Gas shall be desulfurized.	PPs Submission	Noted and being complied. Being Complied Attachment: NA
14	ENERGY PRESERVATION MEASURES	Blast Furnaces shall be equipped with Top Recovery Turbine (capacity more than 550 m3), dry gas cleaning plant, stove waste heat recovery, cast house and stock house ventilation system and slag granulation facility.	PPs Submission	Noted and will be considered during the design stage. Agreed to Comply Attachment: NA

15	AIR QUALITY MONITORING AND PRESERVATION	Secondary fume extraction system shall be installed on converters of Steel Melting Shop.	PPs Submission	Noted and will be considered during the design stage. Agreed to Comply Attachment: NA
16	AIR QUALITY MONITORING AND PRESERVATION	Basic Oxygen Furnace (BOF) gas shall be cleaned dry.	PPs Submission	Noted and will be considered during the design stage. Agreed to Comply Attachment: NA
17	AIR QUALITY MONITORING AND PRESERVATION	Electric Arc Furnace shall be closed type with 4th hole extraction system	PPs Submission	Not applicable as no Electric Arc Furnace is being proposed. Complied Attachment: NA
18	ENERGY PRESERVATION MEASURES	85-90% of billets shall be rolled directly in hot stage. RHF shall operate using only Light Diesel Oil or Mixed BF/CO gas/Producer gas.	PPs Submission	Agreed and will be complied. Rolling mill is still not commissioned. Agreed to Comply Attachment: NA
19	WATER QUALITY MONITORING AND PRESERVATION	Cold Rolling Mill (CRM), color coating and galvanizing plants shall have CETP to treat and recycle the treated water from CRM complex. Sludge generated at CRM ETP shall be sent to TSDF.	PPs Submission	Not applicable as Cold Rolling Mill (CRM), color coating and galvanizing plants is not proposed. Complied Attachment: NA
20	AIR QUALITY MONITORING AND PRESERVATION	Dust emission from Steel Plant stacks shall be up to 30 mg/Nm ³ .	PPs Submission	APC devices are designed to keep the emission below 30 mg/Nm ³ . Recent OCEMS data is enclosed. Being Complied Attachment: Click to View
21	Statutory compliance	The net water requirement of the ISP after implementation of proposed expansion project would be around 491.67 m ³ /hr (11,800 KLD) which will be obtained from Kharagpur	PPs Submission	Noted and being complied Being Complied Attachment: NA

		Municipality and Treated waste water. Bore well supply as envisaged earlier will be completely replaced by surface water/ treated waste water in the present proposal for operation phase of the project. No ground water extraction is permitted.		
22	GREENBELT	Three tier Green Belt shall be developed in a time frame of one year with native species all along the periphery of the project site of adequate width and tree density shall not be less than 2500 per ha. Survival rate of green belt developed shall be monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.	PPs Submission	An area of around 47.72 hectare has already been covered under greenbelt @ 2500 trees per hectare (1, 19,288 nos.) till September 2023. In addition to this 5000 Nos. of saplings on occasion of environment day (5th June 2023) were distributed to nearby school children/ villagers for green belt development. Survival rate of green belt developed being monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years. Being Complied Attachment: Click to View
23	Statutory compliance	Greening and Paving shall be implemented in the plant area to arrest soil erosion and dust pollution from exposed soil surface.	PPs Submission	Greening and paving being implemented in the plant area to arrest soil erosion and dust pollution. Being Complied Attachment: NA
24	Statutory compliance	Performance test shall be conducted on all pollution control systems every year and report shall be submitted to Regional Office of	PPs Submission	Agreed, the performance test/ stack monitoring is conducted on all pollution control systems on quarterly basis for operational unit by NABL/WBPCB accredited laboratory. Stack Monitoring report is enclosed. Ductile Iron Pipe finishing line is equipped with Bag

		<p>the MoEF&CC. i. Ductile Iron (DI) plant shall have the following provisions: a. Bag filter for Zn coating and Mg converter area. b. Wet scrubbers in paint and bitumen coating area. c. Bag Filter in Cement lining area. d. PTFE dipped bags shall be used in the plant. e. PM emissions from BF in Zinc coating area shall be 5 mg/Nm³. f. ETP with recycling facility shall be included.</p>		<p>filter Being Complied Attachment: Click to View</p>
25	WATER QUALITY MONITORING AND PRESERVATION	<p>Rain water harvesting shall be implemented to recharge/harvest water as per the action plan submitted in the EIA/EMP report.</p>	PPs Submission	<p>02 nos. rain water harvesting being implemented to harvest water. Harvested water is used as industrial make up water and also for dust suppression and green belt development Complied Attachment: NA</p>
26	Statutory compliance	<p>The proposed project shall be designed as "Zero Liquid Discharge" Plant. No waste water will be discharged outside the plant boundary.</p>	PPs Submission	<p>No waste water discharged outside the plant boundary. ETP cum STP of adequate capacity is installed to treat the effluent and reused 100% in plant operation, for dust suppression and green belt development. Complied Attachment: NA</p>
27	Statutory compliance	<p>A proper action plan must be implemented to dispose of the electronic waste generated in the industry.</p>	PPs Submission	<p>We've made contract with the authorized e-waste recyclers, the electronic waste generated in the industry will be disposed off by the authorized vendor. Being Complied Attachment: NA</p>
28	Statutory compliance	<p>Railway siding shall be completed by June 2022, as committed by the PP.</p>	PPs Submission	<p>Valid consent to operate obtained from West Bengal Pollution Control Board vide CTO no- CO-132105 dated 08.12.2021</p>

29	Statutory compliance	PP shall prepare and implement an action plan giving annual improvement targets for resource conservation and environment improvement. This plan shall be monitored by the concerned Regional Office of the MoEF&CC.	PPs Submission	<p>The project is still under implementation phase. However 3R?s (Reuse, Recycle & Recover Techniques), energy and natural resource conservation measures adopted by management of OASPL are as: ? Reuse: a) Dust collected from Pellet plant had been/ will be reused in the pellet process. b) Char & Dolochar from DRI Plant being used in CFBC Boilers for power generation resulting reduction in non-renewable source i.e. coal. c) Slag generated during Ferro Manganese production had been/ will be used as a raw material for Silico Manganese production. d) Slag generated during Silico Manganese production had been/ will be used for road construction / land filling. e) Magnesium dust from DI pipe plant had been/ will be used in Sinter Plant of associate company. f) Cement slurry from DI pipe plant will be used Brick making and also in associate company of Cement Plant. g) Tar Sludge from Producer gas plant will be sold to SPCB authorized vendor. ? Recycle: a) Recycling or usage of recycled water at every stage of the process b) The process water had been/ will be treated in ETP and recycled in the process and within plant premises. c) Domestic water had been/ will be treated in STP and will be used for dust suppression & green belt development. d) Phenolic water from producer gas plant had been/ will be used in ABC of DRI Kiln. ? Recovery: a) Waste Heat Recovery boiler with DRI and Coke oven plant had been/ will be installed to capture sensible heat from waste heat. h) Partial Air cooled type cooling system had been/ will be installed with power plant resulting reduction in water consumption. ? Energy Conservation: a) Power Generation with WHRB (Without using fossil fuel) ?68 MW from 4 x 600 TPD DRI Kiln based WHRB b) Power Generation with WHRB (Without using fossil fuel) in coke oven plant- WHRB attached with</p>
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coke oven will generate 42 MW of electricity. c) Use of better quality raw material in DRI & BF resulting reduction in specific energy conservation. d) Use of energy efficient electric motors complying IEE3 Standards. e) Use of highly efficient VFD, minimizing idle running of machines. f) Optimizing loads and periodic preventive maintenance & lubrication g) Prevention of leakages of compressed air h) Optimized compressed air pressure. i) Periodic energy audits. j) Training, awareness and motivational programmes. k) Maximum utilization of renewable energy resources. l) Installation of energy efficient lightings. m) Use of energy saving light fittings. n) Installation of LED/CFL lighting. ? Natural Resource Conservation: a) Water had been/ will be conserved by practicing rainwater harvesting and maximum recycling within the plant premises. b) Waste water after treatment had been/ will be used after treatment in the plant. c) Solar street with LED is installed in common area and parking etc.
Being Complied
Attachment: NA

30	ENERGY PRESERVATION MEASURES	Energy efficient drives, VFD for auxiliary motors and slip power recovery system for motors above 1000 kw shall be provided.	PPs Submission	The heat rate of Coal based power plant as specified by central Electricity Authority shall be considered during the design state of the plant. Being Complied Attachment: NA
			PPs Submission	Energy efficient drives, VFD for auxiliary motors and slip power recovery system for motors above 1000 KW being installed in parallel with implementation of the project. Being Complied Attachment: NA

31	AIR QUALITY MONITORING AND PRESERVATION	PTFE Membrane bags shall be used in filter bag house and designed for 150% of normal design air flow.	PPs Submission	in parallel with implementation of the project. Adequate capacity of Bag Filter has been installed in Ferro alloy plant, secondary unit of DRI plant, DIP finishing line and in Pellet Plant.
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				Being Complied Attachment: Click to View
32	AIR QUALITY MONITORING AND PRESERVATION	Shall use ultralow NOx burner with three stage combustion, flue gas recirculation and auto combustion control system. Shall use Post combustion control system (SCR/SCNR process) with NH3 monitoring when Ammonia is used.	PPs Submission	Sinter plant Coal based CPP is not yet commissioned and during design phase it will be considered. Agreed to Comply Attachment: NA
33	MISCELLANEOUS	Parking area for trucks/dumpers shall be provided within the steel plant. No truck/dumper shall be parked outside the steel plant premises	PPs Submission	6.04 hectare is allocated for parking area for trucks/dumpers within the steel plant. No truck/dumper being parked outside the steel plant premises. Agreed to Comply Attachment: Click to View
34	MISCELLANEOUS	PP reported that out of the 145.69 hectare of land, 131.53 hectare of land is already in possession of M/s Orissa Alloy Steel Private Limited (Formerly M/s Rashmi Alloy Steel Private Limited) and for rest of land (14.16 ha) consent from private rayat obtained, however land is not yet acquired. This EC is subject to obtaining complete acquisition of land required for the proposed expansion project.	PPs Submission	Noted Agreed to Comply Attachment: NA

35	Human Health Environment	<p>This is an existing Unit. PP shall controlled the air pollutants- PM2.5, PM10, SO2, NOx, CO emissions in the occupational environment of different process plants, within the permissible exposure limits of as per the Factories Act. PP shall do the monitoring of industrial hygiene survey within occupational environments in order to ensure good environment within the industry, so that workers health is ensured.</p>	PPs Submission	<p>The occupational health surveillance of the workers is being done on a regular basis and records are maintained as per the Factories Act. The OHS Record is attached Agreed to Comply Attachment: Click to View</p>
36	Human Health Environment	<p>During operational phase at Captive Power Plant PP shall to measure coal dust exposures and to maintain coal dust exposures within stipulated standards at coal handling areas, conveyer belt and coal crushing area- ball mill. PP shall identify extreme hot areas through heat stress survey as well as noise monitoring within process plants to ensure that workers not exposed above 90 dBA levels as per Factories Act, 1948.</p>	PPs Submission	<p>NOTED Agreed to Comply Attachment: NA</p>
37	WASTE MANAGEMENT	<p>A proper action plan must be implemented to dispose of the electronic waste generated in the industry.</p>	PPs Submission	<p>We have made contract with the authorized e-waste recyclers, the electronic waste generated in the industry being dispose of by the authorized vendor. Agreed to Comply Attachment: NA</p>

General Conditions

Sr.No.	Condition Heading	Condition Details	Status of Compliance,Remarks/Reason and Supporting Documents	
1	Statutory compliance	The Environment Clearance (EC) granted to the project/ activity is strictly under the provisions of the EIA Notification, 2006 and its amendments issued from time to time. It does not tantamount/ construe to approvals/ consent/ permissions etc., required to be obtained or standards/conditions to be followed under any other Acts/Rules/Subordinate legislations, etc., as may be applicable to the project.	PPs Submission	Noted Agreed to Comply Attachment: NA
2	AIR QUALITY MONITORING AND PRESERVATION	The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission as well as 04 Nos. Continuous Ambient Air Quality Station (CAAQS) for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS and CAAQMS shall be connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.	PPs Submission	After taking into consideration the interest and financial share cost from associate company of the Group, for monitoring the Ambient Air quality around industrial units of the Group, 04 nos. Continuous Ambient Air Quality Monitoring Station (USEPA/ MCERT approved) is installed covering upwind, downwind and crosswind directions after getting site approval from WBPCB and data is transferred to SPCB & CPCB server. Online continuous emission Monitoring system (OCEMS) has been installed with stack connected with Ferro alloy plant, DRI plant and Pellet plant as per CPCB guideline. The CEMS and CAAQMS are connected to WBPCB and CPCB online servers and calibrate from time to time according to equipment supplier specification. Ambient air monitored at the five locations viz., 1) Near Plant Main Gate, 2) Kantapal Village, 3) Berapara Village, 4) Barkola Village & 5) Truck Parking Area by third party monitoring agency M/s Greenvision, Kolkata which is NABL accredited laboratory. The monitoring reports of month Sept. 2023

				is attached Being Complied Attachment: Click to View
			PPs Submission	Recent CAAQMS reports for all 04 stations area attached Being Complied Attachment: Click to View
3	AIR QUALITY MONITORING AND PRESERVATION	The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories	PPs Submission	Fugitive Emissions have been monitored at the Eight locations viz., 1) DRI & CPP Plant Area, 2) Pellet Plant Area, 3) Ferro Alloy Plant Area, 4) Raw Material Yard, 5) Railway Siding, 6) DIP Plant Area, 7) SMS Area, 8) Coke Oven Site area by third party monitoring agency M/s Greenvision, Kolkata which is NABL accredited laboratory. The monitoring reports, (Sept.-2023) are attached Being Complied Attachment: Click to View
4	AIR QUALITY MONITORING AND PRESERVATION	Sampling facility at process stacks and at quenching towers shall be provided as per CPCB guidelines for manual monitoring of emissions.	PPs Submission	Process stack with DRI Plant, Ferro Plant, Pellet Plant and DIP Finishing line has been installed as per CPCB guidelines for manual monitoring of emissions. Being Complied Attachment: NA
5	AIR QUALITY MONITORING AND PRESERVATION	Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.	PPs Submission	4 X 9 MVA Ferro Alloy Plants; 04 X 600 TPD + 2 x 1200 TPD DRI plant with 136 MW WHRB based CPP, 0.2 MTPA DIP finishing line, 3.0 MTPA Pellet plant with matching beneficiation and 20 X 7500 N.Cu.M PGP, 0.297 MTPA SMS with matching CCM, along with 0.55 MTPA coke oven plant with 42 MW WHRB based CPP, is having valid consent to operate from WBPCB. Adequate APCD is installed with the operational units. The details are as: a) Bag Filter with Heat Exchanger with Ferro Alloy Plant b) ESP with WHRB with DRI plant c)

ESP with Pellet Plant d) Bag Filter with SMS (I.F.) e) WHRB & Bag Filter with Coke oven plant f) Inbuilt Electrostatic Tar Separator with PGP g) Bag Filter with DIP plant

Action taken by company for maintain good housekeeping and controlling emission are: ? Dust suppression systems are/ will be provided at raw material handling, product handling, transfer points, loading and unloading points to control fugitive emission. ? Covered shed and conveyor belts have been provided at various points such as material transfer points, and other enclosed raw material handling areas for control of fugitive emissions. ? Bag houses are designed to meet the standard below 30 mg/Nm³. ? 03 nos. of dedicated Street sweeper machine and 04 nos. movable water tankers are being used. ? Dedicated 04 No water spraying tankers are in use. ? 02 no fixed Water mist fog system has been installed and in used in order to reduce the fugitive dust. ? 01 no movable Water mist fog system has been installed and in used in order to reduce the fugitive dust. ? We have provided GPS enabled tractor mounted water tanker for suppression of dust at nearby villages. ? Water sprinkler/ water gun along the roadside is being installed to reduce fugitive emission. ? Speed limits are enforced for movement of vehicles at the site as per the factory limits ?

Concreting of internal road with proper drainage system to reduce vehicular emission is going on in parallel with implementation of the project. ? Trucks movement for transporting raw materials & solid waste in

				<p>fully covered way to avoid dust pollution. ? Dedicated truck parking facility. ? Engaged more numbers of dedicated Housekeeping team with proper training and equipment. ? Regular painting and cleaning / white washing of wall. ? Scraps are stored in proper demarcated area with proper marking. ? Hazardous wastes are stored in dedicated HZW store. ? Regular cleaning of drain systems pre & post monsoon is done. ? Green belt with density of 2500 per hectare along and around boundary of the site towards the highway is being developed. Also to ensure Ambient Air Quality is meeting the prescribed standard AAQ & Fugitive Monitoring is being done on regular basis by NABL/ MoEF accredited laboratory. Being Complied Attachment: Click to View</p>
6	AIR QUALITY MONITORING AND PRESERVATION	The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.	PPs Submission	Agreed and is considered in design stage Being Complied Attachment: NA
7	AIR QUALITY MONITORING AND PRESERVATION	Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly	PPs Submission	<p>? 03 nos. of dedicated Street sweeper machine and 04 nos. movable water tankers are being used. ? Dedicated 04 No water spraying tankers are in use. ? 02 no fixed Water mist fog system has been installed and in used in order to reduce the fugitive dust. ? 01 no movable Water mist system has been installed and in used in order to reduce the fugitive dust. Being Complied Attachment: Click to View</p>

8	AIR QUALITY MONITORING AND PRESERVATION	Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration.	PPs Submission	Agreed and will be complied in parallel with implementation of the project. For valid CTO obtained units following measures are being adopted: ? Iron ore fines are feed into pellet plant for making pellet, ? APC fines from DRI plant is used for brick making; ? Pellet fines are recycled back to the process. ? SMS slag after metal recovery is used in brick/paver block making or land levelling. ? Coke fines are used in sinter plant of associate company of the Group TCLP Test report is enclosed Being Complied Attachment: Click to View
9	AIR QUALITY MONITORING AND PRESERVATION	The project proponent use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.	PPs Submission	The raw materials are transported in covered dumpers or covered with tarpaulin. Overloading of truck is strictly prohibited. Being Complied Attachment: NA
10	AIR QUALITY MONITORING AND PRESERVATION	Facilities for spillage collection shall be provided for coal and coke on wharf of coke oven batteries (Chain conveyors, land based industrial vacuum cleaning facility).	PPs Submission	Facilities for spillage collection coal and coke on wharf of coke oven batteries (chain conveyors, land based industrial vacuum cleaning facility) are made during the design stage of the plant. Bag Filter is attached with sufficient vent from platform for Coke Pushing/ Charging car. Complied Attachment: NA
11	AIR QUALITY MONITORING AND PRESERVATION	Land-based APC system shall be installed to control coke pushing emissions.	PPs Submission	Land-based APC system is considered during the design stage. The details are as: a) A large gas suction hood fixed on the coke guide car and moving with the coke guide, sending fumes to the coke side dust collecting duct; b) The dust collection duct; and c) The

				<p>final equipment for smoke purification on the ground (ground piping, accumulator cooler, pulse bag dust collector, silencer, ventilation unit, stack, etc.).</p> <p>d) Dust extraction system with bag filters is provided at different places. Emission is maintained below 30 mg/Nm³</p> <p>Complied</p> <p>Attachment: NA</p>
12	AIR QUALITY MONITORING AND PRESERVATION	Monitor CO, HC and O ₂ in flue gases of the coke oven battery to detect combustion efficiency and cross leakages in the combustion chamber	PPs Submission	<p>CO, HC and O₂ in flue gases of the coke oven battery will be monitor to detect combustion efficiency and cross leakages in the combustion chamber.</p> <p>Agreed to Comply</p> <p>Attachment: NA</p>
13	AIR QUALITY MONITORING AND PRESERVATION	Vapour absorption system shall be provided in place of vapour compression system for cooling of coke oven gas in case of recovery type coke ovens.	PPs Submission	<p>Not Applicable. Proposed coke oven plant is non-recovery type.</p> <p>Complied</p> <p>Attachment: NA</p>
14	AIR QUALITY MONITORING AND PRESERVATION	Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.	PPs Submission	<p>Raw materials are currently stored under covered shed or covered with tarpaulin. Water spraying is done on regular basis by movable water mist fog canon system to prevent the diffusion of particles in the atmosphere</p> <p>Being Complied</p> <p>Attachment: NA</p>
15	AIR QUALITY MONITORING AND PRESERVATION	Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.	PPs Submission	<p>Noted and is being considered in design stage</p> <p>Being Complied</p> <p>Attachment: NA</p>
16	WATER QUALITY MONITORING AND PRESERVATION	The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R 277 (E) dated 31st March 2012 (Integrated iron	PPs Submission	<p>The project is still under the construction phase. The plant is being designed as Zero Liquid Discharge (ZLD) and 100% water is recycled after treatment and is used in process, dust suppression</p>

		<p>& Steel); G.S.R 414 (E) dated 30th May 2008 (Sponge Iron) as amended from time to time; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.</p>		<p>& green belt development. Effluent water is being monitored by agency M/s Greenvision, Kolkata which is NABL accredited laboratory. Effluent water quality report done by NABL accredited lab is attached Being Complied Attachment: Click to View</p>
17	WATER QUALITY MONITORING AND PRESERVATION	<p>The project proponent shall monitor regularly ground water quality at least twice a year (pre and post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.</p>	PPs Submission	<p>The project is still under implementation phase. Manual effluent testing and manual monitoring of ground water quality are carried by third party agency (NABL accredited laboratory) at least twice a year (pre and post monsoon). Latest Ground water analysis report is attached Being Complied Attachment: Click to View</p>
18	WATER QUALITY MONITORING AND PRESERVATION	<p>The project proponent shall provide the ETP to meet the standards prescribed in G.S.R 277 (E) dated 31st March 2012 (Integrated iron & Steel); G.S.R 414 (E) dated 30th May 2008 (Sponge Iron) as amended from time to time; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time.</p>	PPs Submission	<p>The project is still under implementation phase. Manual effluent testing and manual monitoring of ground water quality are carried by third party agency (NABL accredited laboratory) at least twice a year (pre and post monsoon). Latest Ground water analysis report is attached Being Complied Attachment: Click to View</p>
			PPs Submission	<p>Effluent water is being monitored by agency M/s Greenvision, Kolkata which is NABL accredited laboratory. Effluent water quality report done by NABL accredited lab is attached Being Complied Attachment: Click to View</p>

19	WATER QUALITY MONITORING AND PRESERVATION	Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.	PPs Submission	STP cum ETP of adequate capacity already installed at site for treatment of the waste water and treated water is recycled/ reused in the process. Being Complied Attachment: Click to View
20	WATER QUALITY MONITORING AND PRESERVATION	Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.	PPs Submission	The project is under construction phase, Garland drains and collection pits are being developed to arrest run off of water. Run off water is stored in existing rain water harvesting pond of sufficient capacity. Being Complied Attachment: Click to View
21	WATER QUALITY MONITORING AND PRESERVATION	Tyre washing facilities shall be provided at the entrance of the plant gates.	PPs Submission	Tyre washing facility is constructed and provided at the entrance of the plant gates. Complied Attachment: Click to View
22	WATER QUALITY MONITORING AND PRESERVATION	Water meters shall be provided at the inlet to all unit processes in the steel plants.	PPs Submission	Plant is being operated on treated waste water from ETP/ STP plant. Water meters is installed at the inlet to all unit process in the steel plant. Complied Attachment: NA
23	Noise Monitoring & Prevention	Noise pollution shall be monitored as per the prescribed Noise Pollution (Regulation and Control) Rules, 2000 and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.	PPs Submission	Noise level has been monitored at ambient & work zone i.e. Plant Main Gate; Bargai Village; Rajogram Village; Ferro Plant Area; DRI & Pellet plant Area; Railway siding, Project construction site and Coke Oven Site by third party monitoring agency M/s Greenvision, Kolkata which is a NABL accredited laboratory. Ambient Noise & Source Noise Monitoring Reports are attached.

Being Complied
Attachment: [Click to View](#)

24	ENERGY PRESERVATION MEASURES	Use torpedo ladle for hot metal transfer as far as possible. If ladles not used, provide covers for open top ladles.	PPs Submission	Agreed and will be considered in operation phase of MBFplant. Agreed to Comply Attachment: NA
25	ENERGY PRESERVATION MEASURES	Restrict Gas flaring to < 1%.	PPs Submission	Still MBF plant is not implemented. The subject point will be considered in operation phase of MBF. Agreed to Comply Attachment: NA
26	ENERGY PRESERVATION MEASURES	Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;	PPs Submission	Solar lighting system is installed at Administrative building, common area, Main gates, Parking area in parallel with implementation of the project. Complied Attachment: NA
27	ENERGY PRESERVATION MEASURES	Provide LED lights in their offices and residential areas.	PPs Submission	LED lights in the offices and residential areas are provided and will be provided more in parallel with implementation of the project. Being Complied Attachment: NA
28	ENERGY PRESERVATION MEASURES	Ensure installation of regenerative/recuperative type burners on all reheating furnaces.	PPs Submission	Recuperative type energy efficient burner (equivalent to regenerative type) will be considered at design phase in Reheating furnaces. Agreed to Comply Attachment: NA

29	WASTE MANAGEMENT	An attrition grinding unit to improve the bulk density of BF granulated slag from 1.0 to 1.5 Kg/l shall be installed to use slag as river sand in construction industry.	PPs Submission	Still MBF plant is not implemented. Blast Furnace slag will be used for cement making in associate company of the Group Agreed to Comply Attachment: NA
30	WASTE MANAGEMENT	Carbon recovery plant to recover the elemental carbon present in GCP slurries for use in Sinter plant shall be installed.	PPs Submission	Noted and will be considered during the operation phase. Agreed to Comply Attachment: NA
31	WASTE MANAGEMENT	Used refractories shall be recycled as far as possible.	PPs Submission	Kiln accretion/ broken refractory mass used in associate company Sinter Plant, Cement Manufacturing, and land levelling Being Complied Attachment: NA
32	WASTE MANAGEMENT	100% utilization of fly ash shall be ensured. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding in this regard shall be submitted to the Ministry's Regional Office.	PPs Submission	Coal based CPP plant is not yet implemented and as on date no fly ash is generated. MOU for utilization of fly ash in cement plant of associate company (Rashmi Cement Limited (Cement Division), Jhargram & Bansal Cement Pvt. Ltd. Kharagpur) already made and submitted to ministry. Agreed to Comply Attachment: NA
33	WASTE MANAGEMENT	Oil Collection pits shall be provided in oil cellars to collect and reuse/recycle spilled oil. Oil collection trays shall be provided under coils on saddles in cold rolled coil storage area.	PPs Submission	Noted and will be considered during design phase of Rolling mill. Agreed to Comply Attachment: NA
34	WASTE MANAGEMENT	Kitchen waste shall be composted or converted to biogas for further use.	PPs Submission	Kitchen wastes are being composted and used in green belt development Being Complied Attachment: NA

35	GREENBELT	PP shall undertake the backlog and gap filling of greenbelt work@ 2500plants/hectare in the 2022 monsoon season itself and shall accordingly increase the budget for green belt purpose.	PPs Submission	We're regularly working on backlog and gap filling for greenbelt. Survival rate of green belt developed bunge monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years. Being Complied Attachment: NA
36	GREENBELT	The project proponent shall prepare GHG emissions inventory for the plant and shall submit the program for reduction of the same including carbon sequestration by trees.	PPs Submission	Updated details of Carbon Foot Prints and Carbon Sequestration (GHG emissions inventory for the plant) is already submitted to IRO-MoEFCC, Kolkata sub office vide letter no. - OASPL/ENV COMPL/JUNE 2023 dated 21.05.2023. Complied Attachment: NA
37	GREENBELT	Project proponent shall submit a study report within six months on Decarbonisation program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/ assessments should be measurable and monitorable with defined time frames.	PPs Submission	In order to reduce carbon emission dependency on WHRB based power plant is being in operation and currently 136 MW WHRB DRI based CPP & 42 MW from Coke Oven Plant Total 178 MW is in operation and in future capacity will be increased to 180 MW. Also process optimisation, modern technologies being adopted to reduce carbon emission. Carbon Foot Prints and Carbon Sequestration is already submitted to IRO-MoEFCC, Kolkata sub office vide letter no. -OASPL/ENV COMPL/JUNE 2023 dated 21.05.2023. Complied Attachment: NA
38	PUBLIC HEARING	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.	PPs Submission	Copy of updated Emergency preparedness plan, Hazard identification and Risk Assessment (HIRA) report and Disaster Management Plan is already submitted vide EC compliance (Dec-2022) vide

			letter no.- OASPL/ENV_COMP/DECEMBER 2022 dated 21.11.2022. Complied Attachment: NA
39	Human Health Environment	The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms.	PPs Submission Workers working in high temperature zone are provided with proper PPEs and the duration of their shift in those areas will be max. 4 hrs. or less per day compared to the shift in other areas. Being Complied Attachment: NA
40	Human Health Environment	Occupational health surveillance of the workers shall be done on a regular basis and records maintained	PPs Submission Workers working in high temperature zone are provided with proper PPEs and the duration of their shift in those areas will be max. 4 hrs. or less per day compared to the shift in other areas. Being Complied Attachment: NA PPs Submission The occupational health surveillance of the workers is being done on a regular basis and records are maintained as per the Factories Act. To strengthen the Occupational Health Surveillance, a system has been made, in which, employee's Gate Pass is issued only after ensuring the initial medical check-up Being Complied Attachment: Click to View
41	Corporate Environmental Responsibility	The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 30/09/2020. As part of Corporate Environment Responsibility (CER) activity, and as committee by the PP, the company shall adopt eleven villages namely Bargai, Dangarpara, Amba, Gokulpur, Kantapal, Keshpal, Ajabpur, Barkola, Wallipur, Mohanpur and	PPs Submission Noted and being complied in time bound manner. Being Complied Attachment: NA

		Risha based on the socio-economic survey and undertake community developmental activities in consultation with the village Panchayat and the District Administration as committed.		
42	Risk Mitigation and Disaster Management	The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.	PPs Submission	The company have a well laid down environmental policy duly approved by the board of directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/ deviation/ violation of the environmental/ forest/wildlife norms/conditions. The company shall have defined system of reporting infringements/ deviation/violation of the environmental/forest/ wildlife norms/ conditions and / or shareholders/stake holders. EHS policy is already provided to the MOEF&CC vide letter no-RASPL/KGP/2020-2021/01 dated 16.06.2020. Complied Attachment: NA
43	Risk Mitigation and Disaster Management	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.	PPs Submission	A separate Environmental cell both at project and company head quarter is in place. Complied Attachment: NA
44	MISCELLANEOUS	The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently	PPs Submission	Advertisement for expansion environment clearance obtained under EIA notification, 2006 in favour of Orissa Alloy Steel Pvt. Ltd. , in two local newspapers that are widely circulated in the region are: 1. Aajkal dated 11.08.2022 (Bengali) 2. The Echo of India dated 11.08.2022 (English) The copy of the same is already submitted vide EC compliance (JUNE-2023) vide letter no.-OASPL/ENV_COMP/DECEMBER 2022 dated 21.11.2022.

			Complied Attachment: NA
45	MISCELLANEOUS	The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayat and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.	PPs Submission Copies of EC dated 10.08.2022 submitted to DM, Paschim Medinipur & Barkola Gram Panchayat vide letter dated 10.08.2022. EC copy also uploaded on the website of the company http://orissametaliks.com/qehs.html . The copy of intimation is already submitted vide EC compliance (Dec-2022) vide letter no.- OASPL/ENV_COMP/DECEMBER 2022 dated 21.11.2022. Complied Attachment: NA
46	MISCELLANEOUS	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis	PPs Submission The environmental clearance and status of compliance of the stipulated environment clearance conditions, including results of monitored data have been uploaded on the website of the company - http://orissametaliks.com/qehs.html Complied Attachment: NA
47	MISCELLANEOUS	The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.	PPs Submission The criteria pollutants level namely; PM10, PM2.5, SO2, NOx (ambient levels as well as stack emissions) is monitored by third party monitoring agency which is NABL accredited laboratory. Emission levels of pollutants of different units is displayed on board as per CPCB format outside the main gate of the plant for disclosure to the public and also uploaded on the website of the company - http://orissametaliks.com/qehs.html . Electronic display board is installed at plant main gate and online stack emission data and CAAQMS data is also being displayed. Being Complied Attachment: NA
48	MISCELLANEOUS	The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest	PPs Submission This report is being submitted in compliance to this point. The last compliance report for the period October 2022 to March 2023 has been submitted to ministry vide

		and Climate Change at environment clearance portal.		letter no. OASPL/ENV_COMP/DECEMBER 2022 dated 21.11.2022 and also uploaded on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal. Being Complied Attachment: NA
49	MISCELLANEOUS	The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.	PPs Submission	The environmental statement for financial year 2022-23 in Form-V is submitted to the West Bengal Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986 vide letter no- OASPL/ENV_Statement/23-24 dated 21.09.2022 and same is uploaded on the website of the company. Being Complied Attachment: NA
50	MISCELLANEOUS	The project proponent 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, commencing the land development work and start of production operation by the project.	PPs Submission	The company is a private company and no finance is needed from outside. Land development work has been started after getting NOC from WBPCB and production operation started after obtaining valid CTO Being Complied Attachment: NA

51	MISCELLANEOUS	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.	<table border="1"> <tr> <td data-bbox="879 0 1102 745">PPs Submission</td> <td data-bbox="1102 0 1461 745">We are in the process of complying all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing. In financial year 2023-24 till September 2023 Rs. 1,20,92,243 is spent under CSR/CER on various activities in nearby villages to address the issues raised during public hearing and socio-economic issues in the study area. Being Complied Attachment: NA</td> </tr> </table>	PPs Submission	We are in the process of complying all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing. In financial year 2023-24 till September 2023 Rs. 1,20,92,243 is spent under CSR/CER on various activities in nearby villages to address the issues raised during public hearing and socio-economic issues in the study area. Being Complied Attachment: NA
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52	MISCELLANEOUS	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).	<table border="1"> <tr> <td data-bbox="879 745 1102 1496">PPs Submission</td> <td data-bbox="1102 745 1461 1496">In compliance to this point, the management obtained subject Expansion EC projects (1.2 Million TPA to 2.0 Million TPA Finished steel With 270 MW Captive Power Plant) by ministry vide EC Identification no- EC22A008WB114687 issued vide File No. J-11011/169/2017-IA-(II) dated 10.08.2022. Copy of the EC is already submitted vide EC compliance (Dec-2022) vide letter no.- OASPL/ENV_COMP/DECEMBER 2022 dated 21.11.2022. Being Complied Attachment: NA</td> </tr> </table>	PPs Submission	In compliance to this point, the management obtained subject Expansion EC projects (1.2 Million TPA to 2.0 Million TPA Finished steel With 270 MW Captive Power Plant) by ministry vide EC Identification no- EC22A008WB114687 issued vide File No. J-11011/169/2017-IA-(II) dated 10.08.2022. Copy of the EC is already submitted vide EC compliance (Dec-2022) vide letter no.- OASPL/ENV_COMP/DECEMBER 2022 dated 21.11.2022. Being Complied Attachment: NA
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53	MISCELLANEOUS	The PP shall put all the environment related expenditure, expenditure related to Action Plan on the PH issues, and other commitments made in the EIA/EMP Report etc. in the company web site for the information to public/public domain. The PP shall also put the information on the left over funds allocated to EMP and PH as committed in the earlier ECs and shall be carried out and spent in next three years, in the company web site for the information to public/public domain.	<table border="1"> <tr> <td data-bbox="879 1496 1043 2132">PPs Submission</td> <td data-bbox="1043 1496 1461 2132">The Action Plan on the PH issues, and other commitments made in the EIA/EMP Report is furnished in Half yearly EC compliance report and is uploaded on the website of the company http://orissametaliks.com/qehs.html. Being Complied Attachment: NA</td> </tr> </table>	PPs Submission	The Action Plan on the PH issues, and other commitments made in the EIA/EMP Report is furnished in Half yearly EC compliance report and is uploaded on the website of the company http://orissametaliks.com/qehs.html . Being Complied Attachment: NA
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54	MISCELLANEOUS	Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.	PPs Submission	Noted & Agreed Being Complied Attachment: NA
55	MISCELLANEOUS	The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data/ information/ monitoring reports.	PPs Submission	Agreed Being Complied Attachment: NA
56	MISCELLANEOUS	The Ministry reserves the right to stipulate additional conditions, if found necessary at subsequent stages and the project proponent shall implement all the said conditions in a time bound manner. The Ministry may revoke or suspend the environmental clearance, if implementation of any of the above conditions is not found satisfactory.	PPs Submission	Noted & Agreed Complied Attachment: NA
57	MISCELLANEOUS	Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of the Environment (Protection) Act, 1986.	PPs Submission	Noted & Agreed Complied Attachment: NA
58	MISCELLANEOUS	Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.	PPs Submission	Noted & Agreed Complied Attachment: NA
59	MISCELLANEOUS	The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with	PPs Submission	Noted & Agreed Complied Attachment: NA

their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

60	MISCELLANEOUS	Sensitization of project proponents on implementation of ban on Single Use Plastic (SUP).	PPs Submission	In order to create awareness among the employees about the harm/ impact of Single Use Plastic on environment , banner and flex are displayed at suitable place like work place, canteen, parking area etc. Being Complied Attachment: NA
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Report (if available)

Additional Attachment (if any) [Click to View](#)

Last Site Visit 21-02-2022

Report Date (if available)

Additional Remarks (if any) Hard Copy of Six Monthly EC compliance with supporting Documents.

- I 'Expansion of Integrated Steel Plant (1.2 to 2.0 Million TPA Finished Steel) with 270 MW Captive Power Plant' hereby give undertaking that the data and information given in the filed compliance and enclosures are true to be best of my knowledge and belief and I am aware that if any part of the data and information found to be false or misleading at any stage, the clearance given to the project will be revoked at our risk and cost. In addition to above, I hereby give undertaking that no activity such as change in project layout, construction, expansion, etc. has been taken up without due approval.

Cover Letter From IRO

Cover Letter From IRO NA

Back

Clearance Letter/s No. and date: - EC Identification no- EC22A008WB114687

F. No. J-11011/169/2017-IA.II (I); Dated
10th August 2022

Period of Compliance Report: - April 2023 to September 2023

A	Specific Conditions w.r.t to EC dated 10.08.2022	Compliance Status
i.	This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.	Agreed
ii.	The project proponent shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.	Agreed and being complied We are complying all the environmental protection measures and safeguards proposed in the documents (EIA/EMP) submitted to the Ministry.
iii.	The project proponent shall utilize modern technologies for capturing of carbon emitted and shall also develop carbon sink/carbon sequestration resources capable of capturing more than emitted. The implementation report shall be submitted to the IRO, MoEF&CC in this regard.	Noted The project is still in implementation phase. The flue gas generated from Coke Oven Plant, DRI plant is utilized in power generation. In order to reduce carbon emission dependency on WHRB based power plant is being practiced and currently 136 MW WHRB DRI based CPP & 42 MW from Coke Oven gas, in total 178 MW is in operation and in future capacity will be increased to 180 MW. Plantation is a suitable method to sequester carbon and 33% of the plant area being developed under greenbelt. An area of around 47.72 hectare has already been covered under greenbelt @ 2500 trees per hectare (1, 19,288 nos.) till September 2023. In addition to this 5000 Nos. of saplings on occasion of environment day (5 th June 2023) were distributed to nearby school children/ villagers for green belt development. Details of green belt development is attached as Annexure- I .

For ORISSA ALLOY STEEL PRIVATE LIMITED


Director / Authorised Signatory

<p>iv.</p>	<p>The activities and the action plan proposed by the project proponent to address the issues raised during public hearing and socio-economic issues in the study area shall be completed as per the schedule presented before the Committee and as described in the EIA report in letter and spirit.</p>	<p>Noted and will be complied in time bound manner. In financial year 2023-24 Rs. 1,20,92,243 is spent under CSR/CER head on various activities in nearby villages to address the issues raised during public hearing and socio-economic issues in the study area.</p> <div data-bbox="841 428 1416 667"> </div> <p style="text-align: center;">Construction of Community Prayer Centre</p> <div data-bbox="831 743 1422 1113"> </div> <p style="text-align: center;">Construction of Community Prayer Centre</p> <div data-bbox="831 1197 1412 1507"> </div> <p style="text-align: center;">Construction of Tribal Prayer Base</p>
<p>v.</p>	<p>Water bodies exist within the study area from the project site. The water bodies shall not be disturbed. Landscaping shall be done on both embankments, with green belt covering 10 m land on both sides. This shall be in addition to the 33% green belt development.</p>	<p>No water body will be disturbed which exists within the study area from the project site.</p> <div data-bbox="831 1671 1416 1890"> </div>


For ORISSA ALLOY STEEL PRIVATE LIMITED

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vi.	Tailings from Iron Ore washing plant shall be dewatered in filter press and no slime /tailing pond shall be permitted.	Noted Current wet grinding is being practiced and no tailing is being generated.
vii.	Iron ore slimes shall be dewatered and disposed dry. The recovered water shall be reused in the process. Ponding of tailings shall not be permitted. Maximum storage for tailings in the plant shall not exceed 90 days.	Agreed, The recovered water is reused and return back to the process
viii.	Rejects from coal washery shall only be used either in the captive power plant (or) in the Thermal Power Plants meeting emission standards.	Agreed, rejects from coal washery will be used in the captive power plant (or) in the Thermal Power Plants meeting emission standards.
ix.	Solid waste utilization <ul style="list-style-type: none"> • PP shall install a slag crusher to convert steel slag into aggregate for use in construction industry, fine sand for use as flux in steel plant, sand in brick making and as lime in cement making. • PP shall recycle/reuse 100 % solid waste generated in the plant. • Used refractories shall be recycled as far as possible. 	Noted and being complied in a time bound manner <ul style="list-style-type: none"> • Dolochar generated from operational DRI kilns are used in CFBC Boilers of the Group Companies. • SMS Slag used for road construction/ Land levelling purpose after recovering metal from Slag Crushing unit. • Slag generated during Ferro Manganese production will be used as a raw material for Silico Manganese production. • Slag generated during Silico Manganese production will be used for road construction/land filling. • Dust from APC devices are used in Sinter Plant of associate companies of the Group and Brick Manufacturing, Pelletisation mix.
x.	Sinter Plant shall be equipped with Sinter cooler waste recovery system and suitable technology for control of dioxins and furans emissions from the plant.	Noted and will be complied prior to the commencement of the plant operation activity.
xi.	Tar shall be recovered from producer gas and shall be sold to registered processors and phenolic water shall be incinerated in After Burn Chamber (ABC) of DRI kilns.	Agreed, tar recovered from producer gas being is sold to registered processors and used as a fuel in pellet plant and phenolic water incinerated in After Burn Chamber (ABC) of DRI kilns.
xii.	Coke oven plant shall be equipped with modified wet quenching system.	Agreed, coke oven plant equipped with modified wet quenching system and water is recycled post primary settlement.

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xiii.	Coke Oven Gas shall be desulfurized.	Noted and being complied.
xiv.	Blast Furnaces shall be equipped with Top Recovery Turbine (capacity more than 550 m ³), dry gas cleaning plant, stove waste heat recovery, cast house and stock house ventilation system and slag granulation facility.	Noted and will be considered during the design stage.
xv.	Secondary fume extraction system shall be installed on converters of Steel Melting Shop.	Noted and will be considered during the design stage.
xvi.	Basic Oxygen Furnace (BOF) gas shall be cleaned dry.	Noted and will be considered during the design stage.
xvii.	Electric Arc Furnace shall be closed type with 4 th hole extraction system.	Not applicable as no Electric Arc Furnace is being proposed.
xviii.	85-90% of billets shall be rolled directly in hot stage. RHF shall operate using only Light Diesel Oil or Mixed BF/CO gas/Producer gas.	Agreed and will be complied. Rolling mill is still not commissioned.
xix.	Cold Rolling Mill (CRM), color coating and galvanizing plants shall have CETP to treat and recycle the treated water from CRM complex. Sludge generated at CRM ETP shall be sent to TSDF.	Not applicable as Cold Rolling Mill (CRM), color coating and galvanizing plants is not proposed.
xx.	Dust emission from Steel Plant stacks shall be up to 30 mg/Nm ³ .	Agreed, APC devices are designed to keep the emission below 30 mg/Nm ³ . Recent OCEMS data is enclosed as Annexure-II .
xxi.	The net water requirement of the ISP after implementation of proposed expansion project would be around 491.67 m ³ /hr (11,800 KLD) which will be obtained from Kharagpur Municipality and Treated waste water. Bore well supply as envisaged earlier will be completely replaced by surface water/ treated waste water in the present proposal for operation phase of the project. No ground water extraction is permitted.	Noted and being complied
xxii.	Three tier Green Belt shall be	An area of around 47.72 hectare has

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developed in a time frame of one year with native species all along the periphery of the project site of adequate width and tree density shall not be less than 2500 per ha. Survival rate of green belt developed shall be monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.

already been covered under greenbelt @ 2500 trees per hectare (1, 19,288 nos.) till September 2023.

In addition to this 5000 Nos. of saplings on occasion of environment day (5th June 2023) were distributed to nearby school children/ villagers for green belt development. Details of green belt development is already attached as **Annexure- I.**

Survival rate of green belt developed bing monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years.



For ORISSA ALLOY STEEL PRIVATE LIMITED


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xxiii .	Greening and Paving shall be implemented in the plant area to arrest soil erosion and dust pollution from exposed soil surface.	Greening and paving being implemented in the plant area to arrest soil erosion and dust pollution.
xxiv .	Performance test shall be conducted on all pollution control systems every year and report shall be submitted to Regional Office of the MoEF&CC. i. Ductile Iron (DI) plant shall have the following provisions: a. Bag filter for Zn coating and Mg converter area. b. Wet scrubbers in paint and bitumen coating area. c. Bag Filter in Cement lining area. d. PTFE dipped bags shall be used in the plant. e. PM emissions from BF in Zinc coating area shall be 5 mg/Nm ³ . f. ETP with recycling facility shall be included.	Agreed, the performance test/ stack monitoring is conducted on all pollution control systems on quarterly basis for operational unit by NABL/WBPCB accredited laboratory. Stack Monitoring report is enclosed as Annexure-III . Ductile Iron Pipe finishing line is equipped with Bag filter.
xxv.	Rain water harvesting shall be implemented to recharge/harvest water as per the action plan submitted in the EIA/EMP report.	Agreed, 02 nos. rain water harvesting being implemented to harvest water. Harvested water is used as industrial make up water and also for dust suppression and green belt development
xxvi .	The proposed project shall be designed as "Zero Liquid Discharge" Plant. No waste water will be discharged outside the plant boundary.	Agreed, no waste water discharged outside the plant boundary. ETP cum STP of adequate capacity is installed to treat the effluent and reused 100% in plant operation, for dust suppression and green belt development.
xxvii .	A proper action plan must be implemented to dispose of the electronic waste generated in the industry.	We've made contract with the authorized e-waste recyclers, the electronic waste generated in the industry will be dispose off by the authorized vendor.
xxvii i.	Railway siding shall be completed by June 2022, as committed by the PP.	Valid consent to operate obtained from West Bengal Pollution Control Board vide CTO no- CO-132105 dated 08.12.2021. 
xxix .	PP shall prepare and implement an action plan giving annual	Being Complied.

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<p>improvement targets for resource conservation and environment improvement. This plan shall be monitored by the concerned Regional Office of the MoEF&CC.</p>	<p>The project is still under implementation phase. However 3R's (Reuse, Recycle & Recover Techniques), energy and natural resource conservation measures adopted by management of OASPL are as:</p> <p>❖ Reuse:</p> <ul style="list-style-type: none"> a) Dust collected from Pellet plant had been/ will be reused in the pellet process. b) Char & Dolochar from DRI Plant being used in CFBC Boilers for power generation resulting reduction in non-renewable source i.e. coal. c) Slag generated during Ferro Manganese production had been/ will be used as a raw material for Silico Manganese production. d) Slag generated during Silico Manganese production had been/ will be used for road construction / land filling. e) Magnesium dust from DI pipe plant had been/ will be used in Sinter Plant of associate company. f) Cement slurry from DI pipe plant will be used Brick making and also in associate company of Cement Plant. g) Tar Sludge from Producer gas plant will be sold to SPCB authorized vendor. <p>❖ Recycle:</p> <ul style="list-style-type: none"> a) Recycling or usage of recycled water at every stage of the process b) The process water had been/ will be treated in ETP and recycled in the process and within plant premises. c) Domestic water had been/ will be treated in STP and will be used for dust suppression & green belt development. d) Phenolic water from producer gas plant had been/ will be used in ABC of DRI Kiln. <p>❖ Recovery:</p> <ul style="list-style-type: none"> a) Waste Heat Recovery boiler with DRI and Coke oven plant had been/ will be installed to capture sensible heat from waste heat. h) Partial Air cooled type cooling
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		<p>system had been/ will be installed with power plant resulting reduction in water consumption.</p> <p>❖ Energy Conservation:</p> <ol style="list-style-type: none"> a) Power Generation with WHRB (Without using fossil fuel) -68 MW from 4 x 600 TPD DRI Kiln based WHRB b) Power Generation with WHRB (Without using fossil fuel) in coke oven plant- WHRB attached with coke oven will generate 42 MW of electricity. c) Use of better quality raw material in DRI & BF resulting reduction in specific energy conservation. d) Use of energy efficient electric motors complying IEE3 Standards. e) Use of highly efficient VFD, minimizing idle running of machines. f) Optimizing loads and periodic preventive maintenance & lubrication g) Prevention of leakages of compressed air h) Optimized compressed air pressure. i) Periodic energy audits. j) Training, awareness and motivational programmes. k) Maximum utilization of renewable energy resources. l) Installation of energy efficient lightings. m) Use of energy saving light fittings. n) Installation of LED/CFL lighting. <p>❖ Natural Resource Conservation:</p> <ol style="list-style-type: none"> a) Water had been/ will be conserved by practicing rainwater harvesting and maximum recycling within the plant premises. b) Waste water after treatment had been/ will be used after treatment in the plant. c) Solar street with LED is installed in common area and parking etc.
xxx.	The heat rate of coal based power plant as specified by Central Electricity Authority shall be maintained and monitored.	<p style="text-align: center;">Noted</p> <p>The heat rate of Coal based power plant as specified by central Electricity Authority shall be considered during the design state of the plant.</p>

For ORISSA ALLOY STEEL PRIVATE LIMITED



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xxxii .	Energy efficient drives, VFD for auxiliary motors and slip power recovery system for motors above 1000 kw shall be provided.	<p>Being complied with</p> <p>Energy efficient drives, VFD for auxiliary motors and slip power recovery system for motors above 1000 KW being installed in parallel with implementation of the project.</p>
xxxii .	PTFE Membrane bags shall be used in filter bag house and designed for 150% of normal design air flow.	<p>Being complied with and will be complied in parallel with implementation of the project. Adequate capacity of Bag Filter has been installed in Ferro alloy plant, secondary unit of DRI plant, DIP finishing line and in Pellet Plant.</p> 
xxxii i.	Shall use ultralow NOx burner with three stage combustion, flue gas recirculation and auto combustion control system. Shall use Post combustion control system (SCR/SCNR process) with NH ₃ monitoring when Ammonia is used.	<p>Will be complied</p> <p>Sinter plant Coal based CPP is not yet commissioned and during design phase it will be considered.</p>
xxxii v.	Parking area for trucks/dumpers shall be provided within the steel plant. No truck/dumper shall be parked outside the steel plant premises.	<p>Agreed</p> <p>6.04 hectare is allocated for parking area for trucks/dumpers within the steel plant. No truck/dumper being parked outside the steel plant premises.</p> 
xxx v.	PP reported that out of the 145.69 hectare of land, 131.53 hectare of land is already in possession of M/s	<p>Noted</p>

	Orissa Alloy Steel Private Limited (Formerly M/s Rashmi Alloy Steel Private Limited) and for rest of land (14.16 ha) consent from private rayat obtained, however land is not yet acquired. This EC is subject to obtaining complete acquisition of land required for the proposed expansion project.	
xxx vi.	This is an existing Unit. PP shall controlled the air pollutants- PM _{2.5} , PM ₁₀ , SO ₂ , NO _x , CO emissions in the occupational environment of different process plants, within the permissible exposure limits of as per the Factories Act. PP shall do the monitoring of industrial hygiene survey within occupational environments in order to ensure good environment within the industry, so that workers health is ensured.	Being Complied The occupational health surveillance of the workers is being done on a regular basis and records are maintained as per the Factories Act. The OHS Record is attached as Annexure-IV .
xxx vii.	During operational phase at Captive Power Plant PP shall to measure coal dust exposures and to maintain coal dust exposures within stipulated standards at coal handling areas, conveyer belt and coal crushing area-ball mill. PP shall identify extreme hot areas through heat stress survey as well as noise monitoring within process plants to ensure that workers not exposed above 90 dBA levels as per Factories Act, 1948.	Noted
xxx viii.	A proper action plan must be implemented to dispose of the electronic waste generated in the industry.	We have made contract with the authorized e-waste recyclers, the electronic waste generated in the industry being dispose of by the authorized vendor.
B	General Conditions w.r.t to EC dated 10.08.2022	Compliance Status
I	Statutory compliance:	
i.	The Environment Clearance (EC) granted to the project/ activity is strictly under the provisions of the EIA Notification, 2006 and its amendments issued from time to time. It does not tantamount/ construe to approvals/ consent/ permissions etc., required to be obtained or standards/conditions to be followed under any other Acts/Rules/Subordinate legislations, etc., as may be applicable to the project.	Noted

II.	Air quality monitoring and preservation:																																					
i.	<p>The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission as well as 04 Nos. Continuous Ambient Air Quality Station (CAAQS) for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS and CAAQMS shall be connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.</p>	<p>After taking into consideration the interest and financial share cost from associate company of the Group, for monitoring the Ambient Air quality around industrial units of the Group, 04 nos. Continuous Ambient Air Quality Monitoring Station (USEPA/MCERT approved) is installed covering upwind, downwind and crosswind directions after getting site approval from WBPCB and data is transferred to SPCB & CPCB server.</p> <p>Online continuous emission Monitoring system (OCEMS) has been installed with stack connected with Ferro alloy plant, DRI plant and Pellet plant as per CPCB guideline.</p> <p>The CEMS and CAAQMS are connected to WBPCB and CPCB online servers and calibrate from time to time according to equipment supplier specification.</p> <p>Ambient air monitored at the five locations viz., 1) Near Plant Main Gate, 2) Kantapal Village, 3) Berapara Village, 4) Barkola Village & 5) Truck Parking Area by third party monitoring agency M/s Greenvision, Kolkata which is NABL accredited laboratory. As per monitoring reports of month Sept. 2023, emission levels are as follows:</p> <table border="1" data-bbox="824 1262 1425 1541"> <thead> <tr> <th>Para.</th> <th>Plant Main Gate</th> <th>Kantapal Village</th> <th>Berapara Village</th> <th>Barkola Village</th> <th>Truck Parking Area</th> </tr> </thead> <tbody> <tr> <td>PM₁₀ (µg/m³)</td> <td>78.22</td> <td>52.49</td> <td>62.74</td> <td>67.24</td> <td>74.29</td> </tr> <tr> <td>PM_{2.5} (µg/m³)</td> <td>38.66</td> <td>27.49</td> <td>32.08</td> <td>34.99</td> <td>35.91</td> </tr> <tr> <td>SO₂ (µg/m³)</td> <td>8.79</td> <td>7.32</td> <td>8.05</td> <td>7.32</td> <td>9.52</td> </tr> <tr> <td>NO₂ (µg/m³)</td> <td>31.37</td> <td>29.73</td> <td>30.94</td> <td>30.33</td> <td>33.37</td> </tr> <tr> <td>CO (mg/m³)</td> <td>0.264</td> <td>0.135</td> <td>0.181</td> <td>0.168</td> <td>0.302</td> </tr> </tbody> </table> <p>CAAQMS reports and AAQMS report carried by NABL accredited laboratory are attached in as Annexure No. – V & VI and Stack report data already attached in as Annexure No.– III.</p>	Para.	Plant Main Gate	Kantapal Village	Berapara Village	Barkola Village	Truck Parking Area	PM ₁₀ (µg/m ³)	78.22	52.49	62.74	67.24	74.29	PM _{2.5} (µg/m ³)	38.66	27.49	32.08	34.99	35.91	SO ₂ (µg/m ³)	8.79	7.32	8.05	7.32	9.52	NO ₂ (µg/m ³)	31.37	29.73	30.94	30.33	33.37	CO (mg/m ³)	0.264	0.135	0.181	0.168	0.302
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ii.	<p>The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognized by Environment</p>	<p>Being Complied</p> <p>Fugitive Emissions have been monitored at the Eight locations viz., 1) DRI & CPP Plant Area, 2) Pellet Plant Area, 3) Ferro Alloy</p>																																				


Director / Authorised Signatory

<p>(Protection) Act, 1986 or NABL accredited laboratories.</p>	<p>Plant Area, 4) Raw Material Yard, 5) Railway Siding, 6) DIP Plant Area, 7) SMS Area, 8) Coke Oven Site area by third party monitoring agency M/s Greenvision, Kolkata which is NABL accredited laboratory. As per monitoring reports, (Sept.-2023) emission levels are as follows:</p> <table border="1" data-bbox="841 443 1406 625"> <tr> <th>Parameter</th> <th>DRI Plant Area</th> <th>Rail. Siding</th> <th>DIP Plant Area</th> <th>SMS Area</th> <th>Coke Oven Site</th> </tr> <tr> <td>TSPM ($\mu\text{g}/\text{m}^3$)</td> <td>494.53</td> <td>602.94</td> <td>508.81</td> <td>542.35</td> <td>523.83</td> </tr> <tr> <th>Parameter</th> <th>Pellet Plant Area</th> <th>Ferro Alloy Plant</th> <th colspan="3">Raw Material Yard</th> </tr> <tr> <td>TSPM ($\mu\text{g}/\text{m}^3$)</td> <td>546.46</td> <td>592.75</td> <td colspan="3">595.13</td> </tr> </table> <p>Fugitive emission report is attached as Annexure-VII.</p>	Parameter	DRI Plant Area	Rail. Siding	DIP Plant Area	SMS Area	Coke Oven Site	TSPM ($\mu\text{g}/\text{m}^3$)	494.53	602.94	508.81	542.35	523.83	Parameter	Pellet Plant Area	Ferro Alloy Plant	Raw Material Yard			TSPM ($\mu\text{g}/\text{m}^3$)	546.46	592.75	595.13		
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TSPM ($\mu\text{g}/\text{m}^3$)	494.53	602.94	508.81	542.35	523.83																				
Parameter	Pellet Plant Area	Ferro Alloy Plant	Raw Material Yard																						
TSPM ($\mu\text{g}/\text{m}^3$)	546.46	592.75	595.13																						
<p>iii. Sampling facility at process stacks and at quenching towers shall be provided as per CPCB guidelines for manual monitoring of emissions.</p>	<p>Process stack with DRI Plant, Ferro Plant, Pellet Plant and DIP Finishing line has been installed as per CPCB guidelines for manual monitoring of emissions.</p>																								
<p>iv. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.</p>	<p>Being complied</p> <p>4 X 9 MVA Ferro Alloy Plants; 04 X 600 TPD + 2 x 1200 TPD DRI plant with 136 MW WHRB based CPP, 0.2 MTPA DIP finishing line, 3.0 MTPA Pellet plant with matching beneficiation and 20 X 7500 N.Cu.M PGP, 0.297 MTPA SMS with matching CCM, along with 0.55 MTPA coke oven plant with 42 MW WHRB based CPP, is having valid consent to operate from WBPCB.</p> <p>Adequate APCD is installed with the operational units. The details are as:</p> <ol style="list-style-type: none"> Bag Filter with Heat Exchanger with Ferro Alloy Plant ESP with WHRB with DRI plant ESP with Pellet Plant Bag Filter with SMS (I.F.) WHRB & Bag Filter with Coke oven plant Inbuilt Electrostatic Tar Separator with PGP Bag Filter with DIP plant <p>Action taken by company for maintain good housekeeping and controlling emission are:</p> <ul style="list-style-type: none"> ❖ Dust suppression systems are/ will be provided at raw material handling, product handling, transfer points, loading and unloading points to control fugitive emission. 																								

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		<ul style="list-style-type: none"> ❖ Covered shed and conveyor belts have been provided at various points such as material transfer points, and other enclosed raw material handling areas for control of fugitive emissions. ❖ Bag houses are designed to meet the standard below 30 mg/Nm³. ❖ 03 nos. of dedicated Street sweeper machine and 04 nos. movable water tankers are being used. ❖ Dedicated 04 No water spraying tankers are in use. ❖ 02 no fixed Water mist fog system has been installed and in used in order to reduce the fugitive dust. ❖ 01 no movable Water mist fog system has been installed and in used in order to reduce the fugitive dust. ❖ We have provided GPS enabled tractor mounted water tanker for suppression of dust at nearby villages. ❖ Water sprinkler/ water gun along the roadside is being installed to reduce fugitive emission. ❖ Speed limits are enforced for movement of vehicles at the site as per the factory limits ❖ Concreting of internal road with proper drainage system to reduce vehicular emission is going on in parallel with implementation of the project. ❖ Trucks movement for transporting raw materials & solid waste in fully covered way to avoid dust pollution. ❖ Dedicated truck parking facility. ❖ Engaged more numbers of dedicated Housekeeping team with proper training and equipment. ❖ Regular painting and cleaning / white washing of wall. ❖ Scraps are stored in proper demarcated area with proper marking. ❖ Hazardous wastes are stored in dedicated HZW store. ❖ Regular cleaning of drain systems pre & post monsoon is done. ❖ Green belt with density of 2500 per hectare along and around boundary of the site towards the highway is being developed. <p>Also to ensure Ambient Air Quality is</p>
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		<p>meeting the prescribed standard AAQ & Fugitive Monitoring is being done on regular basis by NABL/ MoEF accredited laboratory.</p>  <p>Latest Ambient Air Quality Monitoring Analysis reports carried by NABL/MoEF accredited lab are already attached in as Annexure No. -VI.</p>
v.	The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.	Agreed and is considered in design stage.
vi.	Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.	<ul style="list-style-type: none"> ❖ 03 nos. of dedicated Street sweeper machine and 04 nos. movable water tankers are being used. ❖ Dedicated 04 No water spraying tankers are in use. ❖ 02 no fixed Water mist fog system has been installed and in used in order to reduce the fugitive dust. ❖ 01 no movable Water mist system has been installed and in used in order to

		reduce the fugitive dust.
vii.	Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration.	<p>Agreed and will be complied in parallel with implementation of the project.</p> <p>For valid CTO obtained units following measures are being adopted:</p> <ul style="list-style-type: none"> ▪ Iron ore fines are feed into pellet plant for making pellet, ▪ APC fines from DRI plant is used for brick making; ▪ Pellet fines are recycled back to the process. ▪ SMS slag after metal recovery is used in brick/paver block making or land levelling. ▪ Coke fines are used in sinter plant of associate company of the Group. <p>TCLP Test report is enclosed as Annexure-VII.</p>
viii.	The project proponent use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.	<p>Being complied</p> <p>The raw materials are transported in covered dumpers or covered with tarpaulin. Overloading of truck is strictly prohibited.</p>
ix.	Facilities for spillage collection shall be provided for coal and coke on wharf of coke oven batteries (Chain conveyors, land based industrial vacuum cleaning facility).	<p>Noted</p> <p>Facilities for spillage collection coal and coke on wharf of coke oven batteries (chain conveyors, land based industrial vacuum cleaning facility) are made during the design stage of the plant. Bag Filter is attached with sufficient vent from platform for Coke Pushing/ Charging car.</p>
x.	Land-based APC system shall be installed to control coke pushing emissions.	<p>Land-based APC system is considered during the design stage. The details are as:</p> <ol style="list-style-type: none"> a) A large gas suction hood fixed on the coke guide car and moving with the coke guide, sending fumes to the coke side dust collecting duct; b) The dust collection duct; and c) The final equipment for smoke purification on the ground (ground piping, accumulator cooler, pulse bag dust collector, silencer, ventilation unit, stack, etc.). d) Dust extraction system with bag filters is provided at different places. Emission is maintained below 30 mg/Nm³
xi.	Monitor CO, HC and O2 in flue gases of the coke oven battery to detect	<p>Agreed</p> <p>CO, HC and O₂ in flue gases of the coke</p>

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	combustion efficiency and cross leakages in the combustion chamber.	oven battery will be monitor to detect combustion efficiency and cross leakages in the combustion chamber.
xii.	Vapour absorption system shall be provided in place of vapour compression system for cooling of coke oven gas in case of recovery type coke ovens.	Not Applicable. Proposed coke oven plant is non-recovery type.
xiii.	Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.	Raw materials are currently stored under covered shed or covered with tarpaulin. Water spraying is done on regular basis by movable water mist fog canon system to prevent the diffusion of particles in the atmosphere
xiv.	Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.	Noted and is being considered in design stage
III.	Water quality monitoring and preservation:	
i.	The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R 277 (E) dated 31 st March 2012 (Integrated iron & Steel); G.S.R 414 (E) dated 30 th May 2008 (Sponge Iron) as amended from time to time; S.O. 3305 (E) dated 7 th December 2015 (Thermal Power Plants) as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.	Agreed The project is still under the construction phase. The plant is being designed as Zero Liquid Discharge (ZLD) and 100% water is recycled after treatment and is used in process, dust suppression & green belt development. Effluent water is being monitored by agency M/s Greenvision, Kolkata which is NABL accredited laboratory. Effluent water quality report done by NABL accredited lab is attached as Annexure-IX .
ii.	The project proponent shall monitor regularly ground water quality at least twice a year (pre and post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.	Being Complied The project is still under implementation phase. Manual effluent testing and manual monitoring of ground water quality are carried by third party agency (NABL accredited laboratory) at least twice a year (pre and post monsoon). Latest Ground water analysis report is attached as Annexure- X .
iii.	The project proponent shall provide	STP cum ETP of adequate capacity already


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	<p>the ETP to meet the standards prescribed in G.S.R 277 (E) dated 31st March 2012 (Integrated iron & Steel); G.S.R 414 (E) dated 30th May 2008 (Sponge Iron) as amended from time to time; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time.</p>	<p>installed at site for treatment of the waste water and treated water is recycled/ reused in the process.</p> 
<p>iv.</p>	<p>Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.</p>	<p>Being Complied.</p> <p>As stated in point no-iii, STP of adequate capacity already installed at site for treatment of the waste water and treated water will be 100% recycled/ reused in the process.</p>
<p>v.</p>	<p>Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.</p>	<p>Being Complied</p> <p>The project is under construction phase, Garland drains and collection pits are being developed to arrest run off of water. Run off water is stored in existing rain water harvesting pond of sufficient capacity.</p> 
<p>vi.</p>	<p>Tyre washing facilities shall be</p>	<p>Tyre washing facility is constructed and</p>

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	provided at the entrance of the plant gates.	provided at the entrance of the plant gates. 																																
vii.	Water meters shall be provided at the inlet to all unit processes in the steel plants.	Plant is being operated on treated waste water from ETP/ STP plant. Water meters is installed at the inlet to all unit process in the steel plant.																																
IV. Noise monitoring and prevention																																		
i.	Noise pollution shall be monitored as per the prescribed Noise Pollution (Regulation and Control) Rules, 2000 and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.	<p>Being Complied</p> <p>Noise level has been monitored at ambient & work zone i.e. Plant Main Gate; Bargai Village; Rajogram Village; Ferro Plant Area; DRI & Pellet plant Area; Railway siding, Project construction site and Coke Oven Site by third party monitoring agency M/s Greenvision, Kolkata which is a NABL accredited laboratory. As per monitoring reports submitted, levels are as follows:</p> <table border="1" data-bbox="829 1024 1414 1129"> <thead> <tr> <th rowspan="2">Parameter</th> <th colspan="2">Near Plant Main Gate</th> <th colspan="2">Bargai Village</th> <th colspan="2">Rajogram Village</th> <th rowspan="2">Coke Oven Site</th> </tr> <tr> <th>Day</th> <th>Night</th> <th>Day</th> <th>Night</th> <th>Day</th> <th>Night</th> </tr> </thead> <tbody> <tr> <td>Leq (dBA)</td> <td>62.6</td> <td>51.2</td> <td>55.4</td> <td>48.9</td> <td>60</td> <td>52.7</td> <td>55.2-62.0</td> </tr> </tbody> </table> <table border="1" data-bbox="829 1150 1414 1255"> <thead> <tr> <th rowspan="2">Parameter</th> <th>DRI & Pellet Area</th> <th>Railway Siding</th> <th>Project Construction Site</th> <th>Ferro alloy Plant</th> </tr> </thead> <tbody> <tr> <td>Leq (dBA)</td> <td>55.2-64.4</td> <td>58.1-64.2</td> <td>57.2-63.3</td> <td>55.3-63.5</td> </tr> </tbody> </table> <p>Ambient Noise & Source Noise Monitoring Reports are attached as Annexure-XI.</p>	Parameter	Near Plant Main Gate		Bargai Village		Rajogram Village		Coke Oven Site	Day	Night	Day	Night	Day	Night	Leq (dBA)	62.6	51.2	55.4	48.9	60	52.7	55.2-62.0	Parameter	DRI & Pellet Area	Railway Siding	Project Construction Site	Ferro alloy Plant	Leq (dBA)	55.2-64.4	58.1-64.2	57.2-63.3	55.3-63.5
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	Leq (dBA)	55.2-64.4	58.1-64.2	57.2-63.3	55.3-63.5																													
V. Energy Conservation measures																																		
i.	Use torpedo ladle for hot metal transfer as far as possible. If ladles not used, provide covers for open top ladles.	Agreed and will be considered in operation phase of MBF plant.																																
ii.	Restrict Gas flaring to < 1%.	Noted. Still MBF plant is not implemented. The subject point will be considered in operation phase of MBF.																																
iii.	Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;	Solar lighting system is installed at Administrative building, common area, Main gates, Parking area in parallel with implementation of the project.																																
iv.	Provide LED lights in their offices and residential areas.	Being complied LED lights in the offices and residential areas are provided and will be provided more in parallel with implementation of the																																

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		project.
v.	Ensure installation of regenerative/recuperative type burners on all reheating furnaces.	Noted. Recuperative type energy efficient burner (equivalent to regenerative type) will be considered at design phase in Reheating furnaces.
VI. Waste management		
i.	An attrition grinding unit to improve the bulk density of BF granulated slag from 1.0 to 1.5 Kg/I shall be installed to use slag as river sand in construction industry.	Noted Still MBF plant is not implemented. Blast Furnace slag will be used for cement making in associate company of the Group.
ii.	Carbon recovery plant to recover the elemental carbon present in GCP slurries for use in Sinter plant shall be installed.	Noted and will be considered during the operation phase.
iii.	Used refractories shall be recycled as far as possible.	Agreed Kiln accretion/ broken refractory mass used in associate company Sinter Plant, Cement Manufacturing, and land levelling.
iv.	100% utilization of fly ash shall be ensured. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding in this regard shall be submitted to the Ministry's Regional Office.	Agreed Coal based CPP plant is not yet implemented and as on date no fly ash is generated. MOU for utilization of fly ash in cement plant of associate company (Rashmi Cement Limited (Cement Division), Jhargram & Bansal Cement Pvt. Ltd. Kharagpur) already made and submitted to ministry.
v.	Oil Collection pits shall be provided in oil cellars to collect and reuse/recycle spilled oil. Oil collection trays shall be provided under coils on saddles in cold rolled coil storage area.	Noted and will be considered during design phase of Rolling mill.
vi.	Kitchen waste shall be composted or converted to biogas for further use.	Being Complied Kitchen wastes are being composted and used in green belt development.
VII. Green Belt		
i.	PP shall undertake the backlog and gap filling of greenbelt work@ 2500plants/hectare in the 2022 monsoon season itself and shall accordingly increase the budget for green belt purpose.	We're regularly working on backlog and gap filling for greenbelt. Survival rate of green belt developed binge monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years.
ii.	The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration by	Complied Updated details of Carbon Foot Prints and Carbon Sequestration (GHG emissions inventory for the plant) is already

	trees.	submitted to IRO-MoEFCC, Kolkata sub office vide letter no. -OASPL/ENV COMPL/JUNE 2023 dated 21.05.2023.
iii.	Project proponent shall submit a study report within six months on Decarbonisation program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/ assessments should be measurable and monitorable with defined time frames.	In order to reduce carbon emission dependency on WHRB based power plant is being in operation and currently 136 MW WHRB DRI based CPP & 42 MW from Coke Oven Plant Total 178 MW is in operation and in future capacity will be increased to 180 MW. Also process optimisation, modern technologies being adopted to reduce carbon emission. Carbon Foot Prints and Carbon Sequestration is already submitted to IRO-MoEFCC, Kolkata sub office vide letter no. -OASPL/ENV COMPL/JUNE 2023 dated 21.05.2023.
VII	Public hearing and Human health issues	
I.		
i.	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.	Complied Copy of updated Emergency preparedness plan, Hazard identification and Risk Assessment (HIRA) report and Disaster Management Plan is already submitted vide EC compliance (Dec-2022) vide letter no.-OASPL/ENV_COMP/DECEMBER 2022 dated 21.11.2022.
ii.	The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms.	Agreed and being complied Workers working in high temperature zone are provided with proper PPEs and the duration of their shift in those areas will be max. 4 hrs. or less per day compared to the shift in other areas.
iii.	Occupational health surveillance of the workers shall be done on a regular basis and records maintained.	Being Complied The occupational health surveillance of the workers is being done on a regular basis and records are maintained as per the Factories Act. To strengthen the Occupational Health Surveillance, a system has been made, in which, employee's Gate Pass is issued only after ensuring the initial medical check-up. The OHS Record is already attached as Annexure- IV.
IX.	Environment Management	
i.	The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-	Noted and being complied in time bound manner.

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	IA.III dated 30/09/2020. As part of Corporate Environment Responsibility (CER) activity, and as committee by the PP, the company shall adopt eleven villages namely Bargai, Dangarpara, Amba, Gokulpur, Kantapal, Keshpal, Ajabpur, Barkola, Wallipur, Mohanpur and Risha based on the socio-economic survey and undertake community developmental activities in consultation with the village Panchayat and the District Administration as committed.	In financial year 2023-24 Rs. 1,20,92,243 is spent under CSR/CER head on various activities in nearby villages to address the issues raised during public hearing and socio-economic issues in the study area.
ii.	The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.	The company have a well laid down environmental policy duly approved by the board of directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/ deviation/ violation of the environmental/ forest/wildlife norms/conditions. The company shall have defined system of reporting infringements/ deviation/violation of the environmental/forest/ wildlife norms/ conditions and / or shareholders/stake holders. EHS policy is already provided to the MOEF&CC vide letter no- RASPL/KGP/2020-2021/01 dated 16.06.2020.
iii.	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.	A separate Environmental cell both at project and company head quarter is in place.
X	Miscellaneous	
i.	The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.	Complied Advertisement for expansion environment clearance obtained under EIA notification, 2006 in favour of Orissa Alloy Steel Pvt. Ltd. , in two local newspapers that are widely circulated in the region are: 1. Aajkal dated 11.08.2022 (Bengali) 2. The Echo of India dated 11.08.2022 (English) The copy of the same is already submitted vide EC compliance (JUNE-2023) vide letter

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		no.-OASPL/ENV_COMP/DECEMBER 2022 dated 21.11.2022.
ii.	The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayat and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.	<p>Complied</p> <p>Copies of EC dated 10.08.2022 submitted to DM, Paschim Medinipur & Barkola Gram Panchayat vide letter dated 10.08.2022. EC copy also uploaded on the website of the company http://orissametaliks.com/qehs.html.</p> <p>The copy of intimation is already submitted vide EC compliance (Dec-2022) vide letter no.-OASPL/ENV_COMP/DECEMBER 2022 dated 21.11.2022.</p>
iii.	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.	<p>Complied</p> <p>The environmental clearance and status of compliance of the stipulated environment clearance conditions, including results of monitored data have been uploaded on the website of the company - http://orissametaliks.com/qehs.html</p>
iv.	The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.	<p>Being Complied</p> <p>The criteria pollutants level namely; PM10, PM2.5, SO₂, NO_x (ambient levels as well as stack emissions) is monitored by third party monitoring agency which is NABL accredited laboratory. Emission levels of pollutants of different units is displayed on board as per CPCB format outside the main gate of the plant for disclosure to the public and also uploaded on the website of the company - http://orissametaliks.com/qehs.html.</p> <p>Electronic display board is installed at plant main gate and online stack emission data and CAAQMS data is also being displayed.</p>
v.	The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.	<p>Being complied</p> <p>This report is being submitted in compliance to this point.</p> <p>The last compliance report for the period October 2022 to March 2023 has been submitted to ministry vide letter no. OASPL/ENV_COMP/DECEMBER 2022 dated 21.11.2022 and also uploaded on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.</p>
vi.	The project proponent shall submit the environmental statement for each	Being complied

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	financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.	The environmental statement for financial year 2022-23 in Form-V is submitted to the West Bengal Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986 vide letter no-OASPL/ENV_Statement/23-24 dated 21.09.2022 and same is uploaded on the website of the company.
vii.	The project proponent 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, commencing the land development work and start of production operation by the project.	Being Complied The company is a private company and no finance is needed from outside. Land development work has been started after getting NOC from WBPCB and production operation started after obtaining valid CTO.
viii.	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.	Being Complied We are in the process of complying all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing. In financial year 2023-24 till September 2023 Rs. 1,20,92,243 is spent under CSR/CER on various activities in nearby villages to address the issues raised during public hearing and socio-economic issues in the study area.
ix.	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).	Being Complied In compliance to this point, the management obtained subject Expansion EC projects (1.2 Million TPA to 2.0 Million TPA Finished steel With 270 MW Captive Power Plant) by ministry vide EC Identification no- EC22A008WB114687 issued vide File No. J-11011/169/2017-IA-(II) dated 10.08.2022. Copy of the EC is already submitted vide EC compliance (Dec-2022) vide letter no.-OASPL/ENV_COMP/DECEMBER 2022 dated 21.11.2022.
x.	The PP shall put all the environment related expenditure, expenditure related to Action Plan on the PH issues, and other commitments made in the EIA/EMP Report etc. in the company web site for the information to public/public domain. The PP shall also put the information on the left over funds allocated to EMP and PH as committed in the earlier ECs and shall be carried out and spent in next	The Action Plan on the PH issues, and other commitments made in the EIA/EMP Report is furnished in Half yearly EC compliance report and is uploaded on the website of the company http://orissametaliks.com/qehs.html .

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	three years, in the company web site for the information to public/public domain.	
xi.	Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.	Noted
xii.	The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data/ information/ monitoring reports.	Agreed
8	The Ministry reserves the right to stipulate additional conditions, if found necessary at subsequent stages and the project proponent shall implement all the said conditions in a time bound manner. The Ministry may revoke or suspend the environmental clearance, if implementation of any of the above conditions is not found satisfactory.	Noted & Agreed
9	Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of the Environment (Protection) Act, 1986.	Noted
10	Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.	Noted
11	The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any	Noted

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	other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.	
F. No. IA3-22/8/2021-IA.III [E 150512] dated 18.07.2022		
I)	Sensitization of project proponents on implementation of ban on Single Use Plastic (SUP).	In order to create awareness among the employees about the harm/ impact of Single Use Plastic on environment , banner and flex are displayed at suitable place like work place, canteen, parking area etc.

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ANNEXURE-I**FORMAT FOR PROVIDING PARTICULARS ON GREEN BELT/PLANTATION UNDER E (P) ACT 1986**

1 a)	Name of the Project :	M/s Orissa Alloy Steel Private Limited- Expansion of Integrated Steel Plant (1.2 to 2.0 Million TPA Finished Steel) with 270 MW Captive Power Plant					
1 b)	Environment Clearance Nos. :	EC22A008WB114687 issued vide letter no. J-11011/169/2017-IA. II (I) dated 10.08.2022.					
2	Location, Block/ Sub. Divn. / Dist/ State:	Mouja- Nandarchak (J.L NO.-124),Bargai(J.L NO. 197), & Kanjarichak (J.L No. 125) at Village - Gokulpur, P.O. – Shyamraipur, P.S. – Kharagpur(L), District - Paschim Medinipur, West Bengal					
3	Address for communication :	1, Grastin Place, Orbit House, 3 rd Floor, Room No - 3B Kolkata – 700 001(WB)					
4	Existing vegetation in the area/ region		Vacant Land				
	a	Species (trees/shrubs/grasses/climbers)					
	b	Major prevalent species of each type					
5	Land coverage by the project						
	a	Total area under the project	145.69 hectares				
	b	Area covered for basic infrastructure (roads/building/factory etc.)	Project is still in construction phase				
6	Details about natural vegetation		100 % Vacant Land				
	a	Name and number of tree/ species felled	Not Applicable				
	b	Name and number of plant species still available in the area	Not Applicable				
	c	By protecting the area will indigenous stock come up	Not Applicable				
	d	Extent of greenbelt developed	47.72 hectares (32.8%)				
7	Plantations required to be carried out as per						
	a	Conditions of Environmental Clearance in ha./ Nos.	48.07 hectares (33.0%)				
	b	Conditions for Forest act (c) clearance in ha./ Nos.	Not Applicable				
	c	Voluntarily in no. for green belt development in nearby area in Financial year 2023-24	5,000 Nos.				
8	Details of plantations						
	a	Survival of plantation	2019-20	2020-21	2021-22	2022-23	2023-24 (Till Sept.)
		- Total Seedling/ Plantation (No.)	30,000	40,000	40,000	18,410	8,500
		- Survival Trees (No) as on date from date of EC	25,200	33,600	36,000	16,753	7,735
		- Survival	84%	84%	90%	91%	91%
	b	Balance 962 nos. planted after Sept 2023					
		- Total Survival trees (Numbers)	1,19,288= 1,15,288 (inside plant) + 4000 (along NH & service road)				
- Location		Coal unloading, stacking and handling area, Guard Pond, Administrative & Canteen Area and Product Storage Yard, Car & Truck Parking area, Inside the plant boundary wall, slag/ coal crushing area, Near oil tank, Water reservoir, Near, Water reservoir, Tailing Pond, Plant internal road, Gap filling					
9	Agency carrying out plantation and maintenance		Our own horticulture department & third party				

10	Year wise Plantation Programme for expansion project <i>(With the expansion proposal the green belt will be increased from 43.91 hectare to 48.07 hectare)</i>	Sl. No.	Year	Tree/ Sapling (Nos.)	Area to be covered
		1	2023-24 (Oct. to March)	962 nos. + Gap Filling	---

Location: Guard Pond, Administrative & Canteen Area and Product Storage Yard, Car & Truck Parking area, Inside the plant boundary wall, slag/ coal crushing area, Water reservoir, , Gap filling.



ONLINE CONTINUOUS EMISSION MONITORING STATIONS (Period- 1st April 2023 to 30th September 2023)

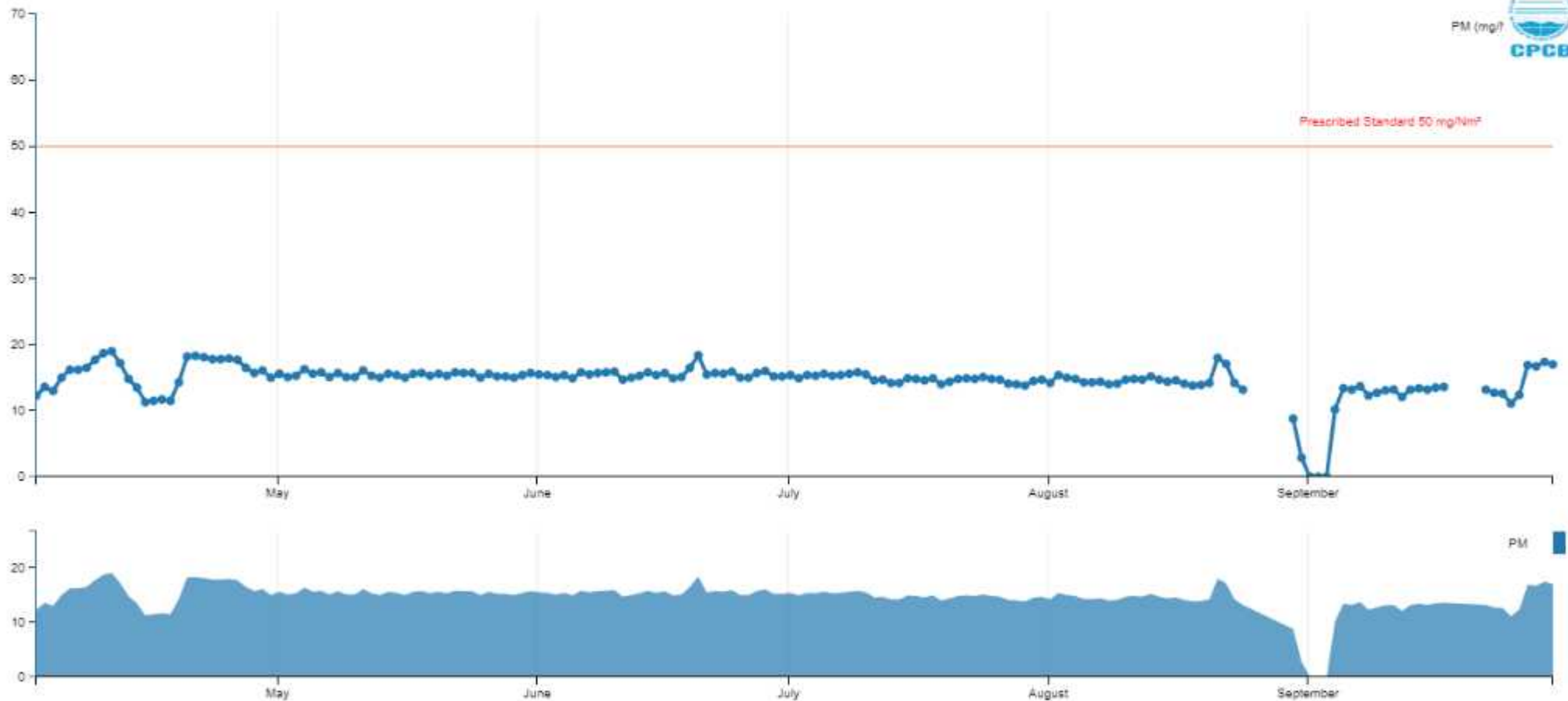
ORISSA ALLOY STEEL PVT LTD (Formerly: RASHMI ALLOY STEEL PVT LTD) STACK-1_Ferro Alloy Plant

P.O-Shyamraipur, P.S.-Kharagpur (Local), Dist.-Paschim Medinipur, West Bengal-721301 Khargapur West Bengal 721301

Start Date - 2023-04-01

End Date - 2023-09-30

Average - daily



ONLINE CONTINUOUS EMISSION MONITORING STATIONS (Period- 1st April 2023 to 30th September 2023)

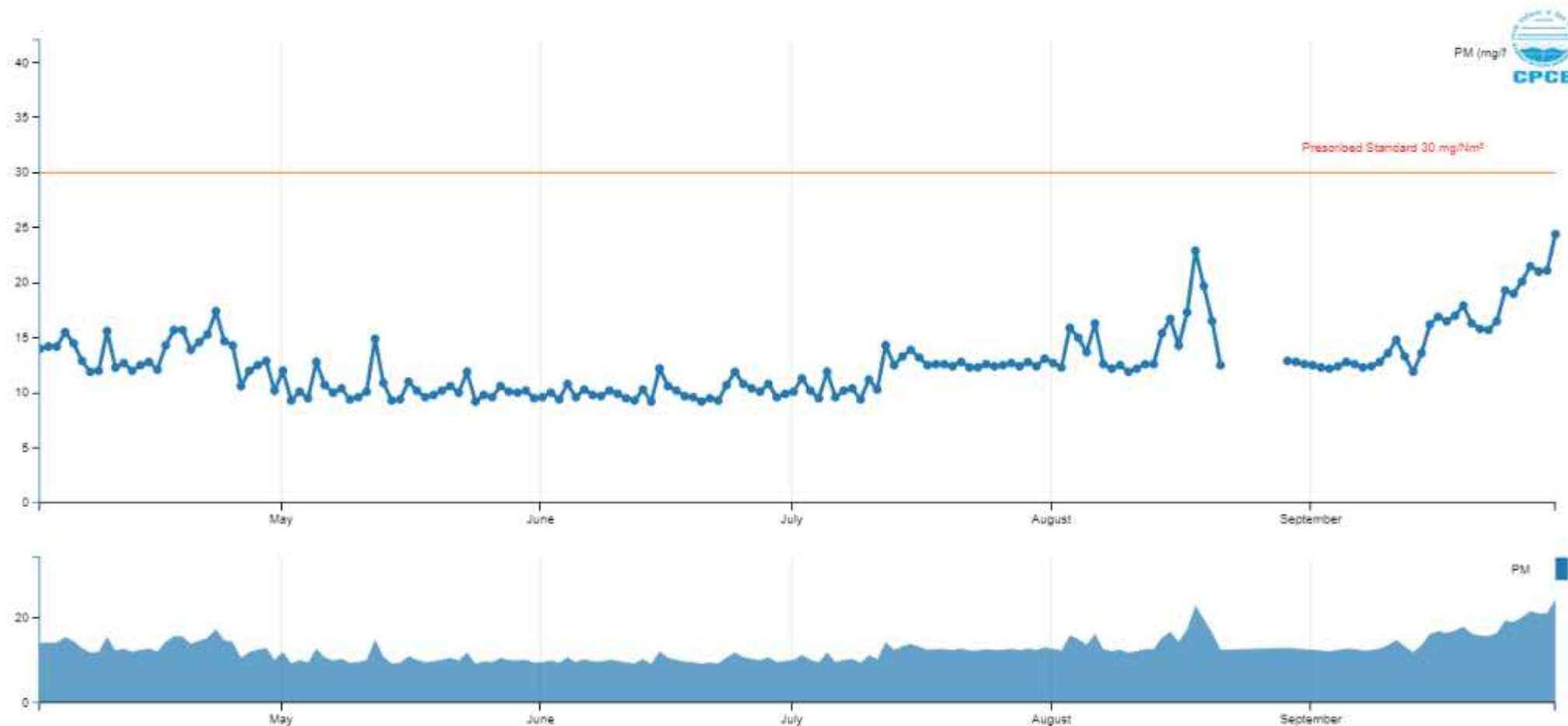
ORISSA ALLOY STEEL PVT LTD (Formerly: RASHMI ALLOY STEEL PVT LTD) Stack-2 - Attached to 02 x 600 DRI plant

P.O.-Shyamraipur, P.S.-Kharagpur (Local), Dist.-Paschim Medinipur, West Bengal-721301 Khargapur West Bengal 721301

Start Date - 2023-04-01

End Date - 2023-09-30

Average - daily



Prescribed Standard 30 mg/Nm³

ONLINE CONTINUOUS EMISSION MONITORING STATIONS (Period- 1st April 2023 to 30th September 2023)

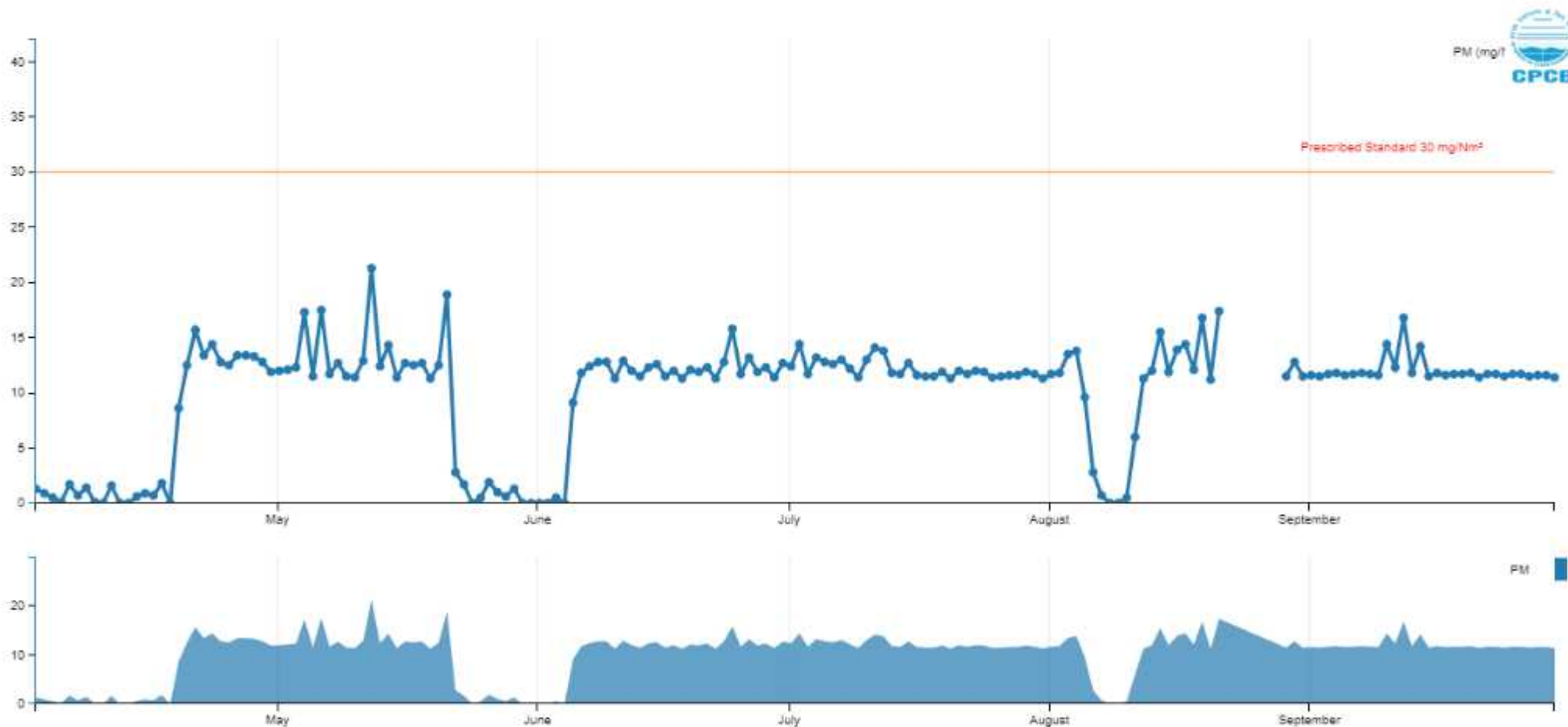
ORISSA ALLOY STEEL PVT LTD (Formerly: RASHMI ALLOY STEEL PVT LTD) Stack-3 - Attached to 2.4 MTPA Pellet Plant

P.O-Shyamraipur, P.S.-Kharagpur (Local), Dist.-Paschim Medinipur, West Bengal-721301 Kharagpur West Bengal 721301

Start Date - 2023-04-01

End Date - 2023-09-30

Average - daily



ONLINE CONTINUOUS EMISSION MONITORING STATIONS (Period- 1st April 2023 to 30th September 2023)

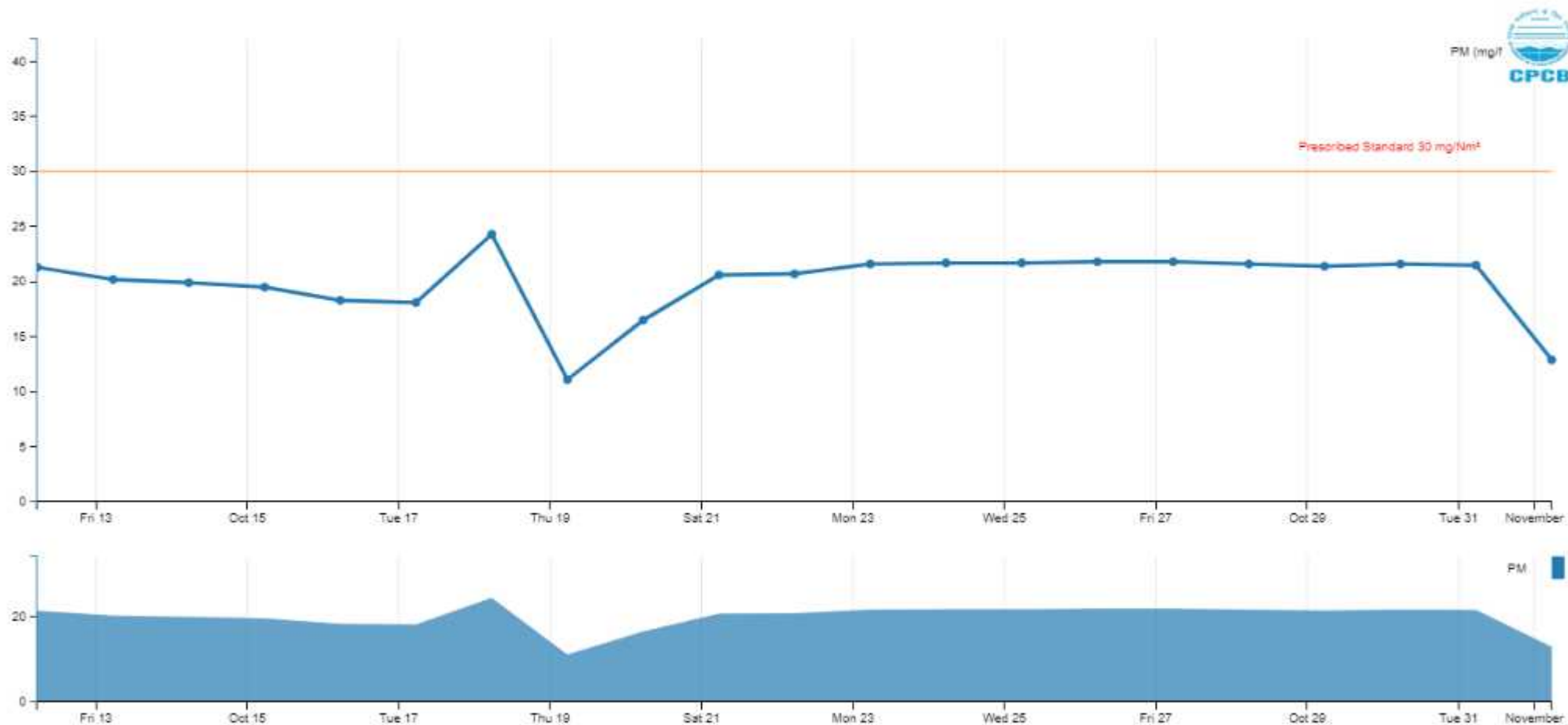
ORISSA ALLOY STEEL PVT LTD (Formerly: RASHMI ALLOY STEEL PVT LTD) Stack-4-Attached to DRI plant K-3 &4

P.O-Shyamraipur, P.S.-Kharagpur (Local), Dist.-Paschim Medinipur, West Bengal-721301 Khargapur West Bengal 721301

Start Date - 2023-09-01

End Date - 2023-11-01

Average - daily



ONLINE CONTINUOUS EMISSION MONITORING STATIONS (Period- 1st April 2023 to 30th September 2023)

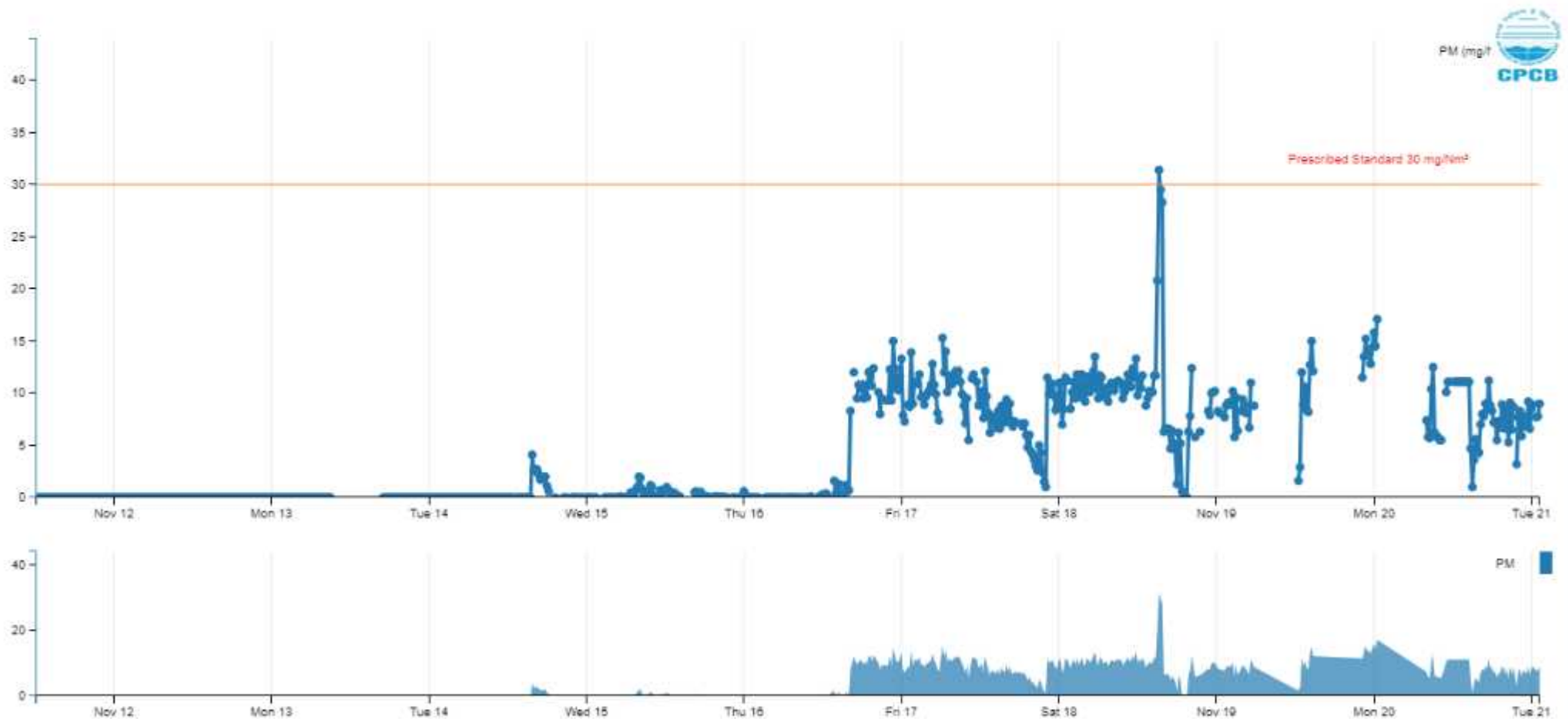
ORISSA ALLOY STEEL PVT LTD (Formerly: RASHMI ALLOY STEEL PVT LTD) Stack-7-Attached to Ferro Alloy Plant F-04

P.O-Shyamraipur, P.S.-Kharagpur (Local), Dist.-Paschim Medinipur, West Bengal-721301 Khargapur West Bengal 721301

Start Date - 2023-11-01

End Date - 2023-11-21

Average - 15 minutes



ONLINE CONTINUOUS EMISSION MONITORING STATIONS (Period- 1st April 2023 to 30th September 2023)

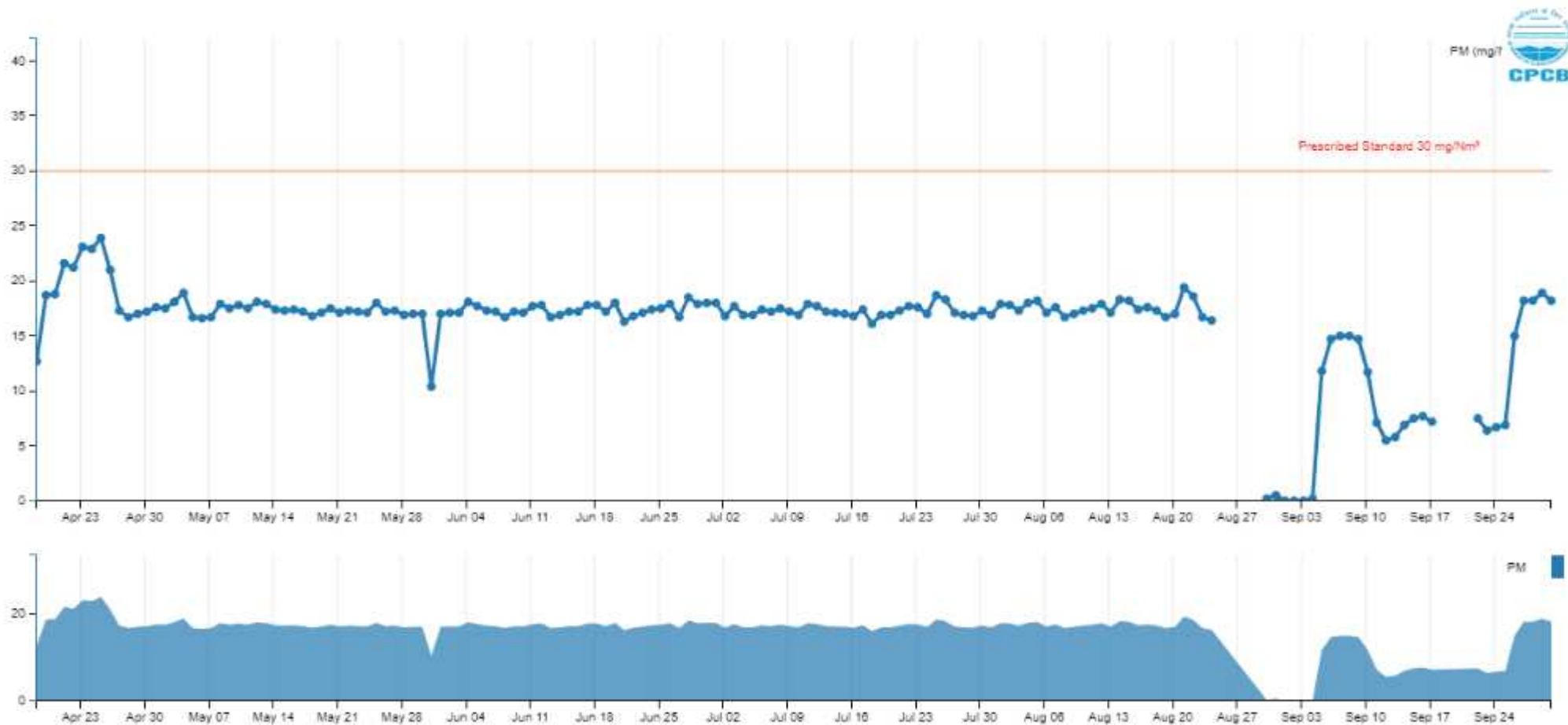
ORISSA ALLOY STEEL PVT LTD (Formerly: RASHMI ALLOY STEEL PVT LTD) Stack-5-Attached to Ferro Alloy Plant F-03

P.O-Shyamraipur, P.S.-Kharagpur (Local), Dist.-Paschim Medinipur, West Bengal-721301 Khargapur West Bengal 721301

Start Date - 2023-04-01

End Date - 2023-09-30

Average - daily



ONLINE CONTINUOUS EMISSION MONITORING STATIONS (Period- 1st April 2023 to 30th September 2023)

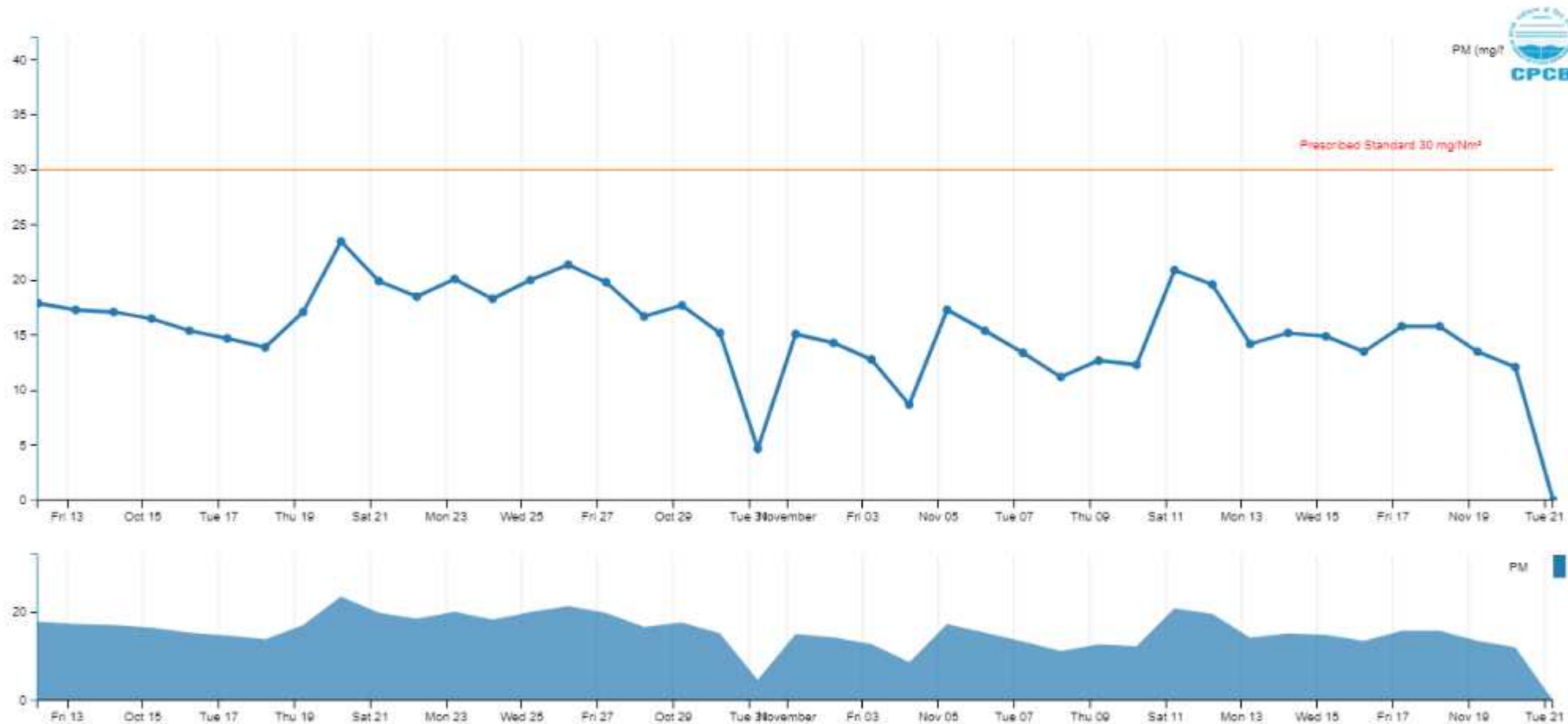
ORISSA ALLOY STEEL PVT LTD (Formerly: RASHMI ALLOY STEEL PVT LTD) Stack-5-Attached to WHRB Boiler-1 Coke Oven

P.O-Shyamraipur, P.S.-Kharagpur (Local), Dist.-Paschim Medinipur, West Bengal-721301 Khargapur West Bengal 721301

Start Date - 2023-05-01

End Date - 2023-11-21

Average - daily





WEST BENGAL POLLUTION CONTROL BOARD

Haldia Regional Laboratory
Raghunathchak, P.O.-Barghasipur, P.S.-Bhabanipur
Haldia, Purba Medinipur - 721 657
Tel: (03224) 2 91292

Analysis Report of Gaseous Emission

Sample ID : 190720230179

1. Name of Industry	: M/s. Orissa Alloy Steel Pvt. Ltd.
2. Address	: Vill-Gokulpur, Shyamraipur, Kharagpur, Paschim Medinipur
3. Category & Type	: Red, Alloy Steel Plant
4. Sampling Date	: 18/07/2023
5. Sampled collected by	: P. Mukherjee (JEE), HRO
6. Thimble Number	: 529
7. Name of WBPCB Recognized Laboratory	: M/s. Indicative Consultant India
8. Duration of Sampling	: 32 min
9. Height of Stack from ground (m)	: 35.0
10. Cross section of stack at sampling point (m ²)	: 3.1428
11. Stack connected to	: Submerged Electrical Arc Furnace No-1 & 2 (Attached with common stack)
12. Emission source (Furnace / Boiler)	: Melting of coke, Mn ore, Dolomite, Limestone
13. Average operational hours of boiler/furnace (per month)	: 720 hrs./month
14. APC System (if any)	: Bag Filter
15. Working load of source (MT/hr.)	: 9 MVA
16. Fuel used	: Electricity
17. Rated Fuel consumption (Kg or L/hr.)	: -
18. Working Fuel consumption (Kg or L/hr.)	: -
19. Nature of Furnace / Boiler	: SEAF
20. Flue Gas Temp (°C)	: 59.0
21. Flue gas velocity (m/sec)	: 8.13
22. Volume of Flue gas drawn in lit (m ³)	: 1.024
23. Corrected flue gas volume (Nm ³)	: 0.9506
24. Percentage CO ₂ and or O ₂	: CO ₂ -1.8% and O ₂ -17.2%
25. To be compensated at (% if required)	: -
26. Initial weight of Thimble (g)	: 1.4765
27. Final weight of Thimble (g)	: 1.4791
28. Weight of Particulate Matter (mg)	: 2.60
29. Particulate Matter (mg/Nm ³)	: 2.74
30. Barometric Pressure Head in mm of Hg	: 755 mm of Hg
31. Diameter of the nozzle (mm)	: 9.525 mm
32. Others	: -

Date of Reporting : 01/08/2023

Scientist

Senior Scientist

Copy to

1. Chief Engineer (O&E)
3. Chief Scientist

2. Chief Engineer (Planning)
4. Haldia Regional Office (2 copies)





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Haldia, Purba Medinipur - 721 657
Tel: (03224) 291292

Analysis Report of Gaseous Emission

Sample ID : 190720230180

1.	Name of Industry	: M/s. Orissa Alloy Steel Pvt. Ltd.
2.	Address	: Vill-Gokulpur, Shyamraipur, Kharagpur, Paschim Medinipur
3.	Category & Type	: Red, Alloy Steel Plant
4.	Sampling Date	: 18/07/2023
5.	Sampled collected by	: P. Mukherjee (JEE), HRO
6.	Thimble Number	: 530
7.	Name of WBPCB Recognized Laboratory	: M/s. Indicative Consultant India
8.	Duration of Sampling	: 28 min
9.	Height of Stack from ground (m)	: 35.0
10.	Cross section of stack at sampling point (m ²)	: 1.7678
11.	Stack connected to	: Submerged Electrical Arc Furnace-03
12.	Emission source (Furnace / Boiler)	: Melting of coke, Mn ore, Dolomite, Limestone
13.	Average operational hours of boiler/furnace (per month)	: 720 hrs./month
14.	APC System (if any)	: Bag Filter
15.	Working load of source (MT/hr.)	: 9 MVA
16.	Fuel used	: Electricity
17.	Rated Fuel consumption (Kg or L/hr.)	: -
18.	Working Fuel consumption (Kg or L/hr.)	: -
19.	Nature of Furnace / Boiler	: SEAF
20.	Flue Gas Temp (°C)	: 57.0
21.	Flue gas velocity (m/sec)	: 8.97
22.	Volume of Flue gas drawn in lit (m ³)	: 1.008
23.	Corrected flue gas volume (Nm ³)	: 0.9488
24.	Percentage CO ₂ and or O ₂	: CO ₂ -2.0% and O ₂ - 17.2%
25.	To be compensated at (% , if required)	: -
26.	Initial weight of Thimble (g)	: 1.3928
27.	Final weight of Thimble (g)	: 1.3939
28.	Weight of Particulate Matter (mg)	: 1.10
29.	Particulate Matter (mg/Nm ³)	: 1.16
30.	Barometric Pressure Head in mm of Hg	: 755 mm of Hg
31.	Diameter of the nozzle (mm)	: 9.525 mm
32.	Others	: -

Date of Reporting : 01/08/2023

[Signature]

Scientist

[Signature]

Senior Scientist

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2. Chief Engineer (Planning)
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Haldia, Purba Medinipur - 721 657
Tel: (03224) 291292

Analysis Report of Gaseous Emission

Sample ID : 190720230181

1.	Name of Industry	: M/s. Orissa Alloy Steel Pvt. Ltd.
2.	Address	: Vill-Gokulpur, Shyamraipur, Kharagpur, Paschim Medinipur
3.	Category & Type	: Red, Sponge Iron Plant
4.	Sampling Date	: 18/07/2023
5.	Sampled collected by	: P. Mukherjee (JEE), HRO
6.	Thimble Number	: 531
7.	Name of WBPCB Recognized Laboratory	: M/s. Indicative Consultant India
8.	Duration of Sampling	: 29 min
9.	Height of Stack from ground (m)	: 50.0
10.	Cross section of stack at sampling point (m ²)	: 7.0714
11.	Stack connected to	: Coke Oven Battery (No. 01 & 02) & (03 & 04) attached to common stack through individual WHRB (all coke oven Battery were in operation)
12.	Emission source (Furnace / Boiler)	: Carbonization of Coal
13.	Average operational hours of boiler/furnace (per month)	: 720 hrs./month
14.	APC System (if any)	: -
15.	Working load of source (MT/hr.)	: Rated -170 TPD(Each) and Running-170 TPD(Each)
16.	Fuel used	: Coal
17.	Rated Fuel consumption (Kg or L/hr.)	: -
18.	Working Fuel consumption (Kg or L/hr.)	: 170 TPD (Each Coke Oven Battery)
19.	Nature of Furnace / Boiler	: Non Recovery Coke Battery
20.	Flue Gas Temp (°C)	: 159.0
21.	Flue gas velocity (m/sec)	: 11.85
22.	Volume of Flue gas drawn in lit (m ³)	: 1.015
23.	Corrected flue gas volume (Nm ³)	: 0.9523
24.	Percentage CO ₂ and or O ₂	: CO ₂ -5.8% and O ₂ - 12.4%
25.	To be compensated at (% if required)	: -
26.	Initial weight of Thimble (g)	: 1.4070
27.	Final weight of Thimble (g)	: 1.4240
28.	Weight of Particulate Matter (mg)	: 17.00
29.	Particulate Matter (mg/Nm ³)	: 17.85
30.	Barometric Pressure Head in mm of Hg	: 755 mm of Hg
31.	Diameter of the nozzle (mm)	: 9.525 mm
32.	Others	: -

Date of Reporting : 01/08/2023

Sunshyama
Scientist

Singha
Senior Scientist

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3. Chief Scientist

2. Chief Engineer (Planning)
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Haldia, Purba Medinipur - 721 657
Tel: (03224) 291292

Analysis Report of Gaseous Emission

Sample ID : 190720230182

1. Name of Industry	: M/s. Orissa Alloy Steel Pvt. Ltd.
2. Address	: Vill-Gokulpur, Shyamraipur, Kharagpur, Paschim Medinipur
3. Category & Type	: Red & Steel Plant
4. Sampling Date	: 18/07/2023
5. Sampled collected by	: P. Mukherjee (JEE), HRO
6. Thimble Number	: 547
7. Name of WBPCB Recognized Laboratory	: M/s. Qualissure Laboratory Service
8. Duration of Sampling	: 25 min
9. Height of Stack from ground (m)	: 75.0
10. Cross section of stack at sampling point (m ²)	: 15.90
11. Stack connected to	: Rotary Kiln (No. 1 & 2) 600 TPDx2, attached with common stack
12. Emission source (Furnace / Boiler)	: Oxidation of Coal & Reduction of Iron Ore
13. Average operational hours of boiler/furnace (per month)	: 720 hrs./month
14. APC System (if any)	: Individual ESP
15. Working load of source (MT/hr.)	: Rated -600 TPDx2 (Both were operation at a Sampling time)
16. Fuel used	: Coal
17. Rated Fuel consumption (Kg or L/hr.)	: -
18. Working Fuel consumption (Kg or L/hr.)	: -
19. Nature of Furnace / Boiler	: Rotary DRI Kiln
20. Flue Gas Temp (°C)	: 152.0
21. Flue gas velocity (m/sec)	: 12.52
22. Volume of Flue gas drawn in lit (m ³)	: 1.000
23. Corrected flue gas volume (Nm ³)	: 0.8642
24. Percentage CO ₂ and or O ₂	: CO ₂ -9.8% and O ₂ - 9.0%
25. To be compensated at (% if required)	: At 12% CO ₂
26. Initial weight of Thimble (g)	: 1.4950
27. Final weight of Thimble (g)	: 1.5148
28. Weight of Particulate Matter (mg)	: 19.80
29. Particulate Matter (mg/Nm ³)	: 28.05
30. Barometric Pressure Head in mm of Hg	: 750 mm of Hg
31. Diameter of the nozzle (mm)	: 9.53 mm
32. Others	: -

Date of Reporting : 01/08/2023

Scientist

Senior Scientist

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Raghu Nathchak, P.O.-Barghasipur, P.S.-Bhabanipur
Haldia, Purba Medinipur - 721 657
Tel: (03224) 291292

Analysis Report of Gaseous Emission

Sample ID : 190720230183

1. Name of Industry	: M/s. Orissa Alloy Steel Pvt. Ltd.
2. Address	: Vill-Gokulpur, Shyamraipur, Kharagpur, Paschim Medinipur
3. Category & Type	: Red & Steel Plant
4. Sampling Date	: 18/07/2023
5. Sampled collected by	: P. Mukherjee (JEE), HRO
6. Thimble Number	: 548
7. Name of WBPCB Recognized Laboratory	: M/s. Qualissure Laboratory Service
8. Duration of Sampling	: 27 min
9. Height of Stack from ground (m)	: 90.0
10. Cross section of stack at sampling point (m ²)	: 28.26
11. Stack connected to	: DRI Kiln No- 3 & 4(600 TPDx2) attached with common
12. Emission source (Furnace / Boiler)	: Combustion of Coal & Reduction of Iron Ore
13. Average operational hours of boiler/furnace (per month)	: 720 hrs./month
14. APC System (if any)	: ESP
15. Working load of source (MT/hr.)	: 600 TPDx2 (Both were operation at sampling time)
16. Fuel used	: Coal
17. Rated Fuel consumption (Kg or L/hr.)	: -
18. Working Fuel consumption (Kg or L/hr.)	: Coal-22 TPH (each)
19. Nature of Furnace / Boiler	: DRI Kiln
20. Flue Gas Temp (°C)	: 161.0
21. Flue gas velocity (m/sec)	: 11.57
22. Volume of Flue gas drawn in lit (m ³)	: 1.026
23. Corrected flue gas volume (Nm ³)	: 0.8866
24. Percentage CO ₂ and or O ₂	: CO ₂ -10.4% and O ₂ - 8.6%
25. To be compensated at (% if required)	: At 12% CO ₂
26. Initial weight of Thimble (g)	: 1.5002
27. Final weight of Thimble (g)	: 1.5198
28. Weight of Particulate Matter (mg)	: 19.60
29. Particulate Matter (mg/Nm ³)	: 25.51
30. Barometric Pressure Head in mm of Hg	: 750 mm of Hg
31. Diameter of the nozzle (mm)	: 9.53 mm
32. Others	: -

Date of Reporting : 01/08/2023

Scientist

Senior Scientist

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3. Chief Scientist

2. Chief Engineer (Planning)
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WEST BENGAL POLLUTION CONTROL BOARD

Haldia Regional Laboratory
Raghunathchak, P.O.-Barghasipur, P.S.-Bhabanipur
Haldia, Purba Medinipur - 721657
Tel: (03224) 291292

Analysis Report of Gaseous Emission

Sample ID : 190720230184

1. Name of Industry	: M/s. Orissa Alloy Steel Pvt. Ltd.
2. Address	: Vill-Gokulpur, Shyamraipur, Kharagpur, Paschim Medinipur
3. Category & Type	: Red & Steel Plant
4. Sampling Date	: 18/07/2023
5. Sampled collected by	: P. Mukherjee (JEE), HRO
6. Thimble Number	: 549
7. Name of WBPCB Recognized Laboratory	: M/s. Qualissure Laboratory Service
8. Duration of Sampling	: 23 min
9. Height of Stack from ground (m)	: 110.0
10. Cross section of stack at sampling point (m ²)	: 47.14
11. Stack connected to	: Rotary Kiln (Pellet Plant)
12. Emission source (Furnace / Boiler)	: Combustion of Coal
13. Average operational hours of boiler/furnace (per month)	: 720 hrs./month
14. APC System (if any)	: ESP
15. Working load of source (MT/hr.)	: 2.4 MT
16. Fuel used	: Coal
17. Rated Fuel consumption (Kg or L/hr.)	: -
18. Working Fuel consumption (Kg or L/hr.)	: 7.0 TPH
19. Nature of Furnace / Boiler	: Pellet Plant
20. Flue Gas Temp (°C)	: 119.0
21. Flue gas velocity (m/sec)	: 12.38
22. Volume of Flue gas drawn in lit (m ³)	: 1.012
23. Corrected flue gas volume (Nm ³)	: 0.9023
24. Percentage CO ₂ and or O ₂	: CO ₂ -10.6% and O ₂ - 8.4%
25. To be compensated at (% if required)	: -
26. Initial weight of Thimble (g)	: 1.4270
27. Final weight of Thimble (g)	: 1.4486
28. Weight of Particulate Matter (mg)	: 21.60
29. Particulate Matter (mg/Nm ³)	: 23.94
30. Barometric Pressure Head in mm of Hg	: 749 mm of Hg
31. Diameter of the nozzle (mm)	: 9.53 mm
32. Others	: -

Date of Reporting : 01/08/2023

Scientist

Senior Scientist

Copy to : 1. Chief Engineer (O&E) 2. Chief Engineer (Planning)
3. Chief Scientist 4. Haldia Regional Office (2 copies)

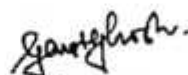


Analysis Report of Gaseous Emission

Sample ID : 130420230006

1.	Name of Industry	: M/S. Orissa Alloy Steel Pvt. Ltd
2.	Address	: Vill-Gokulpur, PO- Shyamraipur, PS- Kharagpur(Local), Dist-Paschim Medinipur
3.	Category & Type	: Red, Steel Plant(Sponge Iron Plant)
4.	Sampling Date	: 11.04.2023
5.	Sampled collected by	: N.C Barai,(AEE),P. Mukherjee(JEE) & S.Mukherjee(JEE), HRO
6.	Thimble Number	: 351
7.	Name of WBPCB Recognized Laboratory	: M/s. Envirocheck
8.	Duration of Sampling	: 30 minutes
9.	Height of Stack from ground (m)	: 75.0
10.	Cross section of stack at sampling point (m ²)	: 15.90
11.	Stack connected to	: Rotary Kiln(No.1 & 2)(600 TPD x 2) attached to common stack through WHRB(only Rotary Kiln-1 was in operation)
12.	Emission source (Furnace / Boiler)	: Oxidation of Coal & reduction of Iron ore
13.	Average operational hours of boiler/furnace (per month)	: 720 hrs
14.	APC System (if any)	: Individual ESP
15.	Working load of source (MT/hr.)	: 600 TPD(Only Rotary Kiln No-1)
16.	Fuel used	: Coal
17.	Rated Fuel consumption (Kg or L /hr.)	: -
18.	Working Fuel consumption (Kg or L /hr.)	: 21.8 TPH(Only Rotary kiln No-1)
19.	Nature of Furnace / Boiler	: Rotary DRI Kiln
20.	Flue Gas Temp (°C)	: 131.0
21.	Flue gas velocity (m/sec)	: 10.19
22.	Volume of Flue gas drawn in lit (m ³)	: 1.020
23.	Corrected flue gas volume (Nm ³)	: 0.9458
24.	Percentage CO ₂ and or O ₂	: CO ₂ -10.6% & O ₂ -8.4%
25.	To be compensated at (% , if required)	: At 12% CO ₂
26.	Initial weight of Thimble (g)	: 1.4876
27.	Final weight of Thimble (g)	: 1.5000
28.	Weight of Particulate Matter (mg)	: 12.40
29.	Particulate Matter (mg/Nm ³)	: 14.84
30.	Barometric Pressure Head in mm of Hg	: 756 mm of Hg
31.	Diameter of the nozzle (mm)	: 9.52 mm
32.	Others	:

Date of Reporting : 18/04/2023


Gargi Ghosh
Scientist


Debanjan Gupta
Senior Scientist

Copy to : 1. Chief Engineer (O&E) 2. Chief Engineer (Planning)
3. Chief Scientist 4. Haldia Regional Office (2 copies)



Analysis Report of Gaseous Emission

Sample ID : 130420230007

1. Name of Industry	: M/S. Orissa Alloy Steel Pvt. Ltd
2. Address	: Vill-Gokulpur, PO- Shyamraipur, PS- Kharagpur(Local), Dist-Paschim Medinipur
3. Category & Type	: Red, (Sponge Iron Plant)
4. Sampling Date	: 11.04.2023
5. Sampled collected by	: N.C.Barai,(AEE),P. Mukherjee(JEE) & S.Mukherjee(JEE), HRO
6. Thimble Number	: 353
7. Name of WBPCB Recognized Laboratory	: M/s. Envirocheck
8. Duration of Sampling	: 32 minutes
9. Height of Stack from ground (m)	: 30.0
10. Cross section of stack at sampling point (m ²)	: 1.76625
11. Stack connected to	: Coal Circuit
12. Emission source (Furnace / Boiler)	: Process Activity(Coal Screening & Crushing)
13. Average operational hours of boiler/furnace (per month)	: 720 hrs
14. APC System (if any)	: Bag Filter
15. Working load of source (MT/hr.)	: -
16. Fuel used	: NIL
17. Rated Fuel consumption (Kg or L /hr.)	: -
18. Working Fuel consumption (Kg or L /hr.)	: -
19. Nature of Furnace / Boiler	: Coal Circuit Of DRI Kiln
20. Flue Gas Temp (°C)	: 38.6
21. Flue gas velocity (m/sec)	: 15.33
22. Volume of Flue gas drawn in lit (m ³)	: 1.024
23. Corrected flue gas volume (Nm ³)	: 0.9626
24. Percentage CO ₂ and or O ₂	: -
25. To be compensated at (% , if required)	: -
26. Initial weight of Thimble (g)	: 1.5000
27. Final weight of Thimble (g)	: 1.5030
28. Weight of Particulate Matter (mg)	: 3.00
29. Particulate Matter (mg/Nm ³)	: 3.12
30. Barometric Pressure Head in mm of Hg	: 756 mm of Hg
31. Diameter of the nozzle (mm)	: 6.53 mm
32. Others	:

Date of Reporting : 18/04/2023


Gargi Ghosh
Scientist


Debanjan Gupta
Senior Scientist

Copy to : 1. Chief Engineer (O&E)
2. Chief Engineer (Planning)
3. Chief Scientist
4. Haldia Regional Office (2 copies)



Analysis Report of Gaseous Emission

Sample ID : 130420230008

1. Name of Industry	: M/S. Orissa Alloy Steel Pvt. Ltd
2. Address	: Vill-Gokulpur, PO- Shyamraipur, PS- Kharagpur(Local), Dist-Paschim Medinipur
3. Category & Type	: Red, (Sponge Iron Plant)
4. Sampling Date	: 11.04.2023
5. Sampled collected by	: N.C Barai,(AEE),P. Mukherjee(JEE) & S.Mukherjee(JEE), HRO
6. Thimble Number	: 356
7. Name of WBPCB Recognized Laboratory	: M/s. Envirocheck
8. Duration of Sampling	: 34 minutes
9. Height of Stack from ground (m)	: 30.0
10. Cross section of stack at sampling point (m ²)	: 1.76625
11. Stack connected to	: Cooler Discharge of DRI -1 & 2, attached to common stack>(*only Cooler Discharge-1 of DRI-1 was running)
12. Emission source (Furnace / Boiler)	: Process Activity(Cooling of Sponge Iron)
13. Average operational hours of boiler/furnace (per month)	: 720 hrs
14. APC System (if any)	: Bag Filter
15. Working load of source (MT/hr.)	: 600 TPD x 1
16. Fuel used	: NIL
17. Rated Fuel consumption (Kg or L /hr.)	: -
18. Working Fuel consumption (Kg or L /hr.)	: -
19. Nature of Furnace / Boiler	: Cooler Discharge of DRI Kiln
20. Flue Gas Temp (°C)	: 48.3
21. Flue gas velocity (m/sec)	: 15.0
22. Volume of Flue gas drawn in lit (m ³)	: 1.020
23. Corrected flue gas volume (Nm ³)	: 0.9557
24. Percentage CO ₂ and or O ₂	: -
25. To be compensated at (% , if required)	: -
26. Initial weight of Thimble (g)	: 1.4969
27. Final weight of Thimble (g)	: 1.5011
28. Weight of Particulate Matter (mg)	: 4.20
29. Particulate Matter (mg/Nm ³)	: 4.39
30. Barometric Pressure Head in mm of Hg	: 756 mm of Hg
31. Diameter of the nozzle (mm)	: 6.35 mm
32. Others	:

Date of Reporting : 18/04/2023


Gargi Ghosh
Scientist


Debanjan Gupta
Senior Scientist

Copy to : 1. Chief Engineer (O&E)
3. Chief Scientist

2. Chief Engineer (Planning)
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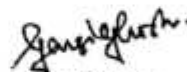


Analysis Report of Gaseous Emission

Sample ID : 130420230009

1. Name of Industry	: M/S. Orissa Alloy Steel Pvt. Ltd
2. Address	: Vill-Gokulpur, PO- Shyamraipur, PS- Kharagpur(Local), Dist-Paschim Medinipur
3. Category & Type	: Red
4. Sampling Date	: 11.04.2023
5. Sampled collected by	: N.C Barai,(AEE),P. Mukherjee(JEE) & S.Mukherjee(JEE), HRO
6. Thimble Number	: 367
7. Name of WBPCB Recognized Laboratory	: M/s. Enviro Cell Laboratory
8. Duration of Sampling	: 24 minutes
9. Height of Stack from ground (m)	: 90.0
10. Cross section of stack at sampling point (m ²)	: 28.26
11. Stack connected to	: DRI Kiln No. -3 & 4(600 TPD x 2), attached to common stack
12. Emission source (Furnace / Boiler)	: Combustion Of Coal & Reduction of Iron Ore
13. Average operational hours of boiler/furnace (per month)	: 720 hrs/hr
14. APC System (if any).	: ESP
15. Working load of source (MT/hr.)	: 600 TPD(Each)
16. Fuel used	: Coal
17. Rated Fuel consumption (Kg or L /hr.)	: 22.TPH(each)
18. Working Fuel consumption (Kg or L/hr.)	: 22 TPH(each)
19. Nature of Furnace / Boiler	: DRI Kiln
20. Flue Gas Temp (°C)	: 145.0
21. Flue gas velocity (m/sec)	: 6.54
22. Volume of Flue gas drawn in lit (m ³)	: 1.008
23. Corrected flue gas volume (Nm ³)	: 0.9514
24. Percentage CO ₂ and or O ₂	: CO ₂ -11.4% & O ₂ -8.0%
25. To be compensated at (% if required)	: -
26. Initial weight of Thimble (g)	: 1.4699
27. Final weight of Thimble (g)	: 1.4975
28. Weight of Particulate Matter (mg)	: 27.60
29. Particulate Matter (mg/Nm ³)	: 29.01
30. Barometric Pressure Head in mm of Hg	: 756 mm of Hg
31. Diameter of the nozzle (mm)	: 12.7 mm
32. Others	:

Date of Reporting : 18/04/2023


Gargi Ghosh
Scientist


Debanjan Gupta
Senior Scientist

Copy to : 1. Chief Engineer (O&E)
3. Chief Scientist

2. Chief Engineer (Planning)
4. Haldia Regional Office (2 copies)



Analysis Report of Gaseous Emission

Sample ID : 130420230010

1. Name of Industry	: M/S. Orissa Alloy Steel Pvt. Ltd
2. Address	: Vill-Gokulpur, PO- Shyamraipur, PS- Kharagpur(Local), Dist-Paschim Medinipur
3. Category & Type	: Red/Alloy Steel Plant
4. Sampling Date	: 11.04.2023
5. Sampled collected by	: N.C Barai,(AEE),P. Mukherjee(JEE) & S.Mukherjee(JEE), HRO
6. Thimble Number	: 368
7. Name of WBPCB Recognized Laboratory	: M/s. Enviro Cell Laboratory
8. Duration of Sampling	: 30 minutes
9. Height of Stack from ground (m)	: 30.0
10. Cross section of stack at sampling point (m ²)	: 2.0
11. Stack connected to	: Product House
12. Emission source (Furnace / Boiler)	: Process Activity
13. Average operational hours of boiler/furnace (per month)	: 720 hrs/hr
14. APC System (if any)	: Bag Filter
15. Working load of source (MT/hr.)	: -
16. Fuel used	: -
17. Rated Fuel consumption (Kg or L /hr.)	: -
18. Working Fuel consumption (Kg or L /hr.)	: -
19. Nature of Furnace / Boiler	: Product House
20. Flue Gas Temp (°C)	: 42.0
21. Flue gas velocity (m/sec)	: 7.14
22. Volume of Flue gas drawn in lit (m ³)	: 1.02
23. Corrected flue gas volume (Nm ³)	: 0.9689
24. Percentage CO ₂ and or O ₂	: CO ₂ <0.2% & O ₂ -20.6%
25. To be compensated at (% , if required)	: -
26. Initial weight of Thimble (g)	: 1.4976
27. Final weight of Thimble (g)	: 1.5114
28. Weight of Particulate Matter (mg)	: 13.80
29. Particulate Matter (mg/Nm ³)	: 14.24
30. Barometric Pressure Head in mm of Hg	: 756 mm of Hg
31. Diameter of the nozzle (mm)	: 9.53 mm
32. Others	:

Date of Reporting : 18/04/2023

Gargi Ghosh
Scientist

Debanjan Gupta
Senior Scientist

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3. Chief Scientist 4. Haldia Regional Office (2 copies)



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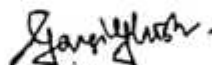
Haldia Regional Laboratory
Raghunathchak, P.O. Barghasipur, P.S.-Bhabanipur
Haldia, Purba Medinipur - 721 657
Tel: (03224) 291292

Analysis Report of Gaseous Emission

Sample ID : 130420230011

1. Name of Industry	: M/S. Orissa Alloy Steel Pvt. Ltd
2. Address	: Vill-Gokulpur, PO- Shyamraipur, PS- Kharagpur(Local), Dist-Paschim Medinipur
3. Category & Type	: Red/Alloy Steel Plant
4. Sampling Date	: 11.04.2023
5. Sampled collected by	: N.C Barai (AEE), P. Mukherjee (JEE) & S.Mukherjee (JEE), HRO
6. Thimble Number	: 369
7. Name of WBPCB Recognized Laboratory	: M/s. Enviro Cell Laboratory
8. Duration of Sampling	: 23 minutes
9. Height of Stack from ground (m)	: 35.0
10. Cross section of stack at sampling point (m ²)	: 1.7663
11. Stack connected to	: SEAF No.-1 & 2(Attached with a common stack) both were running during sampling time
12. Emission source (Furnace / Boiler)	: Melting of coke, Mn ore, Dolomite & Lime Stone
13. Average operational hours of boiler/furnace (per month)	: 720 hrs/hr
14. APC System (If any)	: Bag Filter
15. Working load of source (MT/hr.)	: 9 MVA(Each SEAF)
16. Fuel used	: Electricity
17. Rated Fuel consumption (Kg or L/hr.)	: -
18. Working Fuel consumption (Kg or L/hr.)	: -
19. Nature of Furnace / Boiler	: -
20. Flue Gas Temp (°C)	: 70.0
21. Flue gas velocity (m/sec)	: 9.80
22. Volume of Flue gas drawn in lit (m ³)	: 1.012
23. Corrected flue gas volume (Nm ³)	: 0.9582
24. Percentage CO ₂ and or O ₂	: CO ₂ -1.4% & O ₂ -17.6%
25. To be compensated at (% , If required)	: -
26. Initial weight of Thimble (g)	: 1.6087
27. Final weight of Thimble (g)	: 1.6092
28. Weight of Particulate Matter (mg)	: 0.50
29. Particulate Matter (mg/Nm ³)	: 0.52
30. Barometric Pressure Head in mm of Hg	: 756 mm of Hg
31. Diameter of the nozzle (mm)	: 9.53 mm
32. Others	:

Date of Reporting : 19/04/2023


Gargi Ghosh
Scientist


Debanjan Gupta
Senior Scientist

Copy to : 1. Chief Engineer (O&E) 2. Chief Engineer (Planning)
3. Chief Scientist 4. Haldia Regional Office (2 copies)



WEST BENGAL POLLUTION CONTROL BOARD

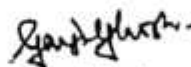
Haldia Regional Laboratory
Raghunathchak, P.O.-Barghasipur, P.S.-Bhabanipur
Haldia, Purba Medinipur - 721 657
Tel: (03224) 291292

Analysis Report of Gaseous Emission

Sample ID : 130420230012

1. Name of Industry	: M/S. Orissa Alloy Steel Pvt. Ltd
2. Address	: Vill-Gokulpur, PO- Shyamraipur, PS- Kharagpur(Local), Dist-Paschim Medinipur
3. Category & Type	: Red/Alloy Steel Plant
4. Sampling Date	: 11.04.2023
5. Sampled collected by	: N.C Baral (AEE), P. Mukherjee (JEE) & S. Mukherjee (JEE), HRO
6. Thimble Number	: 370
7. Name of WBPCB Recognized Laboratory	: M/s. Enviro Cell Laboratory
8. Duration of Sampling	: 25 minutes
9. Height of Stack from ground (m)	: 35.0
10. Cross section of stack at sampling point (m ²)	: 1.7663
11. Stack connected to	: SEAF No.-3
12. Emission source (Furnace / Boiler)	: Melting of coke, Mn ore, Dolomite & Lime Stone
13. Average operational hours of boiler/furnace (per month)	: 720 hrs/hr
14. APC System (if any)	: Bag Filter
15. Working load of source (MT/hr.)	: 9 MVA
16. Fuel used	: Electricity
17. Rated Fuel consumption (Kg or L/hr.)	: -
18. Working Fuel consumption (Kg or L/hr.)	: -
19. Nature of Furnace / Boiler	: -
20. Flue Gas Temp (°C)	: 56.0
21. Flue gas velocity (m/sec)	: 8.80
22. Volume of Flue gas drawn in lit (m ³)	: 1.0
23. Corrected flue gas volume (Nm ³)	: 0.9499
24. Percentage CO ₂ and or O ₂	: CO ₂ -1.2% & O ₂ -17.8%
25. To be compensated at (% if required)	: -
26. Initial weight of Thimble (g)	: 1.5213
27. Final weight of Thimble (g)	: 1.5227
28. Weight of Particulate Matter (mg)	: 1.40
29. Particulate Matter (mg/Nm ³)	: 1.47
30. Barometric Pressure Head in mm of Hg	: 756 mm of Hg
31. Diameter of the nozzle (mm)	: 9.53 mm
32. Others	:

Date of Reporting : 19/04/2023


Gargi Ghosh
Scientist


Debanjan Gupta
Senior Scientist

Copy to : 1. Chief Engineer (O&E) 2. Chief Engineer (Planning)
3. Chief Scientist 4. Haldia Regional Office (2 copies)



WEST BENGAL POLLUTION CONTROL BOARD

Haldia Regional Laboratory
Raghunathchak, P.O.-Barghasipur, P.S.-Bhabanipur
Haldia, Purba Medinipur - 721 657
Tel: (03224) 291292

Analysis Report of Gaseous Emission

Sample ID : 130420230013

1. Name of Industry	: M/S. Orissa Alloy Steel Pvt. Ltd
2. Address	: Vill-Gokulpur, PO- Shyamraipur, P5- Kharagpur (Local), Dist-Paschim Medinipur Pin-721301
3. Category & Type	: Red/Alloy Steel Plant (Coke Oven Div.)
4. Sampling Date	: 11.04.2023
5. Sampled collected by	: N.C Barai (AEE), P. Mukherjee (JEE) & S. Mukherjee (JEE), HRO
6. Thimble Number	: 375
7. Name of WBPCB Recognized Laboratory	: M/s. Envirocheck
8. Duration of Sampling	: 25 minutes
9. Height of Stack from ground (m)	: 50.0
10. Cross section of stack at sampling point (m ²)	: 7.065
11. Stack connected to	: Coke Oven Battery (No.1 & 2) & (No.-3 & 4) attached with common stack through WHRB*(*All coke oven battery were in operation)
12. Emission source (Furnace / Boiler)	: Carbonization of coal
13. Average operational hours of boiler/furnace (per month)	: 720 hrs/hr
14. APC System (if any)	: NIL
15. Working load of source (MT/hr.)	: Rated-170 TPD (each)x4 nos. Running-170TPD (each)x4 nos.
16. Fuel used	: Coal
17. Rated Fuel consumption (Kg or L/hr.)	: -
18. Working Fuel consumption (Kg or L/hr.)	: 170 TPD (Each Coke Oven Battery)
19. Nature of Furnace / Boiler	: Coke Oven Battery(Non-Recovery Type)
20. Flue Gas Temp (°C)	: 174.0
21. Flue gas velocity (m/sec)	: 12.44
22. Volume of Flue gas drawn in lit (m ³)	: 1.0
23. Corrected flue gas volume (Nm ³)	: 0.9370
24. Percentage CO ₂ and or O ₂	: CO ₂ -5.8% & O ₂ -12.2%
25. To be compensated at (% , if required)	: --
26. Initial weight of Thimble (g)	: 1.4991
27. Final weight of Thimble (g)	: 1.5249
28. Weight of Particulate Matter (mg)	: 25.80
29. Particulate Matter (mg/Nm ³)	: 27.53
30. Barometric Pressure Head in mm of Hg	: 756 mm of Hg
31. Diameter of the nozzle (mm)	: 9.52 mm
32. Others	: -

Date of Reporting : 19/04/2023

Gargi Ghosh
Scientist

Debanjan Gupta
Senior Scientist

Copy to : 1. Chief Engineer (O&E)
3. Chief Scientist

2. Chief Engineer (Planning)
4. Haldia Regional Office (2 copies)

1. Serial No. in the Register of adult worker: 60652
 2. Name of worker: PRABHAT KUMAR MISHRA
 3. Sex: MALE

[Prescribed under Rules 63 & 94 of the West Bengal Factories Rules 1958]

Department/Work	Name of Machine/Process	Duration/Period/Shift	Position of job or assignment	How technical, scientific or to-precision duty is assigned to	Date of joining	Date of leaving/last day of work	Reason for discharge/transfer to other work	Sign and symptoms observed during examination
CPP Operation			Desk Engineer		01-04-2013			
CPP Operation			Desk Engineer		01-04-21			
CPP Operation			Desk Engineer		01-04-21			
CPP Operation			Desk Engineer		01-04-21			
CPP Operation			Desk Engineer		01-04-21			

as amended vide Notification No. 1183-LW-IR-1/91 dated 27th Nov. 1991
 4. Date of birth: 12-04-1994
 5. Medical examination and the results thereof

If declared unfit for work

Name of tests & values tested	Result	Period of temporary withdrawal from the work	Reason for such withdrawal	Date of returning to work	Date of expiry of Certificate	Signature with date of the Factory Medical Officer or Certified Surgeon
BP-120/80 mmHg HR-74/min Hb-15.8 g/dl PPV-PEFR-520 L/M FEV1-440 L/M BE < 1/6 G/G	Fit					Dr. R.N. Sanyal 10/5/13 M.B.B.S. D.M.C. Ex. MD Calcutta Medical College Reg. No. 2005
BP-115/80 mmHg P/B-92/1 Ht-85 cm Wt-80 kg PPV-PEFR-520 L/M PRE-490 L/M BE < 1/6 G/G	Fit					Dr. R.N. Sanyal 20/1/21 M.B.B.S. D.M.C. Ex. MD Calcutta Medical College Reg. No. 2005
BP-120/80 mmHg P/B-92/1 Ht-85 cm Wt-80 kg PPV-PEFR-520 L/M PRE-480 L/M BE < 1/6 G/G	Fit					Dr. R.N. Sanyal 31/02/21 M.B.B.S. D.M.C. Ex. MD Calcutta Medical College Reg. No. 2005
BP-118/78 mmHg P/B-92/1 Ht-85 cm Wt-80 kg PPV-PEFR-520 L/M PRE-500 L/M BE < 1/6 G/G	Fit					Dr. R.N. Sanyal 15/12/22 M.B.B.S. D.M.C. Ex. MD Calcutta Medical College Reg. No. 2005
BP-126/84 P/B-90/1 Ht-85 cm Wt-80 kg PPV-PEFR-520 L/M PRE-480 L/M BE < 1/6 G/G	Fit					Dr. R.N. Sanyal 25/5/23 M.B.B.S. D.M.C. Ex. MD Calcutta Medical College Reg. No. 2005

Note: 1. This register should be maintained for prescribed workers.
 2. First copy placed in work for each establishment.

1. Serial No. in the Register of adult worker: 60654
 2. Name of worker: MANA GOBINDA SAHOO
 3. Sex: MALE

[Prescribed under Rules 63 & 64 of the West Bengal Factories Rules 1950]

Department	Name of trade or process	Designation	Name of the worker	Roll number, number of the worker card or to be attached to	Date of joining	Date of leaving (under special work)	Reason for absence/leave or other work	Sign and address of the worker
DRT. Mechanic			Fahman		01-06-2014			
DRT. Mech			Fahman		01-04-17			
DRT. Mech			Fahman		01-04-21			
DRT. Mech			Fahman		01-04-21			
DRT. Mech			Fahman		01-04-21			
DRT. Mech			Fahman		01-04-21			
DRT. Mech			Fahman		01-04-21			
DRT. Mech			Fahman		01-04-21			
DRT. Mech			Fahman		01-04-21			
DRT. Mech			Fahman		01-04-21			

REGISTER

as amended vide Notification No. 1183-LW-IR-(9) dated 27th Nov. 1981
 4. Date of birth: 16-11-1949
 5. Medical examination and the results thereof

Hours of work & work done	Health status	Period of absence from work	Reason for absence	Date of leaving (under special work)	Date of joining (under special work)	Signature and name of the Doctor/ Medical Officer
BP-110/70mmHg HR-75/min HT-165cm PFT-REF-490L/M PRE-420L/M BE-2.6/6 RAS-24mmHg HT-165cm	Fit					Dr. N. S. Saha M.B.B.S., D.C.C. S.N.D. College Medical College Kolkata-700005
BP-115/80mmHg HT-165cm PFT-REF-490L/M PRE-420L/M BE-2.6/6	Fit					Dr. N. S. Saha M.B.B.S., D.C.C. S.N.D. College Medical College Kolkata-700005
BP-115/80mmHg HT-165cm PFT-REF-490L/M PRE-420L/M BE-2.6/6	Fit					Dr. N. S. Saha M.B.B.S., D.C.C. S.N.D. College Medical College Kolkata-700005
BP-115/80mmHg HT-165cm PFT-REF-490L/M PRE-420L/M BE-2.6/6	Fit					Dr. N. S. Saha M.B.B.S., D.C.C. S.N.D. College Medical College Kolkata-700005
BP-115/80mmHg HT-165cm PFT-REF-490L/M PRE-420L/M BE-2.6/6	Fit					Dr. N. S. Saha M.B.B.S., D.C.C. S.N.D. College Medical College Kolkata-700005
BP-115/80mmHg HT-165cm PFT-REF-490L/M PRE-420L/M BE-2.6/6	Fit					Dr. N. S. Saha M.B.B.S., D.C.C. S.N.D. College Medical College Kolkata-700005
BP-115/80mmHg HT-165cm PFT-REF-490L/M PRE-420L/M BE-2.6/6	Fit					Dr. N. S. Saha M.B.B.S., D.C.C. S.N.D. College Medical College Kolkata-700005
BP-115/80mmHg HT-165cm PFT-REF-490L/M PRE-420L/M BE-2.6/6	Fit					Dr. N. S. Saha M.B.B.S., D.C.C. S.N.D. College Medical College Kolkata-700005
BP-115/80mmHg HT-165cm PFT-REF-490L/M PRE-420L/M BE-2.6/6	Fit					Dr. N. S. Saha M.B.B.S., D.C.C. S.N.D. College Medical College Kolkata-700005
BP-115/80mmHg HT-165cm PFT-REF-490L/M PRE-420L/M BE-2.6/6	Fit					Dr. N. S. Saha M.B.B.S., D.C.C. S.N.D. College Medical College Kolkata-700005

Note - 1. Workers sign should be mentioned for individual worker.
 2. There shall be mark for each statement.

1. Serial No. in the Register of adult worker: 60655
 2. Name of worker: CHANDI CHARAN PATRA
 3. Sex: MALE

[Prescribed under Rules 63 & 94 of the West Bengal Factories Rules 1950


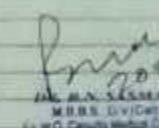

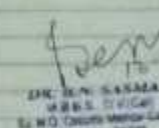
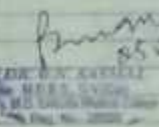
Department/works	Name of hazardous process	Dangerous chemical substance	Nature of job or occupation	First medical check-up or examination made to be entered in	Date of joining	Date of starting regular/seasonal/intermittent work	Reason for withdrawal from the regular work	Signs and symptoms observed during examination
DRI-AC			So-Chemist		01.04.2000			
DRI-AC			So-Chemist		01.04.2000			
DRI-AC			So-Chemist		01.04.2000			
DRI-AC			So-Chemist		01.04.2000			
DRI-AC			So-Chemist		01.04.2000			
DRI-AC			So-Chemist		01.04.2000			
DRI-AC			So-Chemist		01.04.2000			
DRI-AC			So-Chemist		01.04.2000			
DRI-AC			So-Chemist		01.04.2000			
DRI-AC			So-Chemist		01.04.2000			

REGISTER

as amended vide Notification No. 1183-L/W-IR-1/91 dated 27th Nov. 1991

4. Date of birth: 23-04-1970
 5. Medical examination and the results thereof

(If declared unfit for work)

Nature of work & toxic agent	Result (Fit/Unfit)	Period of temporary withdrawal from the work	Reason for work withdrawal	Date of resumption of regular work	Date of expiry from Certificate	Signature with Seal of the Factory Medical Officer, the Certifying Surgeon
P.P: 122/20mmHg Pulse: 75 x/5m HT: 60 cm PFT: PFR - 510 L/M PRE - 460 L/M BE < 6/6	Fit					 M.D. CHOUHURY M.B.B.S. D.V. (Gen) W.C. Choudhury Medical College Kolkata Reg. No. 2585
Group: O +ve RAS-25mm						
BP: 124/80 mmHg, PUL: 80/m. HT: 60 cm, CAG: 90 mm PFT: PFR - 500 L/M PRE - 450 L/M BE < 6/6 '0' +ve	Fit					 M.D. CHOUHURY M.B.B.S. D.V. (Gen) W.C. Choudhury Medical College Kolkata Reg. No. 2585
BP: 125/80 mmHg, PUL: 80/m. HT: 60 cm, CAG: 90 mm PFT: PFR - 520 L/M PRE - 460 L/M BE < 6/6 '0' +ve	Fit					 M.D. CHOUHURY M.B.B.S. D.V. (Gen) W.C. Choudhury Medical College Kolkata Reg. No. 2585
BP: 125/80 mmHg, PUL: 80/m. HT: 60 cm, CAG: 90 mm PFT: PFR - 520 L/M PRE - 460 L/M BE < 6/6 '0' +ve	Fit					 M.D. CHOUHURY M.B.B.S. D.V. (Gen) W.C. Choudhury Medical College Kolkata Reg. No. 2585
BP: 120/80, PUL: 80/m. HT: 60 cm, CAG: 90 mm PFT: PFR - 510 L/M PRE - 460 L/M BE < 6/6 '0' +ve	Fit					 M.D. CHOUHURY M.B.B.S. D.V. (Gen) W.C. Choudhury Medical College Kolkata Reg. No. 2585

1. Duplicate page should be maintained for industrial sector.
 2. First copy should be made for each examination.

1. Serial No. in the Register of adult workers: 60657
 2. Name of worker: SOURAV MANDAL
 3. Sex: MALE

Prescribed under Rules 63 & 64 of the West Bengal Factories Rules 1950

as amended vide Notification No. 1183-LW-IR-1/81 dated 17th Nov. 1981
 4. Date of birth: 02-02-1998
 5. Medical examination and the results thereof

If declared unfit for work

1	2	3	4	5	6	7	8	9
CPP Instrumentation						02-04-2021		
CPP Instrumentation						02-04-2021		
CPP Instrumentation						02-04-2021		
CPP Instrumentation						02-04-2021		
CPP Instrumentation						02-04-2021		

10	11	12	13	14	15
HT-120/80 mmHg PULS-95/min WT-75 kg PFT-PEFR-58 L/M PRE-490 L/M BE < 116 G/G	FIT				Dr. B. N. Sasmal M.B.B.S. (1978) F.M.S. (1980) F.M.C. (1981) F.M.S. (1982)
HT-105/70 mmHg PULS-80/min WT-80 kg PFT-PEFR-55 L/M PRE-470 L/M BE < 116 G/G	FIT				Dr. B. N. Sasmal M.B.B.S. (1978) F.M.S. (1980) F.M.C. (1981) F.M.S. (1982)
HT-110/80 mmHg PULS-85/min WT-85 kg PFT-PEFR-58 L/M PRE-510 L/M BE < 116 G/G	FIT				Dr. B. N. Sasmal M.B.B.S. (1978) F.M.S. (1980) F.M.C. (1981) F.M.S. (1982)
HT-85/60 mmHg PULS-75/min WT-85 kg PFT-PEFR-55 L/M PRE-510 L/M BE < 116 G/G	FIT				Dr. B. N. Sasmal M.B.B.S. (1978) F.M.S. (1980) F.M.C. (1981) F.M.S. (1982)
HT-100/80 mmHg PULS-80/min WT-85 kg PFT-PEFR-55 L/M PRE-510 L/M BE < 116 G/G	FIT				Dr. B. N. Sasmal M.B.B.S. (1978) F.M.S. (1980) F.M.C. (1981) F.M.S. (1982)

1. Separate page should be maintained for industrial workers.
 2. This entry should be made for each examination.

1. Serial No. in the Register of adult workers: 60664
 2. Name of worker: BANAMALI KANP
 3. Sex: MALE

[Prescribed under Rules 63 & 94 of the West Bengal Factories Rules 1950]

Department or work	Name of hazardous process	Designated duty operation	Nature of job or occupation	Has materials or substances in the process likely to be absorbed by	Date of testing	Date of testing expired after days	Reason for not being tested at other work	Sign and signature of the person examined
1	2	3	4	5	6	7	8	9
CPP-BAT			Technician		02-04-2011			
CPP-FBT			Technician		02-04-2011			
CPP-FBT			Technician		02-04-2011			
CPP-FBT			Technician		02-04-2011			
CPP-FBT			Technician		02-04-2011			
CPP-FBT			Technician		02-04-2011			

REGISTER

as amended vide Notification No. 1153-LW-IR-1/91 dated 27th Nov. 1991]

4. Date of birth: 06-06-1989
 5. Medical examination and the results thereof

If declared unfit for work

History of any injury or disease	Result Fit/Unfit	Period of absence from work	Reason for work withheld	Date of expiry of fit for work	Date of expiry of leave certificate	Signature with name of the Medical Officer of the Factory
10	11	12	13	14	15	16
BP-170/80 mmHg PUL-94/min HT-75 mm PFT-PEFR-520 L/M PRE-1490 L/M BE < 216 RAS-20 mg/dl GROUP A (+ve)	Fit					<i>[Signature]</i> DR. R. N. DASGUPTA M.B.B.S. (1970) Ex MD General Medicine College Reg No-20802
BP-124/80 mmHg, PUL-98/min HT-76mm, PFT-PEFR-520 L/M PRE-1430 L/M BE < 216 RAS-20 mg/dl Blood grouping RH- (+ve)	Fit					<i>[Signature]</i> DR. R. N. DASGUPTA M.B.B.S. (1970) Ex MD General Medicine College Reg No-20802
BP-126/80 mmHg, PUL-98/min HT-77mm, PFT-PEFR-510 L/M PRE-1490 L/M BE < 216 RAS-20 mg/dl	Fit					<i>[Signature]</i> DR. R. N. DASGUPTA M.B.B.S. (1970) Ex MD General Medicine College Reg No-20802
HT-120/70 mmHg, PUL-90/min HT-75mm, PFT-PEFR-520 L/M PRE-1430 L/M BE < 216 RAS-20 mg/dl	Fit					<i>[Signature]</i> DR. R. N. DASGUPTA M.B.B.S. (1970) Ex MD General Medicine College Reg No-20802
BP-120/72 mmHg, PUL-92/min HT-76mm, PFT-PEFR-520 L/M PRE-1420 L/M BE < 216 RAS-20 mg/dl	Fit					<i>[Signature]</i> DR. R. N. DASGUPTA M.B.B.S. (1970) Ex MD General Medicine College Reg No-20802

Notes: - 1. Separate page should be maintained for individual workers.
 2. This entry should be made for each examination.

HEALTH

(Prescribed under Rules 62 & 64 of the West Bengal Factories Rules 1950)

- Serial No. in the Register of adult worker: 60668
- Name of worker: DEVJYOTI PAL
- Sex: MALE

Department	Name of business	Designation	Name of job or occupation	Age at admission to the factory	Date of joining	Date of last medical examination	Reason for discharge, transfer or other work	Sign and certificate of medical officer during examination
PELLET Mechanical		ASSI	Engineer		12-11-21			
PELLET Mechanical		Asst. Engineer			03-06-21			
PELLET Mechanical		Asst. Engineer			03-06-21			
PELLET Mechanical		Asst. Engineer			03-04-21			
PELLET Mechanical		Asst. Engineer			03-06-21			

REGISTER

- as amended vide Notification No. 1163-LW-28-131 dated 27th Nov. 1991
- Date of birth: 2010-1997
- Medical examination and the results thereof

If declared unfit for work

Name of worker	Age	Result of examination	Reason for being declared unfit	Period of absence from work	Remarks
DEVJYOTI PAL	11/20	Fit			BP-110/70 mmHg Pulse-73/min HR-52/Min PFT-PFR-520/114 PRE-490 L/M BE-2.46 PRE-REVERSE GLOB-0.16 GLOB-AB (+)ve
DEVJYOTI PAL	12/18	Fit			BP-120/80 mmHg, HR-52/Min HR-52/Min, PFT-PFR-520/114 PRE-490 L/M BE-2.46 PRE-REVERSE GLOB-0.16 GLOB-AB (+)ve
DEVJYOTI PAL	12/18	Fit			BP-120/80 mmHg, HR-52/Min HR-52/Min, PFT-PFR-520/114 PRE-490 L/M BE-2.46 PRE-REVERSE GLOB-0.16 GLOB-AB (+)ve
DEVJYOTI PAL	11/20	Fit			BP-110/70 mmHg, HR-52/Min HR-52/Min, PFT-PFR-520/114 PRE-490 L/M BE-2.46 PRE-REVERSE GLOB-0.16 GLOB-AB (+)ve
DEVJYOTI PAL	11/20	Fit			BP-110/70 mmHg, HR-52/Min HR-52/Min, PFT-PFR-520/114 PRE-490 L/M BE-2.46 PRE-REVERSE GLOB-0.16 GLOB-AB (+)ve

Handwritten signatures and stamps on the right side of the register page, including dates like 12-11-21, 03-06-21, 03-04-21, and 03-06-21.

Note - 1. Separate copy should be submitted for industrial workers.
2. First copy should be made by each examination.

HEALTH

1. Serial No. in the Register of adult workers: 60670
 2. Name of worker: B.S.N.V. Q.M.S.H.
 3. Sex: M/F/LX

[Prescribed under Rules 63 & 64 of the West Bengal Factories Rules 1948]

Sl. No.	Name of Worker	Designation	Age	Sex	Height	Weight	Temperature	Pulse	Blood Pressure	Remarks
101	Prakash	Subervisor	23.11.21	M						
102	Prakash	Supervisor	23.11.21	M						
103	Prakash	Supervisor	23.11.21	M						
104	Prakash	Supervisor	23.11.21	M						
105	Prakash	Supervisor	23.11.21	M						

REGISTER

as amended vide Notification No. 1103-LW/HR/191 dated 17th Nov. 1991
 4. Date of birth: 10-12-1992
 5. Medical examination and the results thereof

If absent call for work

Sl. No.	Name of Worker	Designation	Age	Sex	Height	Weight	Temperature	Pulse	Blood Pressure	Remarks
106	Prakash	Supervisor	23.11.21	M						Present 10/11/21
107	Prakash	Supervisor	23.11.21	M						Present 10/11/21
108	Prakash	Supervisor	23.11.21	M						Present 10/11/21
109	Prakash	Supervisor	23.11.21	M						Present 10/11/21
110	Prakash	Supervisor	23.11.21	M						Present 10/11/21

1. This form should be maintained for industrial workers.
 2. This entry should be made for each examination.

1. Serial No. in the Register of adult worker: 60686
 2. Name of worker: LOMNATH DEHURY
 3. Sex: MALE

[Prescribed under Rules 63 & 94 of the West Bengal Factories Rules 1950]

1	2	3	4	5	6	7	8	9
Department	Name of Machine	Particulars of Machine	Class of job in connection	How recently employed in the industry (Date to be reported in)	Date of joining	Date of last medical examination	Reason for discharge (Specify in other cases)	Place and authority where last medical examination
PEDESTAL ELECTRICAL			Technician		08-04-70			
Latex Electrical			Technician		02-1-71			
Latex Electrical			Technician		05-04-74			
Latex Electrical			Technician		08-04-71			
Latex Electrical			Technician		08-04-71			

REGISTER

as amended vide Notification No. 1183-LW-IR-1/81 dated 27th Nov. 1991

4. Date of birth: 18-06-1990
 5. Medical examination and the results thereof

If declared unfit for work

10	11	12	13	14	15
Name of the worker	Age	Height	Weight	Heart rate	Respiration rate
BP 120/70 mmHg	FT				
Pulse 78/min					
HR 58/min					
PEF 1.88 L/min					
PFE 1.80 L/min					
BE 2.16					
CE 1.16					
QO ₂ 1.0 (1.00)					
RA ₂ 98.6 mmHg					
BP 120/80 mmHg					
HR 58/min					
PFE 1.88 L/min	FT				
BE 2.16					
CE 1.16					
QO ₂ 1.0 (1.00)					
RA ₂ 98.6 mmHg					
BP 120/80 mmHg					
HR 58/min					
PFE 1.88 L/min	FT				
BE 2.16					
CE 1.16					
QO ₂ 1.0 (1.00)					
RA ₂ 98.6 mmHg					
BP 120/80 mmHg					
HR 58/min					
PFE 1.88 L/min	FT				
BE 2.16					
CE 1.16					
QO ₂ 1.0 (1.00)					
RA ₂ 98.6 mmHg					
BP 120/80 mmHg					
HR 58/min					
PFE 1.88 L/min	FT				
BE 2.16					
CE 1.16					
QO ₂ 1.0 (1.00)					
RA ₂ 98.6 mmHg					

Dr. M. N. DASGPTA
 M.B.B.S. D.M.
 15/11/70

Dr. M. N. DASGPTA
 M.B.B.S. D.M.
 20/11/71

Dr. M. N. DASGPTA
 M.B.B.S. D.M.
 21/6/71

Dr. M. N. DASGPTA
 M.B.B.S. D.M.
 13/11/71

Dr. M. N. DASGPTA
 M.B.B.S. D.M.
 08/5/73

Form 17-A. Reports must be submitted for industrial workers.
 B. These reports should be made for each examination.

1. Serial No. in the Register of adult worker: 60687
 2. Name of worker: SOUVIK MUKHERJEE
 3. Sex: MALE

[Prescribed under Rules 63 & 94 of the West Bengal Factories Rules 1950]

as amended vide Notification No. 1183-LW-DR-1(9) dated 27th Nov. 1991]

4. Date of birth: 26-01-1996
 5. Medical examination and the results thereof

If declared unfit for work

Department	Name of Reporting Person	Designation of Reporting Person	Name of Job in Establishment	Date of Birth	Date of Medical Examination	Remarks for the worker's health	Name and position of the Medical Officer
Accounts			Jr. Officer		09-09-20		
Accounts			Jr. Officer		09-09-21		
Accounts			Jr. Officer		09-09-21		
Accounts			Jr. Officer		09-09-21		
Accounts			Jr. Officer		09-09-21		

Name of worker & Health Status	Height	Weight	Heart Rate	Respiration Rate	Temperature	Blood Pressure	Visual Acuity	Field of Vision	Diagnosis	Remarks
SR-122 / Souvik Mukherjee	172	68.00	72/min	16/min	36.8	110/70	6/6	180°	Fit	
SR-123 / Souvik Mukherjee	172	68.00	72/min	16/min	36.8	110/70	6/6	180°	Fit	
SR-124 / Souvik Mukherjee	172	68.00	72/min	16/min	36.8	110/70	6/6	180°	Fit	
SR-125 / Souvik Mukherjee	172	68.00	72/min	16/min	36.8	110/70	6/6	180°	Fit	
SR-126 / Souvik Mukherjee	172	68.00	72/min	16/min	36.8	110/70	6/6	180°	Fit	

Dr. N. K. SARKAR
 M.B.B.S. D.M.D.
 D. M. S. College Medical Centre
 19th Nov. 2020

Dr. N. K. SARKAR
 M.B.B.S. D.M.D.
 D. M. S. College Medical Centre
 19th Nov. 2020

Dr. N. K. SARKAR
 M.B.B.S. D.M.D.
 D. M. S. College Medical Centre
 19th Nov. 2020

Dr. N. K. SARKAR
 M.B.B.S. D.M.D.
 D. M. S. College Medical Centre
 19th Nov. 2020

Dr. N. K. SARKAR
 M.B.B.S. D.M.D.
 D. M. S. College Medical Centre
 19th Nov. 2020

Note: 1. Report card should be submitted for individual worker.
 2. First copy should be made for each institution.

1. Serial No. in the Register of adult worker: 60692
 2. Name of worker: APURBA PAL
 3. Sex: MALE

[Prescribed under Rules 63 & 94 of the West Bengal Factories Rules 1948]

Department/Work	Name of hazardous process	Designated protective apparatus	Name of job or occupation	Eye specialist, physician or hygienist, likely to be referred to	Date of joining	Date of leaving/transfer to other work	Reason for discharge/transfer to other work	Signs and symptoms observed during examination
FERRIC Operations			Buffer Man		10-04-2011			
FERRIC Operations			Buffer Man		10-04-2011			
FERRIC Operations			Buffer Man		10-04-2011			
FERRIC Operations			Buffer Man		10-04-2011			
FERRIC Operations			Buffer Man		10-04-2011			
FERRIC Operations			Buffer Man		10-04-2011			

Note - 1. Signature space should be maintained for individual worker.
 2. Final entry should be made for each examination.

REGISTER

as amended vide Notification No. 1143-LW-IB-1(9) dated 27th Nov. 1991
 4. Date of birth: 02-03-1976
 5. Medical examination and the results thereof

If declared unfit for work

Name of unit & branch thereof	Shift	Period of temporary withdrawal from the work	Reasons for such withdrawal	Date of resumption of work	Date of leaving/transfer to other work	Remarks with date of the Factory Medical Officer or Licencing Inspector
BR-110/70 mm HS	FT					
PULSE-78/min						
WT-65 kg						
PET-PEFR-510 L/M						
PRE-490 L/M						
BE < 1/6						
GROUP 'A' (A100)						
RBS-72.8 mg/dl						
BR-115/70 mm HS	FT					
WT-78 kg						
PET-PEFR-510 L/M						
PRE-490 L/M						
BE < 1/6						
BR-115/70 mm HS	Fit					
WT-80 kg						
PET-PEFR-520 L/M						
PRE-500 L/M						
BE < 1/6						
BR-115/70 mm HS	Fit					
WT-80 kg						
PET-PEFR-520 L/M						
PRE-500 L/M						
BE < 1/6						
BR-115/70 mm HS	Fit					
WT-82 kg						
PET-PEFR-520 L/M						
PRE-500 L/M						
BE < 1/6						

Signature
 DR. B. N. SARKAR
 M.B.B.S. D.V.C.M.
 Ex. M.D. Chittaranjan College
 Reg. No. 2002

Signature
 DR. B. N. SARKAR
 M.B.B.S. D.V.C.M.
 Ex. M.D. Chittaranjan College
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 DR. B. N. SARKAR
 M.B.B.S. D.V.C.M.
 Ex. M.D. Chittaranjan College
 Reg. No. 2002

HEALTH

1. Name of the Register of which worker: 2013
 2. Name of worker: LETTER MANAGER
 3. No.: 1111

(Prescribed under Rules 47 & 48 of the West Bengal Employees Rules 1956)

Sl. No.	Name of the worker	Designation	Grade	Age	Sex	Religion	Marital Status	Family Size	Remarks
1	LETTER MANAGER	LETTER MANAGER		18-12-1940	M	Hindu	Married	3	
2	LETTER MANAGER	LETTER MANAGER		18-12-1940	M	Hindu	Married	3	
3	LETTER MANAGER	LETTER MANAGER		18-12-1940	M	Hindu	Married	3	
4	LETTER MANAGER	LETTER MANAGER		18-12-1940	M	Hindu	Married	3	

REGISTER

as amended with Notification No. 1031/W.B.E.S. dated 27th Nov. 1961
 1. Date of birth: 20-02-1924
 2. Medical examination and the results thereof

(to be filled up by the worker)

Sl. No.	Name of the worker	Designation	Grade	Age	Sex	Religion	Marital Status	Family Size	Remarks
1	LETTER MANAGER	LETTER MANAGER		18-12-1940	M	Hindu	Married	3	
2	LETTER MANAGER	LETTER MANAGER		18-12-1940	M	Hindu	Married	3	
3	LETTER MANAGER	LETTER MANAGER		18-12-1940	M	Hindu	Married	3	
4	LETTER MANAGER	LETTER MANAGER		18-12-1940	M	Hindu	Married	3	

FORM NO. 17A

Record of Eye Examination

SL NO.	DEPARTMENT/ WORK	NAME OF WORKER	SEX	AGE (on last birthday)	OCCUPATION		EXAMINATION OF EYE SIGHT		SIGNATURE OF OPHTHALMOLOGIST	REMARKS
					Nature	Date of Employment	Date	Result		
1	CPP (MECH)	SAGAR PAL 60649	M	29y 16-06-93	GT.E.T.	01-04-2021	05-04-21	BE < 6/6	SAS	FIT
2	CPP (DESK ENGR)	PRAVAT KUMAR MISHRA 60652	M	28y 12-04-1994	OPRATOR	01-04-2021	05-04-21	BE < 6/6	SAS	FIT
3	DRI FOURMAN	MANAGTADIND SAHOO 60654	M	36y 16-11-1991	MECH	01-04-2021	05-04-21	BE < 6/6	SAS	FIT
4	DRI SR.CHEMIST	CHANDICHARAN PATRA 60655	M	23-4-1998	QC	01-04-2021	05-04-21	BE < 6/6	SAS	FIT
5	DRI ENGINEER	MONOJ KUMAR KHAILA	M	40y 01-01-1982	E/I	02-04-21	05-04-21	BE < 6/6	SAS	FIT

Dr. *Dr. Sanjay Das*
 Regd. No. *Sanjay Das*
 MBBS - DLO
 (Ophthalmologist)
 Ophthalmologist Sing. of Seal

FORM NO. 17A

Record of Eye Examination

SL NO.	DEPARTMENT/ WORK	NAME OF WORKER	SEX	AGE (on last birthday)	OCCUPATION		EXAMINATION OF EYE SIGHT		SIGNATURE OF OPHTHALMOLOGIST	REMARKS
					Nature	Date of Employment	Date	Result		
6	CPP ITI	SORAV MANDAL 60657	M	24Y 02-2-1989	INSTRU ENGR	02-04-2021	05-04-23	BE < 6/6	SAS	FIT
7	DRI FITTER	DINABANDHU SAMNTA 60659	M	43Y 01-01-80	MECH	02-4-21	05-04-23	BE < 6/6	SAS	FIT
8	BPP ELECTRI	RAJESH KUMAR THKUR 60602	M	25Y 11-02-97	ELECT	02-04-21	05-04-23	BE < 6/6	SAS	FIT
9	DRI FITTER	SEKH MAMTUL ALAM 60663	M	42Y 16-02-80	MECH	02-04-21	15-04-23	BE < 6/6	SAS	FIT
10	APP TECH	BANAMALI KANP 60664	M	37Y 27-2-85	B&I	02-4-21	15-04-23	BE < 6/6	SAS	FIT

Dr.

Regd. no.

Dr. Sanjay Das
15/04/23

MBBS
(Ophthalmologist)

Rgno. 42401


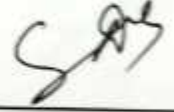

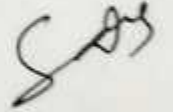
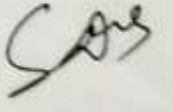
Ophthalmologist Sing. of Seal

Record of Eye Examination

SL NO.	DEPARTMENT/ WORK	NAME OF WORKER	SEX	AGE (on last birthday)	OCCUPATION		EXAMINATION OF EYE SIGHT		SIGNATURE OF OPHTHALMOLOGIST	REMARKS
					Nature	Date of Employment	Date	Result		
11	DRI FITTER	JHANTU JANA 60665	M	37Y 27-2-85	MECH	03-4-21	05-04-23	BE > 6/6	<i>S Das</i>	FIT
12	DRI WELDER	DEVJATI PAL 60668	M	24Y 22-2-97	MECH	03-4-21	05-04-23	BE > 6/6	<i>S Das</i>	FIT
13	DRI WELDER	KOLLON DAS 60669	M	31Y 26-8-90	MECH	03-04-21	05-04-23	B > 6/6	<i>S Das</i>	FIT
14	DRI SUPERV	ASISH GHOSH 60670	M	28YM 27-12-93	PROCES	03-4-21	05-04-23	B > 6/6	<i>S Das</i>	FIT
15	DRI SUPERVISE	AJAY GHOSH 60671	M	20Y 25-11-200	PROFESS	3-4-21	05-04-23	B > 6/6	<i>S Das</i>	FIT



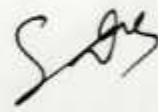
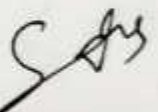
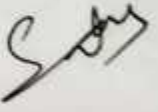
Dr. *Dr. Sanjay Das*
 Regd. no. *05/04/23*
 MBBS - DLO
 (Ophthalmologist)
 Rgno. 42401
 Ophthalmologist Sing. of Seal

Record of Eye Examination

SL NO.	DEPARTMENT/ WORK	NAME OF WORKER	SEX	AGE (on last birthday)	OCCUPATION		EXAMINATION OF EYE SIGHT		SIGNATURE OF OPTHALMOLOGIST	REMARKS
					Nature	Date of Employment	Date	Result		
16	CPP ASST ENG	K. SRINIVAS VIVEK 60673	M	29Y/ 17-06-1992	ELECTRICAL	05-04-2021		BE < 6/6		FIT
17	DRI SR CHAMIST	BIPUL ACHARYA 60674	M	49Y/ 20-04-1972	SC	05-04-2021	05-04-21	BE < 6/6		FIT
18	DRI SR ENGINEER	RAMAKANTA NAYAK 60675	M	31Y/ 16-12-1990	E/I	05-04-2021	05-04-21	BE < 6/6		FIT
19	VICE PRESIDENT	ANIL KR PATRA 60676	M	40Y/ 05-07-1981	OPERATION	06-04-2021	05-04-21	BE < 6/6		FIT
20	PELLET TECH	DHANJOY DAL 60677	M	28Y/ 05-07-1981	ELECTRICAL	06-04-2021	05-04-21	BE < 6/6		FIT

Dr.
 Dr. Sanjay Das
 Regd. no.
 MBBS - DLO
 (Ophthalmologist)
 Regd. no. 42401
 Ophthalmologist Sing. of Seal

Record of Eye Examination

SL NO.	DEPARTMENT/ WORK	NAME OF WORKER	SEX	AGE (on last birthday)	OCCUPATION		EXAMINATION OF EYE SIGHT		SIGNATURE OF OPHTHALMOLOGIST	REMARKS
					Nature	Date of Employment	Date	Result		
21	DRI ELECTRICAL	BASANTA KUMAR 60680	M	31Y/ 12-02-1991	E/I	07-04-2021		BE 46/6		FIT
22	DRI ENGINEER	JITANDRA KUMAR 60681	M	33Y/ 15-07-1988	E/I	07-04-2021		BE 46/6		FIT
23	DRI FITTER	DEEPAK KUMAR 60682	M	25Y/ 02-01-1997	MECHANICAL	07-04-2021		BE 46/6		FIT
24	DRI JR-ENGINEER	SAYANDEEP GHOSH 60683	M	25Y/ 25-02-1997	E/I	09-04-2021		BE 46/6		FIT
25	DRI WELDER	BISWANATH BAGI 60685	M	31Y/ 04-03-1991	MECHANICAL	08-04-2021		BE 46/6		FIT

Dr.

Regd. no.

Dr. Sanjay Das
MBBS - DLO
(Ophthalmologist)

Rgno. 42401

Ophthalmologist Sing. of Seal

Record of Eye Examination

SL NO.	DEPARTMENT/ WORK	NAME OF WORKER	SEX	AGE (on last birthday)	OCCUPATION		EXAMINATION OF EYE SIGHT		SIGNATURE OF OPHTHALMOLOGIST	REMARKS
					Nature	Date of Employment	Date	Result		
26	PELLET ELECTRICAL	LOKNATH DEHARI 60686	M	32Y/ 16-06-1990	TECH	08-09-2021		BE 6/6		FIT
27	ACCOUNT JR. OFFICER	SOUVIK MUKHARJEE 60687	M	27Y/ 16-04-1996	ACCOUNT	09-09-2021		BE 6/6		FIT
28	ASST FITTER	SK. NASIRUDDIN 60688	M	23Y 01-12-1996	MECHANICAL	09-09-2021		BE 6/6		FIT
29	DRI ELECTRICAL	PRAKES CHANDRA BARIK 60689	M	32Y/ 10-06-1989	E/I	09-09-2021		BE 6/6		FIT
30	CPP ENGINEER	SOURAV GOSWAMI 60690	M	32Y/ 20-02-1990	INSTRUMENTAL ENG	09-09-2021		BE 6/6		FIT

Dr.

Regd. no.

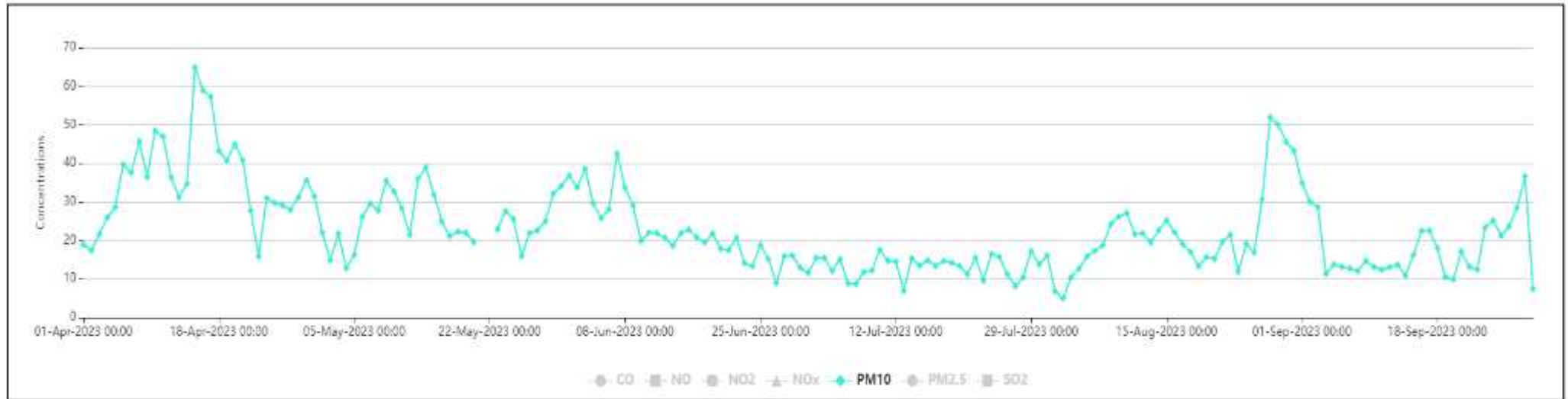
Dr. Sanjay Day
MBBS - DLO
(Ophthalmologist)
Rgno - 42401

Ophthalmologist Sing. of Seal

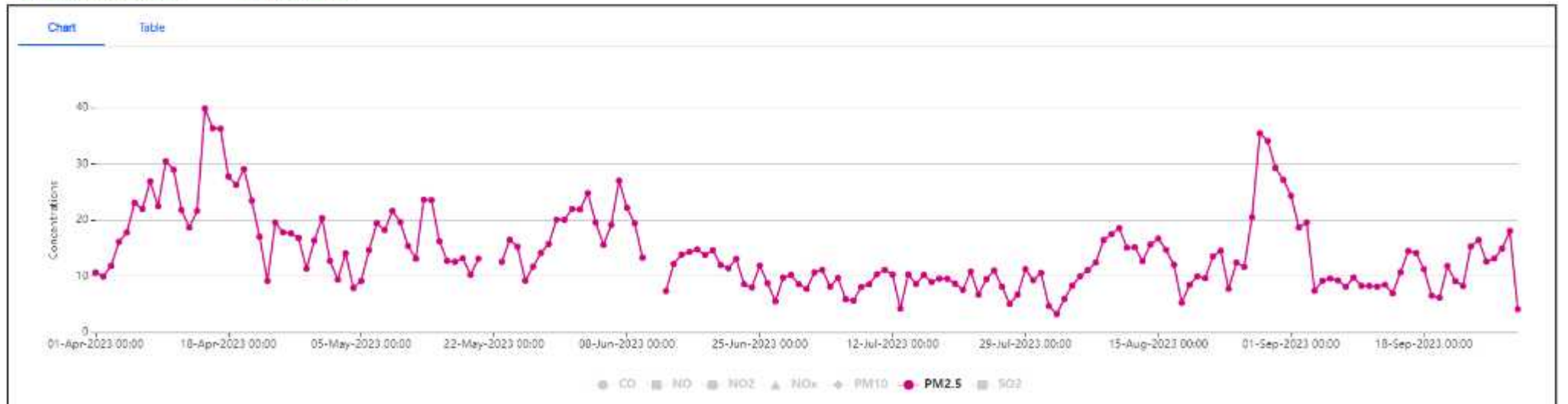


CAAQMS DATA (APRIL 2023 to SEPTEMBER 2023)

Location : Kalyanpur Village
Parameters : PM 10



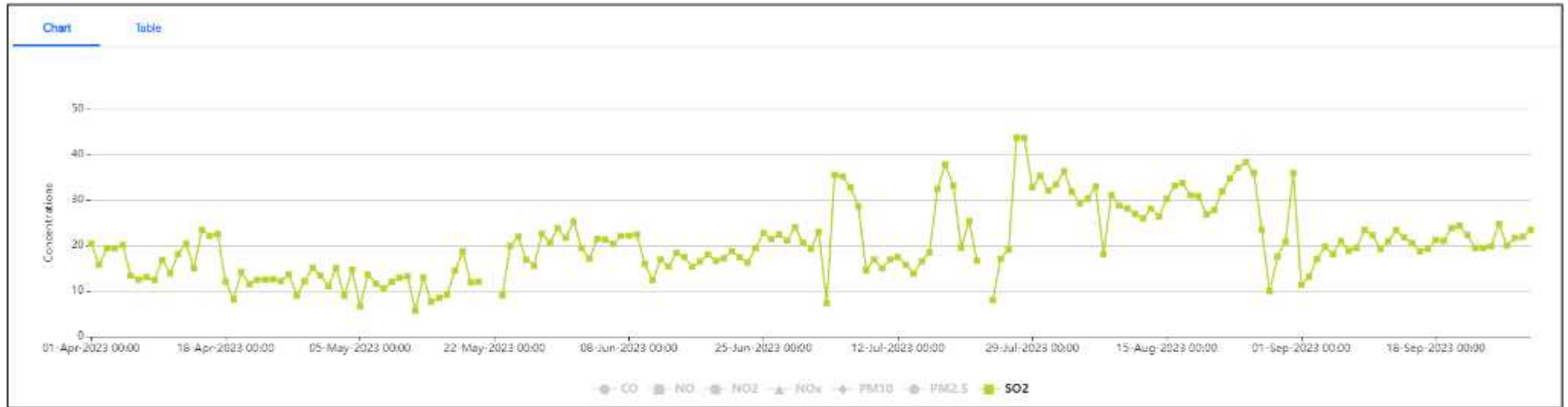
Location : Kalyanpur Village
Parameters : PM 2.5



CAAQMS DATA (APRIL 2023 to SEPTEMBER 2023)

Location : Kalyanpur Village

Parameters : SO₂



Location : Kalyanpur Village

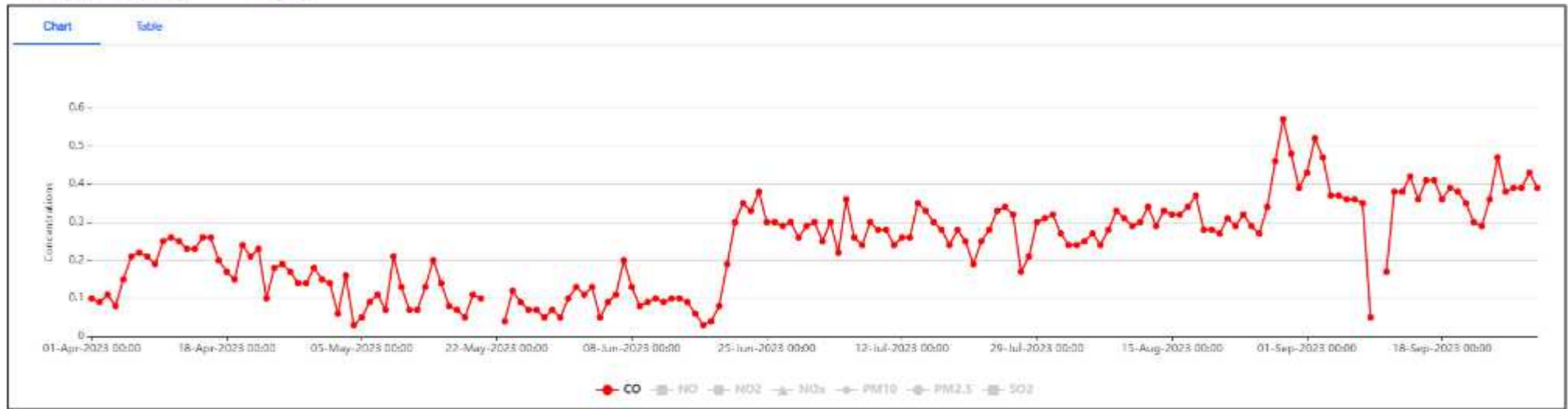
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CAAQMS DATA (APRIL 2023 to SEPTEMBER 2023)

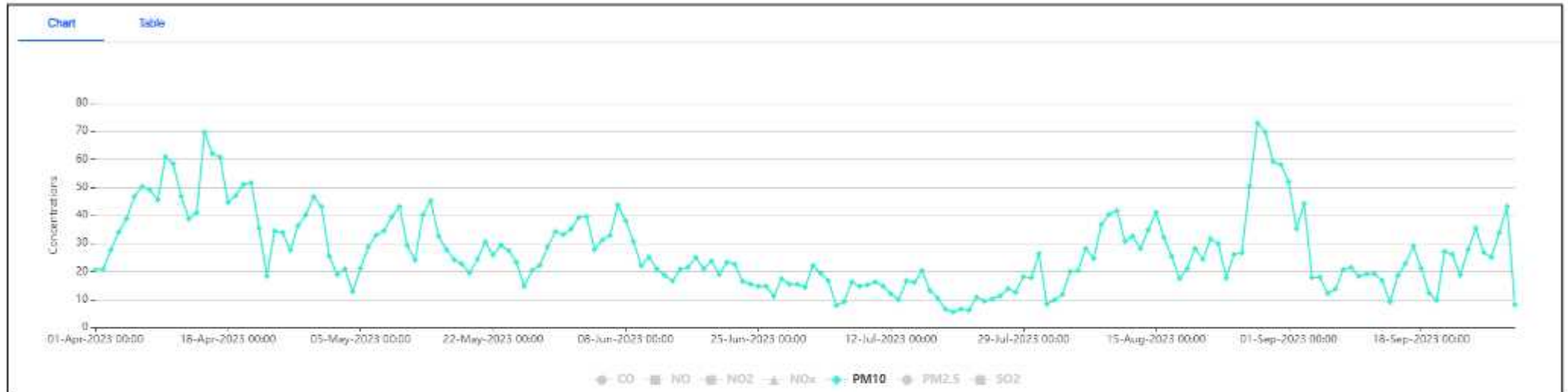
Location : Kalyanpur Village

Parameters : CO

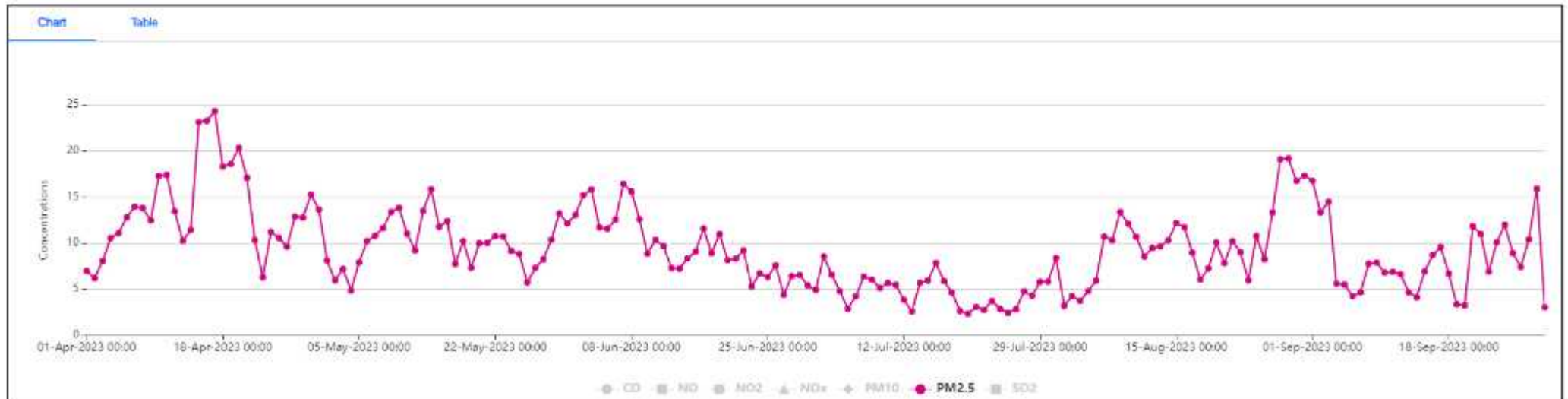


CAAQMS DATA (APRIL 2023 to SEPTEMBER 2023)

Location : Panchrulia Station
Parameters : PM 10



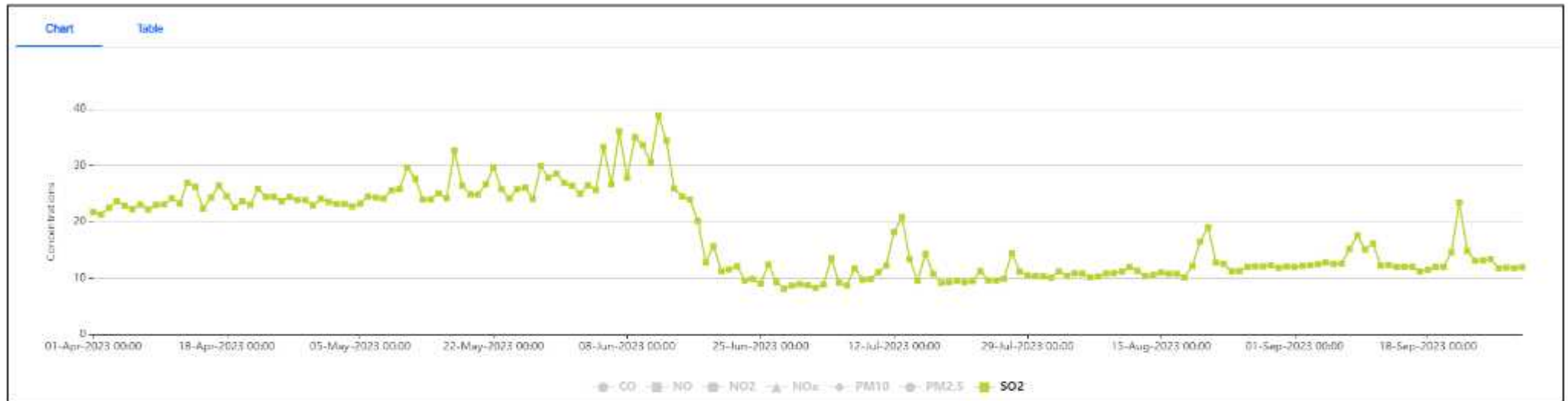
Location : Panchrulia Station
Parameters : PM 2.5



CAAQMS DATA (APRIL 2023 to SEPTEMBER 2023)

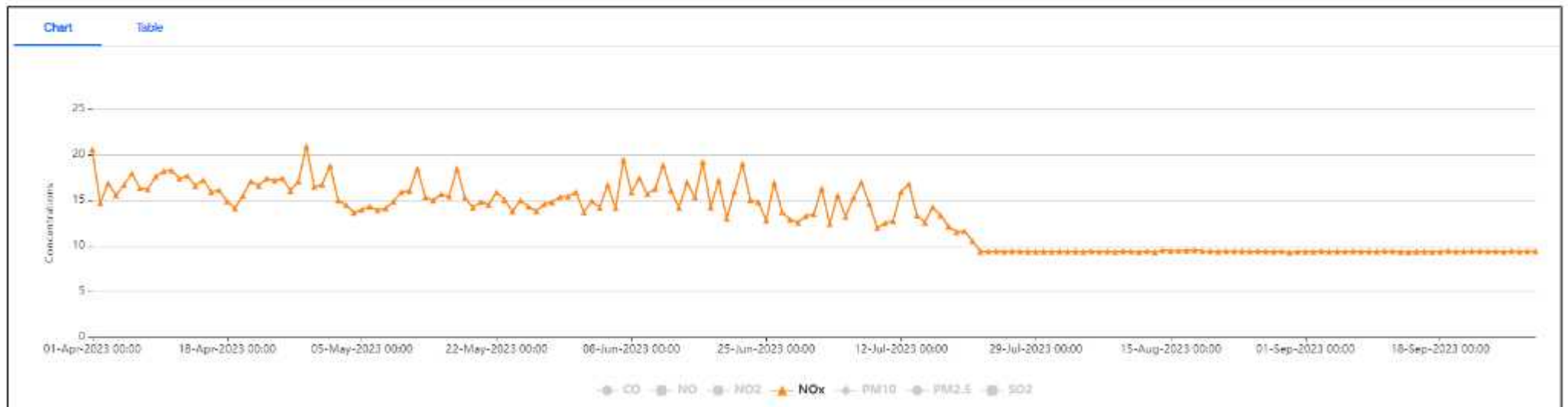
Location : Panchrulia Station

Parameters : SO₂



Location : Panchrulia Station

Parameters : NO_x



CAAQMS DATA (APRIL 2023 to SEPTEMBER 2023)

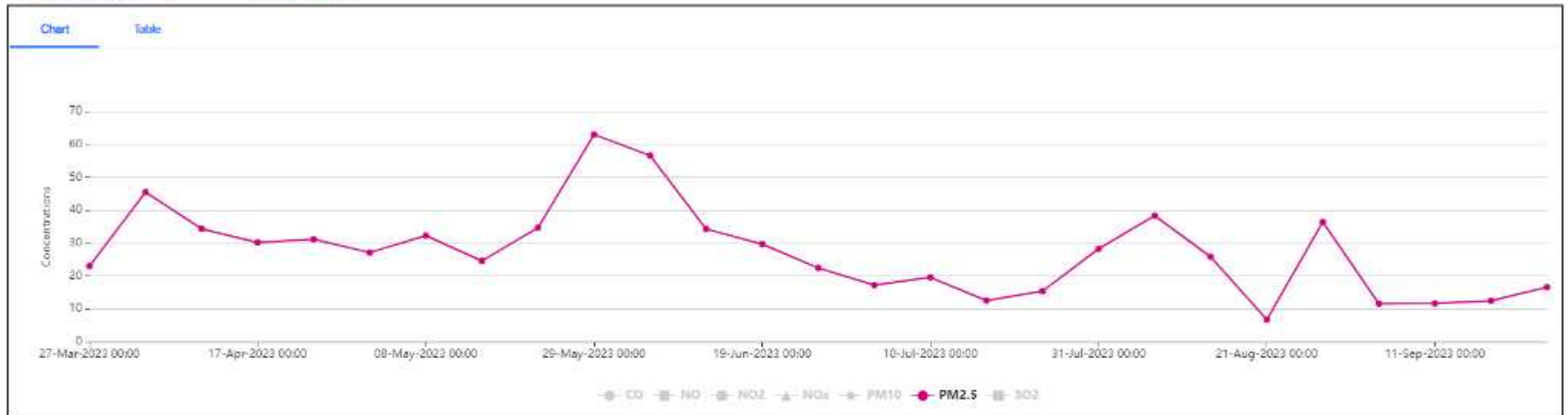
Location : Panchrulia Station
Parameters : CO



CAAQMS DATA (APRIL 2023 to SEPTEMBER 2023)

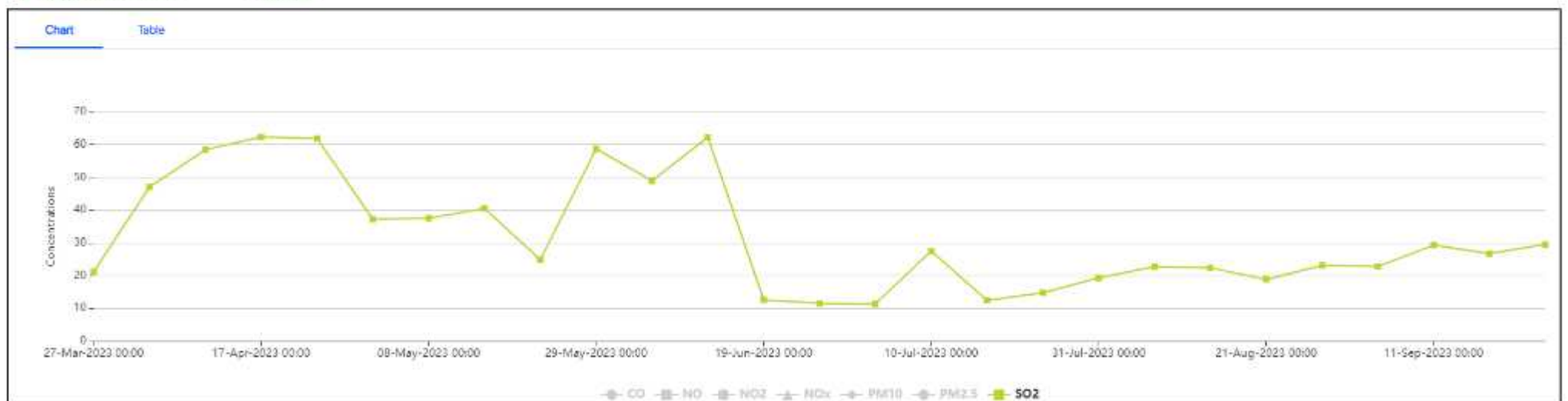
Location : Barkola Station

Parameters : PM 2.5



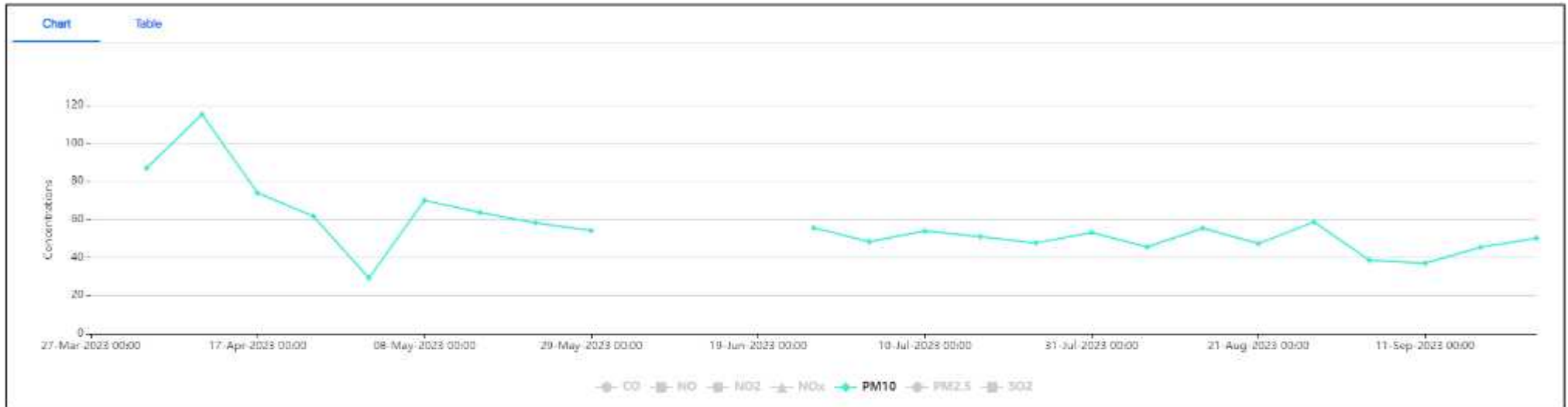
Location : Barkola Station

Parameters : SO2

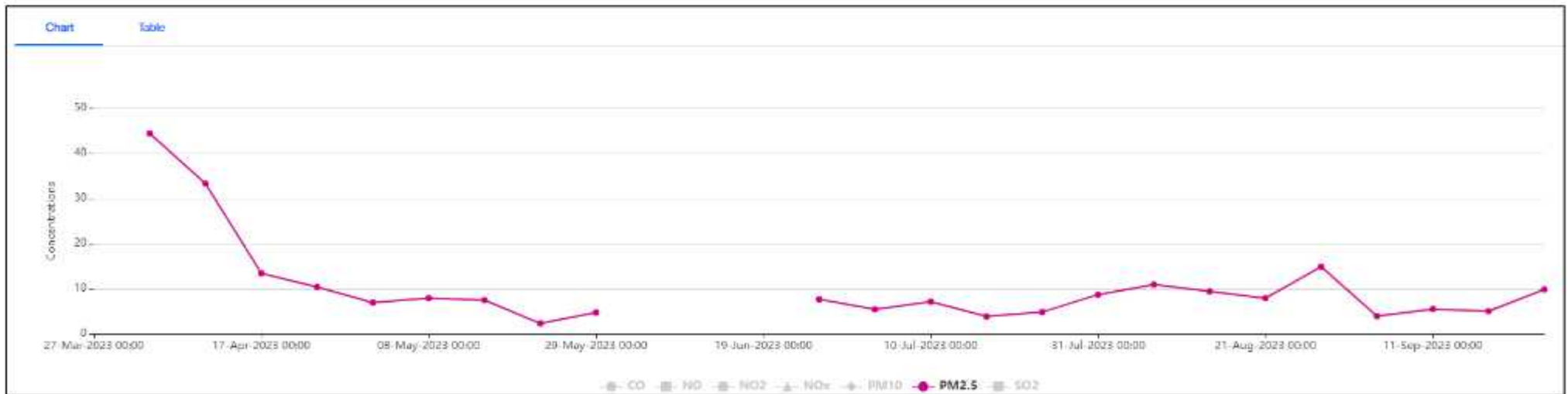


CAAQMS DATA (APRIL 2023 to SEPTEMBER 2023)

Location : Rajogram Station
Parameters : PM10

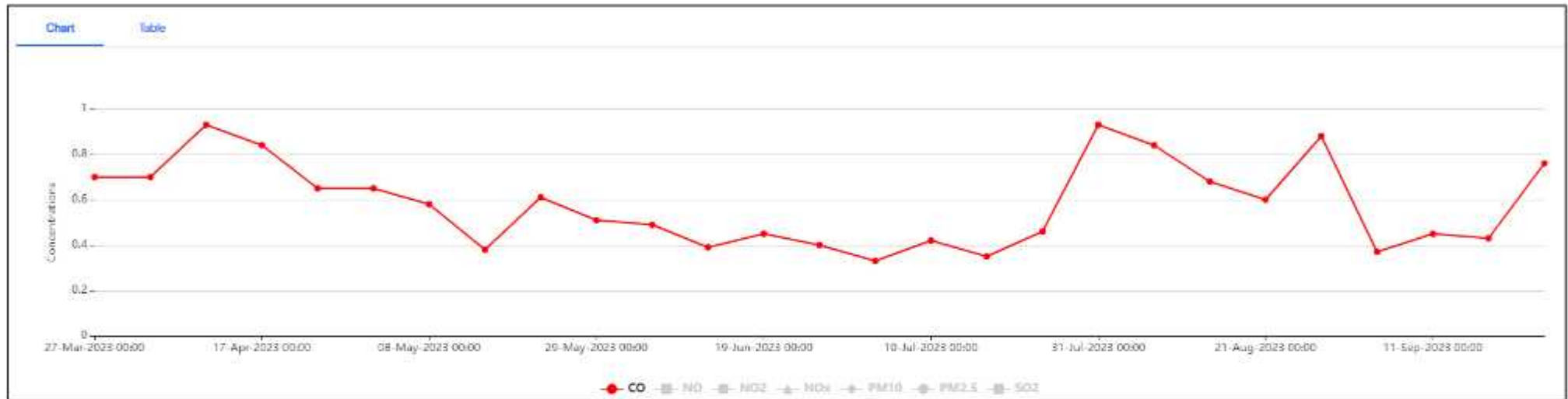


Location : Rajogram Station
Parameters : PM2.5

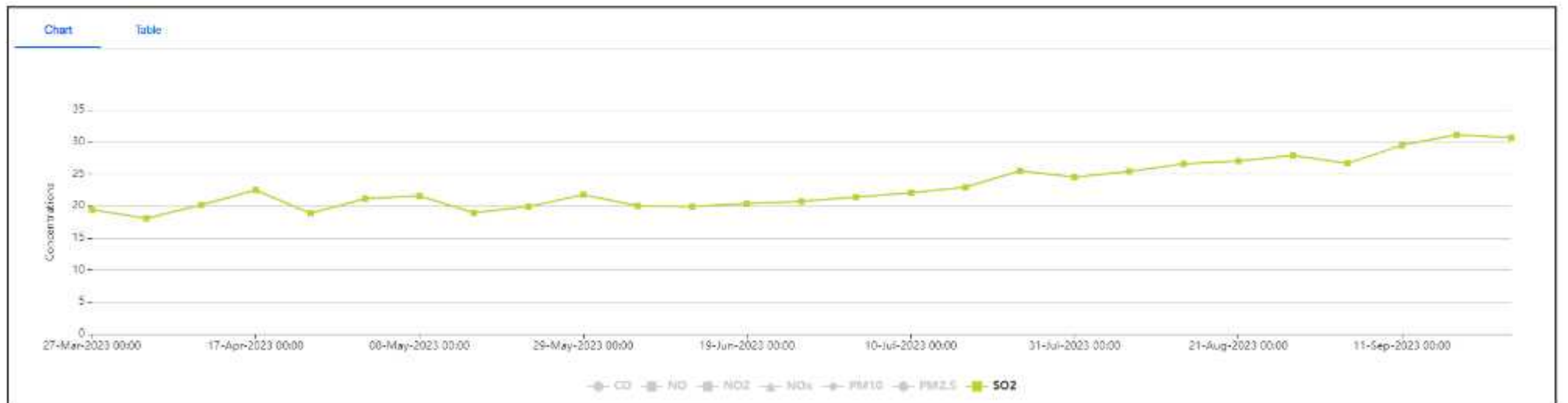


CAAQMS DATA (APRIL 2023 to SEPTEMBER 2023)

Location : Rajogram Station
Parameters : CO



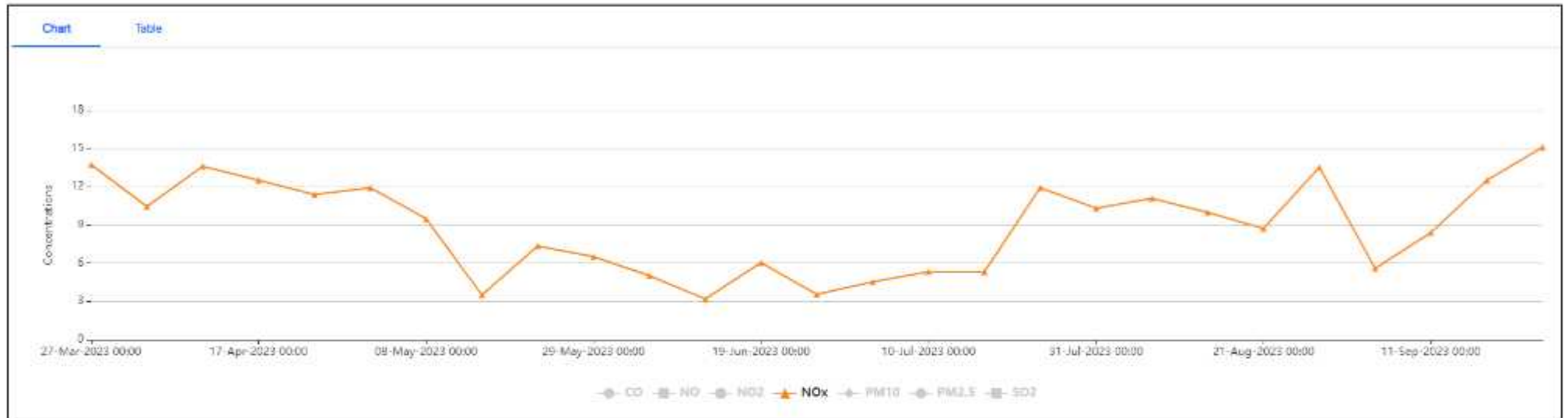
Location : Rajogram Station
Parameters : SO2



CAAQMS DATA (APRIL 2023 to SEPTEMBER 2023)

Location : Rajogram Station

Parameters : NOx





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Urvashi Malhar, Phase II, MEAV-25, Bengal Ambuja Housing Complex, City Centre, Durgapur-713216

Contact : 0343-2543019, 9732580459, 9433158173, email : greenvision.dgp@gmail.com, Website : www.greenvisiondurgapur.com

TEST REPORT OF AMBIENT AIR ANALYSIS

FORMAT NO. : GV/LAB/FM/33A

Sample is drawn by M/s. Greenvision

Report No. : GV/AR/23-24/261
 Name of Customer : M/s. Orissa Alloy Steel Pvt. Ltd.
 (Formerly, M/s. Rashmi Alloy Steel Pvt. Ltd.)
 Address of Customer : NH-6, Shyamraipur, Gokulpur, Kharagpur,
 Dist. : Paschim Medinipur, Pin : 721304, W.B.
 Sample Description : Ambient Air
 Sampling Location : Kantapal Village
 Sample Condition : In GMF Filter Paper & Plastic Bottle
 Location of Testing : At Laboratory
 Sampling Method : CPCB, Emission Regulation (Part III)

U.L.R. No. : TC1100323000000510F

Sample Ref. ID : AS-160-2023(1)
 Report Date : 12.10.2023
 Date of Sampling : 28.09.2023 to
 29.09.2023
 Date of Receiving : 02.10.2023
 Analysis Started On : 03.10.2023
 Analysis Completed On : 04.10.2023
 Time of Sampling : 08:05 am to
 08:05 am

A. METROLOGICAL INFORMATION

Average Temperature ($^{\circ}$ C) : 26.8
 Average Relative Humidity (%) : 70.0
 Barometric Pressure (mm of Hg) : 756.0
 Smell or Odour : No Remarkable Smell
 Weather Condition : Clear Sky

B. RESULT OF ANALYSIS

Sl. No.	Parameters	Unit	Concentration	Test Method
01.	Concentration of PM ₁₀	$\mu\text{g}/\text{m}^3$	52.49	IS : 5182 (Part 23),2006
02.	Concentration of PM _{2.5}	$\mu\text{g}/\text{m}^3$	27.49	EPA CFR – 40 (pt 50) Appendix – 1 : 2003
03.	Concentration of SO ₂	$\mu\text{g}/\text{m}^3$	7.32	IS : 5182 (Part 2),2006
04.	Concentration of NO ₂	$\mu\text{g}/\text{m}^3$	29.73	IS : 5182 (Part 6),2006
05.	Concentration of CO	mg/m^3	0.135	IS 5182 [Part 10] : 1999 Reaffirmed 2005

Limit : ($\mu\text{g}/\text{m}^3$) National Ambient Air Quality Standard, CPCB Notification, 18 th November, 2009

PM₁₀ (24 Hrs) : 100, PM_{2.5} (24 Hrs) : 60, SO₂ (24 Hrs.): 80, NO₂ (24 Hrs.) : 80, CO : 4 (mg/m^3)

S. Roy Chowdhury

Reviewed by
 (Sabyasachi Shyam Roy Chowdhury)
 Quality Manager

S. Roy Chowdhury
 (Sabyasachi Shyam Roy Chowdhury)
 Quality Manager
 Authorised Signatory
 For, GREEN VISION

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Contact : 0343-2543019, 9732580459, 9433158173, email : greenvision.dgp@gmail.com, Website : www.greenvisiondurgapur.com

TEST REPORT OF AMBIENT AIR ANALYSIS

FORMAT NO. : GV/LAB/FM/33A

U.L.R. No. : TC110032300000511F

Sample is drawn by M/s. Greenvision

Report No. : GV/AR/23-24/262

Name of Customer : M/s. Orissa Alloy Steel Pvt. Ltd.
(Formerly, M/s. Rashmi Alloy Steel Pvt. Ltd.)

Address of Customer : NH-6, Shyamraipur, Gokulpur, Kharagpur,
Dist. : Paschim Medinipur, Pin : 721304, W.B.

Sample Description : Ambient Air

Sampling Location : Berapara Village

Sample Condition : In GMF Filter Paper & Plastic Bottle

Location of Testing : At Laboratory

Sampling Method : CPCB, Emission Regulation (Part III)

Sample Ref. ID : AS-160-2023(2)

Report Date : 12.10.2023

Date of Sampling : 28.09.2023 to
29.09.2023

Date of Receiving : 02.10.2023

Analysis Started On : 03.10.2023

Analysis Completed On : 04.10.2023

Time of Sampling : 08:45 am to
08:45 am

A. METROLOGICAL INFORMATION

Average Temperature (°C) : 26.8

Average Relative Humidity (%) : 70.0

Barometric Pressure (mm of Hg) : 756.0

Smell or Odour : No Remarkable Smell

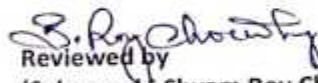
Weather Condition : Clear Sky

B. RESULT OF ANALYSIS

Sl. No.	Parameters	Unit	Concentration	Test Method
01.	Concentration of PM ₁₀	µg/m ³	62.74	IS : 5182 (Part 23),2006
02.	Concentration of PM _{2.5}	µg/m ³	32.08	EPA CFR – 40 (pt 50) Appendix – 1 : 2003
03.	Concentration of SO ₂	µg/m ³	8.05	IS : 5182 (Part 2),2006
04.	Concentration of NO ₂	µg/m ³	30.94	IS : 5182 (Part 6),2006
05.	Concentration of CO	mg/m ³	0.181	IS 5182 [Part 10] : 1999 Reaffirmed 2005

Limit : (µg/m³) National Ambient Air Quality Standard, CPCB Notification, 18 th November, 2009

PM₁₀ (24 Hrs) : 100, PM_{2.5} (24 Hrs) : 60, SO₂ (24 Hrs) : 80, NO₂ (24 Hrs) : 80, CO : 4 (mg/m³)


Reviewed by
(Sabyasachi Shyam Roy Chowdhury)
Quality Manager


(Sabyasachi Shyam Roy Chowdhury)
Quality Manager
Authorised Signatory
For, GREEN VISION

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End of the report.....



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Contact : 0343-2543019, 9732580459, 9433158173, email : greenvision.dgp@gmail.com, Website : www.greenvisiondurgapur.com

TEST REPORT OF AMBIENT AIR ANALYSIS

FORMAT NO. : GV/LAB/FM/33A

Sample is drawn by M/s. Greenvision

Report No. : GV/AR/23-24/263

Name of Customer : M/s. Orissa Alloy Steel Pvt. Ltd.
(Formerly, M/s. Rashmi Alloy Steel Pvt. Ltd.)

Address of Customer : NH-6, Shyamraipur, Gokulpur, Kharagpur,
Dist. : Paschim Medinipur, Pin : 721304, W.B.

Sample Description : Ambient Air

Sampling Location : Barkola Village

Sample Condition : In GMF Filter Paper & Plastic Bottle

Location of Testing : At Laboratory

Sampling Method : CPCB, Emission Regulation (Part III)

U.L.R. No. : TC1100323000000512F

Sample Ref. ID : AS-160-2023(3)

Report Date : 12.10.2023

Date of Sampling : 28.09.2023 to
29.09.2023

Date of Receiving : 02.10.2023

Analysis Started On : 03.10.2023

Analysis Completed On : 04.10.2023

Time of Sampling : 09:20 am to
09:20 am

A. METROLOGICAL INFORMATION

Average Temperature (°C) : 26.8

Average Relative Humidity (%) : 70.0

Barometric Pressure (mm of Hg) : 756.0

Smell or Odour : No Remarkable Smell

Weather Condition : Clear Sky

B. RESULT OF ANALYSIS

Sl. No.	Parameters	Unit	Concentration	Test Method
01.	Concentration of PM ₁₀	µg/m ³	67.24	IS : 5182 (Part 23),2006
02.	Concentration of PM _{2.5}	µg/m ³	34.99	EPA CFR – 40 (pt 50) Appendix – 1 : 2003
03.	Concentration of SO ₂	µg/m ³	7.32	IS : 5182 (Part 2),2006
04.	Concentration of NO ₂	µg/m ³	30.33	IS : 5182 (Part 6),2006
05.	Concentration of CO	mg/m ³	0.168	IS 5182 [Part 10] : 1999 Reaffirmed 2005

Limit : (µg/m³) National Ambient Air Quality Standard, CPCB Notification, 18 th November, 2009

PM₁₀ (24 Hrs) : 100, PM_{2.5} (24 Hrs) : 60, SO₂ (24 Hrs.) : 80, NO₂ (24 Hrs.) : 80, CO : 4 (mg/m³)

Reviewed by
(Sabyasachi Shyam Roy Chowdhury)
Quality Manager

(Sabyasachi Shyam Roy Chowdhury)
Quality Manager
Authorised Signatory
For, GREEN VISION

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Contact : 0343-2543019, 9732580459, 9433158173, email : greenvision.dgp@gmail.com, Website : www.greenvisiondurgapur.com

TEST REPORT OF AMBIENT AIR ANALYSIS

FORMAT NO. : GV/LAB/FM/33A

U.L.R. No. : TC1100323000000513F

Sample is drawn by M/s. Greenvision

Report No. : GV/AR/23-24/264

Name of Customer : M/s. Orissa Alloy Steel Pvt. Ltd.
(Formerly, M/s. Rashmi Alloy Steel Pvt. Ltd.)

Address of Customer : NH-6, Shyamraipur, Gokulpur, Kharagpur,
Dist. : Paschim Medinipur, Pin : 721304, W.B.

Sample Description : Ambient Air

Sampling Location : Truck Parking Area

Sample Condition : In GMF Filter Paper & Plastic Bottle

Location of Testing : At Laboratory

Sampling Method : CPCB, Emission Regulation (Part III)

Sample Ref. ID : AS-160-2023(4)

Report Date : 12.10.2023

Date of Sampling : 28.09.2023 to
29.09.2023

Date of Receiving : 02.10.2023

Analysis Started On : 03.10.2023

Analysis Completed On : 04.10.2023

Time of Sampling : 10:05 am to
10:05 am

A. METROLOGICAL INFORMATION

Average Temperature (°C) : 26.8

Average Relative Humidity (%) : 70.0

Barometric Pressure (mm of Hg) : 756.0

Smell or Odour : No Remarkable Smell

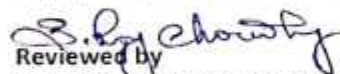
Weather Condition : Clear Sky


B. RESULT OF ANALYSIS

Sl. No.	Parameters	Unit	Concentration	Test Method
01.	Concentration of PM ₁₀	µg/m ³	74.29	IS : 5182 (Part 23),2006
02.	Concentration of PM _{2.5}	µg/m ³	35.91	EPA CFR – 40 (pt 50) Appendix – 1 : 2003
03.	Concentration of SO ₂	µg/m ³	9.52	IS : 5182 (Part 2),2006
04.	Concentration of NO ₂	µg/m ³	33.37	IS : 5182 (Part 6),2006
05.	Concentration of CO	mg/m ³	0.302	IS 5182 [Part 10] : 1999 Reaffirmed 2005

Limit : (µg/m³) National Ambient Air Quality Standard, CPCB Notification, 18 th November, 2009

PM₁₀ (24 Hrs) : 100, PM_{2.5} (24 Hrs) : 60, SO₂ (24 Hrs.) : 80, NO₂ (24 Hrs.) : 80, CO : 4 (mg/m³)


Reviewed by
(Sabyasachi Shyam Roy Chowdhury)
Quality Manager


(Sabyasachi Shyam Roy Chowdhury)
Quality Manager
Authorised Signatory
For, GREEN VISION

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Contact : 0343-2543019, 9732580459, 9433158173, email : greenvision.dgp@gmail.com, Website : www.greenvisiondurgapur.com

TEST REPORT OF AMBIENT AIR ANALYSIS

FORMAT NO. : GV/LAB/FM/33A

Sample is drawn by M/s. Greenvision

U.L.R. No. : TC1100323000000514F

Report No. : GV/AR/23-24/265
Name of Customer : M/s. Orissa Alloy Steel Pvt. Ltd.
(Formerly, M/s. Rashmi Alloy Steel Pvt. Ltd.)
Address of Customer : NH-6, Shyamraipur, Gokulpur, Kharagpur,
Dist. : Paschim Medinipur, Pin : 721304, W.B.
Sample Description : Ambient Air
Sampling Location : Near Plant Main Gate
Sample Condition : In GMF Filter Paper & Plastic Bottle
Location of Testing : At Laboratory
Sampling Method : CPCB, Emission Regulation (Part III)

Sample Ref. ID : AS-160-2023(5)
Report Date : 12.10.2023
Date of Sampling : 29.09.2023 to
30.09.2023
Date of Receiving : 02.10.2023
Analysis Started On : 03.10.2023
Analysis Completed On : 04.10.2023
Time of Sampling : 08:40 am to
08:40 am

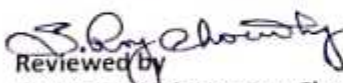
A. METROLOGICAL INFORMATION

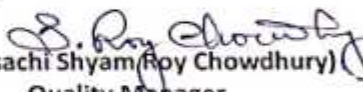
Average Temperature (°C) : 26.5
Average Relative Humidity (%) : 70.0
Barometric Pressure (mm of Hg) : 756.0
Smell or Odour : No Remarkable Smell
Weather Condition : Clear Sky

B. RESULT OF ANALYSIS

Sl. No.	Parameters	Unit	Concentration	Test Method
01.	Concentration of PM ₁₀	µg/m ³	78.22	IS : 5182 (Part 23),2006
02.	Concentration of PM _{2.5}	µg/m ³	38.66	EPA CFR – 40 (pt 50) Appendix – 1 : 2003
03.	Concentration of SO ₂	µg/m ³	8.79	IS : 5182 (Part 2),2006
04.	Concentration of NO ₂	µg/m ³	31.37	IS : 5182 (Part 6),2006
05.	Concentration of CO	mg/m ³	0.264	IS 5182 [Part 10] : 1999 Reaffirmed 2005

Limit : (µg/m³) National Ambient Air Quality Standard, CPCB Notification, 18 th November, 2009
PM₁₀ (24 Hrs) : 100, PM_{2.5} (24 Hrs) : 60, SO₂ (24 Hrs.) : 80, NO₂ (24 Hrs.) : 80, CO : 4 (mg/m³)


Reviewed by
(Sabyasachi Shyam Roy Chowdhury)
Quality Manager


(Sabyasachi Shyam Roy Chowdhury)
Quality Manager
Authorised Signatory
For, GREEN VISION

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Page 1/1

End of the report.....

City Office : 84/10, Roy Bahadur Road, Behala, Kolkata-700 034, Ph. : 9433158173

Branch Office : Durgachak, Haldia, Purba Medinipur, Ph. : 8101647425 M.N. Sarkar Road, Mahananda Para, Siliguri-734001



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Contact : 0343-2543019, 9732580459, 9433158173, email : greenvision.dgp@gmail.com, Website : www.greenvisiondurgapur.com

TEST REPORT OF FUGITIVE AIR ANALYSIS

FORMAT NO. : GV/LAB/FM/33W

U.L.R. No. : TC1100323000000515F

Sample is drawn by M/s. Greenvision

Report No. : GV/AR/23-24/266
Name of Customer : M/s. Orissa Alloy Steel Pvt. Ltd.
(Formerly, M/s. Rashmi Alloy Steel Pvt. Ltd.)
Address of Customer : NH-6, Shyamraipur, Gokulpur, Kharagpur,
Dist. : Paschim Medinipur, Pin : 721304, W.B.
Sample Description : Fugitive Air
Sampling Location : DRI & CPP Plant Area
Sample Condition : In GMF Filter Paper & Plastic Bottle
Location of Testing : At Laboratory
Sampling Method : CPCB, Emission Regulation (Part III)

Sample Ref. ID : AS-160-2023(6)
Report Date : 12.10.2023
Date of Sampling : 29.09.2023
Date of Receiving : 02.10.2023
Analysis Started On : 03.10.2023
Analysis Completed On : 04.10.2023
Time of Sampling : 09:30 am to
05:30 pm

A. METROLOGICAL INFORMATION

Average Temperature (°C) : 27.0
Barometric Pressure (mm of Hg) : 756.0

B. RESULT OF ANALYSIS

Sl. No.	Parameters	Unit	Concentration	Test Method
01.	Concentration of TSPM	$\mu\text{g}/\text{m}^3$	494.53	IS : 5182 (Part 4),1999
02.	Concentration of SO ₂	$\mu\text{g}/\text{m}^3$	8.05	IS : 5182 (Part 2),2006
03.	Concentration of NO ₂	$\mu\text{g}/\text{m}^3$	30.37	IS : 5182 (Part 6),2006

Limit : ($\mu\text{g}/\text{m}^3$) TSPM – 2000, SO₂ – 80, NO₂ – 80

Ref. : The Environment (Protection) Rules, 1986, Fourth Amendment, 2008 notified by G.S.R.414(E), dated 30.5.2008.

S. Roy Chowdhury
Reviewed by
(Sabyasachi Shyam Roy Chowdhury)
Quality Manager

S. Roy Chowdhury
(Sabyasachi Shyam Roy Chowdhury)
Quality Manager
Authorised Signatory
For, GREEN VISION

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TEST REPORT OF FUGITIVE AIR ANALYSIS

FORMAT NO. : GV/LAB/FM/33W

Sample is drawn by M/s. Greenvision

U.L.R. No. : TC110032300000516F

Report No. : GV/AR/23-24/267
Name of Customer : M/s. Orissa Alloy Steel Pvt. Ltd.
(Formerly, M/s. Rashmi Alloy Steel Pvt. Ltd.)
Address of Customer : NH-6, Shyamraipur, Gokulpur, Kharagpur,
Dist. : Paschim Medinipur, Pin : 721304, W.B.
Sample Description : Fugitive Air
Sampling Location : Raw Material Yard
Sample Condition : In GMF Filter Paper & Plastic Bottle
Location of Testing : At Laboratory
Sampling Method : CPCB, Emission Regulation (Part III)

Sample Ref. ID : AS-160-2023(7)
Report Date : 12.10.2023
Date of Sampling : 29.09.2023
Date of Receiving : 02.10.2023
Analysis Started On : 03.10.2023
Analysis Completed On : 04.10.2023
Time of Sampling : 10:05 am to
06:05 pm

A. METROLOGICAL INFORMATION

Average Temperature (°C) : 27.0
Barometric Pressure (mm of Hg) : 756.0

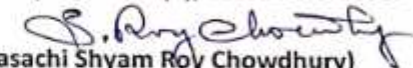
B. RESULT OF ANALYSIS

Sl. No.	Parameters	Unit	Concentration	Test Method
01.	Concentration of TSPM	$\mu\text{g}/\text{m}^3$	595.13	IS : 5182 (Part 4),1999
02.	Concentration of SO ₂	$\mu\text{g}/\text{m}^3$	7.32	IS : 5182 (Part 2),2006
03.	Concentration of NO ₂	$\mu\text{g}/\text{m}^3$	31.55	IS : 5182 (Part 6),2006

Limit : ($\mu\text{g}/\text{m}^3$) TSPM – 2000, SO₂ – 80, NO₂ – 80

Ref. : The Environment (Protection) Rules, 1986, Fourth Amendment, 2008 notified by G.S.R.414(E), dated 30.5.2008.


Reviewed by
(Sabyasachi Shyam Roy Chowdhury)
Quality Manager


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Quality Manager
Authorised Signatory
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TEST REPORT OF FUGITIVE AIR ANALYSIS

FORMAT NO. : GV/LAB/FM/33W

U.L.R. No. : TC110032300000517F

Sample is drawn by M/s. Greenvision

Report No. : GV/AR/23-24/268

Name of Customer : M/s. Orissa Alloy Steel Pvt. Ltd.

(Formerly, M/s. Rashmi Alloy Steel Pvt. Ltd.)

Address of Customer : NH-6, Shyamraipur, Gokulpur, Kharagpur,
Dist. : Paschim Medinipur, Pin : 721304, W.B.

Sample Description : Fugitive Air

Sampling Location : Ferro Alloy Plant Area

Sample Condition : In GMF Filter Paper & Plastic Bottle

Location of Testing : At Laboratory

Sampling Method : CPCB, Emission Regulation (Part III)

Sample Ref. ID : AS-160-2023(8)

Report Date : 12.10.2023

Date of Sampling : 29.09.2023

Date of Receiving : 02.10.2023

Analysis Started On : 03.10.2023

Analysis Completed On : 04.10.2023

Time of Sampling : 10:50 am to
06:50 pm

A. METROLOGICAL INFORMATION

Average Temperature (°C) : 27.0

Barometric Pressure (mm of Hg) : 756.0

B. RESULT OF ANALYSIS

Sl. No.	Parameters	Unit	Concentration	Test Method
01.	Concentration of TSPM	$\mu\text{g}/\text{m}^3$	592.75	IS : 5182 (Part 4),1999
02.	Concentration of SO ₂	$\mu\text{g}/\text{m}^3$	7.32	IS : 5182 (Part 2),2006
03.	Concentration of NO ₂	$\mu\text{g}/\text{m}^3$	30.94	IS : 5182 (Part 6),2006

Limit : ($\mu\text{g}/\text{m}^3$) TSPM – 2000, SO₂ – 80, NO₂ – 80

Ref. : The Environment (Protection) Rules, 1986, Fourth Amendment, 2008 notified by G.S.R.414(E), dated 30.5.2008.

S. Roy Chowdhury
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(Sabyasachi Shyam Roy Chowdhury)

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TEST REPORT OF FUGITIVE AIR ANALYSIS

FORMAT NO. : GV/LAB/FM/33W

U.L.R. No. : TC1100323000000518F

Sample is drawn by M/s. Greenvision

Report No. : GV/AR/23-24/269

Name of Customer : M/s. Orissa Alloy Steel Pvt. Ltd.
(Formerly, M/s. Rashmi Alloy Steel Pvt. Ltd.)

Address of Customer : NH-6, Shyamraipur, Gokulpur, Kharagpur,
Dist. : Paschim Medinipur, Pin : 721304, W.B.

Sample Description : Fugitive Air

Sampling Location : Pellet Plant Area

Sample Ref. ID : AS-160-2023(9)

Report Date : 12.10.2023

Date of Sampling : 29.09.2023 to
30.09.2023

Date of Receiving : 02.10.2023

Analysis Started On : 03.10.2023

Analysis Completed On : 04.10.2023

Time of Sampling : 05:50 pm to
01:50 am

Sample Condition : In GMF Filter Paper & Plastic Bottle

Location of Testing : At Laboratory

Sampling Method : CPCB, Emission Regulation (Part III)

A. METROLOGICAL INFORMATION

Average Temperature (°C) : 25.7

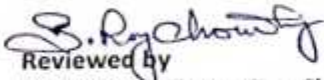
Barometric Pressure (mm of Hg) : 756.0

B. RESULT OF ANALYSIS

Sl. No.	Parameters	Unit	Concentration	Test Method
01.	Concentration of TSPM	$\mu\text{g}/\text{m}^3$	546.46	IS : 5182 (Part 4),1999
02.	Concentration of SO ₂	$\mu\text{g}/\text{m}^3$	8.05	IS : 5182 (Part 2),2006
03.	Concentration of NO ₂	$\mu\text{g}/\text{m}^3$	30.34	IS : 5182 (Part 6),2006

Limit : ($\mu\text{g}/\text{m}^3$) TSPM – 2000, SO₂ – 80, NO₂ – 80

Ref. : The Environment (Protection) Rules, 1986, Fourth Amendment, 2008 notified by G.S.R.414(E), dated 30.5.2008.



Reviewed by
(Sabyasachi Shyam Roy Chowdhury)
Quality Manager



(Sabyasachi Shyam Roy Chowdhury)
Quality Manager
Authorised Signatory
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TEST REPORT OF FUGITIVE AIR ANALYSIS

FORMAT NO. : GV/LAB/FM/33W

U.L.R. No. : TC110032300000519F

Sample is drawn by M/s. Greenvision

Report No. : GV/AR/23-24/270

Name of Customer : M/s. Orissa Alloy Steel Pvt. Ltd.
(Formerly, M/s. Rashmi Alloy Steel Pvt. Ltd.)

Address of Customer : NH-6, Shyamraipur, Gokulpur, Kharagpur,
Dist. : Paschim Medinipur, Pin : 721304, W.B.

Sample Description : Fugitive Air

Sampling Location : SMS Area

Sample Ref. ID : AS-160-2023(10)

Report Date : 12.10.2023

Date of Sampling : 29.09.2023 to
30.09.2023

Date of Receiving : 02.10.2023

Analysis Started On : 03.10.2023

Analysis Completed On : 04.10.2023

Time of Sampling : 06:30 pm to
02:30 am

Sample Condition : In GMF Filter Paper & Plastic Bottle

Location of Testing : At Laboratory

Sampling Method : CPCB, Emission Regulation (Part III)

A. METROLOGICAL INFORMATION

Average Temperature (°C) : 25.7

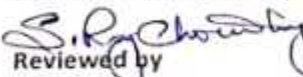
Barometric Pressure (mm of Hg) : 756.0

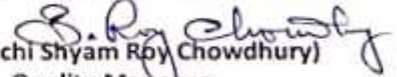
B. RESULT OF ANALYSIS

Sl. No.	Parameters	Unit	Concentration	Test Method
01.	Concentration of TSPM	$\mu\text{g}/\text{m}^3$	542.35	IS : 5182 (Part 4),1999
02.	Concentration of SO ₂	$\mu\text{g}/\text{m}^3$	8.79	IS : 5182 (Part 2),2006
03.	Concentration of NO ₂	$\mu\text{g}/\text{m}^3$	29.55	IS : 5182 (Part 6),2006

Limit : ($\mu\text{g}/\text{m}^3$) TSPM – 2000, SO₂ – 80, NO₂ – 80

Ref. : The Environment (Protection) Rules, 1986, Fourth Amendment, 2008 notified by G.S.R.414(E), dated 30.5.2008.


Reviewed by
(Sabyasachi Shyam Roy Chowdhury)
Quality Manager


(Sabyasachi Shyam Roy Chowdhury)
Quality Manager
Authorised Signatory
For, GREEN VISION

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TEST REPORT OF FUGITIVE AIR ANALYSIS

FORMAT NO. : GV/LAB/FM/33W

Sample is drawn by M/s. Greenvision

U.L.R. No. : TC110032300000520F

Report No. : GV/AR/23-24/271

Sample Ref. ID : AS-160-2023(11)

Name of Customer : M/s. Orissa Alloy Steel Pvt. Ltd.
(Formerly, M/s. Rashmi Alloy Steel Pvt. Ltd.)

Report Date : 12.10.2023

Address of Customer : NH-6, Shyamraipur, Gokulpur, Kharagpur,
Dist. : Paschim Medinipur, Pin : 721304, W.B.

Date of Sampling : 29.09.2023 to
30.09.2023

Sample Description : Fugitive Air

Date of Receiving : 02.10.2023

Analysis Started On : 03.10.2023

Sampling Location : Coke Oven Site

Analysis Completed On : 04.10.2023

Time of Sampling : 07:20 pm to
03:20 am

Sample Condition : In GMF Filter Paper & Plastic Bottle

Location of Testing : At Laboratory

Sampling Method : CPCB, Emission Regulation (Part III)

A. METROLOGICAL INFORMATION

Average Temperature ($^{\circ}$ C) : 25.7

Barometric Pressure (mm of Hg) : 756.0

B. RESULT OF ANALYSIS

Sl. No.	Parameters	Unit	Concentration	Test Method
01.	Concentration of TSPM	$\mu\text{g}/\text{m}^3$	523.83	IS : 5182 (Part 4),1999
02.	Concentration of SO_2	$\mu\text{g}/\text{m}^3$	8.79	IS : 5182 (Part 2),2006
03.	Concentration of NO_2	$\mu\text{g}/\text{m}^3$	30.16	IS : 5182 (Part 6),2006

Limit : ($\mu\text{g}/\text{m}^3$) TSPM – 2000, SO_2 – 80, NO_2 – 80

Ref. : The Environment (Protection) Rules, 1986, Fourth Amendment, 2008 notified by G.S.R.414(E), dated 30.5.2008.

Reviewed by
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Quality Manager

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Quality Manager
Authorised Signatory
For, GREEN VISION

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TEST REPORT OF FUGITIVE AIR ANALYSIS

FORMAT NO. : GV/LAB/FM/33W

Sample is drawn by M/s. Greenvision

U.L.R. No. : TC110032300000521F

Report No. : GV/AR/23-24/272
Name of Customer : M/s. Orissa Alloy Steel Pvt. Ltd.
(Formerly, M/s. Rashmi Alloy Steel Pvt. Ltd.)
Address of Customer : NH-6, Shyamraipur, Gokulpur, Kharagpur,
Dist. : Paschim Medinipur, Pin : 721304, W.B.
Sample Description : Fugitive Air
Sampling Location : DIP Plant Area
Sample Condition : In GMF Filter Paper & Plastic Bottle
Location of Testing : At Laboratory
Sampling Method : CPCB, Emission Regulation (Part III)

Sample Ref. ID : AS-160-2023(12)
Report Date : 12.10.2023
Date of Sampling : 30.09.2023
Date of Receiving : 02.10.2023
Analysis Started On : 03.10.2023
Analysis Completed On : 04.10.2023
Time of Sampling : 09:20 am to
05:20 pm

A. METROLOGICAL INFORMATION

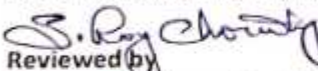
Average Temperature (°C) : 26.0
Barometric Pressure (mm of Hg) : 756.0

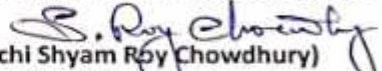
B. RESULT OF ANALYSIS

Sl. No.	Parameters	Unit	Concentration	Test Method
01.	Concentration of TSPM	µg/m ³	508.81	IS : 5182 (Part 4),1999
02.	Concentration of SO ₂	µg/m ³	8.05	IS : 5182 (Part 2),2006
03.	Concentration of NO ₂	µg/m ³	30.94	IS : 5182 (Part 6),2006

Limit : (µg/m³) TSPM – 2000, SO₂ – 80, NO₂ – 80

Ref. : The Environment (Protection) Rules, 1986, Fourth Amendment, 2008 notified by G.S.R.414(E), dated 30.5.2008.


Reviewed by
(Sabyasachi Shyam Roy Chowdhury)
Quality Manager


(Sabyasachi Shyam Roy Chowdhury)
Quality Manager
Authorised Signatory
For, GREEN VISION

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TEST REPORT OF FUGITIVE AIR ANALYSIS

FORMAT NO. : GV/LAB/FM/33W

Sample is drawn by M/s. Greenvision

Report No. : GV/AR/23-24/273

Name of Customer : M/s. Orissa Alloy Steel Pvt. Ltd.
(Formerly, M/s. Rashmi Alloy Steel Pvt. Ltd.)

Address of Customer : NH-6, Shyamraipur, Gokulpur, Kharagpur,
Dist. : Paschim Medinipur, Pin : 721304, W.B.

Sample Description : Fugitive Air

Sampling Location : Railway Siding

Sample Condition : In GMF Filter Paper & Plastic Bottle

Location of Testing : At Laboratory

Sampling Method : CPCB, Emission Regulation (Part III)

U.L.R. No. : TC110032300000522F

Sample Ref. ID : AS-160-2023(13)

Report Date : 12.10.2023

Date of Sampling : 30.09.2023

Date of Receiving : 02.10.2023

Analysis Started On : 03.10.2023

Analysis Completed On : 04.10.2023

Time of Sampling : 09:55 am to
05:55 pm

A. METROLOGICAL INFORMATION

Average Temperature (°C) : 26.0

Barometric Pressure (mm of Hg) : 756.0

B. RESULT OF ANALYSIS

Sl. No.	Parameters	Unit	Concentration	Test Method
01.	Concentration of TSPM	$\mu\text{g}/\text{m}^3$	602.94	IS : 5182 (Part 4),1999
02.	Concentration of SO ₂	$\mu\text{g}/\text{m}^3$	8.79	IS : 5182 (Part 2),2006
03.	Concentration of NO ₂	$\mu\text{g}/\text{m}^3$	28.76	IS : 5182 (Part 6),2006

Limit : ($\mu\text{g}/\text{m}^3$) TSPM – 2000, SO₂ – 80, NO₂ – 80

Ref. : The Environment (Protection) Rules, 1986, Fourth Amendment, 2008 notified by G.S.R.414(E), dated 30.5.2008.

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Quality Manager

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(Sabyasachi Shyam Roy Chowdhury)
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Authorised Signatory
For, GREEN VISION

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TC-11003

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SLAG ANALYSIS REPORT

FORMAT NO. : GV/LAB/FM/335

Sample is drawn by M/s. Greenvision

Sample submitted and identified by customer as : Nil

U.L.R. No. : TC110032300000538F

Report No. : GV/SS/23-24/025

Laboratory Ref. No. : SS-014-2023(1)

Issued to : M/s. Orissa Alloy Steel Pvt. Ltd.
(Formerly, M/s. Rashmi Alloy Steel Pvt. Ltd.)

Report Date : 12.10.2023

Address : NH-6, Shyamraipur, Gokulpur, Kharagpur,
Dist. : Paschim Medinipur, Pin : 721304, W.B.

Date of Sampling : 29.09.2023

Sample Description : Slag Sample

Sample Received on : 01.10.2023

Location : Ferro Slag Storage Area

Analysis Started on : 02.10.2023

Sample Condition : In Plastic Pouch

Analysis Completed on : 05.10.2023

Type of Sample : Ferro Alloy's Slag

Time of Sampling : 04:50 pm

Sl. No.	Parameters	Test Method	Unit	Results	Limit as per EPA CHAPTER-7
01	Cadmium as Cd	EPA 200.8	mg/l	BDL (DL: 0.1 µg/l)	1.0
02	Mercury as Hg	EPA 200.8	mg/l	BDL (DL: 0.1 µg/l)	0.2
03	Total Chromium as Cr	EPA 200.8	mg/l	1.24	5.0
04	Arsenic as As	EPA 200.8	mg/l	BDL (DL: 0.1 µg/l)	5.0
05	Barium as Ba	EPA 200.8	mg/l	1.78	100.0
06	Lead as Pb	EPA 200.8	mg/l	0.94	5.0
07	Selenium as Se	EPA 200.8	mg/l	BDL (DL: 0.1 µg/l)	1.0
08	Silver as Ag	EPA 200.8	mg/l	BDL (DL: 0.1 µg/l)	5.0

*TCLP extraction has been done & the extract analyzed for the above parameters

Reviewed by
(Sabyasachi Shyam Roy Chowdhury)
Quality Manager

(Sabyasachi Shyam Roy Chowdhury)
Quality Manager
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Contact : 0343-2543019, 9732580459, 9433158173, email : greenvision.dgp@gmail.com, Website : www.greenvisiondurgapur.com

SLAG ANALYSIS REPORT

FORMAT NO. : GV/LAB/FM/335

Sample is drawn by M/s. Greenvision

Sample submitted and identified by customer as : Nil

U.L.R. No. : TC1100323000000539F

Report No. : GV/SS/23-24/026

Laboratory Ref. No. : SS-014-2023(2)

Issued to : M/s. Orissa Alloy Steel Pvt. Ltd.
(Formerly, M/s. Rashmi Alloy Steel Pvt. Ltd.)

Report Date : 12.10.2023

Address : NH-6, Shyamraipur, Gokulpur, Kharagpur,
Dist. : Paschim Medinipur, Pin : 721304, W.B.

Date of Sampling : 29.09.2023

Sample Description : Solid Sample

Sample Received on : 01.10.2023

Location : Heap of Dolochar

Analysis Started on : 02.10.2023

Sample Condition : In Plastic Pouch

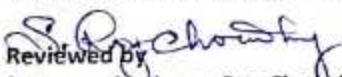
Analysis Completed on : 05.10.2023

Type of Sample : Dolochar

Time of Sampling : 05:00 pm

Sl. No.	Parameters	Test Method	Unit	Results	Limit as per EPA CHAPTER-7
01	Cadmium as Cd	EPA 200.8	mg/l	BDL (DL: 0.1 µg/l)	1.0
02	Mercury as Hg	EPA 200.8	mg/l	BDL (DL: 0.1 µg/l)	0.2
03	Total Chromium as Cr	EPA 200.8	mg/l	0.84	5.0
04	Arsenic as As	EPA 200.8	mg/l	BDL (DL: 0.1 µg/l)	5.0
05	Barium as Ba	EPA 200.8	mg/l	1.18	100.0
06	Lead as Pb	EPA 200.8	mg/l	0.57	5.0
07	Selenium as Se	EPA 200.8	mg/l	BDL (DL: 0.1 µg/l)	1.0
08	Silver as Ag	EPA 200.8	mg/l	BDL (DL: 0.1 µg/l)	5.0

*TCLP extraction has been done & the extract analyzed for the above parameters

Reviewed by 
(Sabyasachi Shyam Roy Chowdhury)
Quality Manager


(Sabyasachi Shyam Roy Chowdhury)
Quality Manager
Authorised Signatory
For, GREEN VISION

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Page 1/1

End of the report.....

City Office : 84/10, Roy Bahadur Road, Behala, Kolkata-700 034, Ph. : 9433158173

Branch Office : Durgachak, Haldia, Purba Medinipur, Ph. : 8101647425 M.N. Sarkar Road, Mahananda Para, Siliguri-734001



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Contact : 0343-2543019, 9732580459, 9433158173, email : greenvision.dgp@gmail.com, Website : www.greenvisiondurgapur.com

TEST REPORT OF WATER ANALYSIS

FORMAT NO. : GV/LAB/FM/33W

Sample is drawn by M/s. Greenvision

Sample submitted and identified by customer as : N.A.

U.L.R. No. : TC1100323000000531F

Report No. : GV/WW/23-24/128

Sample Ref. ID : WS-112-2023(1)

Name of Customer : M/s. Orissa Alloy Steel Pvt. Ltd.
(Formerly, M/s. Rashmi Alloy Steel Pvt. Ltd.)

Report Date : 12.10.2023

Address of Customer : NH-6, Shyamraipur, Gokulpur, Kharagpur,
Dist. : Paschim Medinipur, Pin : 721304, W.B.

Date of Sampling : 30.09.2023

Sample Description : Waste Water

Date of Receiving : 02.10.2023

Sampling Location : ETP Inlet

Analysis Started on : 03.10.2023

Sample Condition : In Glass Bottle & Plastic Bottle

Analysis Completed on : 07.10.2023

Type of Sample : Industrial Waste Water

Time of Sampling : 12:15 pm

Testing Location : At Laboratory

Sampling & Preservation Method : APHA 24th EDITION, 1060

PARAMETERS	TEST METHOD	UNIT	RESULTS
pH	APHA 24 th EDITION, 4500-H+B	---	7.56
Total Suspended Solid(TSS)	APHA 24 th EDITION, 2540 D	mg/l	88.0
Chemical Oxygen Demand (COD)	APHA 24 th EDITION, 5220 B	mg/l	87.48
Biochemical Oxygen Demand (BOD)	IS:3025, P-44, 1993, Reaffirmed 2014	mg/l	15.5
Oil & Grease	APHA 24 th EDITION, 5520 A	mg/l	3.45

S. Roy Chowdhury
Reviewed by
(Sabyasachi Shyam Roy Chowdhury)
Quality Manager

S. Roy Chowdhury
(Sabyasachi Shyam Roy Chowdhury)
Quality Manager
Authorised Signatory
For, GREEN VISION

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TEST REPORT OF WATER ANALYSIS

FORMAT NO. : GV/LAB/FM/33W

Sample is drawn by M/s. Greenvision

Sample submitted and identified by customer as : N.A.

U.L.R. No. : TC1100323000000532F

Report No. : GV/WW/23-24/129

Sample Ref. ID : WS-112-2023(2)

Name of Customer : M/s. Orissa Alloy Steel Pvt. Ltd.
(Formerly, M/s. Rashmi Alloy Steel Pvt. Ltd.)

Report Date : 12.10.2023

Address of Customer : NH-6, Shyamraipur, Gokulpur, Kharagpur,
Dist. : Paschim Medinipur, Pin : 721304, W.B.

Date of Sampling : 30.09.2023

Sample Description : Waste Water

Date of Receiving : 02.10.2023

Sampling Location : ETP Outlet

Analysis Started on : 03.10.2023

Sample Condition : In Glass Bottle & Plastic Bottle

Analysis Completed on : 07.10.2023

Type of Sample : Industrial Waste Water

Time of Sampling : 12:35 pm

Testing Location : At Laboratory

Sampling & Preservation Method : APHA 24th EDITION, 1060

PARAMETERS	TEST METHOD	UNIT	RESULTS
pH	APHA 24 th EDITION, 4500-H+B	—	7.28
Total Suspended Solid (TSS)	APHA 24 th EDITION, 2540 D	mg/l	20.1
Chemical Oxygen Demand (COD)	APHA 24 th EDITION, 5220 B	mg/l	29.16
Biochemical Oxygen Demand (BOD)	IS:3025, P-44, 1993, Reaffirmed 2014	mg/l	5.23
Oil & Grease	APHA 24 th EDITION, 5520 A	mg/l	< 2.0

S. Roy Chowdhury
Reviewed by
(Sabyasachi Shyam Roy Chowdhury)
Quality Manager

S. Roy Chowdhury
(Sabyasachi Shyam Roy Chowdhury)
Quality Manager
Authorised Signatory
For, GREEN VISION

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TC-11003

TEST REPORT OF WATER ANALYSIS

FORMAT NO. : GV/LAB/FM/33W

Sample is drawn by M/s. Greenvision

Sample submitted and identified by customer as : N.A.

U.L.R. No. : TC1100323000000533F

Report No. : GV/WW/23-24/130

Sample Ref. ID : WS-112-2023(3)

Name of Customer : M/s. Orissa Alloy Steel Pvt. Ltd.
(Formerly, M/s. Rashmi Alloy Steel Pvt. Ltd.)

Report Date : 12.10.2023

Address of Customer : NH-6, Shyamraipur, Gokulpur, Kharagpur,
Dist. : Paschim Medinipur, Pin : 721304, W.B.

Date of Sampling : 30.09.2023

Sample Description : Waste Water

Date of Receiving : 02.10.2023

Sampling Location : STP Outlet

Analysis Started on : 03.10.2023

Sample Condition : In Glass Bottle & Plastic Bottle

Analysis Completed on : 07.10.2023

Type of Sample : Industrial Waste Water

Time of Sampling : 03:40 pm

Testing Location : At Laboratory

Sampling & Preservation Method : APHA 24th EDITION, 1060

PARAMETERS	TEST METHOD	UNIT	RESULTS
pH	APHA 24 th EDITION, 4500-H+B	---	7.23
Total Suspended Solid(TSS)	APHA 24 th EDITION, 2540 D	mg/l	22.0
Chemical Oxygen Demand (COD)	APHA 24 th EDITION, 5220 B	mg/l	48.6
Biochemical Oxygen Demand (BOD)	IS:3025, P-44, 1993, Reaffirmed 2014	mg/l	6.28
Oil & Grease	APHA 24 th EDITION, 5520 A	mg/l	< 2.0

Reviewed by
(Sabyasachi Shyam Roy Chowdhury)
Quality Manager

(Sabyasachi Shyam Roy Chowdhury)
Quality Manager
Authorised Signatory
For, GREEN VISION

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TC-11003

TEST REPORT OF WATER ANALYSIS

FORMAT NO. : GV/LAB/FM/33W

U.L.R. No. : TC110032300000534F

Sample is drawn by	: Mr. Uttam Kr. Sil, Field Sampler	Laboratory Ref. No.	: DS-011-2023(1)
Sample identification	: Nil	Report Date	: 12.10.2023
Report No.	: GV/DW/OASPL/23-24/001	Date of Sampling	: 30.09.2023
Issued To	: M/s. Orissa Alloy Steel Pvt. Ltd. (Formerly, M/s. Rashmi Alloy Steel Pvt. Ltd.)		
Address	: NH-6, Shyamraipur, Gokulpur, Kharagpur, Dist. : Paschim Medinipur, Pin : 721304,		
Sample Condition	: In Glass Bottle & Plastic Bottle	Sample Received on	: 02.10.2023
Sample Description	: Drinking Water	Analysis Started on	: 03.10.2023
Sampling Method	: APHA 24 th EDITION, 1060	Analysis Completed	: 09.10.2023
Location	: Tap Near Ferro Plant	Time of Sampling	: 12:30 pm

Sl. No.	Parameters	Unit	Result	As Per IS:10500:2012		Method Followed [APHA 24 th EDITION]
				Acceptable Limit	Permissible limit in the absence of alternate source	
1.	pH (at 25°C)	-	6.86	6.5 to 8.5	No Relaxation	4500-H ⁺ B
2.	Colour	Hazen	1.0	5.0	15.0	2120 B
3.	Odour	-	Agreeable	Agreeable	Agreeable	2150 B
4.	Taste	-	Agreeable	Agreeable	Agreeable	2160 A
5.	Turbidity	N.T.U.	0.73	1	5	2130 B
6.	Conductivity	µS/cm	309.0	-	-	2510 B
7.	Total Dissolved Solid (TDS)	mg/L	225.0	500	2000	2540 C
8.	Total Hardness as CaCO ₃	mg/L	136.0	200	600	2340 C
9.	Chloride as Cl	mg/L	24.11	250	1000	4500Cl ⁻ B
10.	Total Alkalinity as CaCO ₃	mg/L	132.0	200	600	2320 B
11.	Sulfate as SO ₄	mg/L	28.73	200	400	4500 SO ₄ ²⁻ E



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TC-11003

12.	Nitrate as NO ₃ ⁻	mg/L	3.0	45.0	No Relaxation	4500 NO ₃ ⁻
13.	Fluoride as F	mg/L	< 0.2	1	1.5	4500 FD
14.	Calcium as Ca	mg/L	28.86	75	200	3500- Ca B
15.	Magnesium as Mg	mg/L	15.55	30	100	3500- Mg B
16.	Iron as Fe	mg/L	< 0.1	0.3	No Relaxation	3500-Fe B
17.	Residual Free Chlorine	mg/L	Nil	0.2	1.0	4500-Cl B
18.	Aluminium as Al	mg/L	< 0.01	0.03	0.2	3500-Al B
19.	Total Chromium as Cr	mg/L	< 0.01	0.05	No Relaxation	3500-Cr C
20.	Copper as Cu	mg/L	< 0.01	0.05	1.5	3500-Cu B
21.	Lead as Pb	mg/L	< 0.001	0.01	No Relaxation	3500-Pb B
22.	Cyanide as Cn	mg/L	< 0.01	0.05	No Relaxation	4500-CN C
23.	Nickel as Ni	mg/L	< 0.01	0.02	No Relaxation	3500-Ni
24.	Cadmium as Cd	mg/L	< 0.001	0.003	No Relaxation	3500-Cd
25.	Arsenic as As	mg/L	< 0.001	0.01	0.05	3500-As B
26.	Zinc as Zn	mg/L	< 1.0	5.0	15.0	3500-Zn B
27.	Mercury as Hg	mg/L	< 0.001	0.001	No Relaxation	3500-Hg
28.	Total Coliform / 100ml.	MPN/100ml	Absent	Absent	Absent	9221 B
29.	E. Coli / 100ml	MPN/100ml	Absent	Absent	Absent	9221 F

S. Roy Chowdhury
Reviewed by
(Sabyasachi Shyam Roy Chowdhury)
Quality Manager

S. Roy Chowdhury
(Sabyasachi Shyam Roy Chowdhury)
Quality Manager
Authorised Signatory
For, GREEN VISION

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TEST REPORT OF WATER ANALYSIS

FORMAT NO. : GV/LAB/FM/33W

U.L.R. No. : TC110032300000535F

Sample is drawn by : Mr. Uttam Kr. Sil, Field Sampler
Sample identification : Nil
Report No. : GV/DW/OASPL/23-24/002
Issued To : M/s. Orissa Alloy Steel Pvt. Ltd.
(Formerly, M/s. Rashmi Alloy Steel Pvt. Ltd.)
Address : NH-6, Shyamraipur, Gokulpur, Kharagpur,
Dist. : Paschim Medinipur, Pin : 721304,
Sample Condition : In Glass Bottle & Plastic Bottle
Sample Description : Drinking Water
Sampling Method : APHA 24th EDITION, 1060
Location : Tap Near DRI Plant
Laboratory Ref. No. : DS-011-2023(2)
Report Date : 12.10.2023
Date of Sampling : 30.09.2023
Sample Received on : 02.10.2023
Analysis Started on : 03.10.2023
Analysis Completed : 09.10.2023
Time of Sampling : 01:20 pm

Sl. No.	Parameters	Unit	Result	As Per IS:10500:2012		Method Followed [APHA 24 th EDITION]
				Acceptable Limit	Permissible limit in the absence of alternate source	
1.	pH (at 25°C)	-	7.06	6.5 to 8.5	No Relaxation	4500-H* B
2.	Colour	Hazen	1.0	5.0	15.0	2120 B
3.	Odour	-	Agreeable	Agreeable	Agreeable	2150 B
4.	Taste	-	Agreeable	Agreeable	Agreeable	2160 A
5.	Turbidity	N.T.U.	0.46	1	5	2130 B
6.	Conductivity	µS/cm	320.0	-	-	2510 B
7.	Total Dissolved Solid (TDS)	mg/L	231.0	500	2000	2540 C
8.	Total Hardness as CaCO ₃	mg/L	138.0	200	600	2340 C
9.	Chloride as Cl	mg/L	25.07	250	1000	4500Cl ⁻ B
10.	Total Alkalinity as CaCO ₃	mg/L	112.0	200	600	2320 B
11.	Sulfate as SO ₄	mg/L	32.07	200	400	4500 SO ₄ ²⁻ E



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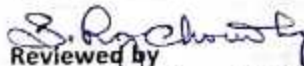


TC-11003

Urvashi Malhar, Phase II, MEAV-25, Bengal Ambuja Housing Complex, City Centre, Durgapur-713216

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12.	Nitrate as NO ₃ ⁻	mg/L	3.2	45.0	No Relaxation	4500 NO ₃ ⁻
13.	Fluoride as F	mg/L	< 0.2	1	1.5	4500 FD
14.	Calcium as Ca	mg/L	29.66	75	200	3500- Ca B
15.	Magnesium as Mg	mg/L	15.55	30	100	3500- Mg B
16.	Iron as Fe	mg/L	< 0.1	0.3	No Relaxation	3500-Fe B
17.	Residual Free Chlorine	mg/L	Nil	0.2	1.0	4500-Cl B
18.	Aluminium as Al	mg/L	< 0.01	0.03	0.2	3500-Al B
19.	Total Chromium as Cr	mg/L	< 0.01	0.05	No Relaxation	3500-Cr C
20.	Copper as Cu	mg/L	< 0.01	0.05	1.5	3500-Cu B
21.	Lead as Pb	mg/L	< 0.001	0.01	No Relaxation	3500-Pb B
22.	Cyanide as Cn	mg/L	< 0.01	0.05	No Relaxation	4500-CN C
23.	Nickel as Ni	mg/L	< 0.01	0.02	No Relaxation	3500-Ni
24.	Cadmium as Cd	mg/L	< 0.001	0.003	No Relaxation	3500-Cd
25.	Arsenic as As	mg/L	< 0.001	0.01	0.05	3500-As B
26.	Zinc as Zn	mg/L	< 1.0	5.0	15.0	3500-Zn B
27.	Mercury as Hg	mg/L	< 0.001	0.001	No Relaxation	3500-Hg
28.	Total Coliform / 100ml.	MPN/100ml	Absent	Absent	Absent	9221 B
29.	E. Coli / 100ml	MPN/100ml	Absent	Absent	Absent	9221 F


Reviewed by
(Sabyasachi Shyam Roy Chowdhury)
Quality Manager


(Sabyasachi Shyam Roy Chowdhury)
Quality Manager
Authorised Signatory
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TC-11003

TEST REPORT OF WATER ANALYSIS

FORMAT NO. : GV/LAB/FM/33W

U.L.R. No. : TC110032300000536F

Sample is drawn by	: Mr. Uttam Kr. Sil, Field Sampler	Laboratory Ref. No.	: DS-011-2023(3)
Sample identification	: Nil	Report Date	: 12.10.2023
Report No.	: GV/DW/OASPL/23-24/003	Date of Sampling	: 30.09.2023
Issued To	: M/s. Orissa Alloy Steel Pvt. Ltd. (Formerly, M/s. Rashmi Alloy Steel Pvt. Ltd.)		
Address	: NH-6, Shyamraipur, Gokulpur, Kharagpur, Dist. : Paschim Medinipur, Pin : 721304,		
Sample Condition	: In Glass Bottle & Plastic Bottle	Sample Received on	: 02.10.2023
Sample Description	: Drinking Water	Analysis Started on	: 03.10.2023
Sampling Method	: APHA 24 th EDITION, 1060	Analysis Completed	: 09.10.2023
Location	: Tap Near Main Gate	Time of Sampling	: 03:10 pm

Sl. No.	Parameters	Unit	Result	As Per IS:10500:2012		Method Followed [APHA 24 th EDITION]
				Acceptable Limit	Permissible limit in the absence of alternate source	
1.	pH (at 25°C)	-	6.8	6.5 to 8.5	No Relaxation	4500-H ⁺ B
2.	Colour	Hazen	1.0	5.0	15.0	2120 B
3.	Odour	-	Agreeable	Agreeable	Agreeable	2150 B
4.	Taste	-	Agreeable	Agreeable	Agreeable	2160 A
5.	Turbidity	N.T.U.	0.61	1	5	2130 B
6.	Conductivity	µS/cm	328.0	-	-	2510 B
7.	Total Dissolved Solid (TDS)	mg/L	239.0	500	2000	2540 C
8.	Total Hardness as CaCO ₃	mg/L	150.0	200	600	2340 C
9.	Chloride as Cl	mg/L	34.71	250	1000	4500Cl ⁻ B
10.	Total Alkalinity as CaCO ₃	mg/L	87.0	200	600	2320 B
11.	Sulfate as SO ₄	mg/L	37.84	200	400	4500 SO ₄ ²⁻ E



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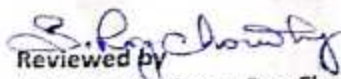
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Contact : 0343-2543019, 9732580459, 9433158173, email : greenvision.dgp@gmail.com, Website : www.greenvisiondurgapur.com



12.	Nitrate as NO ₃ ⁻	mg/L	3.8	45.0	No Relaxation	4500 NO ₃ ⁻
13.	Fluoride as F	mg/L	< 0.2	1	1.5	4500 FD
14.	Calcium as Ca	mg/L	26.45	75	200	3500- Ca B
15.	Magnesium as Mg	mg/L	20.41	30	100	3500- Mg B
16.	Iron as Fe	mg/L	< 0.1	0.3	No Relaxation	3500-Fe B
17.	Residual Free Chlorine	mg/L	Nil	0.2	1.0	4500-Cl B
18.	Aluminium as Al	mg/L	< 0.01	0.03	0.2	3500-Al B
19.	Total Chromium as Cr	mg/L	< 0.01	0.05	No Relaxation	3500-Cr C
20.	Copper as Cu	mg/L	< 0.01	0.05	1.5	3500-Cu B
21.	Lead as Pb	mg/L	< 0.001	0.01	No Relaxation	3500-Pb B
22.	Cyanide as Cn	mg/L	< 0.01	0.05	No Relaxation	4500-CN C
23.	Nickel as Ni	mg/L	< 0.01	0.02	No Relaxation	3500-Ni
24.	Cadmium as Cd	mg/L	< 0.001	0.003	No Relaxation	3500-Cd
25.	Arsenic as As	mg/L	< 0.001	0.01	0.05	3500-As B
26.	Zinc as Zn	mg/L	< 1.0	5.0	15.0	3500-Zn B
27.	Mercury as Hg	mg/L	< 0.001	0.001	No Relaxation	3500-Hg
28.	Total Coliform / 100ml.	MPN/100ml	Absent	Absent	Absent	9221 B
29.	E. Coli / 100ml	MPN/100ml	Absent	Absent	Absent	9221 F


Reviewed by
(Sabyasachi Shyam Roy Chowdhury)
Quality Manager


(Sabyasachi Shyam Roy Chowdhury)
Quality Manager
Authorised Signatory
For, GREEN VISION

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Contact : 0343-2543019, 9732580459, 9433158173, email : greenvision.dgp@gmail.com, Website : www.greenvisiondurgapur.com



TEST REPORT OF WATER ANALYSIS

FORMAT NO. : GV/LAB/FM/33W

U.L.R. No. : TC110032300000537F

Sample is drawn by	: Mr. Uttam Kr. Sil, Field Sampler	Laboratory Ref. No.	: DS-011-2023(4)
Sample identification	: Nil	Report Date	: 12.10.2023
Report No.	: GV/DW/OASPL/23-24/004	Date of Sampling	: 30.09.2023
Issued To	: M/s. Orissa Alloy Steel Pvt. Ltd. (Formerly, M/s. Rashmi Alloy Steel Pvt. Ltd.)		
Address	: NH-6, Shyamraipur, Gokulpur, Kharagpur, Dist. : Paschim Medinipur, Pin : 721304,		
Sample Condition	: In Glass Bottle & Plastic Bottle	Sample Received on	: 02.10.2023
Sample Description	: Drinking Water	Analysis Started on	: 03.10.2023
Sampling Method	: APHA 24 th EDITION, 1060	Analysis Completed	: 09.10.2023
Location	: Tap Near Pellet Plant	Time of Sampling	: 04:05 pm

Sl. No.	Parameters	Unit	Result	As Per IS:10500:2012		Method Followed [APHA 24 th EDITION]
				Acceptable Limit	Permissible limit in the absence of alternate source	
1.	pH (at 25°C)	-	7.1	6.5 to 8.5	No Relaxation	4500-H ⁺ B
2.	Colour	Hazen	1.0	5.0	15.0	2120 B
3.	Odour	-	Agreeable	Agreeable	Agreeable	2150 B
4.	Taste	-	Agreeable	Agreeable	Agreeable	2160 A
5.	Turbidity	N.T.U.	0.73	1	5	2130 B
6.	Conductivity	µS/cm	306.0	-	-	2510 B
7.	Total Dissolved Solid (TDS)	mg/L	222.0	500	2000	2540 C
8.	Total Hardness as CaCO ₃	mg/L	136.0	200	600	2340 C
9.	Chloride as Cl	mg/L	28.93	250	1000	4500Cl ⁻ B
10.	Total Alkalinity as CaCO ₃	mg/L	134.0	200	600	2320 B
11.	Sulfate as SO ₄	mg/L	39.12	200	400	4500 SO ₄ ²⁻ E



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12.	Nitrate as NO ₃ ⁻	mg/L	3.4	45.0	No Relaxation	4500 NO ₃ ⁻
13.	Fluoride as F	mg/L	< 0.2	1	1.5	4500 FD
14.	Calcium as Ca	mg/L	27.25	75	200	3500- Ca B
15.	Magnesium as Mg	mg/L	16.52	30	100	3500- Mg B
16.	Iron as Fe	mg/L	< 0.1	0.3	No Relaxation	3500-Fe B
17.	Residual Free Chlorine	mg/L	Nil	0.2	1.0	4500-Cl B
18.	Aluminium as Al	mg/L	< 0.01	0.03	0.2	3500-Al B
19.	Total Chromium as Cr	mg/L	< 0.01	0.05	No Relaxation	3500-Cr C
20.	Copper as Cu	mg/L	< 0.01	0.05	1.5	3500-Cu B
21.	Lead as Pb	mg/L	< 0.001	0.01	No Relaxation	3500-Pb B
22.	Cyanide as Cn	mg/L	< 0.01	0.05	No Relaxation	4500-CN C
23.	Nickel as Ni	mg/L	< 0.01	0.02	No Relaxation	3500-Ni
24.	Cadmium as Cd	mg/L	< 0.001	0.003	No Relaxation	3500-Cd
25.	Arsenic as As	mg/L	< 0.001	0.01	0.05	3500-As B
26.	Zinc as Zn	mg/L	< 1.0	5.0	15.0	3500-Zn B
27.	Mercury as Hg	mg/L	< 0.001	0.001	No Relaxation	3500-Hg
28.	Total Coliform / 100ml.	MPN/100ml	Absent	Absent	Absent	9221 B
29.	E. Coli / 100ml	MPN/100ml	Absent	Absent	Absent	9221 F

S. Roy Chowdhury
Reviewed by
(Sabyasachi Shyam Roy Chowdhury)
Quality Manager

S. Roy Chowdhury
(Sabyasachi Shyam Roy Chowdhury)
Quality Manager
Authorised Signatory
For, GREEN VISION

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TC-11003

TEST REPORT OF NOISE LEVEL MONITORING

FORMAT NO. : GV/LAB/FM/33N

Sample is drawn by	: M/s. Greenvision	U.L.R. No. : TC110032300000523F
Report No.	: GV/NL/23-24/090	Sample Ref. ID : NLM-060-2023(1)
Name of Customer	: M/s. Orissa Alloy Steel Pvt. Ltd. (Formerly, M/s. Rashmi Alloy Steel Pvt. Ltd.)	Report Date : 12.10.2023
Address of Customer	: NH-6, Shyamraipur, Gokulpur, Kharagpur, Dist. : Paschim Medinipur, Pin : 721304, W.B.	Date of Sampling : 29.09.2023
Sample Description	: Noise Level	Total Time : 1 Hr.
Sampling Location	: Bargai Village	Sampling Method : IS : 9989 :1981
Noise Level Limit	: Day Time : 55 dB(A), Night Time : 45 dB(A) { Source : The Noise Pollution (Regulation and Control) Rules, 2000}	
Monitoring Details	: Distance from Object : 3.0 Mtr. Height from the Ground : 1.5 Mtr.	
Category of Area	: Residential Area	

Noise Level dB (A)					
Day Time (06:00Hrs to 22:00 Hrs.)			Night Time (22:00 Hrs. to 06:00 Hrs.)		
Max.	Min.	Leq.	Max.	Min.	Leq.
59.2	50.5	55.4	52.2	43.5	48.9

S. Roy Chowdhury
Reviewed by
(Sabyasachi Shyam Roy Chowdhury)
Quality Manager

S. Roy Chowdhury
(Sabyasachi Shyam Roy Chowdhury)
Quality Manager
Authorised Signatory
For, GREEN VISION

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TC-11003

TEST REPORT OF NOISE LEVEL MONITORING

FORMAT NO. : GV/LAB/FM/33N

Sample is drawn by	: M/s. Greenvision	U.L.R. No. :	TC1100323000000524F
Report No.	: GV/NL/23-24/091	Sample Ref. ID	: NLM-060-2023(2)
Name of Customer	: M/s. Orissa Alloy Steel Pvt. Ltd. (Formerly, M/s. Rashmi Alloy Steel Pvt. Ltd.)	Report Date	: 12.10.2023
Address of Customer	: NH-6, Shyamraipur, Gokulpur, Kharagpur, Dist. : Paschim Medinipur, Pin : 721304, W.B.	Date of Sampling	: 29.09.2023 & 30.09.2023
Sample Description	: Noise Level	Total Time	: 1 Hr.
Sampling Location	: Rajogram Parking Area	Sampling Method	: IS : 9989 :1981
Noise Level Limit	: Day Time : 75 dB(A), Night Time : 70 dB(A) { Source : The Noise Pollution (Regulation and Control) Rules, 2000}		
Monitoring Details	: Distance from Object : 3.0 Mtr. Height from the Ground : 1.5 Mtr.		
Category of Area	: Industrial Area		

Noise Level dB (A)					
Day Time (06:00Hrs to 22:00 Hrs.)			Night Time (22:00 Hrs. to 06:00 Hrs.)		
Max.	Min.	Leq.	Max.	Min.	Leq.
61.8	55.7	60.0	57.2	49.5	52.7

S. Roy Chowdhury

Reviewed by
(Sabyasachi Shyam Roy Chowdhury)
Quality Manager

S. Roy Chowdhury

(Sabyasachi Shyam Roy Chowdhury)
Quality Manager
Authorised Signatory
For, GREEN VISION

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TEST REPORT OF NOISE LEVEL MONITORING


FORMAT NO. : GV/LAB/FM/33N

Sample is drawn by : M/s. Greenvision U.L.R. No. : TC1100323000000525F
Report No. : GV/NL/23-24/092 Sample Ref. ID : NLM-060-2023(3)
Name of Customer : M/s. Orissa Alloy Steel Pvt. Ltd. Report Date : 12.10.2023
(Formerly, M/s. Rashmi Alloy Steel Pvt. Ltd.)
Address of Customer : NH-6, Shyamraipur, Gokulpur, Kharagpur, Date of Sampling : 29.09.2023 &
Dist. : Paschim Medinipur, Pin : 721304, W.B. 30.09.2023
Sample Description : Noise Level Total Time : 1 Hr.
Sampling Location : Near Plant Main Gate Sampling Method : IS : 9989 :1981
Noise Level Limit : Day Time : 75 dB(A), Night Time : 70 dB(A)
{ Source : The Noise Pollution (Regulation and Control) Rules, 2000}

Monitoring Details : Distance from Object : 3.0 Mtr.
Height from the Ground : 1.5 Mtr.

Category of Area : Industrial Area

Noise Level dB (A)					
Day Time (06:00Hrs to 22:00 Hrs.)			Night Time (22:00 Hrs. to 06:00 Hrs.)		
Max.	Min.	Leq.	Max.	Min.	Leq.
65.2	57.6	62.6	54.3	48.7	51.2


Reviewed by
(Sabyasachi Shyam Roy Chowdhury)
Quality Manager


(Sabyasachi Shyam Roy Chowdhury)
Quality Manager
Authorised Signatory
For, GREEN VISION

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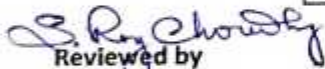
TC-11003

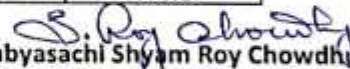
TEST REPORT OF NOISE LEVEL MONITORING

FORMAT NO. : GV/LAB/FM/33N

Sample is drawn by : M/s. Greenvision U.L.R. No. : TC110032300000526F
Report No. : GV/NL/23-24/093 Sample Ref. ID : NLM-060-2023(4)
Name of Customer : M/s. Orissa Alloy Steel Pvt. Ltd. Report Date : 12.10.2023
(Formerly, M/s. Rashmi Alloy Steel Pvt. Ltd.)
Address of Customer : NH-6, Shyamraipur, Gokulpur, Kharagpur, Date of Sampling : 29.09.2023 &
Dist. : Paschim Medinipur, Pin : 721304, W.B. 30.09.2023
Sample Description : Noise Level Total Time : 24 Hrs.
Sampling Location : Ferro Alloy Plant Area Sampling Method : IS : 9989 :1981

Time	Lmax dB (A)	Lmin dB (A)	Leq dB (A)
09:15 hrs. to 10:15 hrs.	65.5	59.8	62.7
10:15 hrs. to 11:15 hrs.	65.7	61.2	63.5
11:15 hrs. to 12:15 hrs.	64.9	58.8	63.0
12:15 hrs. to 13:15 hrs.	63.5	57.3	61.5
13:15 hrs. to 14:15 hrs.	61.7	54.0	58.5
14:15 hrs. to 15:15 hrs.	65.9	58.5	62.8
15:15 hrs. to 16:15 hrs.	65.3	61.7	63.5
16:15 hrs. to 17:15 hrs.	66.1	60.2	63.2
17:15 hrs. to 18:15 hrs.	62.3	56.8	60.8
18:15 hrs. to 19:15 hrs.	63.7	56.5	60.2
19:15 hrs. to 20:15 hrs.	61.4	54.7	59.0
20:15 hrs. to 21:15 hrs.	64.6	58.4	62.5
21:15 hrs. to 22:15 hrs.	60.5	53.8	58.0
22:15 hrs. to 23:15 hrs.	62.4	57.0	59.6
23:15 hrs. to 00:15 hrs.	64.0	56.9	59.3
00:15 hrs. to 01:15 hrs.	58.2	50.7	55.3
01:15 hrs. to 02:15 hrs.	60.3	52.4	57.4
02:15 hrs. to 03:15 hrs.	61.5	52.7	58.0
03:15 hrs. to 04:15 hrs.	56.6	50.4	53.8
04:15 hrs. to 05:15 hrs.	63.2	57.7	61.2
05:15 hrs. to 06:15 hrs.	61.8	55.7	59.0
06:15 hrs. to 07:15 hrs.	64.2	57.4	61.6
07:15 hrs. to 08:15 hrs.	62.4	54.2	59.2
08:15 hrs. to 09:15 hrs.	63.7	56.5	60.2


Reviewed by
(Sabyasachi Shyam Roy Chowdhury)
Quality Manager


(Sabyasachi Shyam Roy Chowdhury)
Quality Manager
Authorised Signatory
For, GREEN VISION

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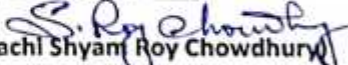
TEST REPORT OF NOISE LEVEL MONITORING

FORMAT NO. : GV/LAB/FM/33N

Sample is drawn by	: M/s. Greenvision	U.L.R. No. : TC1100323000000527F
Report No.	: GV/NL/23-24/094	Sample Ref. ID : NLM-060-2023(5)
Name of Customer	: M/s. Orissa Alloy Steel Pvt. Ltd. (Formerly, M/s. Rashmi Alloy Steel Pvt. Ltd.)	Report Date : 12.10.2023
Address of Customer	: NH-6, Shyamraipur, Gokulpur, Kharagpur, Dist. : Paschim Medinipur, Pin : 721304, W.B.	Date of Sampling : 29.09.2023 & 30.09.2023
Sample Description	: Noise Level	Total Time : 24 Hrs.
Sampling Location	: DRI & Pellet Plant Area	Sampling Method : IS : 9989 :1981

Time	Lmax dB (A)	Lmin dB (A)	Leq dB (A)
09:50 hrs. to 10:50 hrs.	63.0	56.2	60.3
10:50 hrs. to 11:50 hrs.	60.6	53.8	57.8
11:50 hrs. to 12:50 hrs.	58.7	52.4	56.1
12:50 hrs. to 13:50 hrs.	57.2	51.9	55.2
13:50 hrs. to 14:50 hrs.	64.4	57.9	62.0
14:50 hrs. to 15:50 hrs.	62.5	56.0	60.1
15:50 hrs. to 16:50 hrs.	61.5	55.0	59.0
16:50 hrs. to 17:50 hrs.	62.8	54.5	59.8
17:50 hrs. to 18:50 hrs.	60.4	53.6	58.2
18:50 hrs. to 19:50 hrs.	64.0	56.2	61.3
19:50 hrs. to 20:50 hrs.	62.2	57.0	60.7
20:50 hrs. to 21:50 hrs.	60.6	53.4	58.2
21:50 hrs. to 22:50 hrs.	62.4	56.2	60.5
22:50 hrs. to 23:50 hrs.	64.0	58.3	62.4
23:50 hrs. to 00:50 hrs.	61.7	56.1	59.8
00:50 hrs. to 01:50 hrs.	60.6	53.0	57.5
01:50 hrs. to 02:50 hrs.	61.7	54.3	58.6
02:50 hrs. to 03:50 hrs.	62.5	54.8	59.3
03:50 hrs. to 04:50 hrs.	60.4	53.7	57.8
04:50 hrs. to 05:50 hrs.	63.2	57.7	61.2
05:50 hrs. to 06:50 hrs.	62.4	54.6	59.2
06:50 hrs. to 07:50 hrs.	64.2	57.2	61.7
07:50 hrs. to 08:50 hrs.	61.3	54.5	58.6
08:50 hrs. to 09:50 hrs.	65.6	60.8	64.4


Reviewed by
(Sabyasachi Shyam Roy Chowdhury)
Quality Manager


(Sabyasachi Shyam Roy Chowdhury)
Quality Manager
Authorised Signatory
For, GREEN VISION

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TC-11003

TEST REPORT OF NOISE LEVEL MONITORING

FORMAT NO. : GV/LAB/FM/33N

Sample is drawn by	: M/s. Greenvision	U.L.R. No. : TC1100323000000528F
Report No.	: GV/NL/23-24/095	Sample Ref. ID : NLM-060-2023(6)
Name of Customer	: M/s. Orissa Alloy Steel Pvt. Ltd. (Formerly, M/s. Rashmi Alloy Steel Pvt. Ltd.)	Report Date : 12.10.2023
Address of Customer	: NH-6, Shyamraipur, Gokulpur, Kharagpur, Dist. : Paschim Medinipur, Pin : 721304, W.B.	Date of Sampling : 29.09.2023 & 30.09.2023
Sample Description	: Noise Level	Total Time : 24 Hrs.
Sampling Location	: Railway Siding	Sampling Method : IS : 9989 :1981

Time	Lmax dB (A)	Lmin dB (A)	Leq dB (A)
10:40 hrs. to 11:40 hrs.	62.5	54.8	60.0
11:40 hrs. to 12:40 hrs.	62.0	54.2	59.3
12:40 hrs. to 13:40 hrs.	61.4	53.8	58.8
13:40 hrs. to 14:40 hrs.	60.5	53.3	58.3
14:40 hrs. to 15:40 hrs.	61.7	54.0	59.1
15:40 hrs. to 16:40 hrs.	60.9	53.5	58.5
16:40 hrs. to 17:40 hrs.	62.4	54.6	59.8
17:40 hrs. to 18:40 hrs.	64.0	56.2	61.3
18:40 hrs. to 19:40 hrs.	66.2	58.0	63.5
19:40 hrs. to 20:40 hrs.	65.6	60.4	64.2
20:40 hrs. to 21:40 hrs.	64.0	57.6	62.0
21:40 hrs. to 22:40 hrs.	63.5	57.8	62.8
22:40 hrs. to 23:40 hrs.	64.7	59.6	63.4
23:40 hrs. to 00:40 hrs.	64.0	58.4	62.5
00:40 hrs. to 01:40 hrs.	63.3	57.0	61.4
01:40 hrs. to 02:40 hrs.	65.9	57.7	63.0
02:40 hrs. to 03:40 hrs.	65.5	59.8	64.0
03:40 hrs. to 04:40 hrs.	63.8	56.3	61.2
04:40 hrs. to 05:40 hrs.	67.6	59.4	64.8
05:40 hrs. to 06:40 hrs.	66.2	58.7	63.6
06:40 hrs. to 07:40 hrs.	64.8	55.7	61.4
07:40 hrs. to 08:40 hrs.	64.2	56.4	61.6
08:40 hrs. to 09:40 hrs.	63.4	55.2	61.0
09:40 hrs. to 10:40 hrs.	65.0	56.3	61.9

Reviewed by
(Sabyasachi Shyam Roy Chowdhury)
Quality Manager

(Sabyasachi Shyam Roy Chowdhury)
Quality Manager
Authorised Signatory
For, GREEN VISION

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TC-11003

TEST REPORT OF NOISE LEVEL MONITORING

FORMAT NO. : GV/LAB/FM/33N

Sample is drawn by : M/s. Greenvision
Report No. : GV/NL/23-24/096
Name of Customer : M/s. Orissa Alloy Steel Pvt. Ltd.
(Formerly, M/s. Rashmi Alloy Steel Pvt. Ltd.)
Address of Customer : NH-6, Shyamraipur, Gokulpur, Kharagpur,
Dist. : Paschim Medinipur, Pin : 721304, W.B.
Sample Description : Noise Level
Sampling Location : Construction Site, CPP

U.L.R. No. : TC1100323000000529F
Sample Ref. ID : NLM-060-2023(7)
Report Date : 12.10.2023
Date of Sampling : 29.09.2023 &
30.09.2023
Total Time : 24 Hrs.
Sampling Method : IS : 9989 :1981

Time	Lmax dB (A)	Lmin dB (A)	Leq dB (A)
11:25 hrs. to 12:25 hrs.	63.6	56.7	61.2
12:25 hrs. to 13:25 hrs.	62.8	55.2	60.3
13:25 hrs. to 14:25 hrs.	60.3	53.8	58.3
14:25 hrs. to 15:25 hrs.	64.0	58.4	62.0
15:25 hrs. to 16:25 hrs.	63.8	54.3	60.0
16:25 hrs. to 17:25 hrs.	61.6	55.9	60.0
17:25 hrs. to 18:25 hrs.	61.1	53.7	58.7
18:25 hrs. to 19:25 hrs.	60.6	53.0	58.0
19:25 hrs. to 20:25 hrs.	61.1	53.4	59.5
20:25 hrs. to 21:25 hrs.	62.2	54.9	59.2
21:25 hrs. to 22:25 hrs.	59.3	52.7	57.2
22:25 hrs. to 23:25 hrs.	61.8	54.4	59.2
23:25 hrs. to 00:25 hrs.	62.7	54.7	59.9
00:25 hrs. to 01:25 hrs.	62.2	55.4	60.0
01:25 hrs. to 02:25 hrs.	60.8	53.7	58.4
02:25 hrs. to 03:25 hrs.	61.2	53.4	58.5
03:25 hrs. to 04:25 hrs.	64.7	58.7	63.3
04:25 hrs. to 05:25 hrs.	63.3	58.0	61.8
05:25 hrs. to 06:25 hrs.	60.0	53.5	57.9
06:25 hrs. to 07:25 hrs.	61.5	53.2	58.1
07:25 hrs. to 08:25 hrs.	60.7	51.4	57.2
08:25 hrs. to 09:25 hrs.	62.2	54.0	58.9
09:25 hrs. to 10:25 hrs.	63.8	56.9	61.0
10:25 hrs. to 11:25 hrs.	65.3	57.3	62.2

S. Roy Chowdhury
Reviewed by
(Sabyasachi Shyam Roy Chowdhury)
Quality Manager

S. Roy Chowdhury
(Sabyasachi Shyam Roy Chowdhury)
Quality Manager
Authorised Signatory
For, GREEN VISION

Note: 1. This report refers to the values obtained at the time of testing and results related to the items tested.
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End of the report.....

City Office : 84/10, Roy Bahadur Road, Behala, Kolkata-700 034, Ph. : 9433158173

Branch Office : Durgachak, Haldia, Purba Medinipur, Ph. : 8101647425 M.N. Sarkar Road, Mahananda Para, Siliguri-734001



GREENVISION

(A leading environmental research laboratory)

Recognized by West Bengal Pollution Control Board

Urvashi Malhar, Phase II, MEAV-25, Bengal Ambuja Housing Complex, City Centre, Durgapur-713216

Contact : 0343-2543019, 9732580459, 9433158173, email : greenvision.dgp@gmail.com, Website : www.greenvisiondurgapur.com



TC-11603

TEST REPORT OF NOISE LEVEL MONITORING

FORMAT NO. : GV/LAB/FM/33N

Sample is drawn by : M/s. Greenvision
Report No. : GV/NL/23-24/097
Name of Customer : M/s. Orissa Alloy Steel Pvt. Ltd.
(Formerly, M/s. Rashmi Alloy Steel Pvt. Ltd.)
Address of Customer : NH-6, Shyamraipur, Gokulpur, Kharagpur,
Dist. : Paschim Medinipur, Pin : 721304, W.B.
Sample Description : Noise Level
Sampling Location : Coke Oven Plant Area

U.L.R. No. : TC110032300000530F
Sample Ref. ID : NLM-060-2023(8)
Report Date : 12.10.2023
Date of Sampling : 29.09.2023 &
30.09.2023
Total Time : 24 Hrs.
Sampling Method : IS : 9989 :1981

Time	Lmax dB (A)	Lmin dB (A)	Leq dB (A)
12:05 hrs. to 13:05 hrs.	62.2	54.4	59.7
13:05 hrs. to 14:05 hrs.	60.7	50.8	55.8
14:05 hrs. to 15:05 hrs.	60.8	51.2	56.0
15:05 hrs. to 16:05 hrs.	61.9	55.6	59.1
16:05 hrs. to 17:05 hrs.	62.2	54.5	58.4
17:05 hrs. to 18:05 hrs.	62.7	53.6	59.3
18:05 hrs. to 19:05 hrs.	60.3	54.8	58.7
19:05 hrs. to 20:05 hrs.	64.0	58.4	62.0
20:05 hrs. to 21:05 hrs.	59.8	53.3	57.5
21:05 hrs. to 22:05 hrs.	60.6	55.9	59.5
22:05 hrs. to 23:05 hrs.	58.1	53.7	57.0
23:05 hrs. to 00:05 hrs.	60.6	53.0	58.0
00:05 hrs. to 01:05 hrs.	60.1	53.4	57.5
01:05 hrs. to 02:05 hrs.	58.2	50.9	55.2
02:05 hrs. to 03:05 hrs.	59.8	52.7	57.4
03:05 hrs. to 04:05 hrs.	64.2	56.4	61.6
04:05 hrs. to 05:05 hrs.	63.4	55.2	61.0
05:05 hrs. to 06:05 hrs.	65.0	56.3	61.9
06:05 hrs. to 07:05 hrs.	62.5	54.8	60.0
07:05 hrs. to 08:05 hrs.	62.0	54.2	59.3
08:05 hrs. to 09:05 hrs.	61.4	53.8	58.8
09:05 hrs. to 10:05 hrs.	60.5	53.3	58.3
10:05 hrs. to 11:05 hrs.	60.1	52.1	56.1
11:05 hrs. to 12:05 hrs.	60.0	51.6	55.8

S. Roy Chowdhury
Reviewed by
(Sabyasachi Shyam Roy Chowdhury)
Quality Manager

S. Roy Chowdhury
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Quality Manager
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For, GREEN VISION

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