Ref: FACOR/Bhadrak/HSE/03/2025-26
Dtd: 27.11.2025

To

Deputy Director General of Forests (C),
Ministry of Env., Forest & Climate Change,
Integrated Regional Office,
A/3, Chandersekharpur,
Bhubaneswar – 751023
Email: roez.bsr-mef@nic.in

Ref : 1. **Environment Clearance letter No**. F.No. J-11011/594/2008-IA.II(I) dtd. 31.10.2022

2. **Name of the Project**: Expansion of Ferro Alloys Plant High Carbon Ferro Chrome production from 75000TPA to 145000TPA at Randia, District Bhadrak, Orissa by M/s. Ferro Alloys Corporation Ltd.

Sub : Submission of Six Monthly Compliances Report against Environment Clearance letter No. : F.No. J-11011/594/2008-IA.II(I) dtd.31.10.2022 , issued to M/s. Ferro Alloys Corporation Ltd., for the period from April 2025 to September 2025.

Dear Sir,

In compliance to the Stipulated Condition No.ix of the Environment Clearance letter No. F.No. J-11011/594/2008-IA.II(I) dtd. 31.10.2022 issued by your good office, we are submitting herewith Six-Monthly Compliance Report with respect to Charge Chrome Plant of M/s Ferro Alloys Corporation Limited, situated at D.P.Nagar, Po-Randia, District-Bhadrak for the period from April 2025 to September 2025.

The monthly Environmental Monitoring data and other required information with respect to compliance of the said Environment Clearance for the period from April 2025 to September 2025 are also enclosed herewith as Annexure for your kind perusal and records.

Thanking you

Yours faithfully

For Ferro Alloys Corporation Ltd. (Charge Chrome Plant)

Kamod Singh
COO & Plant Manger

Enclosed: As above.

Copy to: Director I.A. Division, Ministry of Environment and Forests, Paryavaran Bhawan, New Delhi

M/s. Ferro Alloys Corporation Ltd. (A subsidiary of Vedanta Ltd.)
Registered Office:
D.P.Nagar, PO : Randia, Dist.: Bhadrak, Odisha, India - 756 135
T +91-6784 240320/240347, Email: facor.mines@vedanta.co.in / facor.ccp@vedanta.co.in
Website: www.facorgroup.in, CIN: U45201OR1955PLC008400.

Six Monthly Environmental Compliance Report for the period from April 2025 up to September 2025			
S No		**Conditions**	**Compliance of Conditions**
	A.	**Specific Conditions**	
1	i	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.	All the environmental protection measures along with recommendations in EIA/EMP in respect of environmental management and risk mitigation measures are being followed.
2	ii	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.	We are using the latest technology provided by M/s Ghalsashi for Ferro chrome industry for lower carbon emission. Further we are taking measures to reduce our carbon emission through multiple projects. We are also developing carbon sinks/ sequestration through plantation. Carbon generation and emission data are attached as **Annexure 1.**
3	iii	The project proponent shall strictly comply with the timelines as per submitted ATR on the partially/non-complied conditions of previous EC(s) observed by IRO. The revised timeline for installation of AAQMS and OCEMS shall be complied. The status of the same shall be submitted to IRO, MoEF&CC.	The timeline for installation of AAQMS and OCEMS has been compiled, and the report has already been submitted to the Ministry within the stipulated time.
4	iv	The Salandi River (0.5 km, E) and Akhaupada High Level Main canal (0.5 km, S) exists within the study area of 10 km around the project site. A robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters along with Soil conservation scheme and multiple Erosion control measures shall be implemented	To protect natural drainage and its flow parameters a Surface Runoff Treatment unit has been set up to collect all the surface runoff. Treated water is stored in rainwater harvesting pond and then reused in multipurpose inside the plant. As per ZLD policy, whatever liquid effluent is being generated, is treated and reused. There is no discharge of water outside the plant premises. Greenbelt around the boundary wall has been developed as a soil conservation and erosion control measure.
5	v	The PP shall undertake flood protection measures due to presence of Salandi river as committed.	Plant MSL is much higher than the riverbed. The plant is outside flood prone area as per record of 25 years of floods as confirmed by Salandi Canal Division. Copy is enclosed as **Annexure 2.**

6	vi	Following additional arrangements to control fugitive dust shall be provided: a. Fog / Mist Sprinklers at all conveyors point and on bulk raw material storage area (at the transfer points) like Iron Ore, Coal and for Fly Ash and similar solid waste storage areas. b. Proper covered vehicle shall be used while transport of materials. c. Wheel washing mechanism shall be provided in entry and exit gates with complete recirculation system.	Following steps are taken to control fugitive emission: a. The raw materials like Ferro Chrome Ore and Concentrate are kept in covered shed. Two new sheds has been constructed to enhance storage space. Additionally, water sprinkling is being carried out in raw material storage areas to control fugitive emission. b. Vehicles are completely covered during transport of materials. c. Wheel washing system has been provided with complete recirculation system.
7	vii	All internal road and connecting road from project site to main highway shall be developed and maintained with suitable Million Axle Standard (MSA) as per the traffic load due to existing and proposed project	All internal road and connecting road from project site to main highway connected with PQC (Pavement Quality Concrete Road) construct as per the IRC guideline to maintain suitable with MSA standard as per the traffic load.
8	viii	Performance test shall be conducted on all pollution control systems every year and report shall be submitted to Regional Office of the MoEF&CC.	The performance test report of all pollution control systems has been submitted to Regional Office of the MoEF&CC. Attached as **Annexure 3.**
9	ix	Particulate matter emission from stacks shall be less than 30 mg/Nm3.	Particulate emission from stack is under prescribed limit as per latest Consent order no. 7239 IND-I-CON 5461 Dated 04.05.2023. Emission Reports of the reporting period are attached as **Annexure 3A**.
10	x	PP shall carry out periodically occupational health surveys as per the applicable norms.	Periodical occupational health check-ups are being carried out annually. IME/PME report attached as **Annexure 4.**
11	xi	The 4th hole extraction system shall be provided in the Sub Merged Arc Furnaces	In the Submerged Arc Furnace, the off-gas generation is being sucked by Creating induced draft with the help of three nos. of Induced Draft fans (2 working and one standby) of 2,00,000m3/hr. capacity each through two nos. of duct connected to the roof of the SAF. The off-gas is being cooled in force draft cooler to 120 deg C. Then the off-gas is fed into the air purging type baghouse, where the off-gas is collected at the bottom hopper of the baghouse. Cleared gas is blown out to the environment by a dedicated stack 34 meters above ground.

12	xii	100% of the slag generated through the process shall be utilized.	100% Slag utilization is being maintained
13	xiii	The water requirement for the proposed project is estimated as 2521 KLD, out of which 1750 KLD of freshwater requirement shall be obtained from Ground water. Necessary permission shall be obtained from the Competent Authority in this regard. PP shall explore the possibility of shifting to alternate source of water to reduce dependency on groundwater	Groundwater usage in process has been reduced by 20 % over the last 3 years. Renewal application for obtaining NOC of withdrawal 1400 KLD groundwater is in process. PP has also taken approval to use surface water from river Salandi to meet the additional requirements.
14	xiv	The proposed project shall be designed as "Zero Liquid Discharge" Plant. ETP shall be installed and there shall be no discharge of effluent from the plant. Domestic effluent shall be treated in Sewage Treatment Plant. Suitable measures shall be adopted for sewage water handling to ensure no contamination of any kind of water body.	The plant has already been designed as a Zero Liquid Discharge plant. All the runoff water is being treated through SRTP and stored in rainwater harvesting pond. STP has been installed to treat domestic wastewater. No wastewater is being released outside of the plant premises.
15	xv	The company shall also undertake rainwater harvesting measures as per the plan submitted in the EIA/EMP report and reduce water dependence from the outside source.	As rainwater harvesting measures three rainwater harvesting ponds are being used to store and reuse water in various processes to minimize water abstraction.
16	xvi	PP shall adopt nearby villages and prepare and implement a robust plan to develop them into model villages in next 10 years.	CSR department is working in nearby six-gram panchayats in thematic areas of health, education, livelihood and community development.
17	xvii	Briquetting and Jigging plant shall be installed in Ferro Alloys Plant.	Briquetting and Jigging unit are available since inception of the plant and in operation.
18	xviii	A proper action plan must be implemented to dispose of the electronic waste generated in the industry.	Disposal of E-waste is being carried out as per E-Waste Management Rule 2022. And if generated, E-waste is being handed over to registered producer, refurbisher or recycler.
19	xix	Three tier Green Belt shall be developed in at least 33% of the project area 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.	As per Greenbelt assessment by expert agency, greenbelt coverage is 34.84%. Native species have been planted along the periphery of the plant. Efforts are being made continuously to achieve the tree density to 2500/Ha by using the existing vacant land and replacement of damaged plants. Report in this regard shall be submitted to Regional Office of the MOEF & CC. Greenbelt details are enclosed as **Annexure 5.**

20	xx	Greening and Paving shall be implemented in the plant area to arrest soil erosion and dust pollution from exposed soil surface	Greenbelt along with stone patching boundary wall in the periphery of the plant boundaries have been developed to arrest soil erosion and dust pollution control.
21	xxi	The PP shall minimize the evaporation losses in jigging operation to less than 10% using suitable advanced process.	Being followed. Water usage in Jigging operation is attached as **Annexure 6.**
22	xxii	The PP shall install CO sensors at the furnace top level and the monitoring report shall be submitted to the IRO, MOEFCC in this regard.	CO sensors have been installed in furnace top level and a report regarding installation has been sent to the IRO, MOEFCC in this regard. Copy attached as **Annexure 7**.
23	xxiii	All the commitments made to the public during the Public Hearing/Public Consultation shall be satisfactorily implemented. The action plan based on the social impact assessment study of the project as per the EMP in accordance to the Ministry's OM dated 30.09.2020 shall be strictly implemented and progress shall be submitted to the Regional Office of MoEF&CC.	The same is compiled and report has been submitted to Regional Office of MOEF & CC. EMP compliance Copy attached as **Annexure 8**.
24	xxiv	The PP shall strengthen the social entrepreneurship opportunities; strengthen Self Help Groups into SMEs; strengthen Health infrastructure in the surrounding nearby villages and the compliance report in this regard needs to be submitted to IRO, MoEFCC.	PP has initiated some opportunities to strengthen SHG like initiating workshop on leadership skill training and conducted health camps nearby villages. PH Compliance report in this regard has been submitted to IRO, MOEF & CC.
25	xxv	The Plastic Waste Management Rules 2016, inter-alia, mandated banning of identified Single Use Plastic (SUP) items with effect from 01/07/2022. In this regard, CPCB has issued a direction to all the State Pollution Control Boards (SPCBs)/Pollution Control Committees (PCCs) on 30/06/2022 to ensure the compliance of Notification published by Ministry on 12/08/2021. The technical guidelines issued by the CPCB in this regard is available at https://cpcb.nic.in/technical-guidelines-3/. All the project proponents are hereby requested to sensitize and create awareness among people working within the Project area as well as its surrounding area on the ban of SUP in order to ensure the compliance of Notification published by this Ministry on 12/08/2021. A report, along with photographs, on the measures taken shall also be included in the six monthly compliance report being submitted by the project proponents.	Awareness sessions on the ban of single use plastics have been conducted to sensitize people on Ban of Single Use plastic. Action plan has been prepared on Banning SUP and handling of plastic waste inside plant premises. Report in this regard is enclosed in **Annexure 9**.
26	xxvi	The project proponent shall adopt the Clean Air practices like mechanical collectors, wet scrubbers, fabric filters (bag houses), electrostatic	To control emissions from furnace and other operation bag filters, dedusting units and dust suppression systems have been

		precipitators, combustion systems (thermal oxidizers), condensers, absorbers, adsorbers, and biological degradation. Controlling emissions related to transportation shall include emission controls on vehicles as well as use of cleaner fuels. Sufficient numbers of additional truck mounted Fog/Mist water cannons shall be procured and operated regularly inside the project premises and also in the surrounding villages to arrest suspended dust in the atmosphere.	installed. To arrest suspended dust during transportation, water sprinkling vehicle has been deployed for dust suppression inside and outside village roads.
	B.	**General Conditions**	
	I.	**Statutory compliance:**	
27	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.	Agree to abide
	II.	**Air quality monitoring and preservation**	
28	i	The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission as well as two 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 recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.	Two continuous emission monitoring systems have been installed in GCP stacks and two numbers of Continuous Ambient Air Quality Station have been installed inside the plant premises. All CEMS & CAAQMS has been interconnected with SPCB online server.
29	ii	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	The fugitive emission inside the plant premises is being monitored quarterly by NABL approved laboratory. Reports are attached as **Annexure 10.**
30	iii	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.	Two dedusting Units with bag filters have been provided in the dust prone area to control fugitive emission. Additional water sprinkling is being done on a regular basis in the dust generation sources to control fugitive dust emission. To control

			stack emission Gas Cleaning Plants have been installed.
31	iv	The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.	An auto pulsing system has been installed to dislodge from bags into hopper. Bag cleaning procedure is enclosed as **Annexure 11**.
32	v	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.	All the raw material fines collected through pollution control devices are being recycled and reused for briquette & pellets making.
33	vi	The project proponent shall ensure covered transportation and conveying of ore, coal and other raw material to prevent spillage and dust generation.	All the raw materials are transported through covered vehicle and conveying of ore & other raw material through covered conveyors.
34	vii	The project proponent shall provide primary and secondary fume extraction system at all melting furnaces.	Fume extraction system has been installed to control primary and secondary emission. Flue gas is being filtered in GCP bag filters and filtered gas is released through GCP Stack.
35	viii	Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.	The ventilation system has been designed as per requirement.
	III.	**Water quality monitoring and preservation**	
36	i	The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 (G.S.R 414 (E) dated 30th May 2008; G.S.R 277 (E) dated 31st March 2012 (applicable to IF/EAF); 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.	Effluent quality from Surface runoff treatment plant (SRTP) and Sewage treatment plant (STP) are being monitored on a monthly basis by NABL accredited laboratories. Parameters are under prescribed limit. Reports are attached as **Annexure 12**.
37	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 recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories.	Ground water monitoring is being carried out by NABL accredited laboratories in piezometers / sampling wells in the plant and also in nearby villages. Report enclosed in **Annexure 13**.

38	iii	Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.	Sewage Treatment Plant (STP) of 10KLD capacity for Plant & 50KLD capacity for colony has been installed for treatment of domestic wastewater and treated water are being utilized in gardening purpose.
39	iv	The project proponent shall provide the ETP for effluents of rolling mills to meet the standards prescribed in G.S.R 277 (E) 31st March 2012 (applicable to IF/EAF) as amended from time to time.	There is no rolling mills unit available.
40	v	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.	A Surface Run-off Treatment Plant (SRTP) has been set up to collect all the runoff water during rain and after treatment water is stored in rainwater harvesting pond and reuse in process. Water Quality is being tested by NABL accredited lab monthly.
41	vi	Tyre washing facilities shall be provided at the entrance/exit of the plant gates.	Wheel washing system has been provided with complete recirculation system.
	IV.	**Noise monitoring and prevention**	
42	i	Noise quality 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.	Noise quality monitoring is being carried out regularly as per Noise Pollution (Regulation and Control) Rules,2000. Reports are enclosed in **Annexure 14**.
	V.	**Energy Conservation measures**	
43	i	Energy conservation measures may be adopted such as adoption of solar energy and provision of LED lights etc., to minimize the energy consumption.	PP has taken various energy conservation measures like Solar streetlights have been provided to various villages and convention lights replaced by LED etc.
	VI.	**Waste management**	
44	i	Used refractories shall be recycled.	We will ensure to recycle the used refractories when generates.
45	ii	Kitchen waste shall be composted or converted to biogas for further use.	Kitchen waste is being composted and used in plantation as an organic manure. We have planned for the installation of organic waste converter for composting.
	VII.	**Green Belt**	
46	i	The project proponent shall prepare GHG emissions inventory for the plant and shall submit the program for reduction of the same including carbon sequestration including plantation.	A preliminary report has been prepared by the external agency which includes a program for reduction of GHG and carbon sequestration including plantation. We are exploring the possibilities for implementation.

47	ii	Project proponent shall submit a study report on De-carbonization program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon capture, use and storage and 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.	Carbon Assessment has been done by External Agency. Various projects proposed by the consultant related to reduction in carbon footprint are under review. A roadmap has been prepared. Copy is enclosed as **Annexure 15**
	VIII	**Public hearing and Human health issues**	
48	i	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.	Emergency Preparedness Plan and Disaster Management Plan is available and implemented accordingly.
49	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 of Factory Act	PP has carried out Qualitative & Quantitative analysis for heat stress those are working in high temperature work zone. All the appropriate PPE's are being provided to the workmen.
50	iii	Occupational health surveillance of the workers shall be done on a regular basis and records maintained.	Periodical occupational health check-up of workers is being conducted annually, and records are maintained.
	IX.	**Environment Management**	
51	i	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, company shall adopt nearby villages based on the socio-economic survey and undertake community developmental activities in consultation with the village Panchayat and the District Administration as committed.	PP is working in nearby six gram panchayats in thematic areas of health, education, livelihood and community development in consultation with village Panchayat and District Administration.
52	ii.	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	Environment policy duly approved by the Board of Directors and Board resolution in this regard is being submitted herewith. **Annexure 16.**

		regard shall be submitted to the MoEF&CC as a part of six-monthly report.	
53	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 dedicated Environment Cell consisting of qualified personnel has been set up to look after environmental management. Details attached as **Annexure 17.**
	X.	**Miscellaneous**	
54	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. Copy enclosed in **Annexure 18**.
55	ii.	The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats 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.	PP has submitted the copies of the environmental clearances to the relevant local bodies, panchayats, municipal bodies and govt offices within the time. Copy enclosed in **Annexure 19**.
56	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.	Being followed.
57	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.	PP is monitoring the pollutants for ambient air and stack emission on monthly basis by NABL accredited lab. Copy enclosed in **Annexure 20**. Digital display board has been installed at main entrance point for public view. Monitoring Reports are also displayed on the website of the company as well.
58	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.	Being followed

59	vi.	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.	Being followed, Copy enclosed in **Annexure-21**.
60	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.	Agree to abide
61	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.	Agree to abide
62	ix.	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.	Compliance Report is enclosed with **Annexure 22 & Annexure 8.** PH & EMP compliance reports are available on the company website.
63	x.	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).	Agree to abide
64	xi.	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.	Agree to abide.

FERRO ALLOYS CORPORATION LTD. BHADRAK

Charge Chrome Plant

of M/S Ferro Alloys Corporation Limited

Details of Scope 1 & 2 Emissions & GHG intensity during the period of April 2025-Sept 2025.

Industry Name	Parameters	April 25	May 25	June25	July25	Aug25	Sept25
Ferro Alloys Corporation Limited (Charge Chrome Plant)	Scope 1+2 (tCO_2 eq.)	12,685	15,905	190,14	16,689	7,104	14,145
	Metal production (MT)	8,753	9,429	10,105	7,739	4,230	6,815
	GHG intensity (tCO_2 eq./ MT)	**1.45**	**1.69**	**1.88**	**2.16**	**1.68**	**2.08**

Carbon Emission Reduction Projects:

Project Title	Status
Waste heat recovery system installation at FACOR plant	Completed
Procurement of 1 EV Forklift at FACOR plant	Completed
Procurement of 3 Electric Vehicles at FACOR plant	Completed
Replacement of conventional tubes & Bulbs with LEDs	Completed
Alternative fuel to Furnace Oil (LPG)	In Progress
20 KW RE Solar installation at plant Location	In Progress

Annexure-2

OFFICE OF THE SUPERINTENDING ENGINEER, SALANDI CANAL DIVISION, BHADRAK

E-mail ID:-scdbdk1960@gmail.com {Ph.06787-250231}

Letter No. 1018 /dt. 17/2/2024

To

The Chief Executive Officer,
Facor Charge Chrome Plant of M/S Ferro Alloys Corporation Ltd.
At-D.P.Nagar,Post-Randia,Dist-Bhadrak.

Sub: Requesting to provide clearance to M/s Ferro Alloys Corporation Ltd. Located at village Randia,P.S-Bhadrak (Rural)Dist-Bhadrak,Odisha is not coming under the vicinity of Flood plain area.

Ref: Your Letter No-FACL/BDK/GP/001/2023-24 Dt. 14.11.2023

Sir,

With reference to your letter & subject cited above, it is to intimate you that the Charge Chrome Plant of M/S Ferro Alloys Corporation Ltd. is not coming under Flood plain Zone as per the record of 25 years of Floods.

Yours Faithfully,

Superintending Engineer,
Salandi Canal Division
Bhadrak
17/2/24

Memo No. 1019 Date 17/2/2024

Copy forwarded to the Chief Asst. Executive Engineer, Bhadrak Irrigation Sub-Division,Bhadrak,for favour of kind information.

Superintending Engineer,
Salandi Canal Division
Bhadrak
17/2/24

Ref. No: FACOR/HSE/MOEF/01/2025-26
Date: 30.06.2025

To
The Deputy Inspector General of Forest (Central)
Government of India,
Ministry of Environment Forest & Climate Changes
Regional Office, A/3, Chandrasekharpur
Bhubaneswar -751023

Sub: Submission of report conducting Performance Evaluation of Pollution Control Devices of Ferro Alloys Corporation Limited (Charge Chrome Plant) Randia, Bhadrak.

Ref: 1. With reference to our earlier communication vide Letter no. FACOR/HSE/MOEF/01/2024-25, dated 31.03.2025

2. Environmental Clerance **("EC")** Identification no EC24A1005OR5164847N issued by MOEF& CC to Ferro Alloys Corporation Limited **("FACOR"),** Randia Bhadrak

Respected Sir,

With reference to the subject cited above, we are submitting herewith the report on Performance Evaluation of pollution control devices conducted by NIT, Rourkela vide Specific condition no 11.4 of EC Identification no EC24A1005OR5164847N has granted in favour of M/s Ferro Alloys Corporation Limited.

This is for your kind perusal.

Thanking You
Yours Faithfully
For Ferro Alloys Corporation Ltd.

Krutisunder Mohapatra
Chief HSE & Sustainability Officer-FACOR

Encl: As above
Copy to: The Member Secretary, SPCB, Odisha
The Regional Officer, Regional Office, Balasore, SPCB, Odisha

A
report

On

Performance Evaluation of Pollution Control and Online Monitoring Equipments

of

M/S Ferro Alloys Corporation Ltd., DP Nagar, Randia, Bhadrak, Odisha-756135

by
Dr. Soumya Sanjeeb Mohapatra
(Principal Investigator)
and

Dr. Prof. Abanti Sahoo
(Co-Principal Investigator)

National Institute of Technology Rourkela
Rourkela-769008

June 2025

Contents

TEST REPORT

Test Report No: ENVLAB/25-26/TR-02055 *Date: 05.05.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**28.04.2025**
			Sample Received on	:	**29.04.2025**
Sample Description	:	**Source Emission**	Sampling Procedure	:	VCSPL/SOP/003, Dt. 01.08.2019
			Sampling Location	:	**ST-1: Dedusting System**
Sample Condition	;	Air Tight Sealed and gaseous Sample Solution Refrigerated	Sampling done by	:	Ashutosh Mohanty
Test Started on	:	**29.04.2025**	Test Completed on	:	**03.05.2025**

1. Chemical Testing

A. Atmospheric Pollution

Sl. No.	Parameter	Unit	Standard as per CTO	Analysis Results
				ST-1
1	**Temperature**	**^0K**	--	**364**
2	**Velocity**	**m/sec**	--	**10.97**
3	**Particulate Matter as PM**	**mg/Nm^3**	**100**	**52.4**
4	**Sulphur Dioxide as SO_2**	**mg/Nm^3**	--	**35.3**
5	**Oxides of Nitrogen as NO_X**	**mg/Nm^3**	--	**36.9**
6	**Carbon Monoxide as CO**	**mg/m^3**	--	**0.038**
7	**Carbon dioxide as (CO_2)**	**%**	--	**6.2**
8	**Mercury (as Hg)**	**mg/Nm^3**	--	**0.65**
9	**Quantity of Gas flow**	**Nm3/hr**	--	**1901**

Remarks: *The above Sample test results are within the prescribed standard for the above mentioned parameters.*

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*** End Report***

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Reviewed by

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Approved by

TEST REPORT

Test Report No: ENVLAB/25-26/TR-02056 *Date: 05.05.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**28.04.2025**
			Sample Received on	:	**29.04.2025**
Sample Description	:	**Source Emission**	Sampling Procedure	:	VCSPL/SOP/003, Dt. 01.08.2019
			Sampling Location	:	**ST-2: DRYER STACK**
Sample Condition	:	Air Tight Sealed and gaseous Sample Solution Refrigerated	Sampling done by	:	Ashutosh Mohanty
Test Started on	:	**29.04.2025**	Test Completed on	:	**03.05.2025**

1. Chemical Testing

A. Atmospheric Pollution

Sl. No.	Parameter	Unit	Standard as per CTO	Analysis Results
				ST-2
1	**Temperature**	**^0K**	--	**361**
2	**Velocity**	**m/sec**	--	**9.37**
3	**Particulate Matter as PM**	**mg/Nm^3**	**100**	**64.5**
4	**Sulphur Dioxide as SO_2**	**mg/Nm^3**	--	**36.8**
5	**Oxides of Nitrogen as NO_X**	**mg/Nm^3**	--	**39.6**
6	**Carbon Monoxide as CO**	**mg/m^3**	--	**0.083**
7	**Carbon dioxide as (CO_2)**	**%**	--	**6.6**
8	**Mercury (as Hg)**	**mg/Nm^3**	--	**0.75**
9	**Quantity of Gas flow**	**Nm3/hr**	--	**1637**

Remarks: *The above Sample test results are within the prescribed standard for the above mentioned parameters.*

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TEST REPORT

Test Report No: ENVLAB/25-26/TR-02057 *Date: 05.05.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**28.04.2025**
			Sample Received on	:	**29.04.2025**
Sample Description	:	**Source Emission**	Sampling Procedure	:	VCSPL/SOP/003, Dt. 01.08.2019
			Sampling Location	:	**ST-3: GCP STACK (45 MVA)**
Sample Condition	;	Air Tight Sealed and gaseous Sample Solution Refrigerated	Sampling done by	:	Ashutosh Mohanty
Test Started on	:	**29.04.2025**	Test Completed on	:	**03.05.2025**

1. Chemical Testing

A. Atmospheric Pollution

Sl. No.	Parameter	Unit	Standard as per CTO	Analysis Results
				ST-3
1	**Temperature**	^0K	--	**379**
2	**Velocity**	**m/sec**	--	**11.39**
3	**Particulate Matter as PM**	**mg/Nm^3**	**100**	**75.2**
4	**Sulphur Dioxide as SO_2**	**mg/Nm^3**	--	**29.2**
5	**Oxides of Nitrogen as NO_X**	**mg/Nm^3**	--	**36.4**
6	**Carbon Monoxide as CO**	**mg/m^3**	--	**0.093**
7	**Carbon dioxide as (CO_2)**	**%**	--	**7.5**
8	**Mercury (as Hg)**	**mg/Nm^3**	--	**0.074**
9	**Quantity of Gas flow**	**Nm3/hr**	--	**75809**

Remarks: *The above Sample test results are within the prescribed standard for the above mentioned parameters.*

TERMS AND CONDITION:-

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TEST REPORT

Test Report No: ENVLAB/25-26/TR-08825 *Date: 06.06.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**21.05.2025**
			Sample Received on	:	**22.05.2025**
Sample Description	:	**Source Emission**	Sampling Procedure	:	VCSPL/SOP/003, Dt. 01.08.2019
			Sampling Location	:	**ST-1: Dedusting System**
Sample Condition	;	Air Tight Sealed and gaseous Sample Solution Refrigerated	Sampling done by	:	Ashutosh Mohanty
Test Started on	:	**22.05.2025**	Test Completed on	:	**25.05.2025**

1. Chemical Testing

A. Atmospheric Pollution

Sl. No.	Parameter	Unit	Standard as per CTO	Analysis Results
				ST-1
1	**Temperature**	**^0K**	--	**365**
2	**Velocity**	**m/sec**	--	**10.4**
3	**Particulate Matter as PM**	**mg/Nm^3**	**100**	**51.8**
4	**Sulphur Dioxide as SO_2**	**mg/Nm^3**	--	**34.9**
5	**Oxides of Nitrogen as NO_X**	**mg/Nm^3**	--	**37.2**
6	**Carbon Monoxide as CO**	**mg/m^3**	--	**0.035**
7	**Carbon dioxide as (CO_2)**	**%**	--	**6.6**
8	**Mercury (as Hg)**	**mg/Nm^3**	--	**0.61**
9	**Quantity of Gas flow**	**Nm3/hr**	--	**1799**

Remarks: *The above Sample test results are within the prescribed standard for the above mentioned parameters.*

TERMS AND CONDITION:-

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TEST REPORT

Test Report No: ENVLAB/25-26/TR-08826 *Date: 06.06.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**21.05.2025**
			Sample Received on	:	**22.05.2025**
Sample Description	:	**Source Emission**	Sampling Procedure	:	VCSPL/SOP/003, Dt. 01.08.2019
			Sampling Location	:	**ST-2: DRYER STACK**
Sample Condition	;	Air Tight Sealed and gaseous Sample Solution Refrigerated	Sampling done by	:	Ashutosh Mohanty
Test Started on	:	**22.05.2025**	Test Completed on	:	**25.05.2025**

1. Chemical Testing

A. Atmospheric Pollution

Sl. No.	Parameter	Unit	Standard as per CTO	Analysis Results
				ST-2
1	**Temperature**	**^0K**	--	**362**
2	**Velocity**	**m/sec**	--	**9.1**
3	**Particulate Matter as PM**	**mg/Nm^3**	**100**	**65.2**
4	**Sulphur Dioxide as SO_2**	**mg/Nm^3**	--	**37.1**
5	**Oxides of Nitrogen as NO_X**	**mg/Nm^3**	--	**38.8**
6	**Carbon Monoxide as CO**	**mg/m^3**	--	**0.080**
7	**Carbon dioxide as (CO_2)**	**%**	--	**6.2**
8	**Mercury (as Hg)**	**mg/Nm^3**	--	**0.72**
9	**Quantity of Gas flow**	**Nm3/hr**	--	**1587**

Remarks: *The above Sample test results are within the prescribed standard for the above mentioned parameters.*

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TEST REPORT

Test Report No: ENVLAB/25-26/TR-08827 *Date: 06.06.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**21.05.2025**
			Sample Received on	:	**22.05.2025**
Sample Description	:	**Source Emission**	Sampling Procedure	:	VCSPL/SOP/003, Dt. 01.08.2019
			Sampling Location	:	**ST-3: GCP STACK (45 MVA)**
Sample Condition	;	Air Tight Sealed and gaseous Sample Solution Refrigerated	Sampling done by	:	Ashutosh Mohanty
Test Started on	:	**22.05.2025**	Test Completed on	:	**25.05.2025**

1. Chemical Testing

A. Atmospheric Pollution

Sl. No.	Parameter	Unit	Standard as per CTO	Analysis Results
				ST-3
1	**Temperature**	**^0K**	--	**380**
2	**Velocity**	**m/sec**	--	**11.4**
3	**Particulate Matter as PM**	**mg/Nm^3**	**100**	**72.8**
4	**Sulphur Dioxide as SO_2**	**mg/Nm^3**	--	**28.6**
5	**Oxides of Nitrogen as NO_X**	**mg/Nm^3**	--	**35.9**
6	**Carbon Monoxide as CO**	**mg/m^3**	--	**0.096**
7	**Carbon dioxide as (CO_2)**	**%**	--	**7.2**
8	**Mercury (as Hg)**	**mg/Nm^3**	--	**0.078**
9	**Quantity of Gas flow**	**Nm3/hr**	--	**75576**

Remarks: *The above Sample test results are within the prescribed standard for the above mentioned parameters.*

TERMS AND CONDITION:-

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*** End Report***

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TEST REPORT

Test Report No: ENVLAB/25-26/TR-09601 *Date:07.07.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**26.06.2025**
			Sample Received on	:	**27.06.2025**
Sample Description	:	**Source Emission**	Sampling Procedure	:	VCSPL/SOP/003, Dt. 01.08.2019
			Sampling Location	:	**ST-1: DEDUSTING SYSTEM**
Sample Condition	:	Air Tight Sealed and gaseous Sample Solution Refrigerated	Sampling done by	:	**Biswajeet Bhoi**
Test Started on	:	**27.06.2025**	Test Completed on	:	**30.06.2025**

1. Chemical Testing

A. Atmospheric Pollution

Sl. No.	Parameter	Unit	Standard as per CTO	Analysis Results
				ST-1
1	**Temperature**	**^0K**	--	**360**
2	**Velocity**	**m/sec**	--	**10.1**
3	**Particulate Matter as PM**	**mg/Nm^3**	**100**	**51.2**
4	**Sulphur Dioxide as SO_2**	**mg/Nm^3**	--	**35.2**
5	**Oxides of Nitrogen as NO_X**	**mg/Nm^3**	--	**36.4**
6	**Carbon Monoxide as CO**	**mg/m^3**	--	**0.40**
7	**Carbon dioxide as (CO_2)**	**%**	--	**6.1**
8	**Mercury (as Hg)**	**mg/Nm^3**	--	**0.63**
9	**Quantity of Gas flow**	**Nm3/hr**	--	**1827.71**

Remarks: *The above Sample test results are within the prescribed standard for the above mentioned parameters.*

TERMS AND CONDITION:-

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*** End Report***

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TEST REPORT

Test Report No: ENVLAB/25-26/TR-09602 *Date:07.07.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**26.06.2025**
			Sample Received on	:	**27.06.2025**
Sample Description	:	**Source Emission**	Sampling Procedure	:	VCSPL/SOP/003, Dt. 01.08.2019
			Sampling Location	:	**ST-2: DRYER STACK**
Sample Condition	;	Air Tight Sealed and gaseous Sample Solution Refrigerated	Sampling done by	:	**Biswajeet Bhoi**
Test Started on	:	**27.06.2025**	Test Completed on	:	**30.06.2025**

2. Chemical Testing

B. Atmospheric Pollution

Sl. No.	Parameter	Unit	Standard as per CTO	Analysis Results
				ST-2
1	Temperature	^0K	--	359
2	Velocity	m/sec	--	9.4
3	Particulate Matter as PM	mg/Nm^3	100	62.8
4	Sulphur Dioxide as SO_2	mg/Nm^3	--	37.5
5	Oxides of Nitrogen as NO_X	mg/Nm^3	--	36.4
6	Carbon Monoxide as CO	mg/m^3	--	0.09
7	Carbon dioxide as (CO_2)	%	--	6.1
8	Mercury (as Hg)	mg/Nm^3	--	0.07
9	Quantity of Gas flow	Nm3/hr	--	1654.35

Remarks: *The above Sample test results are within the prescribed standard for the above mentioned parameters.*

TERMS AND CONDITION: -

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*** End Report***

Reviewed by **Approved by**

TEST REPORT

Test Report No: ENVLAB/25-26/TR-09603 *Date:07.07.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**26.06.2025**
			Sample Received on	:	**27.06.2025**
Sample Description	:	**Source Emission**	Sampling Procedure	:	VCSPL/SOP/003, Dt. 01.08.2019
			Sampling Location	:	**ST-3: GCP STACK (45 MVA)**
Sample Condition	;	Air Tight Sealed and gaseous Sample Solution Refrigerated	Sampling done by	:	**Biswajeet Bhoi**
Test Started on	:	**27.06.2025**	Test Completed on	:	**30.06.2025**

1. Chemical Testing

A. Atmospheric Pollution

Sl. No.	Parameter	Unit	Standard as per CTO	Analysis Results
				ST-3
1	**Temperature**	**^0K**	--	**375**
2	**Velocity**	**m/sec**	--	**11.02**
3	**Particulate Matter as PM**	**mg/Nm^3**	**100**	**65.6**
4	**Sulphur Dioxide as SO_2**	**mg/Nm^3**	--	**27.9**
5	**Oxides of Nitrogen as NO_X**	**mg/Nm^3**	--	**34.6**
6	**Carbon Monoxide as CO**	**mg/m^3**	--	**0.092**
7	**Carbon dioxide as (CO_2)**	**%**	--	**6.8**
8	**Mercury (as Hg)**	**mg/Nm^3**	--	**0.08**
9	**Quantity of Gas flow**	**Nm3/hr**	--	**73058.72**

Remarks: *The above Sample test results are within the prescribed standard for the above mentioned parameters.*

TERMS AND CONDITION:-

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*** End Report***

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TEST REPORT

Test Report No: ENVLAB/25-26/TR-11068 *Date: 06.08.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**23.07.2025**
			Sample Received on	:	**25.07.2025**
Sample Description	:	**Source Emission**	Sampling Procedure	:	VCSPL/SOP/003, Dt. 01.08.2019
			Sampling Location	:	**ST-2: GCP STACK (45 MVA)**
Sample Condition	;	Air Tight Sealed and gaseous Sample Solution Refrigerated	Sampling done by	:	Bibek Tripathy
Test Started on	:	**25.07.2025**	Test Completed on	:	**28.07.2025**

1. Chemical Testing

A. Atmospheric Pollution

Sl. No.	Parameter	Unit	Standard as per CTO	Analysis Results
				ST-2
1	**Temperature**	**^{0}K**	--	**375**
2	**Velocity**	**m/sec**	--	**11.02**
3	**Particulate Matter as PM**	**mg/Nm^3**	**100**	**65.6**
4	**Sulphur Dioxide as SO_2**	**mg/Nm^3**	--	**27.9**
5	**Oxides of Nitrogen as NO_X**	**mg/Nm^3**	--	**34.6**
6	**Carbon Monoxide as CO**	**mg/m^3**	--	**0.092**
7	**Carbon dioxide as (CO_2)**	**%**	--	**6.8**
8	**Mercury (as Hg)**	**mg/Nm^3**	--	**0.074**
9	**Quantity of Gas flow**	**Nm3/hr**	--	**73058.72**

Remarks: *The above Sample test results are within the prescribed standard for the above mentioned parameters.*

TERMS AND CONDITION:-

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Approved by

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TEST REPORT

Test Report No: ENVLAB/25-26/TR-11069 *Date: 06.08.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**23.07.2025**
			Sample Received on	:	**25.07.2025**
Sample Description	:	**Source Emission**	Sampling Procedure	:	VCSPL/SOP/003, Dt. 01.08.2019
			Sampling Location	:	**ST-3: Dedusting System**
Sample Condition	;	Air Tight Sealed and gaseous Sample Solution Refrigerated	Sampling done by	:	Bibek Tripathy
Test Started on	:	**25.07.2025**	Test Completed on	:	**28.07.2025**

1. Chemical Testing

A. Atmospheric Pollution

Sl. No.	Parameter	Unit	Standard as per CTO	Analysis Results
				ST-3
1	**Temperature**	^{0}K	--	**362**
2	**Velocity**	**m/sec**	--	**9.9**
3	**Particulate Matter as PM**	**mg/Nm^3**	**100**	**49.8**
4	**Sulphur Dioxide as SO_2**	**mg/Nm^3**	--	**33.5**
5	**Oxides of Nitrogen as NO_X**	**mg/Nm^3**	--	**36.4**
6	**Carbon Monoxide as CO**	**mg/m^3**	--	**0.04**
7	**Carbon dioxide as (CO_2)**	**%**	--	**6.7**
8	**Mercury (as Hg)**	**mg/Nm^3**	--	**0.59**
9	**Quantity of Gas flow**	**Nm3/hr**	--	**1727.91**

Remarks: *The above Sample test results are within the prescribed standard for the above mentioned parameters.*

TERMS AND CONDITION:-

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TEST REPORT

Test Report No: ENVLAB/25-26/TR-11070 *Date: 06.08.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**23.07.2025**
			Sample Received on	:	**25.07.2025**
Sample Description	:	**Source Emission**	Sampling Procedure	:	VCSPL/SOP/003, Dt. 01.08.2019
			Sampling Location	:	**ST-4: DRYER STACK**
Sample Condition	;	Air Tight Sealed and gaseous Sample Solution Refrigerated	Sampling done by	:	Bibek Tripathy
Test Started on	:	**25.07.2025**	Test Completed on	:	**28.07.2025**

1. **Chemical Testing**

A. Atmospheric Pollution

Sl. No.	Parameter	Unit	Standard as per CTO	Analysis Results
				ST-4
1	**Temperature**	^0K	--	**362**
359	**Velocity**	**m/sec**	--	**9.1**
9.4	**Particulate Matter as PM**	**mg/Nm^3**	**100**	**65.2**
62.8	**Sulphur Dioxide as SO_2**	**mg/Nm^3**	--	**37.1**
37.5	**Oxides of Nitrogen as NO_X**	**mg/Nm^3**	--	**38.8**
36.4	**Carbon Monoxide as CO**	**mg/m^3**	--	**0.080**
0.09	**Carbon dioxide as (CO_2)**	**%**	--	**6.2**
6.1	**Mercury (as Hg)**	**mg/Nm^3**	--	**0.72**
0.67	**Quantity of Gas flow**	**Nm3/hr**	--	**1587**
1654.35				

TERMS AND CONDITION:-

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TEST REPORT

Test Report No: ENVLAB/25-26/TR-11975 *Date: 05.09.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**22.08.2025**
			Sample Received on	:	**23.08.2025**
Sample Description	:	**Source Emission**	Sampling Procedure	:	VCSPL/SOP/003, Dt. 01.08.2019
			Sampling Location	:	**ST-2: DG Stack at DG Set -2**
Sample Condition	;	Air Tight Sealed and gaseous Sample Solution Refrigerated	Sampling done by	:	Asutosh Mohanty
Test Started on	:	**23.08.2025**	Test Completed on	:	**27.08.2025**

1. Chemical Testing

A. Atmospheric Pollution

Sl. No.	Parameter	Unit	Standard as per CTO	Analysis Results
				ST-2
1	**Temperature**	**^0K**	--	**382**
2	**Velocity**	**m/sec**	--	**6.7**
3	**Particulate Matter as PM**	**mg/Nm^3**	**100**	**43.9**
4	**Sulphur Dioxide as SO_2**	**mg/Nm^3**	--	**21.9**
5	**Oxides of Nitrogen as NO_X**	**mg/Nm^3**	--	**34.5**
6	**Carbon Monoxide as CO**	**mg/m^3**	--	**0.07**
7	**Carbon dioxide as (CO_2)**	**%**	--	**7.9**
8	**Mercury (as Hg)**	**mg/Nm^3**	--	**0.026**
9	**Quantity of Gas flow**	**Nm3/hr**	--	**89.0**

Remarks: *The above Sample test results are within the prescribed standard for the above mentioned parameters.*

TERMS AND CONDITION: -

1. *The Test result is relevant only to the item tested.*
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5. *The laboratory's responsibility under this report is limited to; proven willful negligence.*

*** End Report***

Reviewed by

Approved by

TEST REPORT

Test Report No: ENVLAB/25-26/TR-11976 *Date: 05.09.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**22.08.2025**
			Sample Received on	:	**23.08.2025**
Sample Description	:	**Source Emission**	Sampling Procedure	:	VCSPL/SOP/003, Dt. 01.08.2019
			Sampling Location	:	**ST-3: Dedusting System**
Sample Condition	;	Air Tight Sealed and gaseous Sample Solution Refrigerated	Sampling done by	:	Asutosh Mohanty
Test Started on	:	**23.08.2025**	Test Completed on	:	**27.08.2025**

1. Chemical Testing

A. Atmospheric Pollution

Sl. No.	Parameter	Unit	Standard as per CTO	Analysis Results
				ST-3
1	**Temperature**	**^0K**	--	**359**
2	**Velocity**	**m/sec**	--	**10.2**
3	**Particulate Matter as PM**	**mg/Nm^3**	**100**	**48.2**
4	**Sulphur Dioxide as SO_2**	**mg/Nm^3**	--	**33.1**
5	**Oxides of Nitrogen as NO_X**	**mg/Nm^3**	--	**35.8**
6	**Carbon Monoxide as CO**	**mg/m^3**	--	**0.05**
7	**Carbon dioxide as (CO_2)**	**%**	--	**6.5**
8	**Mercury (as Hg)**	**mg/Nm^3**	--	**0.57**
9	**Quantity of Gas flow**	**Nm3/hr**	--	**1791.95**

Remarks: *The above Sample test results are within the prescribed standard for the above mentioned parameters.*

TERMS AND CONDITION:-

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4. *The test item will not be retained for more than 15 days from the date of issue of test report except in case as required by applicable regulations.*
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*** End Report***

Reviewed by

Approved by

TEST REPORT

Test Report No: ENVLAB/25-26/TR-11977 *Date: 05.09.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**22.08.2025**
			Sample Received on	:	**23.08.2025**
Sample Description	:	**Source Emission**	Sampling Procedure	:	VCSPL/SOP/003, Dt. 01.08.2019
			Sampling Location	:	**ST-4: DRYER STACK**
Sample Condition	;	Air Tight Sealed and gaseous Sample Solution Refrigerated	Sampling done by	:	Asutosh Mohanty
Test Started on	:	**23.08.2025**	Test Completed on	:	**27.08.2025**

1. Chemical Testing

A. Atmospheric Pollution

Sl. No.	Parameter	Unit	Standard as per CTO	Analysis Results
				ST-4
1	**Temperature**	^0K	--	**358**
2	**Velocity**	m/sec	--	**9.3**
3	**Particulate Matter as PM**	mg/Nm^3	**100**	**64.7**
4	**Sulphur Dioxide as SO_2**	mg/Nm^3	--	**36.8**
5	**Oxides of Nitrogen as NO_X**	mg/Nm^3	--	**37.7**
6	**Carbon Monoxide as CO**	mg/m^3	--	**0.075**
7	**Carbon dioxide as (CO_2)**	%	--	**6.3**
8	**Mercury (as Hg)**	mg/Nm^3	--	**0.69**
9	**Quantity of Gas flow**	Nm3/hr	--	**1638.29**

TERMS AND CONDITION:-

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*** End Report***

Reviewed by

Approved by

TEST REPORT

Test Report No: ENVLAB/25-26/TR-13147 *Date: 08.10.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**24.09.2025**
			Sample Received on	:	**25.09.2025**
Sample Description	:	**Source Emission**	Sampling Procedure	:	VCSPL/SOP/003, Dt. 01.08.2019
			Sampling Location	:	**ST-2: GCP STACK (45 MVA)**
Sample Condition	;	Air Tight Sealed and gaseous Sample Solution Refrigerated	Sampling done by	:	Asutosh Mohanty
Test Started on	:	**25.09.2025**	Test Completed on	:	**29.09.2025**

1. Chemical Testing

A. Atmospheric Pollution

Sl. No.	Parameter	Unit	Standard as per CTO	Analysis Results
				ST-2
1	**Temperature**	**^0K**	--	**371**
2	**Velocity**	**m/sec**	--	**10.94**
3	**Particulate Matter as PM**	**mg/Nm^3**	**100**	**64.5**
4	**Sulphur Dioxide as SO_2**	**mg/Nm^3**	--	**28.2**
5	**Oxides of Nitrogen as NO_X**	**mg/Nm^3**	--	**33.2**
6	**Carbon Monoxide as CO**	**%**	--	**0.055**
7	**Carbon dioxide as (CO_2)**	**%**	--	**7.8**
8	**Mercury (as Hg)**	**mg/Nm^3**	--	**0.025**
9	**Quantity of Gas flow**	**Nm3/hr**	--	**174493.58**

Remarks: *The above Sample test results are within the prescribed standard for the above mentioned parameters.*

TERMS AND CONDITION: -

1. *The Test result is relevant only to the item tested.*
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5. *The laboratory's responsibility under this report is limited to; proven willful negligence.*

*** End Report***

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TEST REPORT

Test Report No: ENVLAB/25-26/TR-13148 *Date: 08.10.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**25.09.2025**
			Sample Received on	:	**25.09.2025**
Sample Description	:	**Source Emission**	Sampling Procedure	:	VCSPL/SOP/003, Dt. 01.08.2019
			Sampling Location	:	**ST-3: Dedusting System**
Sample Condition	;	Air Tight Sealed and gaseous Sample Solution Refrigerated	Sampling done by	:	Asutosh Mohanty
Test Started on	:	**26.09.2025**	Test Completed on	:	**29.09.2025**

1. Chemical Testing

A. Atmospheric Pollution

Sl. No.	Parameter	Unit	Standard as per CTO	Analysis Results
				ST-3
1	**Temperature**	**^{0}K**	--	**356**
2	**Velocity**	**m/sec**	--	**9.9**
3	**Particulate Matter as PM**	**mg/Nm^3**	**100**	**47.5**
4	**Sulphur Dioxide as SO_2**	**mg/Nm^3**	--	**34.2**
5	**Oxides of Nitrogen as NO_X**	**mg/Nm^3**	--	**36.8**
6	**Carbon Monoxide as CO**	**%**	--	**0.04**
7	**Carbon dioxide as (CO_2)**	**%**	--	**6.9**
8	**Mercury (as Hg)**	**mg/Nm^3**	--	**0.56**
9	**Quantity of Gas flow**	**Nm3/hr**	--	**1752.11**

Remarks: *The above Sample test results are within the prescribed standard for the above mentioned parameters.*

TERMS AND CONDITION:-

1. *The Test result is relevant only to the item tested.*
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TEST REPORT

Test Report No: ENVLAB/25-26/TR-13149 *Date: 08.10.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**25.09.2025**
			Sample Received on	:	**25.09.2025**
Sample Description	:	**Source Emission**	Sampling Procedure	:	VCSPL/SOP/003, Dt. 01.08.2019
			Sampling Location	:	**ST-4: DRYER STACK**
Sample Condition	;	Air Tight Sealed and gaseous Sample Solution Refrigerated	Sampling done by	:	Asutosh Mohanty
Test Started on	:	**26.09.2025**	Test Completed on	:	**29.09.2025**

1. Chemical Testing

A. Atmospheric Pollution

Sl. No.	Parameter	Unit	Standard as per CTO	Analysis Results
				ST-4
1	**Temperature**	**^0K**	--	**356**
2	**Velocity**	**m/sec**	--	**9.5**
3	**Particulate Matter as PM**	**mg/Nm^3**	**100**	**62.8**
4	**Sulphur Dioxide as SO_2**	**mg/Nm^3**	--	**35.6**
5	**Oxides of Nitrogen as NO_X**	**mg/Nm^3**	--	**36.2**
6	**Carbon Monoxide as CO**	**%**	--	**0.06**
7	**Carbon dioxide as (CO_2)**	**%**	--	**6.4**
8	**Mercury (as Hg)**	**mg/Nm^3**	--	**0.67**
9	**Quantity of Gas flow**	**Nm3/hr**	--	**1686.04**

TERMS AND CONDITION:-

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5. *The laboratory's responsibility under this report is limited to; proven willful negligence.*

*** End Report***

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TEST REPORT

Test Report No: ENVLAB/25-26/TR-02058 *Date: 05.05.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**28.04.2025**
			Sample Received on	:	**29.04.2025**
Sample Description	:	**Source Emission**	Sampling Procedure	:	VCSPL/SOP/003, Dt. 01.08.2019
			Sampling Location	:	**ST-4: GCP STACK (33 MVA)**
Sample Condition	;	Air Tight Sealed and gaseous Sample Solution Refrigerated	Sampling done by	:	Ashutosh Mohanty
Test Started on	:	**29.04.2025**	Test Completed on	:	**03.05.2025**

1. **Chemical Testing**

A. Atmospheric Pollution

Sl. No.	Parameter	Unit	Standard as per CTO	Analysis Results
				ST-4
1	**Temperature**	^0K	--	**383**
2	**Velocity**	**m/sec**	--	**12.42**
3	**Particulate Matter as PM**	**mg/Nm^3**	**100**	**44.3**
4	**Sulphur Dioxide as SO_2**	**mg/Nm^3**	--	**26.2**
5	**Oxides of Nitrogen as NO_X**	**mg/Nm^3**	--	**34.2**
6	**Carbon Monoxide as CO**	**mg/m^3**	--	**0.083**
7	**Carbon dioxide as (CO_2)**	**%**	--	**7.6**
8	**Mercury (as Hg)**	**mg/Nm^3**	--	**0.072**
9	**Quantity of Gas flow**	**Nm3/hr**	--	**240643**

Remarks: *The above Sample test results are within the prescribed standard for the above mentioned parameters.*

TERMS AND CONDITION:-

B. The Test result is relevant only to the item tested.

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E. The test item will not be retained for more than 15 days from the date of issue of test report except in case as required by applicable regulations.

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*** End Report***

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TEST REPORT

Test Report No: ENVLAB/25-26/TR-08828 *Date: 06.06.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**21.05.2025**
			Sample Received on	:	**22.05.2025**
Sample Description	:	**Source Emission**	Sampling Procedure	:	VCSPL/SOP/003, Dt. 01.08.2019
			Sampling Location	:	**ST-4: GCP STACK (33 MVA)**
Sample Condition	;	Air Tight Sealed and gaseous Sample Solution Refrigerated	Sampling done by	:	Ashutosh Mohanty
Test Started on	:	**22.05.2025**	Test Completed on	:	**25.05.2025**

1. Chemical Testing

A. Atmospheric Pollution

Sl. No.	Parameter	Unit	Standard as per CTO	Analysis Results
				ST-4
1	**Temperature**	**^0K**	--	**381**
2	**Velocity**	**m/sec**	--	**12.2**
3	**Particulate Matter as PM**	**mg/Nm^3**	**100**	**25.0**
4	**Sulphur Dioxide as SO_2**	**mg/Nm^3**	--	**25.8**
5	**Oxides of Nitrogen as NO_X**	**mg/Nm^3**	--	**32.6**
6	**Carbon Monoxide as CO**	**mg/m^3**	--	**0.081**
7	**Carbon dioxide as (CO_2)**	**%**	--	**7.2**
8	**Mercury (as Hg)**	**mg/Nm^3**	--	**0.070**
9	**Quantity of Gas flow**	**Nm3/hr**	--	**237272**

Remarks: *The above Sample test results are within the prescribed standard for the above mentioned parameters.*

TERMS AND CONDITION:-

B. The Test result is relevant only to the item tested.

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E. The test item will not be retained for more than 15 days from the date of issue of test report except in case as required by applicable regulations.

F. The laboratory's responsibility under this report is limited to; proven willful negligence.

*** End Report***

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TEST REPORT

Test Report No: ENVLAB/25-26/TR-09604 *Date: 07.07.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**26.06.2025**
			Sample Received on	:	**27.06.2025**
Sample Description	:	**Source Emission**	Sampling Procedure	:	VCSPL/SOP/003, Dt. 01.08.2019
			Sampling Location	:	**ST-4: GCP STACK (33 MVA)**
Sample Condition	;	Air Tight Sealed and gaseous Sample Solution Refrigerated	Sampling done by	:	**Biswajeet Bhoi**
Test Started on	:	**27.06.2025**	Test Completed on	:	**30.06.2025**

1. Chemical Testing

A. Atmospheric Pollution

Sl. No.	Parameter	Unit	Standard as per CTO	Analysis Results
				ST-4
1	**Temperature**	**^0K**	--	**376**
2	**Velocity**	**m/sec**	--	**11.96**
3	**Particulate Matter as PM**	**mg/Nm^3**	**100**	**24.9**
4	**Sulphur Dioxide as SO_2**	**mg/Nm^3**	--	**27.2**
5	**Oxides of Nitrogen as NO_X**	**mg/Nm^3**	--	**31.9**
6	**Carbon Monoxide as CO**	**mg/m^3**	--	**0.08**
7	**Carbon dioxide as (CO_2)**	**%**	--	**6.9**
8	**Mercury (as Hg)**	**mg/Nm^3**	--	**0.07**
9	**Quantity of Gas flow**	**Nm3/hr**	--	**236478.70**

Remarks: *The above Sample test results are within the prescribed standard for the above mentioned parameters.*

TERMS AND CONDITION:-

B. The Test result is relevant only to the item tested.

C. This report shall not be reproduced in full or part without written approval of Visiontek consultancy services.(P) Ltd

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E. The test item will not be retained for more than 15 days from the date of issue of test report except in case as required by applicable regulations.

F. The laboratory's responsibility under this report is limited to; proven willful negligence.

*** End Report***

Reviewed by VISIONTEK CONSULTANCY SERVICES PVT. LTD. BBSR

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TEST REPORT

Test Report No: ENVLAB/25-26/TR-11067 *Date: 06.08.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**23.07.2025**
			Sample Received on	:	**25.07.2025**
Sample Description	:	**Source Emission**	Sampling Procedure	:	VCSPL/SOP/003, Dt. 01.08.2019
			Sampling Location	:	**ST-1: GCP STACK (33 MVA)**
Sample Condition	;	Air Tight Sealed and gaseous Sample Solution Refrigerated	Sampling done by	:	Bibek Tripathy
Test Started on	:	**25.07.2025**	Test Completed on	:	**28.07.2025**

1. **Chemical Testing**

A. Atmospheric Pollution

Sl. No.	Parameter	Unit	Standard as per CTO	Analysis Results
				ST-1
1	Temperature	^0K	--	376
2	Velocity	m/sec	--	11.96
3	Particulate Matter as PM	mg/Nm^3	100	26.8
4	Sulphur Dioxide as SO_2	mg/Nm^3	--	26.4
5	Oxides of Nitrogen as NO_X	mg/Nm^3	--	31.9
6	Carbon Monoxide as CO	mg/m^3	--	0.08
7	Carbon dioxide as (CO_2)	%	--	6.9
8	Mercury (as Hg)	mg/Nm^3	--	0.071
9	Quantity of Gas flow	Nm3/hr	--	236478.70

Remarks: *The above Sample test results are within the prescribed standard for the above mentioned parameters.*

TERMS AND CONDITION:-

B. The Test result is relevant only to the item tested.

C. This report shall not be reproduced in full or part without written approval of Visiontek consultancy services.(P) Ltd

D. The laboratory is not responsible for the authenticity of photocopied test report.

E. The test item will not be retained for more than 15 days from the date of issue of test report except in case as required by applicable regulations.

F. The laboratory's responsibility under this report is limited to; proven willful negligence.

*** End Report***

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VISIONTEK CONSULTANCY SERVICES PVT. LTD. BBSR

TEST REPORT

Test Report No: ENVLAB/25-26/TR-11974 *Date: 05.09.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**22.08.2025**
			Sample Received on	:	**23.08.2025**
Sample Description	:	**Source Emission**	Sampling Procedure	:	VCSPL/SOP/003, Dt. 01.08.2019
			Sampling Location	:	**ST-1: GCP STACK (33 MVA)**
Sample Condition	;	Air Tight Sealed and gaseous Sample Solution Refrigerated	Sampling done by	:	Asutosh Mohanty
Test Started on	:	**23.08.2025**	Test Completed on	:	**27.08.2025**

1. **Chemical Testing**

A. Atmospheric Pollution

Sl. No.	Parameter	Unit	Standard as per CTO	Analysis Results
				ST-1
1	**Temperature**	**^0K**	--	**372**
2	**Velocity**	**m/sec**	--	**11.79**
3	**Particulate Matter as PM**	**mg/N^3**	**100**	**26.2**
4	**Sulphur Dioxide as SO_2**	**mg/Nm^3**	--	**25.9**
5	**Oxides of Nitrogen as NO_X**	**mg/Nm^3**	--	**30.8**
6	**Carbon Monoxide as CO**	**mg/m^3**	--	**0.07**
7	**Carbon dioxide as (CO_2)**	**%**	--	**6.6**
8	**Mercury (as Hg)**	**mg/Nm^3**	--	**0.07**
9	**Quantity of Gas flow**	**Nm3/hr**	--	**235201.34**

Remarks: *The above Sample test results are within the prescribed standard for the above mentioned parameters.*

TERMS AND CONDITION: -

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4.The test item will not be retained for more than 15 days from the date of issue of test report except in case as required by applicable regulations.
5The laboratory's responsibility under this report is limited to: proven willful negligence.

*** End Report***

Reviewed by

Approved by

TEST REPORT

Test Report No: ENVLAB/25-26/TR-13146 *Date: 08.10.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**24.09.2025**
			Sample Received on	:	**25.09.2025**
Sample Description	:	**Source Emission**	Sampling Procedure	:	VCSPL/SOP/003, Dt. 01.08.2019
			Sampling Location	:	**ST-1: GCP STACK (33 MVA)**
Sample Condition	;	Air Tight Sealed and gaseous Sample Solution Refrigerated	Sampling done by	:	Asutosh Mohanty
Test Started on	:	**25.09.2025**	Test Completed on	:	**29.09.2025**

1. Chemical Testing

A. Atmospheric Pollution

Sl. No.	Parameter	Unit	Standard as per CTO	Analysis Results
				ST-1
1	**Temperature**	**^{0}K**	--	**381**
2	**Velocity**	**m/sec**	--	**11.65**
3	**Particulate Matter as PM**	**mg/Nm^3**	100	**26.6**
4	**Sulphur Dioxide as SO_2**	**mg/Nm^3**	--	**44.2**
5	**Oxides of Nitrogen as NO_X**	**mg/Nm^3**	--	**48.3**
6	**Carbon Monoxide as CO**	**%**	--	**0.023**
7	**Carbon dioxide as (CO_2)**	**%**	--	**7.9**
8	**Mercury (as Hg)**	**mg/Nm^3**	--	**0.07**
9	**Quantity of Gas flow**	**Nm3/hr**	--	**237326.28**

Remarks: *The above Sample test results are within the prescribed standard for the above mentioned parameters.*

TERMS AND CONDITION: -

1The Test result is relevant only to the item tested.
2This report shall not be reproduced in full or part without written approval of Visiontek consultancy services.(P) Ltd
3.The laboratory is not responsible for the authenticity of photocopied test report.
4.The test item will not be retained for more than 15 days from the date of issue of test report except in case as required by applicable regulations.
5The laboratory's responsibility under this report is limited to: proven willful negligence.

*** End Report***

Reviewed by

Approved by

Annexure 4

REGD. NO.- 1951 - IME - 25

DATE OF EXAM. 30-4-25

MOB. NO. 7327909347

VALIDITY UPTO. 29-4-26

FORM NO. 31-A

Adno 4220 8638 4163

HEALTH RECORD

(PRESCRIBED UNDER RULE 6Z-1)

VEDANTA FERRO ALLOYS CORPORATION LTD.

CHARGE CHROME PLANT, RANDIA A.U.M

REPORT OF MEDICAL EXAMINATION (PRE-EMPLOYMENT / PERIODICAL / OTHERS)

- Name of the employee : Eswar Ch. Nayak
- Employment no. : — Sex : Male/Female
- Date of birth/age : 36/M - 17-01-1989 36
- Date of employment : April 2010
- Length in service : 15 years.
- Nature of job : Helper.
- Identification marks : A black mole on face.
- General Survey :

Health : — Good / Fair / Poor

Height - 163 Cm.

Weight - 55 Kg.

- Blood group : O+
- Eye vision : Normal / Abnormal RE - 6/6 LE - 6/6

Use of glass – Yes / No

- Hearing : Normal / Abnormal
- Respiratory system & chest measurement :

Inspiration – 84 cm

Expiration – 82 cm

Respiratory Rate / min – 18

Remarks if any – NAD

- Cardiovascular system :

Pulse rate – 80

Bp- 120/80

Heart sounds-

- Abdomen Tenderness : Yes/ No

  Liver : Normal / Enlarged

  Spleen : Normal / Enlarged

- Nervous system :

  History of fits : Yes / No

  Epilepsy : Yes / No

  Remarks on mental health :

- Locomotor system : Normal / Abnormal
- Skin condition : Normal / Abnormal

  Remarks on any skin disease noticed –

- Hernias : Absent / Present
- Hydrocele : Absent / Present
- Present complain, if any
- Summary of findings

  Heart disease

  Hypertension

  Diabetes

  T.B.

  Epilepsy

  Poisoning

  Dental

  Occupational disease, if any

NAD

- Recommendation, if any

  For any further investigation

Dr. Deepak Nayak
General Physician
Reg No-21264/16

Signature of the Employee

Signature of the Medical Officer

REGD. NO.- 1473- PME -25

MOB. NO. 7681860826

DATE OF EXAM. 8-4-25

VALIDITY UPTO 7-4-26

FORM NO. 31-A

Adno 7237160402977

HEALTH RECORD

(PRESCRIBED UNDER RULE 6Z-1)

VEDANTA FERRO ALLOYS CORPORATION LTD.

CHARGE CHROME PLANT, RANDIA PAPL

REPORT OF MEDICAL EXAMINATION (PRE-EMPLOYMENT / PERIODICAL / OTHERS)

- Name of the employee : Siba Prasad Peda.
- Employment no. : CCP0008098 Sex : Male/Female
- Date of birth/age : 01/01/1997 28
- Date of employment : April 2023
- Length in service : 2 years
- Nature of job : ~~01/01/1997~~. (operation) "Helper.
- Identification marks : A black mole on face
- General Survey :

Health : Good / Fair / Poor

Height - 5'4" Cm.

Weight - 59 Kg.

- Blood group : O+ve.
- Eye vision : Normal / Abnormal RE - 6/6

Use of glass – Yes / No LE - 6/6

- Hearing : Normal / Abnormal Near vision = N/6
- Respiratory system & chest measurement :

Inspiration – 84 c.m Colour vision (N)

Expiration – 82 c.m

Respiratory Rate / min – 18/m

Remarks if any –

- Cardiovascular system :

Pulse rate – 84 b/m

Bp- 120/80 mmhg

Heart sounds-

- Abdomen Tenderness : Yes/ No

  Liver : Normal / Enlarged

  Spleen : Normal / Enlarged

- Nervous system :

  History of fits : Yes / No

  Epilepsy : Yes / No

  Remarks on mental health : NIL

- Locomotor system : Normal / Abnormal
- Skin condition : Normal / Abnormal

  Remarks on any skin disease noticed – NIL

- Hernias : Absent / Present
- Hydrocele : Absent / Present
- Present complain, if any
- Summary of findings

  Heart disease
  Hypertension
  Diabetes
  T.B.
  Epilepsy
  Poisoning
  Dental

  NIL

  Occupational disease, if any

- Recommendation, if any

  For any further investigation

Siba Prasad Pedo.

Signature of the Employee

Signature of the Medical Officer

MEDICAL OFFICER
VEDA... ...ACOR

Greenbelt

Ferro Alloys Corporation Ltd (Charge Chrome Plant) has 34.84% green belt coverage as per the Greenbelt assessment by an expert agency. PP is continuously working to achieve the tree density to 2500/Ha by using the existing vacant land and replacement of damaged plants.

Details of plantation are provided below.

Total land coverage by the project : 86.163 HA.

Greenbelt Cover : 30.01 HA

Plantation: (Apr 2025-Sept 2025)

Year of plantation	Species planted	Spacing	Height attained (As on Date)	Total area covered in Ha (Approx)
2025-26	**3,458**	1.5 m	>1 m	5.3

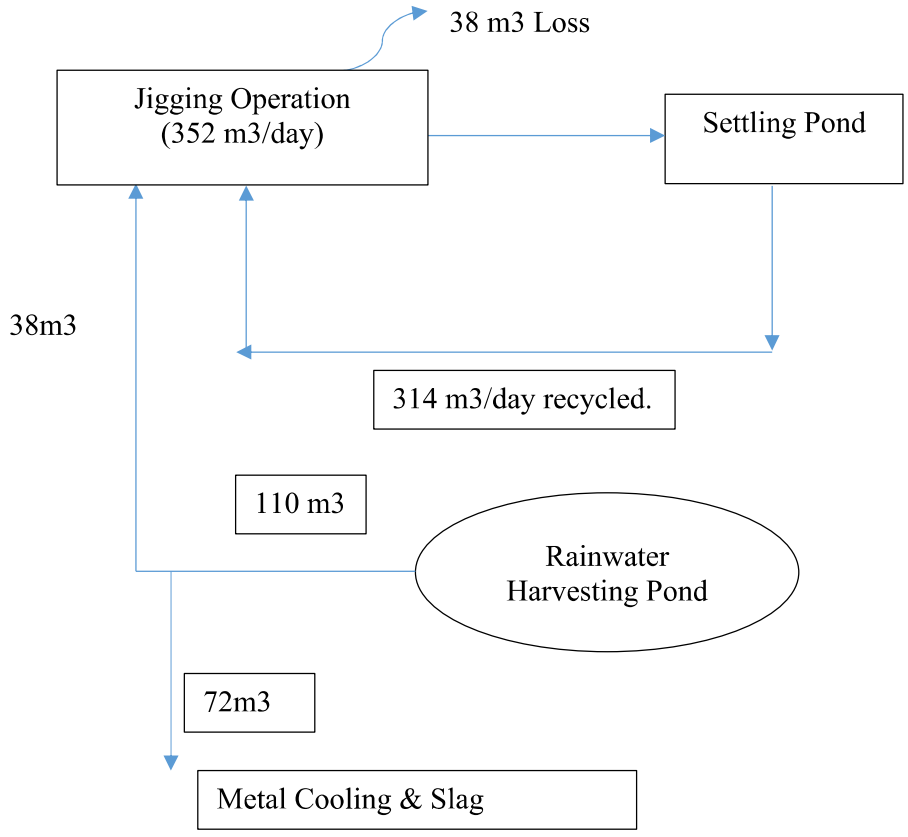
Trees Details:

Local Name	Botanical Name	Family
Trees		
Nimba	*Azadiracta india*	Meliaceae
Radhachura	*Peltophurum ferrugineum*	Caesalpiniaceae
Karanja	*Pongamia pinnata*	Fabaceae
Acacia	*Acacia auriculiformis*	Mimosaceae
Debadaru	*Polyalthia longifolia*	Annonaceae
Jamun	*Syzygium cumini*	Myrtaceae
Kadamba	*Neolamarckia cadamba*	Neolamarckia cadamba
Sishu	*Dalbergia sissoo*	Fabaceae
Amla	*Phyllanthus emblica*	Phyllanthaceae
Arjun	*Terminalia arjuna*	Combretaceae
Debdaru	*Polyalthia longifolia*	Annonaceae
Banyan	*Ficus benghalensis*	Moraceae
Bahada	*Terminalia bellirica*	Combretaceae
Sunari	*Cassia fistula*	Fabaceae
Peepal	*Ficus religiosa*	Moraceae
Indian bael	*Aegle marmelos*	Rutaceae
Shrubs		
Kadali	*Musa paradisiaca*	Musaceae
Pedipedika	*Abutilon persicum*	Malvaceae
Dalimba	*Punica granatum*	Puniaceae

Water Requirement in Jigging Operation

Process	Water Requirement (m3)	Transit Loss	Evaporation Loss	Total Loss (%) ((c+d)/(a+b))
Jigging	352 (a)	4 (c)	34(d)	9.74%
Jigging Makeup	38 (b)			
Metal Cooling & Granulation	72	-	-	
Total Supply from Rainwater Harvesting Pond	110			

Water Flow Diagram



vedanta
transforming for good

Annexure 7

FACOR

Ref: FACOR/BHADRAK/MOEF/24-04
Date: 08.05.2024

TO,

Deputy Director General of Forest (C),
Ministry of Env., Forest and Climate Change,
Integrated Regional Office,
A/3 Chandersekharpur,
Bhubneswar-751023
Email: roez.bsr-mef@nic.in

Ref : **1. Environment Clearance letter No. F.No. J-11011/594/2008-IA.II(1) dtd. 31.10.2022**

2. Name of the Project: Expansion of Ferro Alloys Plant High Carbon Ferro Chrome production from 75000TPA to 145000TPA at Randia, District Bhadrak, Orissa by M/s. Ferro Alloys Corporation Ltd.

Sub : **Compliance of the specific condition no. XXII against Environment Clearance letter No.: F.No. J-11011/594/2008-IA.II(I) dtd.31.10.2022, issued to M/s. Ferro Alloys Corporation Ltd.**

Dear Sir,

In compliance with the Stipulated Specific Condition No. XXII of the Environment Clearance letter No.. F.No. J-11011/594/2008-IA.II(1) dtd. 31.10.2022 issued by your good office, we are submitting herewith the Compliance status of the installation of CO sensors at the furnace top level with respect to Charge Chrome Plant of M/s Ferro Alloys Corporation Limited, situated at D.P.Nagar, Po-Randia, District-Bhadrak.

Specific Condition No.	Compliance Condition	Status
XXII	The PP shall install CO sensors at the furnace top level and the monitoring report shall be submitted to the IRO, MoEFCC in this regard.	Installation of CO sensor in furnace top level has been completed.

**Enclosed with this letter, please find the necessary documentation as evidence for compliance with the same.

Thanking you,

Yours faithfully,
For Ferro Alloy Corporation Ltd.,
Charge Chrome Plant.

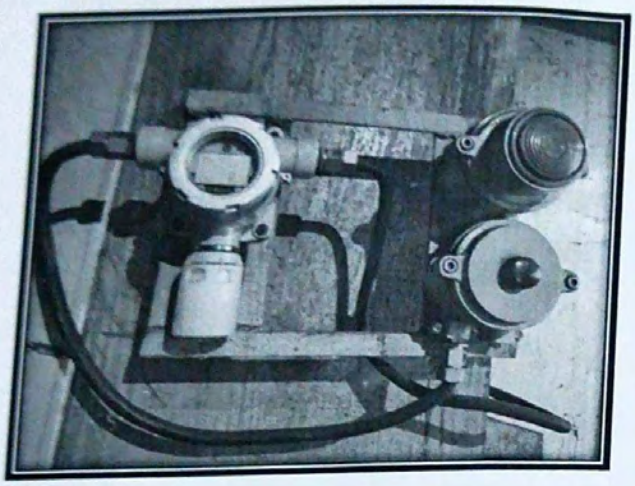
GOVT. OF INDIA
MoEF & CC Integrated R.O
Bhubaneswar-751023
09 MAY 2024
RECEIVED

Mr. Krutisunder Mohapatra
Chief HSE Officer, FACOR
Encl: As above

CO Sensor at Furnace Top Level

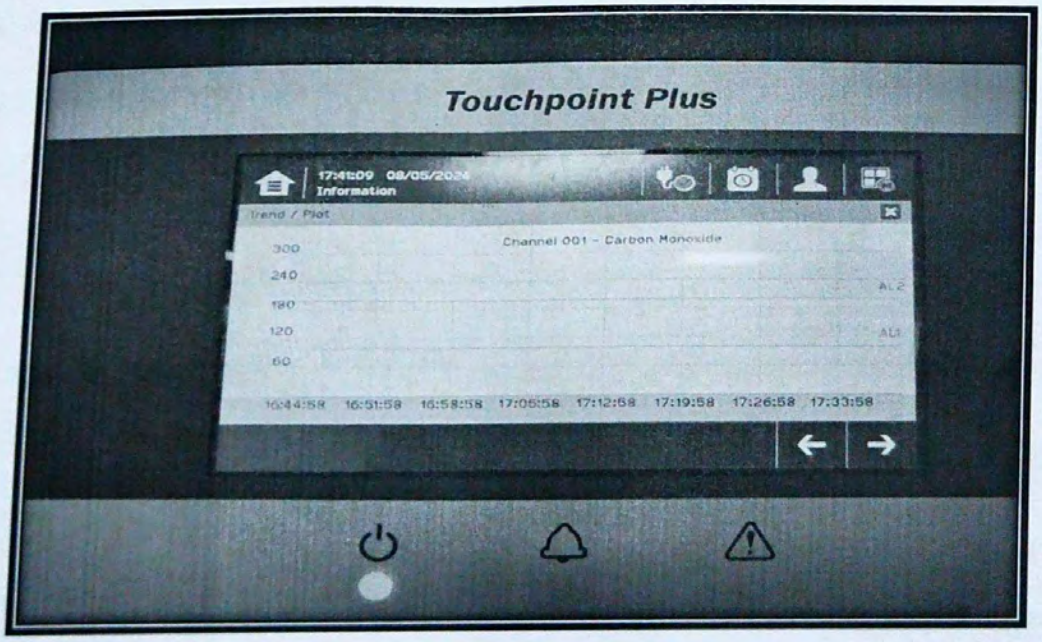
Charge Chrome Plant

Area: 33 MVA Furnace



CO Sensor installed at 33 MVA furnace top level.

Controller System at 33 MVA Furnace Control Room.



Controller Display with Data Trend from Sensor

Charge Chrome Plant, M/s Ferro Alloys Corporation Limited.

Environment Management Plan Compliance				
		Mitigation Measures	**Actions Taken**	**Compliance Status**
1	Water Environment	The plant would be designed on the concept of 'zero discharge' of plant effluent	The Plant follows Zero effluent discharge policy. No effluent is being discharged outside the plant.	Complied
2		The water used for furnace & gas cleaning plant operation are completely recycled with proper water treatment.	The cooling water is being recycled through pressure filters.	Complied
3		8235 Nos. of trees are planted & 3500 sq. m. Gardens developed inside the plant for soil & water conservation	6675 nos. of plants have been planted till date. Gardens also have been developed inside the plant premises.	Being Complied
4		The domestic effluents will be treated through STP of adequate size and the treated water shall be used for gardening. Canteen wastewater to soak pit through settling pit.	STP has been installed to treat domestic wastewater and treated water is being used for gardening purpose	Complied
5		The plant concrete drainage network system has been constructed for most of the areas & it is connected to 9 Nos. of water recharging pits (13 wells) to take care of storm water.	Concrete drainage network has been constructed and recharging pits have been constructed to take care of storm water. Photocopy is enclosed as **Annexure 1**	Complied
6		Developing a settling pond to collect storm water around the premises to prevent it from any contamination and recalculating by pumping system for plantation & water sprinkling for dust suppression. Also, for design and implementation of Roof-Top rainwater harvesting	Rainwater harvesting ponds have been developed to store storm water. The water is being used for plantation and dust suppression. Photocopy is enclosed as **Annexure 2.**	Complied

C.K. Dhawad

7	Air Environment	Bag filter with designed outlet dust concentration of 50 mg/Nm3;	Outlet dust concentration is within the limit and analysis report has been attached as **Annexure 3.**	Being complied
8		The event of failure of any pollution control equipment, automatic tripping in the control system, shall be provided	Air pollution control device (Gas cleaning plant) has been provided with interlocking system.	Complied
9		Attempt shall be made to use low sulfur coke to the possible extent	Coke with sulfur content of < 0.7 % (wt.) is used in the process. Total consumption for the year 2023-24 is 36102 MT. Testing report is enclosed as **Annexure 4**	Complied
10		Flame temperature will be maintained to ensure emission of less NOx	Emission of NOx from GCP bag filters are monitored through external NABL accredited lab. Report of the same has been attached with the **Annexure 3**	Complied
11		All vehicles and their exhausts would be well maintained and regularly tested for emission concentration	PUC certificate is maintained for all vehicles. Reference copy is enclosed as **Annexure 5**	Complied
12		Regular preventive maintenance of pollution control equipment;	It is being maintained regularly. Reference copy is enclosed as **Annexure 6**	Complied
13		Stack emissions shall be regularly monitored by FERRO ALLOYS CORPORATION LTD. / SPCB/external agencies on periodic basis as per statutory requirements.	It is being monitored regularly. Report for the same is enclosed as **Annexure 3**	Complied
14		Jet Pulse bag filters at all dry material conveying and transfer points	For controlling dust pollution in conveying and transfer points Dedusting unit with bag filter system has been installed. Photocopy is enclosed as **Annexure 7**	Complied
15		Regular dust suppression with water sprinkler on the haul roads;	Regular water sprinkling is being done through mobile sprinkler. Photocopy is attached for reference as **Annexure 7**	Being complied
16		Plant roads &approach roads shall be made of bitumen/concrete;	All internal road and connecting road from project site to main highway connected with PQC (Pavement Quality Concrete Road). Photocopy is attached for reference in **Annexure 8**	Complied
17		Areas between various sections and truck parking areas shall be made of concrete/bitumen/brickwork;	Photocopy attached for reference in **Annexure 8**	Complied
18		Open areas within the plant premises and along with boundaries of the plant premises shall be covered under greenbelt/plantation	PP have planted native species of trees around the plant boundaries. PP is currently having 34.84% of greenbelt coverage as per Greenbelt assessment by expert agency.	Complied
19		Construction materials such as sand etc. shall be fully covered during transportation to/from the plant site by road.	It is being followed and implemented	Complied
20		Installation of dust suppression system i.e. Dry Fog System near the fugitive dust generation sources in the Metal Recovery Plant.	Water sprinkling system has been installed in the fugitive dust generation points in metal recovery plant. Photographs to be attached	Complied
21		GCP stack emission monitoring	Stack emission monitoring is being carried out on monthly basis. Monitoring Report has been attached as **Annexure 3**	Complied

22	Noise Environment	Plantation around the plant boundary will create a noise barrier for attenuating noise level.	Greenbelt along with stone patching boundary wall in the periphery of the plant boundaries has been developed to create a noise barrier for attenuating noise level.	Complied
23		Machinery design specifications of all the equipment in the Silico manganese plant will be to operate with noiselevelshallnotexceed85dBA as per the requirement of OSHA (Occupational Safety and Health Administration).	There is no silico manganese plant. So, this is not applicable.	Not applicable
24		Provision of acoustic enclosures to modulate the noise generated by machines.	Acoustic enclosures have been provided in the heavy noise generating equipment like DG sets, Compressors etc. Photographs enclosed as **Annexure 9**	Complied
25		Periodical lubrication of the heavy vehicles will help to keep the noise & vibration level at minimum.	It is being maintained.	Complied
26		Provision of Protective device like earmuff/plugs to the workers	Ear plugs have been provided to the workers working in high noise prone area. Reference copy is enclosed as **Annexure 10**	Complied
27		Post health check-ups of employees &contractual labourers working in the noise prone areas	Health check-ups is being carried out regularly for employees &contractual laborers working in the noise prone areas. PME attached as **Annexure 11.**	Being complied

28	Water Resources	Continuous attempt shall be made to optimize/reduce the use of water;	Water Policy has been framed and implemented along with that VSAP (Vedanta Sustainability Assurance Program) is maintained. Regular trainings have been given to the employees to use the water in a sustainable way. Details are enclosed as **Annexure 12**	Being complied
29		The wastewater generation from cooling tower blow down shall be minimized when COC is maintained at 6.	It is being complied & maintained	Complied
30		The makeup water for the cooling tower will be minimum, thereby facilitating water conservation.	There is minimal water requirement as makeup water in cooling tower. Raw water is treated through treatment unit and used in cooling purpose. To minimize makeup water requirement recirculation water is filtered through pressure filters and again used in cooling purpose.	Complied
31		Continuous attempt shall be made to avoid wastage and leakage of water	Leakage points & wastage areas are regularly identified & rectified. Regular awareness sessions have been conducted to sensitize employees about water conservation. Training program photographs are enclosed with **Annexure 13**	Complied
32		100% wastewater shall be recycled back after treatment	All wastewater is being treated through treatment unit and recycled in process.	Complied
33		Regular record of water consumption on daily basis shall be maintained	Digital water flowmeter with telemetry system has been installed for this purpose. Reference copy is enclosed as **Annexure 14**	Complied
34		Toilets and bathrooms shall be provided at site	It has been provided at site. **Annexure 14**	Complied
35		Water harvesting shall be carried out.	Rainwater water harvesting initiatives has been implemented. 3nos of recharging ponds have been developed to water harvesting purpose. Photographs attached as **Annexure 2**	Complied

36	Ecology	The species proposed to be planted shall be selected based on the criteria prescribed by CPCB as "Guidelines for Developing Greenbelts"	Native species have been selected for plantation as per guidance of forestry office. Details of the species is enclosed as **Annexure 15.**	Complied
37		Local species shall be preferred	Plantation of local native species have been preferred. Details of the species is enclosed as **Annexure 15.**	Complied
38		A qualified horticulturalist shall be deployed for proposed greenbelt development/plantation	A horticulturalist has been deployed for proposed greenbelt development/plantation	Complied
39		Proper fencing shall be carried out around the area where plantation is being carried out	Being followed in the required areas while plantation.	Complied
40		Necessary clearance shall be obtained from the statutory authorities due to the proposed plant on the ecological sensitive areas and proper management plan as suggested in the conservation plan shall be implemented seriously	The plant area is not coming under ecological sensitive area. The plant is established within the predefined industrial area. So, this point is not applicable	Not applicable

41	Solid Waste	Attempt shall be made to utilize the waste to maximum possible extent	100% of High-Volume Low Toxicity of waste is being utilized. Waste Utilization report is attached as **Annexure 16.**	Complied
42		Proper records of the solid waste to be generated and their usages for different purposes shall be maintained	Solid waste generation & utilization records are maintained. Waste Utilization report is attached as **Annexure 16**	Complied
43		Area used for storage of solid waste, if required at plant site shall be fenced properly. Continuous water spray shall be made for dust suppression and pucca road shall be constructed up to storage yard	As 100% of High-Volume Low Toxicity of waste is being utilized, so there is no storage area that to be fenced.	Not applicable
44		Dumping of solid waste shall be made in systematic manner and shall be levelled and compacted from time to time with layer of earth. At the end, the site shall be reclaimed by appropriate species of trees	As 100% of High-Volume Low Toxicity of waste is being utilized, so there is no solid waste dump.	Not applicable
45		Suitable drainage system shall be developed for surface runoff water during monsoon and at places settling/catch pits shall be provided to arrest any solid particles before it shall be flowing over to natural drainage system of the area	Drainage systems has been provided to transfer natural drainage water to collection pit for further treatment in SRTP. Photographs enclosed as **Annexure 17**	Complied
46		Dumping site shall be properly fenced and surrounded by green belt	As 100% of generated slag is being utilized so there is no requirement of fencing	Not applicable
47		Regular ambient air quality for dust and water monitoring shall be carried out around the dumping site	Monitoring of air quality and water quality is being carried out around the plant on regular basis. Report enclosed with **Annexure 18**	Complied
48		Lubricating waste oil shall be collected separately in drums and shall be sold to authorized external agency for further treatment	Separate drums are used to store lubricating waste oil and it is sold to SPCB authorized agency. Form 10 copy enclosed with **Annexure 19**	Being Complied

For Ferro Alloys Corporation Limited

Chief HSE Officer

Krutisunder Mohapatra

MS Ferro Alloys Corporation Ltd. (FACOR)
Charge Chrome Plant

			EIA Commitment		Compliance	
	Sl. No.	Particulars	Capital Investment (INR in lacs)	Recurring Investment (INR in lacs)	Capital Investment (INR in lacs)	Recurring Investment (INR in lacs)
COST OF ENVIRONMENT MANAGEMENT PLAN	1	Air Pollution Control	1950	105	1729	11.46
	2	Water pollution	325	28	233.05	14.9
	3	Noise pollution	55	8	_	0.5
	4	Environmental Monitoring & Management	140	70	179.2	10.39
	5	Occupational health	35	25	5.6	52
	6	Risk Control Measures	30	20	133.1	5.1
	7	Green belt	25	25	14.12	7.38
		Total	**2560**	**281**	**2294.06**	**101.73**

Annexure 9

Handling of Single-use Plastic in FACOR

The Ministry of Environment, Forest & Climate Change (MoEF & CC) issued a Notification on **12/08/2021** which mandated the **banning of identified single-use plastic items**. Vedanta is also committed to **'Transformation for Good'**, and it is clearly visible through our ESG aims. Our ESG aim-6 aims to incorporate new innovations for a greener business model. At FACOR, various measures have been taken to reduce the use of single-use plastics inside plant premises.

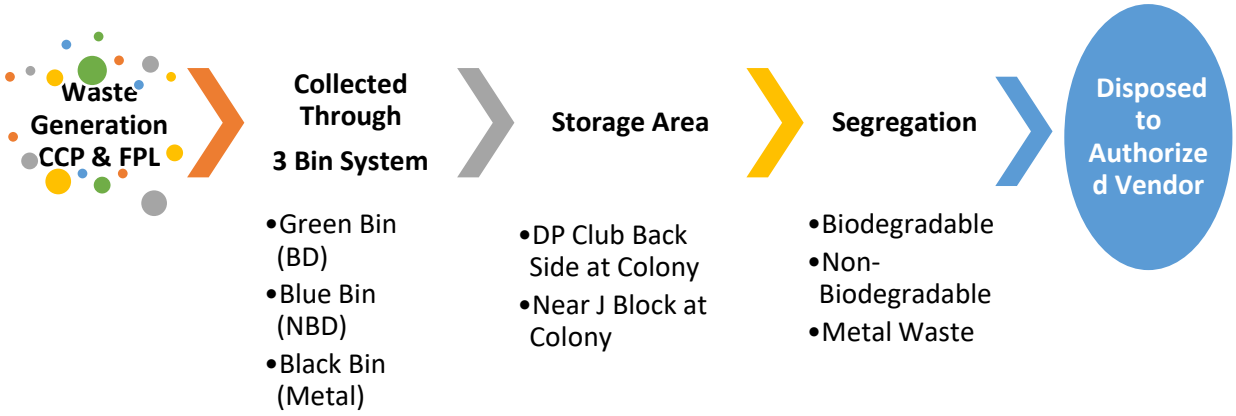
Types of Plastic Waste Generation

Location	Types of Waste Generated
Security Barrack	Polyethylene Terephthalate (PET), HDPE & LDPE (i.e., Plastic bags, Plastic bottles, etc.)
Project Area	
Canteen	
Wagon Tippler	
Store	Plastic Tag, Bubble Wraps, PET, Raw Material Bags.

Banned Single-Use Plastics and Alternatives.

Banned Single Use Plastic	**Alternatives**
Synthetic Fabric	Cotton FABRIC
Plastic Bottles	Steel Bottles
Plastic Cutlery (Spoons, Knife & other Kitchen equipment)	Wooden/ Metal Cutlery
Plastic Bags	Jute/ Cloth Bags
Plastic Containers	Glass Containers
Plastic Plates	Dry Leaf Plates
Plastic Cup/Glasses	Paper Cup/ Glasses
Wrapping & Packing Material (Invitation Card, Cigarette Box)	Carboard Boxes
Plastic Stir Stick	Metal Stir Stick

Disposal process for waste



Waste segregation

For the segregation of different types of wastes i.e., biodegradable, non-biodegradable, and metal waste, there are three types of bins coloured green, blue, and black respectively. Bins in sufficient numbers are yet to be placed at the required place to improve the scenario of waste segregation.

However, there are separate colour coding for handling bio-medical waste. The colour coding goes as follows,

Colour	Type of waste
Yellow	Human tissue, solid waste, contaminated with blood and body fluids plaster casts cotton swabs, expired or discarded pharmaceutical waste
White	Needles, syringes with fixed needles from needle tip cutters or burners, scalpels, blades, or any other contaminated shard object that may cause punctures and cuts. Used, discarded, and contaminated metal sharps
Red	Tubing, bottles, IV tubes and sets, catheters, urine bags, syringes without needles, vacutainers with needles cut, and gloves.
Blue	Broken and discarded and contaminated glass including medicine vials and ampules except those contaminated with cytotoxic wastes

Storage area

There are designated storage areas for segregated wastes, one at DP Club Back Side at Colony and another at Near J Block at Colony.

Figure 1: Designated site for segregated waste collection

Training & awareness

Awareness campaigns have been conducted among the employees to sensitize them on not using single-use plastics and the ill effects of using them.

Ban on Single use Plastic.

The FACOR administration is going forward to ban all kinds of single-use plastics inside plant premises. This noble decision will surely contribute towards a greener and more sustainable future altogether.

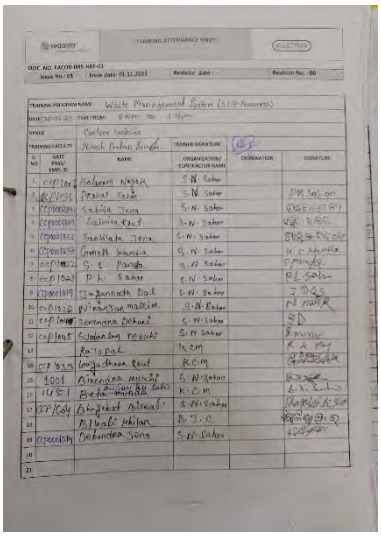


Figure 1: Training Attendance Sheet

Figure 2: Awareness Posters regarding SUP alternative

Annexure 10

TEST REPORT

Test Report No: ENVLAB/25-26/TR-09612 *Date: 07.07.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**25.06.2025**
			Sample Received on	:	**26.06.2025**
Sample Description	:	**Fugitive Emission**	Sampling Procedure	:	**IS 5182**
			Sampling Location	:	**1-Near Raw Material Handling Yard 2- Near Day Bin Area**
Environment Condition during Sampling	:	Atmospheric Temp.: 29 – 33°C Barometric Pressure : 755 mm of Hg	Instrument used for Sampling	:	RDS (APM 460 BL), FPS (APM 550), VOC Sampler
Sample Condition	;	Air Tight Sealed and gaseous Sample Solution Refrigerated	Sampling done by	:	**Biswajeet Bhoi**
Test Started on	:	**26.06.2025**	Test Completed on	:	**29.06.2025**

SL. No	Location	Test Result	
		Suspended Particulate Matter($\mu g/m^3$)	Respirable Particulate Matter ($\mu g/m^3$)
1	**Near Raw Material handling Yard**	**373**	**89**
2	**Near Day bin Area**	**282**	**79**
Standard For Crusher /Industrial Area		**1200**	**----**

TERMS AND CONDITION: -

1. *The Test result is relevant only to the item tested.*
2. *This report shall not be reproduced in full or part without written approval of Visiontek consultancy services. (P) Ltd*
3. *The laboratory is not responsible for the authenticity of photocopied test report.*
4. *The test item will not be retained for more than 15 days from the date of issue of test report except in case as required by applicable regulations.*
5. *The laboratory's responsibility under this report is limited to: proven willful negligence.*

*** End Report***

Reviewed by

Approved by

TEST REPORT

Test Report No: ENVLAB/25-26/TR-11984 *Date: 05.09.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**22.08.2025**
			Sample Received on	:	**23.08.2025**
Sample Description	:	**Fugitive Emission**	Sampling Procedure	:	**IS 5182**
			Sampling Location	:	**1.Near Agglomeration area 2.Near MRP Area**
Environment Condition during Sampling	:	Atmospheric Temp.: 29 – 33°C Barometric Pressure : 754 mm of Hg	Instrument used for Sampling	:	RDS (APM 460 BL), FPS (APM 550), VOC Sampler
Sample Condition	;	Air Tight Sealed and gaseous Sample Solution Refrigerated	Sampling done by	:	Ashutosh Mohanty
Test Started on	:	**23.08.2025**	Test Completed on	:	**27.08.2025**

SL. No	Location	Test Result	
		Suspended Particulate Matter(µg/m³)	**Respirable Particulate Matter (µg/m³)**
1	**Near Agglomeration area**	**379**	**91**
2	**Near MRP Area**	**284**	**80**
	Standard for Crusher /Industrial Area	**1200**	**----**

TERMS AND CONDITION: -

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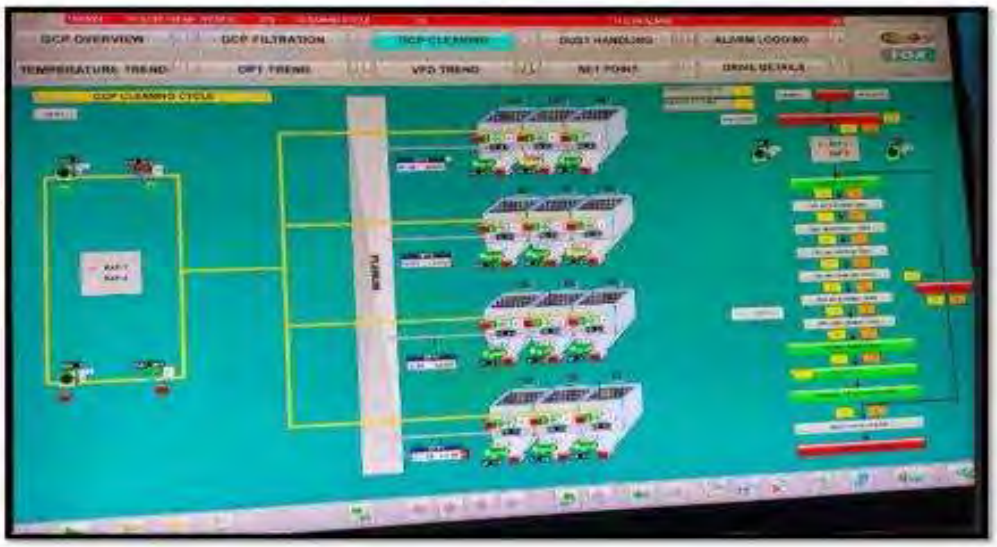
Leakage detection & mechanized bag cleaning facility details

Leakages being detected by regular visits & site inspections and corrective measures being taken by team.

Auto pulsing system is installed to dislodge dust layers from the bags into the hopper.



Automated GCP Cleaning Process in DCS

TEST REPORT

Test Report No: ENVLAB/25-26/TR- 02061 *Date: 05.05.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**28.04.2025**
			Sample Received on	:	**29.04.2025**
Sample Description	:	**Waste Water**	Sampling Procedure	:	APHA 1060 B
Sample Condition	:	Ice Preservation	Sampling Location	:	**WW3-: SRTP OUTLET**
			Sampling done by	:	Ashutosh Mohanty
Test Started on	:	**29.04.2025**	Test Completed on	:	**04.05.2025**

Chemical Testing

WATER :

Sl. No	Parameter	Unit	Testing Methods	Standard as per CTO	Analysis Results
					WW4
1.	pH at 25^{0}C	mg/l	APHA4500 H+B	6.5-9.0	7.20
2.	Suspended Solids	mg/l	APHA 2540 D	<100	41.0
3.	Biochemical Oxygen Demand (as BOD at 27^{0}C For 3 days)	mg/l	IS3025(P-44)1993 RA 2003	<30	5.6
4.	Chemical Oxygen Demand as COD	mg/l	APHA 5220-C	<250	30.0
5.	Oil & Grease	mg/l	APHA 5520 B	10	ND
6.	Iron (as Fe)	mg/l	APHA3500-Fe, B	3	0.43
7.	Chromium as (Cr+6)	mg/l	APHA 3500 Cr B	0.1	<0.01

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(Committed For Better Environment)

VISIONTEK

TEST REPORT

Test Report No: ENVLAB/25-26/TR- 08831 *Date: 06.06.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**21.05.2025**
			Sample Received on	:	**22.05.2025**
Sample Description	:	**Waste Water**	Sampling Procedure	:	APHA 1060 B
Sample Condition	:	Ice Preservation	Sampling Location	:	**WW3-: SRTP OUTLET**
			Sampling done by	:	Ashutosh Mohanty
Test Started on	:	**22.05.2025**	Test Completed on	:	**27.05.2025**

Chemical Testing

WATER :

Sl. No	Parameter	Unit	Testing Methods	Standard as per CTO	Analysis Results
					WW4
1.	pH at 25^{0}C	mg/l	APHA4500 H+B	6.5-9.0	7.18
2.	Suspended Solids	mg/l	APHA 2540 D	<100	38.0
3.	Biochemical Oxygen Demand (as BOD at 27^{0}C For 3 days)	mg/l	IS3025(P-44)1993 RA 2003	<30	5.2
4.	Chemical Oxygen Demand as COD	mg/l	APHA 5220-C	<250	25.0
5.	Oil & Grease	mg/l	APHA 5520 B	10	ND
6.	Iron (as Fe)	mg/l	APHA3500-Fe, B	3	0.40
7.	Chromium as (Cr+6)	mg/l	APHA 3500 Cr B	0.1	<0.01

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Approved by

Plot No.-M-22&23, Chandaka Industrial Estate, Patia, Bhubaneswar-751024, Dist-Khurda, Odisha Tel.: 0674-3511721
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Visit us at: www.visiontek.org

TEST REPORT

Test Report No: ENVLAB/25-26/TR- 09607 *Date: 07.07.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**26.06.2025**
			Sample Received on	:	**27.06.2025**
Sample Description	:	**Waste Water**	Sampling Procedure	:	APHA 1060 B
Sample Condition	:	Ice Preservation	Sampling Location	:	**WW3-: SRTP OUTLET**
			Sampling done by	:	**Biswajeet Bhoi**
Test Started on	:	**27.06.2025**	Test Completed on	:	**02.07.2025**

Chemical Testing

WATER :

Sl. No	Parameter	Unit	Testing Methods	Standard as per CTO	Analysis Results
					WW3
1.	pH at 25^0C	mg/l	APHA4500 H+B	6.5-9.0	7.24
2.	Suspended Solids	mg/l	APHA 2540 D	<100	40.0
3.	Biochemical Oxygen Demand (as BOD at 27^0C For 3 days)	mg/l	IS3025(P-44)1993 RA 2003	<30	5.8
4.	Chemical Oxygen Demand as COD	mg/l	APHA 5220-C	<250	24.8
5.	Oil & Grease	mg/l	APHA 5520 B	10	ND
6.	Iron (as Fe)	mg/l	APHA3500-Fe, B	3	0.36
7.	Chromium as (Cr+6)	mg/l	APHA 3500 Cr B	0.1	<0.01

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TEST REPORT

Test Report No: ENVLAB/25-26/TR-11073 *Date: 06.08.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**24.07.2025**
			Sample Received on	:	**25.07.2025**
Sample Description	:	**Waste Water**	Sampling Procedure	:	APHA 1060 B
Sample Condition	:	Ice Preservation	Sampling Location	:	**WW3-: SRTP OUTLET**
			Sampling done by	:	Bibekraj Tripathy
Test Started on	:	**26.07.2025**	Test Completed on	:	**02.08.2025**

Chemical Testing

WATER :

Sl. No	Parameter	Unit	Testing Methods	Standard as per CTO	Analysis Results
					WW3
1.	pH at 25^0C	mg/l	APHA4500 H+B	6.5-9.0	7.21
2.	Suspended Solids	mg/l	APHA 2540 D	<100	38.0
3.	Biochemical Oxygen Demand (as BOD at 27^0C For 3 days)	mg/l	IS3025(P-44)1993 RA 2003	<30	6.8
4.	Chemical Oxygen Demand as COD	mg/l	APHA 5220-C	<250	27.4
5.	Oil & Grease	mg/l	APHA 5520 B	10	ND
6.	Iron (as Fe)	mg/l	APHA3500-Fe, B	3	0.32
7.	Chromium as (Cr+6)	mg/l	APHA 3500 Cr B	0.1	<0.01

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Plot No.-M-22&23, Chandaka Industrial Estate, Patia, Bhubaneswar-751024, Dist-Khurda, Odisha Tel.: 0674-3511721
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TEST REPORT

Test Report No: ENVLAB/25-26/TR-11979 *Date: 05.09.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**22.08.2025**
			Sample Received on	:	**23.08.2025**
Sample Description	:	**Waste Water**	Sampling Procedure	:	APHA 1060 B
Sample Condition	:	Ice Preservation	Sampling Location	:	**WW2-: SRTP OUTLET**
			Sampling done by	:	Asutosh Mohanty
Test Started on	:	**23.08.2025**	Test Completed on	:	**29.08.2025**

Chemical Testing

WATER :

Sl. No	Parameter	Unit	Testing Methods	Standard as per CTO	Analysis Results
					WW2
1.	pH at 25^0C	mg/l	APHA4500 H+B	6.5-9.0	7.16
2.	Suspended Solids	mg/l	APHA 2540 D	<100	36.0
3.	Biochemical Oxygen Demand (as BOD at 27^0C For 3 days)	mg/l	IS3025(P-44)1993 RA 2003	<30	7.4
4.	Chemical Oxygen Demand as COD	mg/l	APHA 5220-C	<250	28.8
5.	Oil & Grease	mg/l	APHA 5520 B	10	ND
6.	Iron (as Fe)	mg/l	APHA3500-Fe, B	3	0.30
7.	Chromium as (Cr+6)	mg/l	APHA 3500 Cr B	0.1	<0.01

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*** End Report***

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TEST REPORT

Test Report No: ENVLAB/25-26/TR-13153 *Date: 08.10.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**24.09.2025**
			Sample Received on	:	**25.09.2025**
Sample Description	:	**Waste Water**	Sampling Procedure	:	APHA 1060 B
Sample Condition	:	Ice Preservation	Sampling Location	:	**WW4-: SRTP OUTLET**
			Sampling done by	:	Bibekraj Tripathy
Test Started on	:	**26.09.2025**	Test Completed on	:	**03.10.2025**

Chemical Testing:

A. Waste Water

Sl. No	Parameter	Unit	Testing Methods	Standard as per CTO	Analysis Results
					WW3
1.	pH at 25^0C	mg/l	APHA4500 H+B	6.5-9.0	7.21
2.	Suspended Solids	mg/l	APHA 2540 D	<100	38.0
3.	Biochemical Oxygen Demand (as BOD at 27^0C For 3 days)	mg/l	IS3025(P-44)1993 RA 2003	<30	6.8
4.	Chemical Oxygen Demand as COD	mg/l	APHA 5220-C	<250	27.4
5.	Oil & Grease	mg/l	APHA 5520 B	10	ND
6.	Iron (as Fe)	mg/l	APHA3500-Fe, B	3	0.32
7.	Chromium as (Cr+6)	mg/l	APHA 3500 Cr B	0.1	<0.01

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TEST REPORT

Test Report No: ENVLAB/25-26/TR- 02065 **Date: 05.05.2025**

Name & Address of the Customer	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**			
Sample Description	:	**Ground Water**	Date of Sampling	:	**28.04.2025**
			Sample Received on	:	**29.04.2025**
			Sampling Procedure	:	APHA 1060 B
Identification by Customer	:	**GW-1**	Sampling Location	:	**GW-1: Village Randia**
Sample Condition	:	Ice Preserved	Sampling done by	:	Ashutosh Mohanty
Test Started on	:	**29.04.2025**	Test Completed on	:	**04.05.2025**

Sl. No.	Parameter	Unit	TEST METHOD	Standard as per IS -10500:2012 Amended on 2015 & 2018		GW1
				Acceptable Limit	Permissible Limit	
	Physical Parameter					
1	**Colour**	**Hazen,Max**	APHA 23rd Ed,2017 : 2120 B, C	**5**	**15**	<5
2	**Odour**	--	APHA 23rd Ed,2017 :2120 B	**Agreeable**	**Agreeable**	Agreeable
3	**pH at 25^{0}C**	--	APHA 23Rrd Ed,2017 : 4500H$^+$ B	**6.5-8.5**	**6.5-8.5**	7.22
4	**Taste**	--	APHA 23rd Ed,2017 : 2160 C	**Agreeable**	**Agreeable**	Agreeable
5	**Turbidity**	**NTU,Max**	APHA 2130 B	**1**	**5**	1.4
6	**Dissolved Solids**	**mg/l,Max**	APHA 23rd Ed,2017 : 2540 C	**500**	**2000**	354
	CHEMICAL PARAMETER					
1	**Aluminium as(Al)**	**mg/l,Max**	APHA 3500Al B	**0.03**	**0.2**	<0.03
2	**Ammonical Nitrogen(NH_3.N)**	**mg/l,Max**	APHA 4500 NH_3C	**0.5**	**0.5**	<0.5
3	**Anionic Detergents (as MBAS)**	**mg/l,Max**	APHA 5540 C	**0.2**	**1.0**	ND
4	**Barium(Ba)**	**mg/l,Max**	APFA 3111,B	**0.7**	**0.7**	<0.5
5	**Boron (as B)**	**mg/l,Max**	APHA 4500 B,B	**0.5**	**1.0**	<0.1
6	**Calcium (as Ca)**	**mg/l,Max**	APHA 23rd Ed,2017 : 3500Ca B	**75**	**200**	38.6
7	**Chloramines (as Cl_2)**	**mg/l,Max**	APHA 4500 –Cl G	**4.0**	**4.0**	ND
8	**Chloride (as Cl)**	**mg/l,Max**	APHA 23rd Ed,2017 : 4500Cl$^-$B	**250**	**1000**	42.5
9	**Copper (as Cu)**	**mg/l,Max**	APHA 3111 B,C	**0.05**	**1.5**	<0.05
10	**Fluoride (as F)**	**mg/l,Max**	APHA 4500 F,C	**1.0**	**1.5**	<0.1
11	**Residual, free Chlorine**	**mg/l,Min**	APHA 4500 Cl B	**0.2**	**1.0**	ND
12	**Iron (as Fe)**	**mg/l,Max**	APHA 23rd Ed,2017 : 3111, B	**1.0**	**1.0**	0.41

13	Magnesium (as Mg)	mg/l,Max	APHA 3500 Mg B	30	100	16.2
14	Manganese (as Mn)	mg/l,Max	APHA 3500Mn B	0.1	0.3	<0.05
15	Mineral Oil	mg/l,Max	APHA 5520 B	0.5	0.5	ND
16	Nitrate (as NO_3)	mg/l,Max	APHA 4500 NO_3^- E	45	45	0.63
17	Phenolic Compounds(as C_6H_5OH)	mg/l,Max	APHA 5530 B,D	0.001	0.002	<0.001
18	Selenium (as Se)	mg/l,Max	APHA 23rd Ed,2017: 3500 Se C	0.01	0.01	<0.005
19	Silver(asAg)	mg/l,Max	APHA 23rd Ed,2017: 3111 B	0.1	0.1	<0.1
20	Sulphate (as SO_4)	mg/l,Max	APHA 4500 SO_4^{2-} E	200	400	12.2
21	Sulphide (as H_2S)	mg/l,Max	APHA 23rd Ed,2017 :4500-S,D	0.05	0.05	ND
22	Alkalinity	mg/l,Max	APHA 2320 B	200	600	65
23	Total Hardness (as $CaCO_3$)	mg/l,Max	APHA 23rd Ed,2017 : 2340 C	200	600	163
24	Zinc (as Zn)	mg/l,Max	APHA 23rd Ed,2017: 3111 B	5	15	0.30
1	Chromium (as Cr^{+6})	mg/l,Max	APHA 3500Cr B	0.05	0.05	<0.05
2	Cadmium as(Cd)	mg/l,Max	APHA 23rd Ed,2017: 3111 B	0.003	0.003	<0.003
3	Cyanide as (CN-)	mg/l,Max	APHA 23rd Ed,2017: 4500 CN^- C,D	0.05	0.05	<0.01
4	Lead as(Pb)	mg/l,Max	APHA 23rd Ed,2017 3111 B	0.1	0.1	<0.1
5	Mercury as (Hg)	mg/l,Max	APHA 23rd Ed,2017: 3111 B	0.001	0.001	<0.001
6	Nickel (Ni)	mg/l,Max	IS 5185 (Part-22)	0.02	0.02	<0.02
7	Arsenic as (As)	mg/l,Max	APHA 23rd Ed,2017: 3114 B	0.01	0.01	<0.005
8	Polychlorinated biphenyls	mg/l,Max	APHA 23rd Ed,2017 :6440 B	0.0005	0.0005	ND
9	Polyaromatic hydrocarbons (PAH)	mg/l,Max	APHA 23rd Ed,2017 :6440 B	0.0001	0.0001	ND
10	Total Chromium	mg/l,Max	APHA 3500Cr B	0.05	0.05	<0.05
11	Bromoform	mg/l,Max	APHA 6232	0.1	0.1	ND
12	Dibromochloromethane	mg/l,Max	APHA 6232	0.1	0.1	ND
13	Bromodichloromethane	mg/l,Max	APHA 6232	0.06	0.06	ND
14	Chloroform	mg/l,Max	APHA 6232	0.2	0.2	ND
15	Molybdenum (Mo)	mg/l,Max	IS 3025 (Part 2)	0.07	0.07	<0.07
Bacteriological Parameter						
1	Total Coliform	MPN/100 ml	APHA 23rd Ed,2017: 9221 B	Shall not be detectable in any 100 ml sample		ABSENT

PESTICIDES					
1	Endosulfan à	µg/l,Max	APHA 23rd edition: 6630 C	0.4	<0.005
2	Endosulfan ß	µg/l,Max	APHA 23rd edition: 6630 C	0.4	<0.005
3	Endosulfan sulphate	µg/l,Max	APHA 23rd edition: 6630 C	0.4	<0.005
4	Alachlor	µg/l, Max	APHA 23rd edition: 6630 C	20	<0.01
5	Atrazine	µg/l, Max	APHA 23rd edition: 6630 C	2.0	<0.01
6	Aldrin	µg/l, Max	APHA 23rd edition: 6630 C	0.03	<0.01
8	Alpha HCH	µg/l, Max	APHA 23rd edition: 6630 C	0.01	<0.01
9	Beta HCH	µg/l, Max	APHA 23rd edition: 6630 C	0.04	<0.01
10	Delta HCH	µg/l, Max	APHA 23rd edition: 6630 C	0.04	<0.01
11	Butachlor	µg/l, Max	APHA 23rd edition: 6630 C	125.0	<0.01
12	Chloropyriphos	µg/l, Max	APHA 23rd edition: 6630 C	30.0	<0.01
13	2,4-Dichlorophenoxyacetic acid	µg/l, Max	APHA 23rd edition: 6630 C	30.0	<0.05
14	p p DDE	µg/l, Max	APHA 23rd edition: 6630 C	1.0	<0.05
15	p p DDD	µg/l, Max	APHA 23rd edition: 6630 C	1.0	<0.05
16	p p DDT	µg/l, Max	APHA 23rd edition: 6630 C	1.0	<0.05
17	o p DDE	µg/l, Max	APHA 23rd edition: 6630 C	1.0	<0.05
18	o p DDD	µg/l, Max	APHA 23rd edition: 6630 C	1.0	<0.05
19	o p DDT	µg/l, Max	APHA 23rd edition: 6630 C	1.0	<0.05
20	Ethion	µg/l, Max	APHA 23rd edition: 6630 C	3.0	<0.01
21	Lindane	µg/l, Max	APHA 23rd edition: 6630 C	2.0	<0.01
22	Isoproturon	µg/l, Max	APHA 23rd edition: 6630 C	9.0	<0.01
23	Malathion	µg/l, Max	APHA 23rd edition: 6630 C	190.0	<0.01
24	Methyl parathion	µg/l, Max	APHA 23rd edition: 6630 C	0.3	<0.01
25	Monocrotophos	µg/l, Max	APHA 23rd edition: 6630 C	1.0	<0.01
26	Phorate	µg/l, Max	APHA 23rd edition: 6630 C	2.0	<0.01

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TEST REPORT

Test Report No: ENVLAB/25-26/TR- 08834

Date: 06.06.2025

Name & Address of the Customer	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**			
Sample Description	:	**Ground Water**	Date of Sampling	:	**21.05.2025**
			Sample Received on	:	**22.05.2025**
			Sampling Procedure	:	APHA 1060 B
Identification by Customer	:	**GW-1**	Sampling Location	:	**GW-1: BOREWELL-3**
Sample Condition	:	Ice Preserved	Sampling done by	:	Ashutosh Mohanty
Test Started on	:	**22.05.2025**	Test Completed on	:	**28.05.2025**

Sl. No.	Parameter	Unit	TEST METHOD	Standard as per IS -10500:2012 Amended on 2015 & 2018		GW1
				Acceptable Limit	Permissible Limit	
	Physical Parameter					
1	**Colour**	**Hazen,Max**	APHA 23rd Ed,2017 : 2120 B, C	**5**	**15**	**<5**
2	**Odour**	--	APHA 23rd Ed,2017 :2120 B	**Agreeable**	**Agreeable**	**Agreeable**
3	**pH at 25^{0}C**	--	APHA 23Rrd Ed,2017 : 4500H+ B	**6.5-8.5**	**6.5-8.5**	**7.05**
4	**Taste**	--	APHA 23rd Ed,2017 : 2160 C	**Agreeable**	**Agreeable**	**Agreeable**
5	**Turbidity**	**NTU,Max**	APHA 2130 B	**1**	**5**	**2.0**
6	**Dissolved Solids**	**mg/l,Max**	APHA 23rd Ed,2017 : 2540 C	**500**	**2000**	**380**
	CHEMICAL PARAMETER					
1	**Aluminium as(Al)**	**mg/l,Max**	APHA 3500Al B	**0.03**	**0.2**	**<0.03**
2	**Ammonical Nitrogen(NH_3-N)**	**mg/l,Max**	APHA 4500 NH_3 C	**0.5**	**0.5**	**<0.5**
3	**Anionic Detergents (as MBAS)**	**mg/l,Max**	APHA 5540 C	**0.2**	**1.0**	**ND**
4	**Barium(Ba)**	**mg/l,Max**	APFA 3111,B	**0.7**	**0.7**	**<0.5**
5	**Boron (as B)**	**mg/l,Max**	APHA 4500 B,B	**0.5**	**1.0**	**<0.1**
6	**Calcium (as Ca)**	**mg/l,Max**	APHA 23rd Ed,2017 : 3500Ca B	**75**	**200**	**42.5**
7	**Chloramines (as Cl_2)**	**mg/l,Max**	APHA 4500 –Cl G	**4.0**	**4.0**	**ND**
8	**Chloride (as Cl)**	**mg/l,Max**	APHA 23rd Ed,2017 : 4500Cl- B	**250**	**1000**	**35**
9	**Copper (as Cu)**	**mg/l,Max**	APHA 3111 B,C	**0.05**	**1.5**	**<0.05**
10	**Fluoride (as F)**	**mg/l,Max**	APHA 4500 F,C	**1.0**	**1.5**	**<0.1**
11	**Residual, free Chlorine**	**mg/l,Min**	APHA 4500 Cl B	**0.2**	**1.0**	**ND**
12	**Iron (as Fe)**	**mg/l,Max**	APHA 23rd Ed,2017 : 3111, B	**1.0**	**1.0**	**0.45**

13	Magnesium (as Mg)	mg/l,Max	APHA 3500 Mg B	30	100	18.2
14	Manganese (as Mn)	mg/l,Max	APHA 3500Mn B	0.1	0.3	<0.05
15	Mineral Oil	mg/l,Max	APHA 5520 B	0.5	0.5	ND
16	Nitrate (as NO_3)	mg/l,Max	APHA 4500 NO_3^- E	45	45	0.85
17	Phenolic Compounds(as C_6H_5OH)	mg/l,Max	APHA 5530 B,D	0.001	0.002	<0.001
18	Selenium (as Se)	mg/l,Max	APHA 23rd Ed,2017: 3500 Se C	0.01	0.01	<0.005
19	Silver(asAg)	mg/l,Max	APHA 23rd Ed,2017: 3111 B	0.1	0.1	<0.1
20	Sulphate (as SO_4)	mg/l,Max	APHA 4500 SO_4^{2-} E	200	400	15.6
21	Sulphide (as H_2S)	mg/l,Max	APHA 23rd Ed,2017 :4500-S,D	0.05	0.05	ND
22	Alkalinity	mg/l,Max	APHA 2320 B	200	600	55
23	Total Hardness (as $CaCO_3$)	mg/l,Max	APHA 23rd Ed,2017 : 2340 C	200	600	181
24	Zinc (as Zn)	mg/l,Max	APHA 23rd Ed,2017: 3111 B	5	15	0.36
1	Chromium (as Cr^{+6})	mg/l,Max	APHA 3500Cr B	0.05	0.05	<0.05
2	Cadmium as(Cd)	mg/l,Max	APHA 23rd Ed,2017: 3111 B	0.003	0.003	<0.003
3	Cyanide as (CN-)	mg/l,Max	APHA 23rd Ed,2017: 4500 CN^- C,D	0.05	0.05	<0.01
4	Lead as(Pb)	mg/l,Max	APHA 23rd Ed,2017 3111 B	0.1	0.1	<0.1
5	Mercury as (Hg)	mg/l,Max	APHA 23rd Ed,2017: 3111 B	0.001	0.001	<0.001
6	Nickel (Ni)	mg/l,Max	IS 5185 (Part-22)	0.02	0.02	<0.02
7	Arsenic as (As)	mg/l,Max	APHA 23rd Ed,2017: 3114 B	0.01	0.01	<0.005
8	Polychlorinated biphenyls	mg/l,Max	APHA 23rd Ed,2017 :6440 B	0.0005	0.0005	ND
9	Polyaromatic hydrocarbons (PAH)	mg/l,Max	APHA 23rd Ed,2017 :6440 B	0.0001	0.0001	ND
10	Total Chromium	mg/l,Max	APHA 3500Cr B	0.05	0.05	<0.05
11	Bromoform	mg/l,Max	APHA 6232	0.1	0.1	ND
12	Dibromochloromethane	mg/l,Max	APHA 6232	0.1	0.1	ND
13	Bromodichloromethane	mg/l,Max	APHA 6232	0.06	0.06	ND
14	Chloroform	mg/l,Max	APHA 6232	0.2	0.2	ND
15	Molybdenum (Mo)	mg/l,Max	IS 3025 (Part 2)	0.07	0.07	<0.07
Bacteriological Parameter						
1	Total Coliform	MPN/100 ml	APHA 23rd Ed,2017: 9221 B	Shall not be detectable in any 100 ml sample		ABSENT

PESTICIDES					
1	Endosulfan à	µg/l,Max	APHA 23rd edition: 6630 C	0.4	<0.005
2	Endosulfan ß	µg/l,Max	APHA 23rd edition: 6630 C	0.4	<0.005
3	Endosulfan sulphate	µg/l,Max	APHA 23rd edition: 6630 C	0.4	<0.005
4	Alachlor	µg/l, Max	APHA 23rd edition: 6630 C	20	<0.01
5	Atrazine	µg/l, Max	APHA 23rd edition: 6630 C	2.0	<0.01
6	Aldrin	µg/l, Max	APHA 23rd edition: 6630 C	0.03	<0.01
8	Alpha HCH	µg/l, Max	APHA 23rd edition: 6630 C	0.01	<0.01
9	Beta HCH	µg/l, Max	APHA 23rd edition: 6630 C	0.04	<0.01
10	Delta HCH	µg/l, Max	APHA 23rd edition: 6630 C	0.04	<0.01
11	Butachlor	µg/l, Max	APHA 23rd edition: 6630 C	125.0	<0.01
12	Chloropyriphos	µg/l, Max	APHA 23rd edition: 6630 C	30.0	<0.01
13	2,4-Dichlorophenoxyacetic acid	µg/l, Max	APHA 23rd edition: 6630 C	30.0	<0.05
14	p p DDE	µg/l, Max	APHA 23rd edition: 6630 C	1.0	<0.05
15	p p DDD	µg/l, Max	APHA 23rd edition: 6630 C	1.0	<0.05
16	p p DDT	µg/l, Max	APHA 23rd edition: 6630 C	1.0	<0.05
17	o p DDE	µg/l, Max	APHA 23rd edition: 6630 C	1.0	<0.05
18	o p DDD	µg/l, Max	APHA 23rd edition: 6630 C	1.0	<0.05
19	o p DDT	µg/l, Max	APHA 23rd edition: 6630 C	1.0	<0.05
20	Ethion	µg/l, Max	APHA 23rd edition: 6630 C	3.0	<0.01
21	Lindane	µg/l, Max	APHA 23rd edition: 6630 C	2.0	<0.01
22	Isoproturon	µg/l, Max	APHA 23rd edition: 6630 C	9.0	<0.01
23	Malathion	µg/l, Max	APHA 23rd edition: 6630 C	190.0	<0.01
24	Methyl parathion	µg/l, Max	APHA 23rd edition: 6630 C	0.3	<0.01
25	Monocrotophos	µg/l, Max	APHA 23rd edition: 6630 C	1.0	<0.01
26	Phorate	µg/l, Max	APHA 23rd edition: 6630 C	2.0	<0.01

Reviewed by:

Approved By

TEST REPORT

Test Report No: ENVLAB/25-26/TR-09611 **Date: 07.07.2025**

Name & Address of the Customer	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**			
Sample Description	:	**Ground Water**	Date of Sampling	:	**25.06.2025**
			Sample Received on	:	**26.06.2025**
			Sampling Procedure	:	APHA 1060 B
Identification by Customer	:	**GW-1**	Sampling Location	:	**GW-1: Village Chengadia**
Sample Condition	;	Ice Preserved	Sampling done by	:	Biswajeet Bhoi
Test Started on	:	**26.06.2025**	Test Completed on	:	**04.07.2025**

Sl. No.	Parameter	Unit	TEST METHOD	Standard as per IS -10500:2012 Amended on 2015 & 2018		GW1
				Acceptable Limit	Permissible Limit	
	Physical Parameter					
1	**Colour**	**Hazen,Max**	APHA 23rd Ed,2017 : 2120 B, C	**5**	**15**	**<5**
2	**Odour**	--	APHA 23rd Ed,2017 :2120 B	**Agreeable**	**Agreeable**	**Agreeable**
3	**pH at 25^{0}C**	--	APHA 23Krd Ed,2017 : 4500H+ B	**6.5-8.5**	**6.5-8.5**	**7.23**
4	**Taste**	--	APHA 23rd Ed,2017 : 2160 C	**Agreeable**	**Agreeable**	**Agreeable**
5	**Turbidity**	**NTU,Max**	APHA 2130 B	**1**	**5**	**1.6**
6	**Dissolved Solids**	**mg/l,Max**	APHA 23rd Ed,2017 : 2540 C	**500**	**2000**	**369**
	CHEMICAL PARAMETER					
1	**Aluminium as(Al)**	**mg/l,Max**	APHA 3500Al B	**0.03**	**0.2**	**<0.03**
2	**Ammonical Nitrogen(NH_3-N)**	**mg/l,Max**	APHA 4500 NH_3 C	**0.5**	**0.5**	**<0.5**
3	**Anionic Detergents (as MBAS)**	**mg/l,Max**	APHA 5540 C	**0.2**	**1.0**	**ND**
4	**Barium(Ba)**	**mg/l,Max**	APFA 3111,B	**0.7**	**0.7**	**<0.5**
5	**Boron (as B)**	**mg/l,Max**	APHA 4500 B,B	**0.5**	**1.0**	**<0.1**
6	**Calcium (as Ca)**	**mg/l,Max**	APHA 23rd Ed,2017 : 3500Ca B	**75**	**200**	**38.8**
7	**Chloramines (as Cl_2)**	**mg/l,Max**	APHA 4500 –Cl G	**4.0**	**4.0**	**ND**
8	**Chloride (as Cl)**	**mg/l,Max**	APHA 23rd Ed,2017 : 4500Cl- B	**250**	**1000**	**34.2**
9	**Copper (as Cu)**	**mg/l,Max**	APHA 3111 B,C	**0.05**	**1.5**	**<0.05**
10	**Fluoride (as F)**	**mg/l,Max**	APHA 4500 F,C	**1.0**	**1.5**	**<0.1**
11	**Residual, free Chlorine**	**mg/l,Min**	APHA 4500 Cl B	**0.2**	**1.0**	**ND**
12	**Iron (as Fe)**	**mg/l,Max**	APHA 23rd Ed,2017 : 3111, B	**1.0**	**1.0**	**0.38**

13	Magnesium (as Mg)	mg/l,Max	APHA 3500 Mg B	30	100	18.5
14	Manganese (as Mn)	mg/l,Max	APHA 3500Mn B	0.1	0.3	<0.05
15	Mineral Oil	mg/l,Max	APHA 5520 B	0.5	0.5	ND
16	Nitrate (as NO_3)	mg/l,Max	APHA 4500 NO_3^- E	45	45	0.79
17	Phenolic Compounds(as C_6H_5OH)	mg/l,Max	APHA 5530 B,D	0.001	0.002	<0.001
18	Selenium (as Se)	mg/l,Max	APHA 23rd Ed,2017: 3500 Se C	0.01	0.01	<0.005
19	Silver(asAg)	mg/l,Max	APHA 23rd Ed,2017: 3111 B	0.1	0.1	<0.1
20	Sulphate (as SO_4)	mg/l,Max	APHA 4500 SO_4^{2-} E	200	400	14.9
21	Sulphide (as H_2S)	mg/l,Max	APHA 23rd Ed,2017 :4500-S,D	0.05	0.05	ND
22	Alkalinity	mg/l,Max	APHA 2320 B	200	600	64.6
23	Total Hardness (as $CaCO_3$)	mg/l,Max	APHA 23rd Ed,2017 : 2340 C	200	600	174
24	Zinc (as Zn)	mg/l,Max	APHA 23rd Ed,2017: 3111 B	5	15	0.32
	HEAVY METALS AND TOXICITY PARAMETER					
1	Chromium (as Cr^{+6})	mg/l,Max	APHA 3500Cr B	0.05	0.05	<0.05
2	Cadmium as(Cd)	mg/l,Max	APHA 23rd Ed,2017: 3111 B	0.003	0.003	<0.003
3	Cyanide as (CN-)	mg/l,Max	APHA 23rd Ed,2017: 4500 CN^- C,D	0.05	0.05	<0.01
4	Lead as(Pb)	mg/l,Max	APHA 23rd Ed,2017 3111 B	0.1	0.1	<0.1
5	Mercury as (Hg)	mg/l,Max	APHA 23rd Ed,2017: 3111 B	0.001	0.001	<0.001
6	Nickel (Ni)	mg/l,Max	IS 5185 (Part-22)	0.02	0.02	<0.02
7	Arsenic as (As)	mg/l,Max	APHA 23rd Ed,2017: 3114 B	0.01	0.01	<0.005
8	Polychlorinated biphenyls	mg/l,Max	APHA 23rd Ed,2017 :6440 B	0.0005	0.0005	ND
9	Polyaromatic hydrocarbons (PAH)	mg/l,Max	APHA 23rd Ed,2017 :6440 B	0.0001	0.0001	ND
10	Total Chromium	mg/l,Max	APHA 3500Cr B	0.05	0.05	<0.05
11	Bromoform	mg/l,Max	APHA 6232	0.1	0.1	ND
12	Dibromochloromethane	mg/l,Max	APHA 6232	0.1	0.1	ND
13	Bromodichloromethane	mg/l,Max	APHA 6232	0.06	0.06	ND
14	Chloroform	mg/l,Max	APHA 6232	0.2	0.2	ND
15	Molybdenum (Mo)	mg/l,Max	IS 3025 (Part 2)	0.07	0.07	<0.07

Bacteriological Parameter

I	Total Coliform	MPN/100 ml	APHA 23rd Ed,2017: 9221 B	Shall not be detectable in any 100 ml sample	ABSENT

PESTICIDES					
1	Endosulfan à	µg/l,Max	APHA 23rd edition: 6630 C	0.4	<0.005
2	Endosulfan ß	µg/l,Max	APHA 23rd edition: 6630 C	0.4	<0.005
3	Endosulfan sulphate	µg/l,Max	APHA 23rd edition: 6630 C	0.4	<0.005
4	Alachlor	µg/l, Max	APHA 23rd edition: 6630 C	20	<0.01
5	Atrazine	µg/l, Max	APHA 23rd edition: 6630 C	2.0	<0.01
6	Aldrin	µg/l, Max	APHA 23rd edition: 6630 C	0.03	<0.01
8	Alpha HCH	µg/l, Max	APHA 23rd edition: 6630 C	0.01	<0.01
9	Beta HCH	µg/l, Max	APHA 23rd edition: 6630 C	0.04	<0.01
10	Delta HCH	µg/l, Max	APHA 23rd edition: 6630 C	0.04	<0.01
11	Butachlor	µg/l, Max	APHA 23rd edition: 6630 C	125.0	<0.01
12	Chloropyriphos	µg/l, Max	APHA 23rd edition: 6630 C	30.0	<0.01
13	2,4-Dichlorophenoxyacetic acid	µg/l, Max	APHA 23rd edition: 6630 C	30.0	<0.05
14	p p DDE	µg/l, Max	APHA 23rd edition: 6630 C	1.0	<0.05
15	p p DDD	µg/l, Max	APHA 23rd edition: 6630 C	1.0	<0.05
16	p p DDT	µg/l, Max	APHA 23rd edition: 6630 C	1.0	<0.05
17	o p DDE	µg/l, Max	APHA 23rd edition: 6630 C	1.0	<0.05
18	o p DDD	µg/l, Max	APHA 23rd edition: 6630 C	1.0	<0.05
19	o p DDT	µg/l, Max	APHA 23rd edition: 6630 C	1.0	<0.05
20	Ethion	µg/l, Max	APHA 23rd edition: 6630 C	3.0	<0.01
21	Lindane	µg/l, Max	APHA 23rd edition: 6630 C	2.0	<0.01
22	Isoproturon	µg/l, Max	APHA 23rd edition: 6630 C	9.0	<0.01
23	Malathion	µg/l, Max	APHA 23rd edition: 6630 C	190.0	<0.01
24	Methyl parathion	µg/l, Max	APHA 23rd edition: 6630 C	0.3	<0.01
25	Monocrotophos	µg/l, Max	APHA 23rd edition: 6630 C	1.0	<0.01
26	Phorate	µg/l, Max	APHA 23rd edition: 6630 C	2.0	<0.01

Reviewed by:

Approved By

TEST REPORT

Test Report No: ENVLAB/25-26/TR-11076 **Date: 06.08.2025**

Name & Address of the Customer	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**			
Sample Description	:	**Ground Water**	Date of Sampling	:	**24.07.2025**
			Sample Received on	:	**25.07.2025**
			Sampling Procedure	:	APHA 1060 B
Identification by Customer	:	**GW-1**	Sampling Location	:	**GW-1: BOREWELL**
Sample Condition	:	Ice Preserved	Sampling done by	:	Bibek Tripathy
Test Started on	:	**25.07.2025**	Test Completed on	:	**01.08.2025**

Sl. No.	Parameter	Unit	TEST METHOD	Standard as per IS -10500:2012 Amended on 2015 & 2018		GW1
				Acceptable Limit	Permissible Limit	
	Physical Parameter					
1	Colour	Hazen,Max	APHA 23rd Ed,2017 : 2120 B, C	5	15	<5
2	Odour	--	APHA 23rd Ed,2017 :2120 B	Agreeable	Agreeable	Agreeable
3	pH at 25^{0}C	--	APHA 23Rrd Ed,2017 : 4500H$^+$ B	6.5-8.5	6.5-8.5	7.26
4	Taste	--	APHA 23rd Ed,2017 : 2160 C	Agreeable	Agreeable	Agreeable
5	Turbidity	NTU,Max	APHA 2130 B	1	5	1.5
6	Dissolved Solids	mg/l,Max	APHA 23rd Ed,2017 : 2540 C	500	2000	361
	CHEMICAL PARAMETER					
1	Aluminium as(Al)	mg/l,Max	APHA 3500Al B	0.03	0.2	<0.03
2	Ammonical Nitrogen(NH_3-N)	mg/l,Max	APHA 4500 NH_3 C	0.5	0.5	<0.5
3	Anionic Detergents (as MBAS)	mg/l,Max	APHA 5540 C	0.2	1.0	ND
4	Barium(Ba)	mg/l,Max	APFA 3111,B	0.7	0.7	<0.5
5	Boron (as B)	mg/l,Max	APHA 4500 B,B	0.5	1.0	<0.1
6	Calcium (as Ca)	mg/l,Max	APHA 23rd Ed,2017 : 3500Ca B	75	200	36.4
7	Chloramines (as Cl_2)	mg/l,Max	APHA 4500 –Cl G	4.0	4.0	ND
8	Chloride (as Cl)	mg/l,Max	APHA 23rd Ed,2017 : 4500Cl$^-$B	250	1000	33.6
9	Copper (as Cu)	mg/l,Max	APHA 3111 B,C	0.05	1.5	<0.05
10	Fluoride (as F)	mg/l,Max	APHA 4500 F,C	1.0	1.5	<0.1
11	Residual, free Chlorine	mg/l,Min	APHA 4500 Cl B	0.2	1.0	ND
12	Iron (as Fe)	mg/l,Max	APHA 23rd Ed,2017 : 3111, B	1.0	1.0	0.30

13	Magnesium (as Mg)	mg/l,Max	APHA 3500 Mg B	30	100	20.2
14	Manganese (as Mn)	mg/l,Max	APHA 3500Mn B	0.1	0.3	<0.05
15	Mineral Oil	mg/l,Max	APHA 5520 B	0.5	0.5	ND
16	Nitrate (as NO_3)	mg/l,Max	APHA 4500 NO_3^- E	45	45	0.68
17	Phenolic Compounds(as C_6H_5OH)	mg/l,Max	APHA 5530 B,D	0.001	0.002	<0.001
18	Selenium (as Se)	mg/l,Max	APHA 23rd Ed,2017: 3500 Se C	0.01	0.01	<0.005
19	Silver(asAg)	mg/l,Max	APHA 23rd Ed,2017: 3111 B	0.1	0.1	<0.1
20	Sulphate (as SO_4)	mg/l,Max	APHA 4500 SO_4^{2-} E	200	400	12.8
21	Sulphide (as H_2S)	mg/l,Max	APHA 23rd Ed,2017 :4500-S,D	0.05	0.05	ND
22	Alkalinity	mg/l,Max	APHA 2320 B	200	600	65.8
23	Total Hardness (as $CaCO_3$)	mg/l,Max	APHA 23rd Ed,2017 : 2340 C	200	600	170.2
24	Zinc (as Zn)	mg/l,Max	APHA 23rd Ed,2017: 3111 B	5	15	0.30
	HEAVY METALS AND TOXICITY PARAMETER					
1	Chromium (as Cr^{+6})	mg/l,Max	APHA 3500Cr B	0.05	0.05	<0.05
2	Cadmium as(Cd)	mg/l,Max	APHA 23rd Ed,2017: 3111 B	0.003	0.003	<0.003
3	Cyanide as (CN-)	mg/l,Max	APHA 23rd Ed,2017: 4500 CN^- C,D	0.05	0.05	<0.01
4	Lead as(Pb)	mg/l,Max	APHA 23rd Ed,2017 3111 B	0.1	0.1	<0.1
5	Mercury as (Hg)	mg/l,Max	APHA 23rd Ed,2017: 3111 B	0.001	0.001	<0.001
6	Nickel (Ni)	mg/l,Max	IS 5185 (Part-22)	0.02	0.02	<0.02
7	Arsenic as (As)	mg/l,Max	APHA 23rd Ed,2017: 3114 B	0.01	0.01	<0.005
8	Polychlorinated biphenyls	mg/l,Max	APHA 23rd Ed,2017 :6440 B	0.0005	0.0005	ND
9	Polyaromatic hydrocarbons (PAH)	mg/l,Max	APHA 23rd Ed,2017 :6440 B	0.0001	0.0001	ND
10	Total Chromium	mg/l,Max	APHA 3500Cr B	0.05	0.05	<0.05
11	Bromoform	mg/l,Max	APHA 6232	0.1	0.1	ND
12	Dibromochloromethane	mg/l,Max	APHA 6232	0.1	0.1	ND
13	Bromodichloromethane	mg/l,Max	APHA 6232	0.06	0.06	ND
14	Chloroform	mg/l,Max	APHA 6232	0.2	0.2	ND
15	Molybdenum (Mo)	mg/l,Max	IS 3025 (Part 2)	0.07	0.07	<0.07
	Bacteriological Parameter					
1	Total Coliform	MPN/100 ml	APHA 23rd Ed,2017: 9221 B	Shall not be detectable in any 100 ml sample		ABSENT

PESTICIDES					
1	Endosulfan à	µg/l,Max	APHA 23rd edition: 6630 C	0.4	<0.005
2	Endosulfan ß	µg/l,Max	APHA 23rd edition: 6630 C	0.4	<0.005
3	Endosulfan sulphate	µg/l,Max	APHA 23rd edition: 6630 C	0.4	<0.005
4	Alachlor	µg/l, Max	APHA 23rd edition: 6630 C	20	<0.01
5	Atrazine	µg/l, Max	APHA 23rd edition: 6630 C	2.0	<0.01
6	Aldrin	µg/l, Max	APHA 23rd edition: 6630 C	0.03	<0.01
8	Alpha HCH	µg/l, Max	APHA 23rd edition: 6630 C	0.01	<0.01
9	Beta HCH	µg/l, Max	APHA 23rd edition: 6630 C	0.04	<0.01
10	Delta HCH	µg/l, Max	APHA 23rd edition: 6630 C	0.04	<0.01
11	Butachlor	µg/l, Max	APHA 23rd edition: 6630 C	125.0	<0.01
12	Chloropyriphos	µg/l, Max	APHA 23rd edition: 6630 C	30.0	<0.01
13	2,4-Dichlorophenoxyacetic acid	µg/l, Max	APHA 23rd edition: 6630 C	30.0	<0.05
14	p p DDE	µg/l, Max	APHA 23rd edition: 6630 C	1.0	<0.05
15	p p DDD	µg/l, Max	APHA 23rd edition: 6630 C	1.0	<0.05
16	p p DDT	µg/l, Max	APHA 23rd edition: 6630 C	1.0	<0.05
17	o p DDE	µg/l, Max	APHA 23rd edition: 6630 C	1.0	<0.05
18	o p DDD	µg/l, Max	APHA 23rd edition: 6630 C	1.0	<0.05
19	o p DDT	µg/l, Max	APHA 23rd edition: 6630 C	1.0	<0.05
20	Ethion	µg/l, Max	APHA 23rd edition: 6630 C	3.0	<0.01
21	Lindane	µg/l, Max	APHA 23rd edition: 6630 C	2.0	<0.01
22	Isoproturon	µg/l, Max	APHA 23rd edition: 6630 C	9.0	<0.01
23	Malathion	µg/l, Max	APHA 23rd edition: 6630 C	190.0	<0.01
24	Methyl parathion	µg/l, Max	APHA 23rd edition: 6630 C	0.3	<0.01
25	Monocrotophos	µg/l, Max	APHA 23rd edition: 6630 C	1.0	<0.01
26	Phorate	µg/l, Max	APHA 23rd edition: 6630 C	2.0	<0.01

VISIONTEK CONSULTANCY SERVICES PVT. LTD. BBSR

Reviewed By

VISIONTEK CONSULTANCY SERVICES PVT. LTD. BBSR

Approved By

TEST REPORT

Test Report No: ENVLAB/25-26/TR-11982

Date: 05.09.2025

Name & Address of the Customer	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**			
Sample Description	:	**Ground Water**	Date of Sampling	:	**22.08.2025**
			Sample Received on	:	**23.08.2025**
			Sampling Procedure	:	APHA 1060 B
Identification by Customer	:	**GW-1**	Sampling Location	:	**GW-1: VILLAGE-OLANGA**
Sample Condition	:	Ice Preserved	Sampling done by	:	Asutosh Mohanty
Test Started on	:	**23.08.2025**	Test Completed on	:	**29.08.2025**

Sl. No.	Parameter	Unit	TEST METHOD	Standard as per IS -10500:2012 Amended on 2015 & 2018		GW1
				Acceptable Limit	Permissible Limit	
	Physical Parameter					
1	Colour	Hazen,Max	APHA 23rd Ed,2017 : 2120 B, C	5	15	<5
2	Odour	--	APHA 23rd Ed,2017 :2120 B	Agreeable	Agreeable	Agreeable
3	pH at 25^{0}C	--	APHA 23Rrd Ed,2017 : 4500H$^+$ B	6.5-8.5	6.5-8.5	7.32
4	Taste	--	APHA 23rd Ed,2017 : 2160 C	Agreeable	Agreeable	Agreeable
5	Turbidity	NTU,Max	APHA 2130 B	1	5	1.4
6	Dissolved Solids	mg/l,Max	APHA 23rd Ed,2017 : 2540 C	500	2000	365.5
	CHEMICAL PARAMETER					
1	Aluminium as(Al)	mg/l,Max	APHA 3500Al B	0.03	0.2	<0.03
2	Ammonical Nitrogen(NH_3.N)	mg/l,Max	APHA 4500 NH_3C	0.5	0.5	<0.5
3	Anionic Detergents (as MBAS)	mg/l,Max	APHA 5540 C	0.2	1.0	ND
4	Barium(Ba)	mg/l,Max	APFA 3111,B	0.7	0.7	<0.5
5	Boron (as B)	mg/l,Max	APHA 4500 B,B	0.5	1.0	<0.1
6	Calcium (as Ca)	mg/l,Max	APHA 23rd Ed,2017 : 3500Ca B	75	200	34.8
7	Chloramines (as Cl_2)	mg/l,Max	APHA 4500 –Cl G	4.0	4.0	ND
8	Chloride (as Cl)	mg/l,Max	APHA 23rd Ed,2017 : 4500Cl$^-$B	250	1000	31.6
9	Copper (as Cu)	mg/l,Max	APHA 3111 B,C	0.05	1.5	<0.05
10	Fluoride (as F)	mg/l,Max	APHA 4500 F,C	1.0	1.5	<0.1
11	Residual, free Chlorine	mg/l,Min	APHA 4500 Cl B	0.2	1.0	ND
12	Iron (as Fe)	mg/l,Max	APHA 23rd Ed,2017 : 3111, B	1.0	1.0	0.28

13	Magnesium (as Mg)	mg/l,Max	APHA 3500 Mg B	30	100	19.5
14	Manganese (as Mn)	mg/l,Max	APHA 3500Mn B	0.1	0.3	<0.05
15	Mineral Oil	mg/l,Max	APHA 5520 B	0.5	0.5	ND
16	Nitrate (as NO_3)	mg/l,Max	APHA 4500 NO_3^- E	45	45	0.59
17	Phenolic Compounds(as C_6H_5OH)	mg/l,Max	APHA 5530 B,D	0.001	0.002	<0.001
18	Selenium (as Se)	mg/l,Max	APHA 23rd Ed,2017: 3500 Se C	0.01	0.01	<0.005
19	Silver(asAg)	mg/l,Max	APHA 23rd Ed,2017: 3111 B	0.1	0.1	<0.1
20	Sulphate (as SO_4)	mg/l,Max	APHA 4500 SO_4^{2-} E	200	400	11.6
21	Sulphide (as H_2S)	mg/l,Max	APHA 23rd Ed,2017 :4500-S,D	0.05	0.05	ND
22	Alkalinity	mg/l,Max	APHA 2320 B	200	600	86.0
23	Total Hardness (as $CaCO_3$)	mg/l,Max	APHA 23rd Ed,2017 : 2340 C	200	600	168.0
24	Zinc (as Zn)	mg/l,Max	APHA 23rd Ed,2017: 3111 B	5	15	0.31
	HEAVY METALS AND TOXICITY PARAMETER					
1	Chromium (as Cr^{+6})	mg/l,Max	APHA 3500Cr B	0.05	0.05	<0.05
2	Cadmium as(Cd)	mg/l,Max	APHA 23rd Ed,2017: 3111 B	0.003	0.003	<0.003
3	Cyanide as (CN-)	mg/l,Max	APHA 23rd Ed,2017: 4500 CN^- C,D	0.05	0.05	<0.01
4	Lead as(Pb)	mg/l,Max	APHA 23rd Ed,2017 3111 B	0.1	0.1	<0.1
5	Mercury as (Hg)	mg/l,Max	APHA 23rd Ed,2017: 3111 B	0.001	0.001	<0.001
6	Nickel (Ni)	mg/l,Max	IS 5185 (Part-22)	0.02	0.02	<0.02
7	Arsenic as (As)	mg/l,Max	APHA 23rd Ed,2017: 3114 B	0.01	0.01	<0.005
8	Polychlorinated biphenyls	mg/l,Max	APHA 23rd Ed,2017 :6440 B	0.0005	0.0005	ND
9	Polyaromatic hydrocarbons (PAH)	mg/l,Max	APHA 23rd Ed,2017 :6440 B	0.0001	0.0001	ND
10	Total Chromium	mg/l,Max	APHA 3500Cr B	0.05	0.05	<0.05
11	Bromoform	mg/l,Max	APHA 6232	0.1	0.1	ND
12	Dibromochloromethane	mg/l,Max	APHA 6232	0.1	0.1	ND
13	Bromodichloromethane	mg/l,Max	APHA 6232	0.06	0.06	ND
14	Chloroform	mg/l,Max	APHA 6232	0.2	0.2	ND
15	Molybdenum (Mo)	mg/l,Max	IS 3025 (Part 2)	0.07	0.07	<0.07

Bacteriological Parameter

1	Total Coliform	MPN/100 ml	APHA 23rd Ed,2017: 9221 B	Shall not be detectable in any 100 ml sample	ABSENT

PESTICIDES					
1	Endosulfan à	µg/l,Max	APHA 23rd edition: 6630 C	0.4	<0.005
2	Endosulfan ß	µg/l,Max	APHA 23rd edition: 6630 C	0.4	<0.005
3	Endosulfan sulphate	µg/l,Max	APHA 23rd edition: 6630 C	0.4	<0.005
4	Alachlor	µg/l, Max	APHA 23rd edition: 6630 C	20	<0.01
5	Atrazine	µg/l, Max	APHA 23rd edition: 6630 C	2.0	<0.01
6	Aldrin	µg/l, Max	APHA 23rd edition: 6630 C	0.03	<0.01
8	Alpha HCH	µg/l, Max	APHA 23rd edition: 6630 C	0.01	<0.01
9	Beta HCH	µg/l, Max	APHA 23rd edition: 6630 C	0.04	<0.01
10	Delta HCH	µg/l, Max	APHA 23rd edition: 6630 C	0.04	<0.01
11	Butachlor	µg/l, Max	APHA 23rd edition: 6630 C	125.0	<0.01
12	Chloropyriphos	µg/l, Max	APHA 23rd edition: 6630 C	30.0	<0.01
13	2,4-Dichlorophenoxyacetic acid	µg/l, Max	APHA 23rd edition: 6630 C	30.0	<0.05
14	p p DDE	µg/l, Max	APHA 23rd edition: 6630 C	1.0	<0.05
15	p p DDD	µg/l, Max	APHA 23rd edition: 6630 C	1.0	<0.05
16	p p DDT	µg/l, Max	APHA 23rd edition: 6630 C	1.0	<0.05
17	o p DDE	µg/l, Max	APHA 23rd edition: 6630 C	1.0	<0.05
18	o p DDD	µg/l, Max	APHA 23rd edition: 6630 C	1.0	<0.05
19	o p DDT	µg/l, Max	APHA 23rd edition: 6630 C	1.0	<0.05
20	Ethion	µg/l, Max	APHA 23rd edition: 6630 C	3.0	<0.01
21	Lindane	µg/l, Max	APHA 23rd edition: 6630 C	2.0	<0.01
22	Isoproturon	µg/l, Max	APHA 23rd edition: 6630 C	9.0	<0.01
23	Malathion	µg/l, Max	APHA 23rd edition: 6630 C	190.0	<0.01
24	Methyl parathion	µg/l, Max	APHA 23rd edition: 6630 C	0.3	<0.01
25	Monocrotophos	µg/l, Max	APHA 23rd edition: 6630 C	1.0	<0.01
26	Phorate	µg/l, Max	APHA 23rd edition: 6630 C	2.0	<0.01

Reviewed by:

Approved By

TEST REPORT

Test Report No: ENVLAB/25-26/TR-13155 **Date: 08.10.2025**

Name & Address of the Customer	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**			
Sample Description	:	**Ground Water**	Date of Sampling	:	**25.09.2025**
			Sample Received on	:	**25.09.2025**
			Sampling Procedure	:	APHA 1060 B
Identification by Customer	:	**GW-1**	Sampling Location	:	**GW-1: BOREWELL-5**
Sample Condition	:	Ice Preserved	Sampling done by	:	Asutosh Mohanty
Test Started on	:	**26.09.2025**	Test Completed on	:	**04.10.2025**

Sl. No	Parameter	Unit	TEST METHOD	Standard as per IS -10500:2012 Amended on 2015 & 2018		GW1
				Acceptable Limit	Permissible Limit	
	Physical Parameter					
1	**Colour**	**Hazen,Max**	APHA 23rd Ed,2017 : 2120 B, C	**5**	**15**	**<5**
2	**Odour**	**--**	APHA 23rd Ed,2017 :2120 B	**Agreeable**	**Agreeable**	**Agreeable**
3	**pH at 25^{0}C**	**--**	APHA 23Rrd Ed,2017 : 4500H+ B	**6.5-8.5**	**6.5-8.5**	**7.28**
4	**Taste**	**--**	APHA 23rd Ed,2017 : 2160 C	**Agreeable**	**Agreeable**	**Agreeable**
5	**Turbidity**	**NTU,Max**	APHA 2130 B	**1**	**5**	**1.1**
6	**Dissolved Solids**	**mg/l,Max**	APHA 23rd Ed,2017 : 2540 C	**500**	**2000**	**356.4**
	CHEMICAL PARAMETER					
1	**Aluminium as(Al)**	**mg/l,Max**	APHA 3500Al B	**0.03**	**0.2**	**<0.03**
2	**Ammonical Nitrogen(NH_3-N)**	**mg/l,Max**	APHA 4500 NH_3C	**0.5**	**0.5**	**<0.05**
3	**Anionic Detergents (as MBAS)**	**mg/l,Max**	APHA 5540 C	**0.2**	**1.0**	**<0.05**
4	**Barium(Ba)**	**mg/l,Max**	APFA 3111,B	**0.7**	**0.7**	**<0.5**
5	**Boron (as B)**	**mg/l,Max**	APHA 4500 B,B	**0.5**	**1.0**	**<0.1**
6	**Calcium (as Ca)**	**mg/l,Max**	APHA 23rd Ed,2017 : 3500Ca B	**75**	**200**	**34.2**
7	**Chloramines (as Cl_2)**	**mg/l,Max**	APHA 4500 –Cl G	**4.0**	**4.0**	**ND**
8	**Chloride (as Cl)**	**mg/l,Max**	APHA 23rd Ed,2017 : 4500Cl- B	**250**	**1000**	**28.4**
9	**Copper (as Cu)**	**mg/l,Max**	APHA 3111 B,C	**0.05**	**1.5**	**<0.05**
10	**Fluoride (as F)**	**mg/l,Max**	APHA 4500 F,C	**1.0**	**1.5**	**<0.1**
11	**Residual, free Chlorine**	**mg/l,Min**	APHA 4500 Cl B	**0.2**	**1.0**	**<0.1**
12	**Iron (as Fe)**	**mg/l,Max**	APHA 23rd Ed,2017 : 3111, B	**1.0**	**1.0**	**0.26**
13	**Magnesium (as Mg)**	**mg/l,Max**	APHA 3500 Mg B	**30**	**100**	**19.2**
14	**Manganese (as Mn)**	**mg/l,Max**	APHA 3500Mn B	**0.1**	**0.3**	**<0.05**

15	Mineral Oil	mg/l,Max	APHA 5520 B	0.5	0.5	<0.05
16	Nitrate (as NO_3)	mg/l,Max	APHA 4500 NO_3^- E	45	45	0.70
17	Phenolic Compounds(as C_6H_5OH)	mg/l,Max	APHA 5530 B,D	0.001	0.002	<0.001
18	Selenium (as Se)	mg/l,Max	APHA 23rd Ed,2017: 3500 Se C	0.01	0.01	<0.005
19	Silver(asAg)	mg/l,Max	APHA 23rd Ed,2017: 3111 B	0.1	0.1	<0.1
20	Sulphate (as SO_4)	mg/l,Max	APHA 4500 SO_4^{2-} E	200	400	11.4
21	Sulphide (as H_2S)	mg/l,Max	APHA 23rd Ed,2017 :4500-S.D	0.05	0.05	ND
22	Alkalinity	mg/l,Max	APHA 2320 B	200	600	102.2
23	Total Hardness (as $CaCO_3$)	mg/l,Max	APHA 23rd Ed,2017 : 2340 C	200	600	166.4
24	Zinc (as Zn)	mg/l,Max	APHA 23rd Ed,2017: 3111 B	5	15	0.26
	HEAVY METALS AND TOXICITY PARAMETER					
1	Chromium (as Cr^{+6})	mg/l,Max	APHA 3500Cr B	0.05	0.05	<0.01
2	Cadmium as(Cd)	mg/l,Max	APHA 23rd Ed,2017: 3111 B	0.003	0.003	<0.003
3	Cyanide as (CN-)	mg/l,Max	APHA 23rd Ed,2017: 4500 CN^- C,D	0.05	0.05	<0.01
4	Lead as(Pb)	mg/l,Max	APHA 23rd Ed,2017 3111 B	0.1	0.1	<0.1
5	Mercury as (Hg)	mg/l,Max	APHA 23rd Ed,2017: 3111 B	0.001	0.001	<0.001
6	Nickel (Ni)	mg/l,Max	IS 5185 (Part-22)	0.02	0.02	<0.02
7	Arsenic as (As)	mg/l,Max	APHA 23rd Ed,2017: 3114 B	0.01	0.01	<0.005
8	Polychlorinated biphenyls	mg/l,Max	APHA 23rd Ed,2017 :6440 B	0.0005	0.0005	ND
9	Polyaromatic hydrocarbons (PAH)	mg/l,Max	APHA 23rd Ed,2017 :6440 B	0.0001	0.0001	ND
10	Total Chromium	mg/l,Max	APHA 3500Cr B	0.05	0.05	<0.05
11	Bromoform	mg/l,Max	APHA 6232	0.1	0.1	ND
12	Dibromochloromethane	mg/l,Max	APHA 6232	0.1	0.1	ND
13	Bromodichloromethane	mg/l,Max	APHA 6232	0.06	0.06	ND
14	Chloroform	mg/l,Max	APHA 6232	0.2	0.2	ND
15	Molybdenum (Mo)	mg/l,Max	IS 3025 (Part 2)	0.07	0.07	<0.07
	Bacteriological Parameter					
1	Total Coliform	MPN/100 ml	APHA 23rd Ed,2017: 9221 B	Shall not be detectable in any 100 ml sample		ABSENT

PESTICIDES					
1	Endosulfan à	µg/l,Max	APHA 23rd edition: 6630 C	0.4	<0.005
2	Endosulfan ß	µg/l,Max	APHA 23rd edition: 6630 C	0.4	<0.005
3	Endosulfan sulphate	µg/l,Max	APHA 23rd edition: 6630 C	0.4	<0.005
4	Alachlor	µg/l, Max	APHA 23rd edition: 6630 C	20	<0.01
5	Atrazine	µg/l, Max	APHA 23rd edition: 6630 C	2.0	<0.01
6	Aldrin	µg/l, Max	APHA 23rd edition: 6630 C	0.03	<0.01
8	Alpha HCH	µg/l, Max	APHA 23rd edition: 6630 C	0.01	<0.01
9	Beta HCH	µg/l, Max	APHA 23rd edition: 6630 C	0.04	<0.01
10	Delta HCH	µg/l, Max	APHA 23rd edition: 6630 C	0.04	<0.01
11	Butachlor	µg/l, Max	APHA 23rd edition: 6630 C	125.0	<0.01
12	Chloropyriphos	µg/l, Max	APHA 23rd edition: 6630 C	30.0	<0.01
13	2,4-Dichlorophenoxyacetic acid	µg/l, Max	APHA 23rd edition: 6630 C	30.0	<0.05
14	p p DDE	µg/l, Max	APHA 23rd edition: 6630 C	1.0	<0.05
15	p p DDD	µg/l, Max	APHA 23rd edition: 6630 C	1.0	<0.05
16	p p DDT	µg/l, Max	APHA 23rd edition: 6630 C	1.0	<0.05
17	o p DDE	µg/l, Max	APHA 23rd edition: 6630 C	1.0	<0.05
18	o p DDD	µg/l, Max	APHA 23rd edition: 6630 C	1.0	<0.05
19	o p DDT	µg/l, Max	APHA 23rd edition: 6630 C	1.0	<0.05
20	Ethion	µg/l, Max	APHA 23rd edition: 6630 C	3.0	<0.01
21	Lindane	µg/l, Max	APHA 23rd edition: 6630 C	2.0	<0.01
22	Isoproturon	µg/l, Max	APHA 23rd edition: 6630 C	9.0	<0.01
23	Malathion	µg/l, Max	APHA 23rd edition: 6630 C	190.0	<0.01
24	Methyl parathion	µg/l, Max	APHA 23rd edition: 6630 C	0.3	<0.01
25	Monocrotophos	µg/l, Max	APHA 23rd edition: 6630 C	1.0	<0.01
26	Phorate	µg/l, Max	APHA 23rd edition: 6630 C	2.0	<0.01

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Annexure 14

TEST REPORT

Test Report No: ENVLAB/25-26/TR-02054 *Date: 05.05.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nag Randia, Bhadrak**	Date of Sampling	:	**28.04.2025**
			Sample Received on	:	**29.04.2025**
Sample Description	:	**NOISE**	Sampling Procedure	:	IS 9989: 2020
Sampling done by :	:	**Ashutosh Mohanty**			

Location ID	Location	Noise Level in dB(A) leq Day Time	Noise Level in dB(A) leq Night time
S-1	NEAR 45 MVA FURNACE	65.9	64.0
S-2	NEAR ADMINISTRATIVE BUILDING	64.3	44.5
S-3	NEAR AGGLOMERATION PLANT	69.6	65.1
S-4	NEAR AUTO GARAGE	72.0	63.8
S-5	NEAR BRIQUETTE STORAGE AREA	73.5	64.2
S-6	NEAR CENTRAL STORE	68.9	48.9
S-7	NEAR DRYER PLANT	73.1	63.6
S-8	NEAR FACOR COLONY	53.9	44.5
S-9	NEAR FINISHED PRODUCT HANDLING	73.2	63.9
S-10	NEAR GCP	74.1	67.8
S-11	NEAR MAIN GATE	70.2	55.1
S-12	NEAR MATERIAL RECOVERY PLANT	71.5	64.2
S-13	NEAR MRSS SWITCH YARD	65.9	58.8
S-14	NEAR STORAGE AREA	53.8	42.3
S-15	NEAR VEHICLE PARKING AREA	66.1	44.1
S-16	NEAR WATER COOLING TOWER AREA	74.0	64.7
S-17	OHC	62.3	53.6
Limit		75.0	70.0

VISIONTEK CONSULTANCY SERVICES PVT. LTD. BBSR

Reviewed by:

VISIONTEK CONSULTANCY SERVICES PVT. LTD. BBSR

Approved by:

TEST REPORT

Test Report No: ENVLAB/25-26/TR-08824 *Date: 06.06.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nag Randia, Bhadrak**	Date of Sampling	:	**21.05.2025**
			Sample Received on	:	**22.05.2025**
Sample Description	:	**NOISE**	Sampling Procedure	:	IS 9989: 2020
Sampling done by :	:	**Ashutosh Mohanty**			

Location ID	Location	Noise Level in dB(A) leq Day Time	Noise Level in dB(A) leq Night time
S-1	NEAR 45 MVA FURNACE	64.3	61.2
S-2	NEAR ADMINISTRATIVE BUILDING	62.9	43.9
S-3	NEAR AGGLOMERATION PLANT	68.8	64.8
S-4	NEAR AUTO GARAGE	71.6	62.6
S-5	NEAR BRIQUETTE STORAGE AREA	73.2	65.1
S-6	NEAR CENTRAL STORE	69.5	49.2
S-7	NEAR DRYER PLANT	74.0	64.4
S-8	NEAR FACOR COLONY	52.8	45.2
S-9	NEAR FINISHED PRODUCT HANDLING	72.9	63.3
S-10	NEAR GCP	74.5	68.1
S-11	NEAR MAIN GATE	71.1	54.9
S-12	NEAR MATERIAL RECOVERY PLANT	71.2	63.8
S-13	NEAR MRSS SWITCH YARD	66.3	59.2
S-14	NEAR STORAGE AREA	53.4	43.1
S-15	NEAR VEHICLE PARKING AREA	65.7	44.5
S-16	NEAR WATER COOLING TOWER AREA	74.1	65.1
S-17	OHC	61.9	54.0
Limit		**75.0**	**70.0**

Reviewed by:

Approved by:

TEST REPORT

Test Report No: ENVLAB/25-26/TR-09600 *Date: 07.07.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nag Randia, Bhadrak**	Date of Sampling	:	**25.06.2025**
			Sample Received on	:	**26.06.2025**
Sample Description	:	**NOISE**	Sampling Procedure	:	IS 9989: 2020
Sampling done by :	:	**Biswajeet Bhoi**			

Location ID	Location	Noise Level in dB(A) leq Day Time	Noise Level in dB(A) leq Night time
S-1	NEAR 45 MVA FURNACE	68.2	64.5
S-2	NEAR ADMINISTRATIVE BUILDING	55.6	49.8
S-3	NEAR AGGLOMERATION PLANT	71.2	65.3
S-4	NEAR AUTO GARAGE	72.3	63.2
S-5	NEAR BRIQUETTE STORAGE AREA	74.6	65.9
S-6	NEAR CENTRAL STORE	70.4	50.5
S-7	NEAR DRYER PLANT	74.9	65.6
S-8	NEAR FACOR COLONY	51.3	45.1
S-9	NEAR FINISHED PRODUCT HANDLING	70.5	62.4
S-10	NEAR GCP	71.8	67.8
S-11	NEAR MAIN GATE	64.3	52.8
S-12	NEAR MATERIAL RECOVERY PLANT	73.3	65.2
S-13	NEAR MRSS SWITCH YARD	68.7	60.9
S-14	NEAR STORAGE AREA	58.2	44.7
S-15	NEAR VEHICLE PARKING AREA	66.3	49.3
S-16	NEAR WATER COOLING TOWER AREA	70.8	64.9
S-17	OHC	74.7	60.6
S-18	CANTEEN	50.6	45.2
Limit		75.0	70.0

Reviewed by:

Approved by:

TEST REPORT

Test Report No: ENVLAB/25-26/TR-11066 *Date: 06.08.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nag Randia, Bhadrak**	Date of Sampling	:	**24.07.2025**
			Sample Received on	:	**25.07.2025**
Sample Description	:	**NOISE**	Sampling Procedure	:	IS 9989: 2020
Sampling done by :	:	**Bibek Tripathy**			

Location ID	Location	Noise Level in dB(A) leq Day Time	Noise Level in dB(A) leq Night time
S-1	NEAR 45 MVA FURNACE	67.6	64.8
S-2	NEAR ADMINISTRATIVE BUILDING	54.5	48.4
S-3	NEAR AGGLOMERATION PLANT	69.9	65.6
S-4	NEAR AUTO GARAGE	71.2	64.5
S-5	NEAR BRIQUETTE STORAGE AREA	72.3	64.8
S-6	NEAR CENTRAL STORE	68.4	50.5
S-7	NEAR DRYER PLANT	71.6	66.1
S-8	NEAR FACOR COLONY	50.5	44.6
S-9	NEAR FINISHED PRODUCT HANDLING	69.7	61.8
S-10	NEAR GCP	70.6	66.2
S-11	NEAR MAIN GATE	62.7	51.5
S-12	NEAR MATERIAL RECOVERY PLANT	71.2	66.3
S-13	NEAR MRSS SWITCH YARD	67.5	58.9
S-14	NEAR STORAGE AREA	56.7	45.2
S-15	NEAR VEHICLE PARKING AREA	66.6	48.2
S-16	NEAR WATER COOLING TOWER AREA	69.6	63.3
S-17	OHC	70.4	59.8
Limit		75.0	70.0

Reviewed by:

Approved by:

TEST REPORT

Test Report No: ENVLAB/25-26/TR-11973 *Date: 05.09.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nag Randia, Bhadrak**	Date of Sampling	:	**22.08.2025**
			Sample Received on	:	**23.08.2025**
Sample Description	:	**NOISE**	Sampling Procedure	:	IS 9989: 2020
Sampling done by :	:	**Bibek Tripathy**			

Location ID	Location	Noise Level in dB(A) leq Day Time	Noise Level in dB(A) leq Night time
S-1	NEAR 45 MVA FURNACE	66.8	65.1
S-2	NEAR ADMINISTRATIVE BUILDING	53.8	47.4
S-3	NEAR AGGLOMERATION PLANT	68.6	66.2
S-4	NEAR AUTO GARAGE	70.4	65.3
S-5	NEAR BRIQUETTE STORAGE AREA	71.2	66.5
S-6	NEAR CENTRAL STORE	68.4	49.4
S-7	NEAR DRYER PLANT	70.5	67.2
S-8	NEAR FACOR COLONY	49.8	45.2
S-9	NEAR FINISHED PRODUCT HANDLING	68.8	62.6
S-10	NEAR GCP	69.6	66.2
S-11	NEAR MAIN GATE	61.2	52.3
S-12	NEAR MATERIAL RECOVERY PLANT	70.4	66.8
S-13	NEAR MRSS SWITCH YARD	66.6	59.2
S-14	NEAR STORAGE AREA	55.9	45.7
S-15	NEAR VEHICLE PARKING AREA	67.2	50.4
S-16	NEAR WATER COOLING TOWER AREA	68.4	62.2
S-17	OHC	69.5	60.4
Limit		**75.0**	**70.0**

Reviewed by:

Approved by:

TEST REPORT

Test Report No: ENVLAB/25-26/TR-13145 *Date: 08.10.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nag Randia, Bhadrak**	Date of Sampling	:	**25.09.2025**
			Sample Received on	:	**25.09.2025**
Sample Description	:	**NOISE**	Sampling Procedure	:	IS 9989: 2020
Sampling done by :	:	**Asutosh Mohanty**			

Location ID	Location	Noise Level in dB(A) leq Day Time	Noise Level in dB(A) leq Night time
S-1	NEAR 45 MVA FURNACE	67.1	65.8
S-2	NEAR ADMINISTRATIVE BUILDING	52.4	46.6
S-3	NEAR AGGLOMERATION PLANT	67.6	65.8
S-4	NEAR AUTO GARAGE	69.4	64.2
S-5	NEAR BRIQUETTE STORAGE AREA	70.2	65.4
S-6	NEAR CENTRAL STORE	65.4	47.2
S-7	NEAR DRYER PLANT	68.6	65.2
S-8	NEAR FACOR COLONY	48.6	44.8
S-9	NEAR FINISHED PRODUCT HANDLING	66.7	60.6
S-10	NEAR GCP	67.8	65.2
S-11	NEAR MAIN GATE	58.4	50.6
S-12	NEAR MATERIAL RECOVERY PLANT	68.6	62.5
S-13	NEAR MRSS SWITCH YARD	65.8	56.6
S-14	NEAR STORAGE AREA	53.4	44.8
S-15	NEAR VEHICLE PARKING AREA	69.8	51.2
S-16	NEAR WATER COOLING TOWER AREA	66.6	60.4
S-17	OHC	67.2	59.4
Limit		75.0	70.0

Reviewed by: **Approved by:**

VISIONTEK CONSULTANCY SERVICES PVT. LTD. BBSR

Decarbonization Program- FACOR (Charge Chrome Plant)

Sensitivity: Public (C4)

Background

FACOR has 3 Units-

- **Mines-** FACOR has 2 open pit running mines and 1 underground mines in the Odisha state. It contributes ~ 8% of Indian chrome ore production.
- **M/s Facor Power Limited-** A 100 MW coal based thermal Captive Power Plant in Randia, Odisha. Power generated in this plant is used to produce Ferro Chorme in the plant.
- **Charge Chrome Plant-** High Carbon Ferrochrome / Charge Chrome are produced in the plant in Submerged Electric Arc Furnace.

Sl. No.	Primary energy source
1	Coal in boilers (FPL)
2	FO (CCP)
3	HSD (CCP + Mine + FPL)
4	Coke
5	Charge Chrome (CCP)
6	Electricity

Sl. No.	Planned mitigation measures for CO2 reduction	Capacity
1	Installation of Solar (MW)	145

Sensitivity: Public (C4)

Production & Key Assumptions- Charge Chrome Plant

SN	FACOR Unit	Product	Current Capacity	Production Achieved (FY 2025)	Proposed Capacity (Post Expansion)
1	Charge Chrome Plant	Ferro Chrome (in MT)	145000	82,748	445000

Key Assumptions:

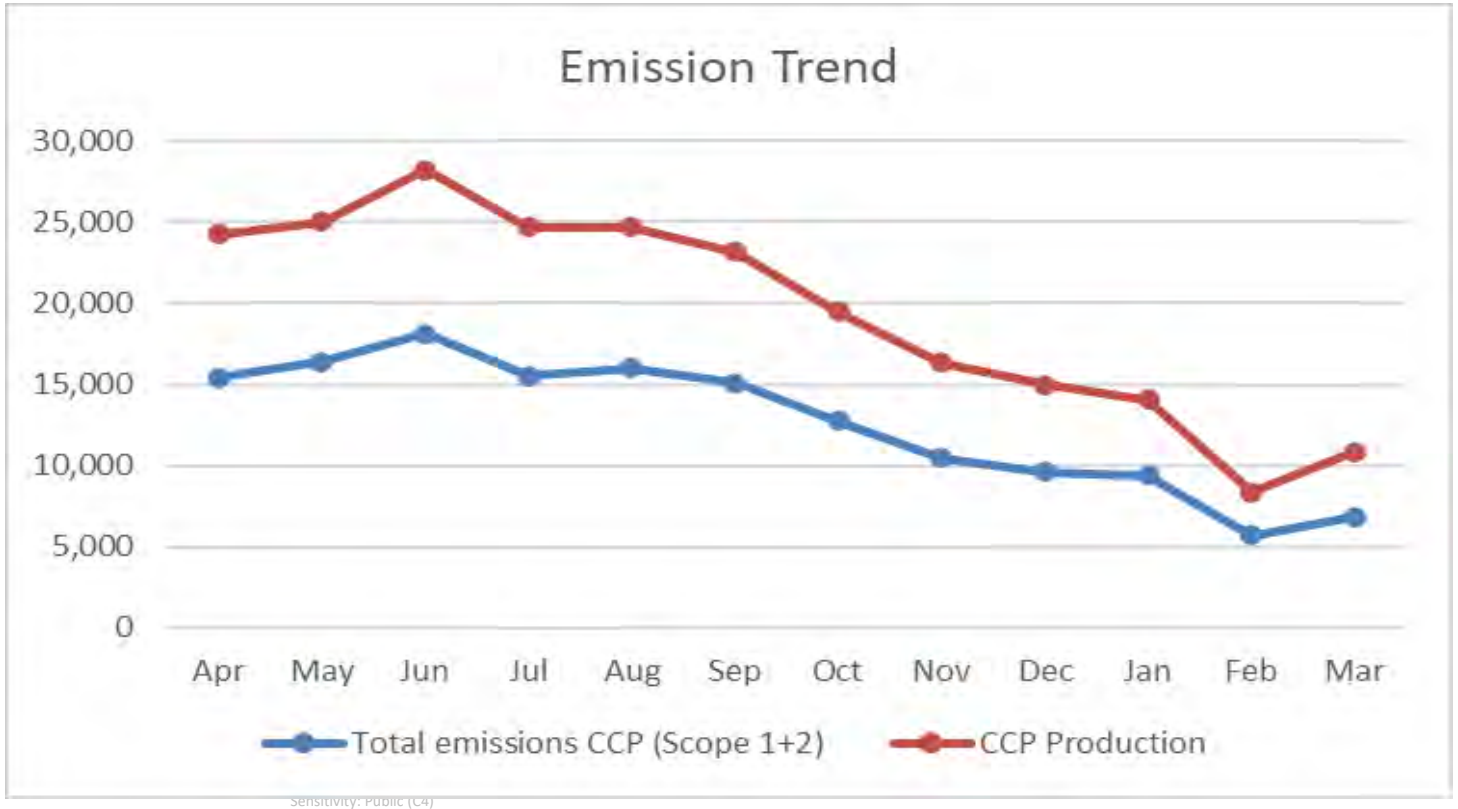
1. Power from the 100 MW power plant will be used in the existing plant of capacity 145 KTPA & RE power will be sourced for the 300 KTPA expansion unit.

Sensitivity: Public (C4)

Current Scenario

Month	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
Total emissions CCP (Scope 1+2)	15,396	16,395	18,103	15,508	15,979	15,080	12,754	10,463	9,603	9,393	5,710	6,826	151,210
CCP Production	8870	8593	10070	9156	8672	8102	6743	5877	5366	4645	2630	4024	82,748
GHG intensity	1.7357	1.9079	1.7977	1.6938	1.8426	1.8613	1.8914	1.7803	1.7896	2.0222	2.171102	1.6963	1.8274

GHG intensity= 1.82

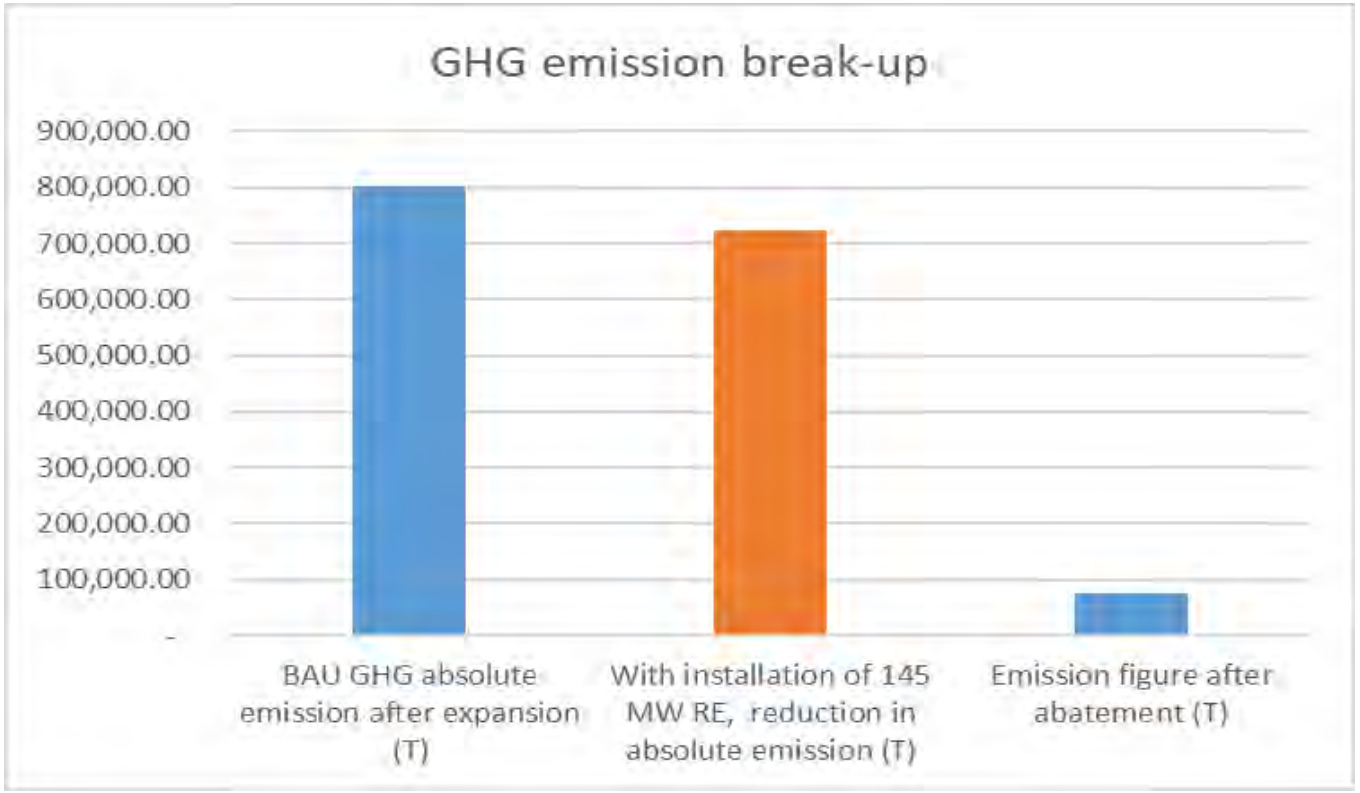


Sensitivity: Public (C4)

Way Forward

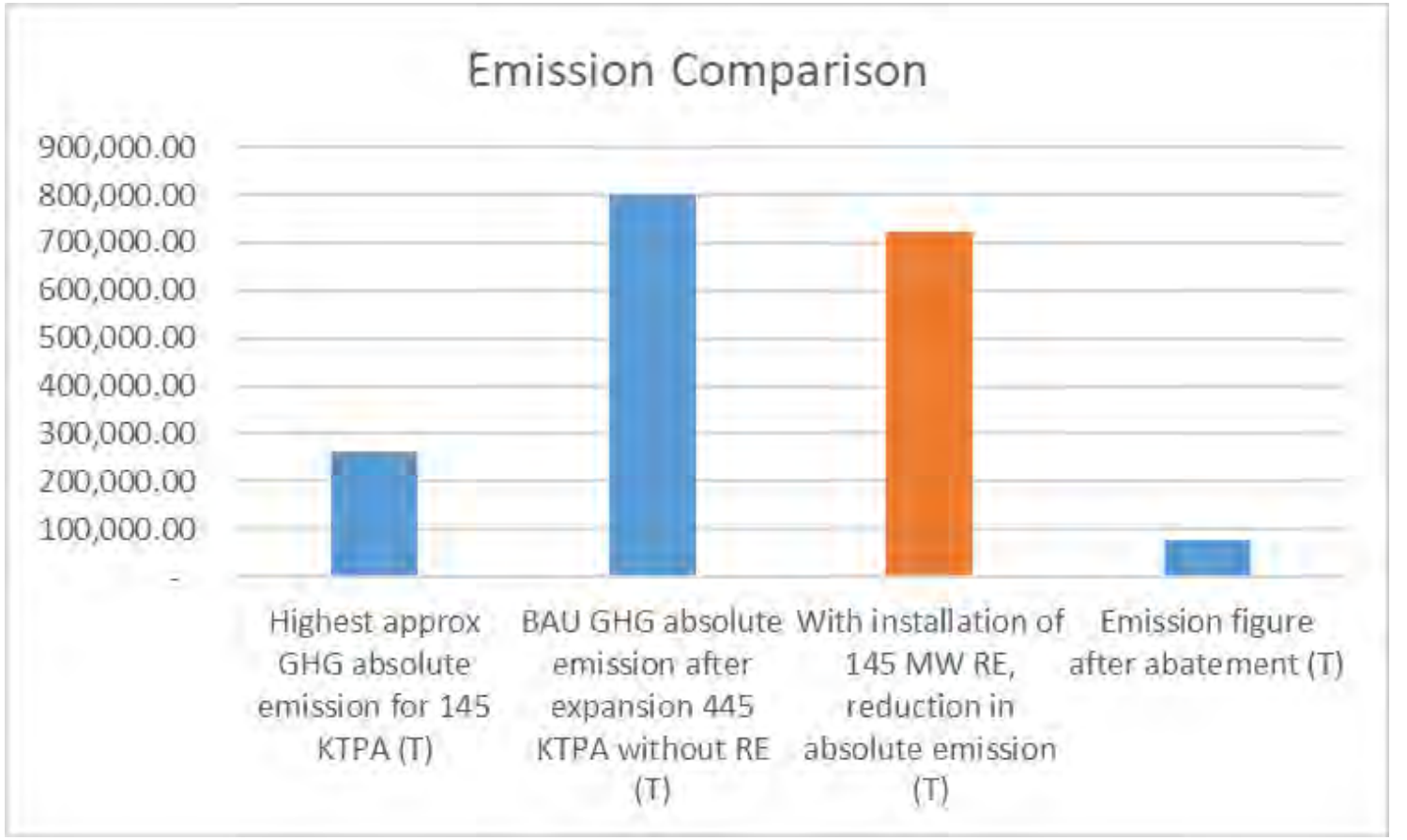
Assumption 1	
Capacity after expansion(Mt)	445000
Highest power requirement (MW)	213
BAU GHG absolute emission (T)	801,000.00

Assumption-2	
BAU GHG absolute emission after expansion (T)	801,000.00
If we install 145 MW RE, reduction in absolute emission (T)	724,469.00
Emission figure after abatement (T)	**76,531.00**



Sensitivity: Public (C4)

Emission Comparison



Sensitivity: Public (C4)

THANKS!

https://www.facorgroup.in/

Scan & Visit

Sensitivity: Public (C4)

Environmental Policy

Purpose

Vedanta Limited ("Vedanta") is committed to achieving excellence in environmental management. Our goal is to minimise environmental impacts of our business across the entire lifecycle by implementing pollution-prevention and natural resource conservation actions either on site or off site.

This policy is forward looking and sets a vision for businesses across the Vedanta group.

Scope

This policy is applicable to all Vedanta Limited companies, including subsidiaries, joint ventures, and acquisitions, managed sites, licensees, outsourcing partners, corporate offices, and research facilities. This policy is also applicable to all Vedanta Limited employees, contractor employees, business partners, suppliers, and others with whom Vedanta does business.

In addition, this policy is applicable throughout the operational lifecycle of the projects and mines, covering stages from exploration and planning to evaluation, operation, and closure. Furthermore, it extends to activities in our upstream and downstream value chain, limited to distribution, logistics, and sale of products and services to the customer.

Objectives of the Environmental Policy

Vedanta will strive to:

- Comply with applicable national, regional, and local environmental regulations and statutory obligations. In the absence (or lack) of appropriate legislation, industry best practices and applicable international standards will be used.
- Develop, implement, and improve environmental management systems, consistent with world-class standards.
- Set targets and objectives to avoid, reduce or mitigate Environmental impacts on people and planet.
- Consistently assess our environmental risks, manage our impacts, take appropriate mitigation and adaptation measures, and communicate our environmental strategy to our stakeholders.
- Incorporate appropriate environmental criteria for all business decisions including the planning, operationalization, and closure of the projects.
- Conduct regular environmental review and due diligence of the projects (including for mergers & acquisitions) to identify, prioritize, assess, and take effective actions for mitigating the potential environmental risks.
- Drive continuous environmental performance improvement by implementing appropriate available practices and technology.
- Conserve natural resources by adopting environment-friendly and energy-efficient technologies through process improvements.
- Apply mitigation hierarchy (avoid, reduce, reuse, recycle, disposal) to environmental impacts and adopt the principles of circular economy.
- Manage impacts related to energy, carbon emissions, waste, nature, air emissions, land-use & biodiversity, and water.
- Raise awareness of internal and external stakeholders including business partners, suppliers, and other stakeholders on adoption of practices in alignment with our policies, thereby fostering a collective commitment to managing environmental impacts.
- Provide appropriate training to all employees and emphasize the importance of minimising risks to environment, while also understanding the impacts of their work activities on the environment.
- Communicate with all our stakeholders on the progress and performance of Environment management.
- Review the performance against the policy on a periodic basis to ensure management of environmental

impacts as per our objectives including the sharing of good practices throughout the organization andstakeholders

Responsibility & Review

This policy is part of the Vedanta Sustainability Framework and each Vedanta business shall implement this policy. The Group CEO will be accountable for controlling and setting the policy, and the Group Executive Committee are responsible for the full implementation of the policy and associated standards. The Board ESG Committee will review this policy annually and recommend appropriate revisions to the Board as may deem necessary.

Related additional policies: *Energy & Climate Change Policy, Biodiversity Policy, Water Policy, Tailing Management Policy*

Signed by:

Sunil Duggal

Group CEO, Vedanta

LimitedDate: 27th July

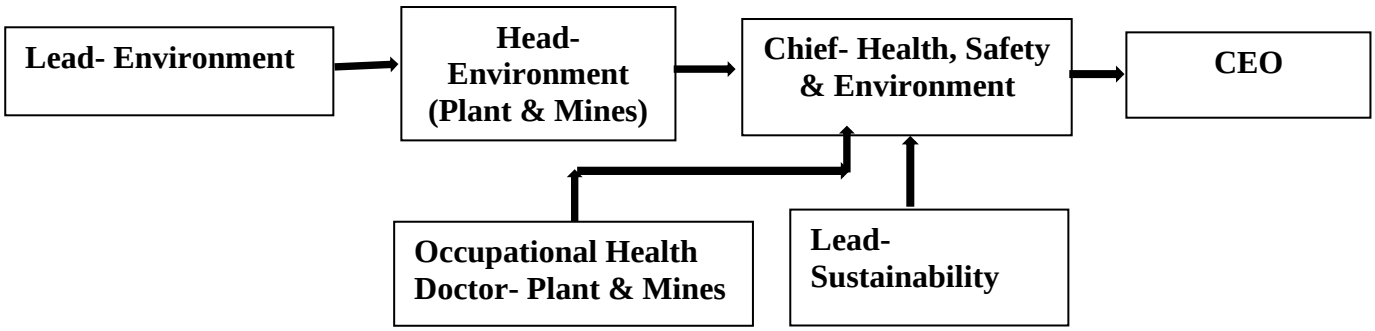
2023

STATUS OF ENVIRONMENT MANAGEMENT CELL IN M/S FERRO ALLOYS CORPORATION LTD.

A. Details of Persons available in the Cell:

Sl.No.	Name of the Persons	Designation	Duty assigned	Mob. No / Email	Qualification
01	Krutisunder Mohapatra	Chief- HSE	Health, Safety & Environment	7894405442 krutisunder.mohapatra@vedanta.co.in	M.Tech in ENV., PDIS, PGDBM
02	Biswa Bhusan Panigrahi	Head-Environment	Env.mgmt.& Pollution control	7735738480 biswabhusan.panigrahi@vedanta.co.in	M.Sc. in Environmental Science
03	Susanta Biswal	Head Geology & Environment (Mines)	Env. Mgmt & Pollution control	9437496738 susanta.biswal@vedanta.co.in	M.Sc. in Geology
04	Somnath Pal	Lead-Environment	Env.mgmt.& Pollution control	9064376724 somnath.pal@vedanta.co.in	M.Tech in Environmental Engineering
05	Avik Biswas	Lead-Sustainability	ESG & Sustainability	8902791259 avik.biswas@vedanta.co.in	Postgraduate Diploma in Forestry Management
06	Nilesh Pratap Singh	Lead-Sustainability	ESG & Sustainability	8455002075 nilesh.singh1@vedanta.co.in	Postgraduate Diploma in Sustainability Management
07	Dr Swati Jaiswar	Medical Officer (Plant)	Occupational Health	7536073463 ohc.facor@vedanta.co.in	MBBS, AFIH
08	Dr Anil Mahto	Medical Officer (Mines)	Occupational Health	7328002623 ohc.ostapal@vedanta.co.in	MBBS, AFIH

B. Reporting system of the Environment Management Cell (Please enclose Organization Chart).



Annexure 18

277

Sd/- Principal
J.B.(D) College,
Sardhapali

VIL JUDGE Sr. Div., Jeypore
01/2022

...Petitioner

...Opposite Party

otice
oner, Ayshwarjya Deepak Swain,
hok Kumar Swain, resident at:
: Boipariguda, Dist: Koraput has
certificate claiming rights ever
0117226 PS- Rs.5,22,101/-

ns having any interest may appear
11.2022 in person or through an

his Court on this the 22 Oct., 2022.
/- Civil Judge (Sr. Division),
Jeypore

NGIR C-1489

45)/2022-23
r paper, EMD, Time of completion,
other necessary documents can be

mentioned in DTCN

khs (Including GST)

22 to 5.00 PM of 14.11.2022

ir Municipality

ection with the tenders shall be
ll be given. Bidders are advised to

Executive Officer
Balangir Municipality

DIVISION, Nayagarh

11.2022
ehalf of Managing Director, Odisha
Rate bids in single cover system in
ing H.T Electrical License issued by
ith the state PWD/Irrigation/PHED

aries from Rs.13.00 lakh to 30.00 lakh

to 23.11.2022 upto 17.00 hours

gov.in.
n in the said website.
EXECUTIVE ENGINEER,
L.I. DIVISION, Nayagarh

ବୋଲି ମୁଖ୍ୟମନ୍ତ୍ରୀ କହିଛନ୍ତି । ଜଳସାଥୀଙ୍କ ଯୋଗୁଁ ମିଟର ରିଡିଂ, ଜଳକର ଆଦାୟ ଓ ବେନିୟମ ପାଇପ ସଂଯୋଗ ଦୂର କରିବା କାର୍ଯ୍ୟରେ ବହୁତ ଉନ୍ନତି ଆସିପାରିଛି । ଏହି କାର୍ଯ୍ୟକ୍ରମର

The SAKALA
03 - 11 - 2022

FACOR

ସାଧାରଣ ବିଜ୍ଞପ୍ତି

ଏତଦ୍ୱାରା ସର୍ବସାଧାରଣଙ୍କ ଅବଗତି ନିମନ୍ତେ ଜଣାଇ ଦିଆଯାଉଛି ଯେ ମେସର୍ସ ଫେରୋଏଲୋଏଜ କର୍ପୋରେସନ ଲିମିଟେଡ୍ (ଫେକର) କମ୍ପାନୀ ଅଧିନସ୍ଥ ଚାର୍ଜକ୍ରୋମ ପ୍ଲାଣ୍ଟ, ଡି.ପି. ନଗର, ଗ୍ରାମ / ପୋଷ୍ଟ : ରାନ୍ଦିଆ, ତହସିଲ / ଜିଲ୍ଲା: ଭଦ୍ରକ, ଓଡିଶାରୁ ଫେରୋଏଲୋଏଜ ପ୍ରକଳ୍ପ ର ସମ୍ପ୍ରସାରଣ କରି ୧ x ୪୫ ଏମ.ଭି.ଏ. ଫର୍ନେସ ଏବଂ ଅତିରିକ୍ତ ୧ x ୩୩ ଏମ.ଭି.ଏ. ଫର୍ନେସରୁ ସର୍ବମୋଟ ବାର୍ଷିକ ୧,୪୫,୦୦୦ ଟନ୍ ଏବଂ ମେଟାଲ ରିକଭରୀ ପ୍ଲାଣ୍ଟରୁ ବାର୍ଷିକ ୧୧,୮୨୦ ଟନ୍ ଉତ୍ପାଦନ ବୃଦ୍ଧି କରିବାପାଇଁ ଭାରତ ସରକାରଙ୍କ ପରିବେଶ, ଜଙ୍ଗଲ ଏବଂ ଜଳବାୟୁ ପରିବର୍ତ୍ତନ ମନ୍ତ୍ରଣାଳୟ ଗତ ୩୧.୦୧.୨୦୨୨ ତାରିଖରେ ଇ.ସି. ପରିଚୟ କ୍ରମାଙ୍କ : ଇସି ୨୨ଏ୦୦୮ଓଆର୧୯୩୧୧୩ ମାଧ୍ୟମରେ ପରିବେଶ ସ୍ୱୀକୃତି ପ୍ରଦାନ କରିଛନ୍ତି । ଉକ୍ତ ସ୍ୱୀକୃତିପ୍ରାପ୍ତ ଚିଠି ପରିବେଶ ଜଙ୍ଗଲ ଏବଂ ଜଳବାୟୁ ପରିବର୍ତ୍ତନ ମନ୍ତ୍ରଣାଳୟ ଭାରତ ସରକାରଙ୍କ ୱେବସାଇଟ http://environmentclearance.nic.in ରେ ମଧ୍ୟ ଉପଲବ୍ଧ ଅଟେ ।

କାରଖାନା ପରିଚାଳକ
ଫେରୋଏଲୋଏଜ କର୍ପୋରେସନ ଲିମିଟେଡ୍ (ଫେକର)
ଡି.ପି.ନଗର, ରାନ୍ଦିଆ, ଜିଲ୍ଲା: ଭଦ୍ରକ ।

Office of the Notified Area of Council, Dharamgarh.

******

" e " Procurement Notice No.3190,Dated. 31.10.2022 C-1499

BID IDENTIFICATION No. DHARAMGARH/NAC/02/2022-23

The Notified Area of Council, Dharamgarh invites online bid in single cover system through e-procurement.

Tender reference No.	DHARAMGARH/NAC/02/2022-23
Name of Work	Civil Work
Total Nos of Works	2 (Two)
Value of Works	RS. 1,32,000/- TO Rs.20,00,000/-
Date of availability of Tender for online Bidding	From Dt.01/11/2022 at 11.00 AM Up to Dt.07/11/2022 at 5.00 PM
Date of Opening of Bids	Dt.09/11/2022 at 11.00 AM .
Name and Address of the Officer Inviting Bid	Executive Officer NAC, Dharamgarh

Further details can be seen from procurement portal the website: www.tendersodisha.gov.in

Sub-Collector-cum-Executive Officer
NAC, Dharamgarh

OIPR-13163/11/0007/2223

OFFICE OF THE DEPUTY DIRECTOR SOIL CONSERVATION-CUM-PROJECT DIRECTOR WATERSHEDS, BARGARH

Letter No.1062 Dated-31.10.2022

TENDER NOTICE

Sealed tenders are invited from reputed manpower agencies/service providers to provide the services for engagement of Watershed Development Team (WDT) At-Padmapur project Implementing Agency (PIA) Level for implementation of centrally sponsored scheme Watershed Development Component of Pradhan Mantri Krishi Sinchayee Yojana (WDC-PMKSY 2.0) to guide Watershed Committee (WC) in Planning and implementation of project activities at Micro Watershed Level for a period upto 31.03.2023 from the date of contract through a suitable placement agency on contract basis. The detail information for outsourcing the service of aforesaid posts has been given in the Tender document which may either be downloaded from the website in www.bargarh.nic.in or obtained in person from Project Director, Watersheds, Bargarh with an EMD cost of Rs. 5000/- in shape of Bank Draft payable at Bargarh, in favour of Project Director, Watersheds, Bargarh, on any working day between 10.00 AM to 4.00 PM and deposit processing fees of Rs. 450/- in shape of cash/ Draft (Non refundable). The last date & time for submission of Tender document is 15.11.2022 by 4.00 PM through Regd. Post or Drop Box in Office. Tender documents received by other mode shall summarily be rejected. The authority reserves the right to accept or reject some or all quotations without assigning reason thereof.

Dy. Director Soil Conservation-Cum-
Project Director Watersheds, Bargarh

OIPR-24098/11/0003/22

OFFIC
MINOR

BID IDE

1. Name of the Inviti
Jashipur
2. Name of the Work:-
3. No. of Works:-
4. Tender Amount Vari
5. Date and Time of Ava
for online Bidding fr
6. Last Date and Time
7. Last Date and Time
8. Date of opening of Bi

The detail tender call notic
Name & Address of the O

Further details can be see
e-Procurement market pl
- Subsequent corrigend
- The tender inviting a
without assigning an

OIPR-32282/11/00

1. The Block Developm
Percentage rate bid in
class of eligible contr
Government and contra
MES / Railway, to be e
proof of registration fr
successful, the bidder
the State PWD in appr
submit bids for any or a
downloaded from the
undersigned during off

SL No	Name of work
1	2
1	Construction of Ad Room 2 nos. Reno Old room and Hand Platform at Kank Bidyapitha, Pedipath

1. Sale of Tender Pap
Holiday during off
2. Last date of receipt
or registered post o
3. Date of Opening of
undersigned)

OIPR-19091/11/000

...absconding after the
nt.
rding to the police, impact of
ident was very severe and two
irbags of the car were deployed
crash. The person sitting on
nt seat was possibly thrown
the car and he survived the ac-
His condition is stated to be
ving, police informed.

A D

rape

wo persons for allegedly raping a
ed a complaint in Kharavela Nagar
n had come from Cuttack to visit a
k and was sitting near Ram Mandir
ched her and offered her a place to
s away and allegedly gangraped her
0), who is also a security guard.

Appendix - IV [Rule 8(1)]

POSSESSION NOTICE

(For Immovable Property)

lpur,
838

e Securitisation and Reconstruction of
powers conferred under Section 13(12)
13(2) of the said act calling upon the
ys from the date of the receipt of the said
ce is hereby given to the Borrower(s)/
f the property described herein below, in
e Security Interest (Enforcement) Rules,
and the public in general are hereby
rge of IDBI Bank Limited for the amount
or(s)/ Mortgagor(s) attention is invited to
ned assets.

Description of the Immovable Property
All that piece and parcel of immovable properties situated at Mouza: Bargarh, Khata No.: 2414/10426, Plot No.: e state of Odisha recorded in the name of Gartia, East: Land of Ashok Gartia, West: and machinery attached to the earth or

Authorised Officer, IDBI Bank Limited

POSSESSION NOTICE

(RULE-8(1)) For Immovable Property

SARFAESI Act, 2002
ts and Enforcement of Security Interest
urity Interest (Enforcement) Rules 2002,
hereinafter calling upon the following
s within 60 days from the date of receipt
y given to the Borrower/Guarantors and
ged herein below in exercise of power
ct on the date mentioned against below
ned not to deal with the property and any
amount stated below with interest, costs

of the section 13 of the Act, in respect

	Liabilities due on the specified date as per Notice	Date of Demand/ Possession Notice
consist of S.: Khaira, Plot No.: 302, Area: Khata No.: Dec., Plot omestead, ate Mohan	₹30,22,215/- as on 09.03.2022 with further interest, incidental expenses and costs thereon	28.03.2022 / 01.11.2022

Authorised Officer, State Bank of India

DEO 'B' - 01 Post at ICMR-NITM Belagavi

For detailed advertisement please visit the https://icmrnitm.res.in/careers/ and www.icmr.nic.in websites.

Date: 14.10.2022
Place: Belagavi

Sd/-
Director

The Indian Express FACOR

09.11.22

PUBLIC NOTICE

It is hereby informed to the general public that the Ministry of Environment, Forest and Climate Change, Government of India (MOEF & CC) has granted Environment Clearance (E.C) to the Charge Chrome Plant of M/s Ferro Alloys Corporation Ltd. (FACOR) on dtd. 31.10. 2022 vide **E.C. Identification No. EC22A008OR193113,** for expansion of Ferro Alloys Plant for production of High Carbon Ferro Chrome up to 1,45,000 TPA from two furnace i.e 1 X 45 MVA & 1 X 33 MVA and 11,800 TPA from the Metal Recovery Plant (MRP) situated at village Randia of Bhadrak District of Odisha. This E.C. is also available in the official portal of Ministry of Environment, Forest and Climate Change, Govt. of India i.e **http://environmentclearance.nic.in.**

Factory Manager
M/s. Ferro Alloys Corporation Ltd.
Charge Chrome Plant, Randia, Bhadrak.

PARAS

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No: NCESS/P&GA/9115/11/2022

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changes, if any, will be notified thr
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The Committee to Regulate - Mon
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prepare the General Merit List for
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downloaded from the website www.
Date of online application form s
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Date of Downloading Hall ticket
Date of Entrance Examination
Publication of Merit List/Results
The candidate should send the
(with enclosures) on or before 18.1
Tel: 044-24422211

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Supervisor (S-4 Grade) (On Fixed Term Contract)	(i) Mecha (ii) Electric (iii) Hull & Out of the for PwBD reserved f
Supervisor (S-1 Grade) (On Fixed Term Contract)	Security Out of thi reserved

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FACOR

FACOR / Bhadrak / Legal / 185 / 2022 Dt. 11.11.2022

To

The Deputy Director General of Forests (C)
Ministry of Environment, Forest & Climate Change
Integrated Regional Office, A/3, Chandrasekharpur
Bhubaneswar – 751023,
Email: roez.bsr-mef@nic.in

Ref: Environment Clearance Identification No.: EC22A008OR193113, dtd. 31.10.2022

Sub: Submission of Compliance report with respect to General conditions no. X(i), (ii) and (vi) of the Environment Clearance issued for expansion of the Charge Chrome Plant of M/s. Ferro Alloys Corporation Ltd. (FACOR) granted vide EC Identification No.: EC22A008OR193113 on dtd. 31.10.2022.

Dear Sir,

In compliance to the General conditions no. X(i), (ii) and (vi) of the Environment Clearance (Page no.11 of the EC issued for expansion of the Charge Chrome Plant of M/s. Ferro Alloys Corporation Ltd. (FACOR) granted vide EC Identification No.: EC22A008OR193113 on dtd. 31.10.2022 we are submitting herewith the compliance status report for your kind perusal and records as under :

General Condition – Miscellaneous (Page no.11 of the EC) :

Condition No. X(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."*

Compliance status of Condition No.X(i) :

We have published Public Notice in the English daily newspaper **"The Indian Express"** in English language and in a Odia daily newspaper namely **"The Sakala"** in vernacular language i.e Odia on dtd. 03.11.2022 regarding approval of Environment Clearance for the expansion project of Charge Chrome Plant of M/s. Ferro Alloys Corporation Ltd. vide EC Identification No.: EC22A008OR193113, dtd. 31.10.2022. The copy of the said Advertisement clips are enclosed herewith as **Annexure-1** Series for your kind reference and records.

Further in compliance to the aforesaid condition, we have also uploaded the copy the said EC in our official company website for public. The URL link of the same is appended below for the purpose of public access :

https://www.facorgroup.in/wp-content/uploads/2022/11/Enviornment-Clearance-ccp-2022.pdf.

Condition No. X(ii) : *"The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats 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."*

Manoj Kr. Shaw

Ferro Alloys Corporation Limited
Charge Chrome Plant, D.P. Nagar, Randia - 756 135, Dist. Bhadrak, Odisha, India.
Phone : 06784 240320/240347/240272, Fax : 06784 240626.
E-mail : Facor.corporate@vedanta.co.in I Website : www.facorgroup.in
CIN : U45201OR1955PLC008400

Sensitivity: Internal (C3)

Compliance status of Condition No. X(ii) :

We have submitted the copies of the Environment Clearance dtd. 31.10.2022 to the Heads of the local bodies. Panchayats and relevant Government Offices as per the below mentioned table:

Sl No.	Letter No.	Date	Submitted to	Acknowledged on
01	FACOR / Bhadrak / Legal / 172 / 2022	02.11.2022	Collector, Bhadrak	05.11.2022
02	FACOR / Bhadrak / Legal / 173 / 2022	02.11.2022	Sub-Collector, Bhadrak	05.11.2022
03	FACOR / Bhadrak / Legal / 174 / 2022	02.11.2022	Tahasildar, Bhadrak	05.11.2022
04	FACOR / Bhadrak / Legal / 175 / 2022	02.11.2022	Sarapanch, Randia	07.11.2022
05	FACOR / Bhadrak / Legal / 176 / 2022	02.11.2022	Sarapanch, Olanga	07.11.2022
06	FACOR / Bhadrak / Legal / 177 / 2022	02.11.2022	Sarapanch, Rampur	07.11.2022
07	FACOR / Bhadrak / Legal / 178 / 2022	02.11.2022	Sarapanch, Ramkrishnapur	05.11.2022
08	FACOR / Bhadrak / Legal / 179 / 2022	02.11.2022	Sarapanch, Geltua	07.11.2022
09	FACOR / Bhadrak / Legal / 180 / 2022	02.11.2022	Sarapanch, Baudpur	07.11.2022
10	FACOR / Bhadrak / Legal / 181 / 2022	02.11.2022	OSPCB, Bhubaneswar	04.11.2022
11	FACOR / Bhadrak / Legal / 182 / 2022	02.11.2022	DDM, Baripada	04.11.2022

Copy of acknowledgment of the above letters are enclosed herewith as **Annexures-2 series** for your records please.

Condition No. X(vi) : "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."

Compliance status of Condition No. X(vi) :

We have submitted the Environment Statement for the financial year 2021-2022 to the office of OSPCB, Bhubaneswar and simultaneously have also uploaded the same in our company website. The URL link of the same is appended below for reference please :-

https://www.facorgroup.in/wp-content/uploads/2022/11/CCP-Environmental-Statement-Apr2021-Mar2022.pdf

In addition to the above submissions, we do hereby assure your good office that we have already initiated action for compliance of all the Specified Condition as well as General condition of the Environment Clearance dtd. 31.10.2022 issued to M/s. Ferro Alloys Corporation Ltd. Also we will submit compliance status report of the same in the six-monthly compliance report for the period ending from October 2022 to March 2023 within due time.

This is for your kind information and records please.

Thanking you
Yours faithfully
For Ferro Alloys Corporation Ltd.

Factory Manager
Charge Chrome Plant

Copy to : Director I.A. Division, Ministry of Environment and Forest, Paryavaran Bhawan, New Delhi.

Ferro Alloys Corporation Limited
Charge Chrome Plant, D.P. Nagar, Randia - 756 135, Dist. Bhadrak, Odisha, India.
Phone : 06784 240320/240347/240272, Fax : 06784 240626.
E-mail : Facor.corporate@vedanta.co.in I Website : www.facorgroup.in
CIN : L45201OR1955PLC008400

Sensitivity: Internal (C3)

TEST REPORT

Test Report No: ENVLAB/25-26/TR-02050 *Date: 05.05.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**28.04.2025**
			Sample Received on	:	**29.04.2025**
Sample Description	:	**Ambient Air**	Sampling Procedure	:	VCSPL/F-SOP/001, Dt. 04.09.2021
			Sampling Location	:	**AUTO GARAGE**
Environment Condition during Sampling	:	Atmospheric Temp.: 29 – 33°C Barometric Pressure : 755 mm of Hg	Instrument used for Sampling	:	RDS (APM 460 BL), FPS (APM 550), VOC Sampler
Sample Condition	;	Air Tight Sealed and gaseous Sample Solution Refrigerated	Sampling done by	:	Ashutosh Mohanty
Test Started on	:	**29.04.2025**	Test Completed on	:	**04.05.2025**

1. Chemical Testing

A. Atmospheric Pollution

Sl. No	Parameters	Unit	Test Method	National Ambient Air Quality Standard, CPCB, 18th Nov. 2009	Analysis Result
1	Particulate matter as PM_{10}	($\mu g/m^3$)	IS 5182 : Part 23: 2006, RA 2017	**100**	**62.3**
2	Particulate matter as $PM_{2.5}$	($\mu g/m^3$)	IS 5182 (Part 24):2019	**60**	**31.8**
3	Sulphur Oxides as SO_2	($\mu g/m^3$)	IS 5182 (Part 2): 2001, RA 2017	**80**	**20.5**
4	Nitrogen Oxides as NOx	($\mu g/m^3$)	IS 5182 (Part 6): 2006, RA 2017	**80**	**22.7**
5	Carbon monoxide as CO	(mg/m^3)	IS 5182(Part 10):2019	**2**	**0.70**
6	Ozone as O_3	($\mu g/m^3$)	IS 5182 (Part-09):2019	**180**	**7.1**
7	Ammonia as NH_3	($\mu g/m^3$)	IS 5182 (Part 25): 2018	**400**	**<20**
8	Lead as Pb	($\mu g/m^3$)	IS 5182(Part -22):2019	**1**	**<0.02**
9	Nickel as Ni	(ng/m^3)	IS 5182(Part -22):2019	**20**	**<2.5**
10	Arsenic as As	(ng/m^3)	IS 5182(Part -22):2019	**6**	**<1.0**
11	Benzene as C_6H_6	($\mu g/m^3$)	IS 5182 (Part 11):2006	**5**	**<4**
12	Benzo-a-pyrine as BaP	(ng/m^3)	IS 5182 (Part 12):2017	**1**	**<0.5**

BDL Values: SO_2< 4 $\mu g/m^3$, NO_X< 6 $\mu g/m^3$, O_3<5 $\mu g/m^3$, NH_3<20 $\mu g/m^3$, Ni<2.5 ng/m^3, As <1.0 ng/m^3, C_6H_6<4.0 $\mu g/m^3$, BaP<0.5 ng/m^3, Pb<0.02 $\mu g/m^3$, CO-<0.1 mg/m^3

Remarks: *The above Sample test results are within the prescribed standard for the above mentioned parameters.*

TERMS AND CONDITION:-

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4. *The test item will not be retained for more than 15 days from the date of issue of test report except in case as required by applicable regulations.*
5. *The laboratory's responsibility under this report is limited to; proven willful negligence.*

*** End Report***

Reviewed by

Approved by

TEST REPORT

Test Report No: ENVLAB/25-26/TR-02051 *Date: 05.05.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**28.04.2025**
			Sample Received on	:	**29.04.2025**
Sample Description	:	**Ambient Air**	Sampling Procedure	:	VCSPL/F-SOP/001, Dt. 04.09.2021
			Sampling Location	:	**MRP**
Environment Condition during Sampling	:	Atmospheric Temp.: 29 – 33°C Barometric Pressure : 755 mm of Hg	Instrument used for Sampling	:	RDS (APM 460 BL), FPS (APM 550), VOC Sampler
Sample Condition	;	Air Tight Sealed and gaseous Sample Solution Refrigerated	Sampling done by	:	Ashutosh Mohanty
Test Started on	:	**29.04.2025**	Test Completed on	:	**04.05.2025**

1. Chemical Testing

A. Atmospheric Pollution

Sl. No	Parameters	Unit	Test Method	National Ambient Air Quality Standard, CPCB, 18th Nov. 2009	Analysis Result
1	Particulate matter as PM_{10}	($\mu g/m^3$)	IS 5182 : Part 23: 2006, RA 2017	**100**	**66.2**
2	Particulate matter as $PM_{2.5}$	($\mu g/m^3$)	IS 5182 (Part 24):2019	**60**	**33.8**
3	Sulphur Oxides as SO_2	($\mu g/m^3$)	IS 5182 (Part 2): 2001, RA 2017	**80**	**19.9**
4	Nitrogen Oxides as NOx	($\mu g/m^3$)	IS 5182 (Part 6): 2006, RA 2017	**80**	**22.6**
5	Carbon monoxide as CO	(mg/m^3)	IS 5182(Part 10):2019	**2**	**0.28**
6	Ozone as O_3	($\mu g/m^3$)	IS 5182 (Part-09):2019	**180**	**7.0**
7	Ammonia as NH_3	($\mu g/m^3$)	IS 5182 (Part 25): 2018	**400**	**<20**
8	Lead as Pb	($\mu g/m^3$)	IS 5182(Part -22):2019	**1**	**<0.02**
9	Nickel as Ni	(ng/m^3)	IS 5182(Part -22):2019	**20**	**<2.5**
10	Arsenic as As	(ng/m^3)	IS 5182(Part -22):2019	**6**	**<1.0**
11	Benzene as C_6H_6	($\mu g/m^3$)	IS 5182 (Part 11):2006	**5**	**<4**
12	Benzo-a-pyrine as BaP	(ng/m^3)	IS 5182 (Part 12):2017	**1**	**<0.5**

BDL Values: SO_2< 4 $\mu g/m^3$, NO_X< 6 $\mu g/m^3$, O_3<5 $\mu g/m^3$, NH_3<20 $\mu g/m^3$, Ni<2.5 ng/m^3, As <1.0 ng/m^3, C_6H_6<4.0 $\mu g/m^3$, BaP<0.5 ng/m^3, Pb<0.02 $\mu g/m^3$, CO-<0.1 mg/m^3

Remarks: *The above Sample test resultsare within the prescribed standard for the above mentioned parameters.*

TERMS AND CONDITION:-

1. *The Test result is relevant only to the item tested.*
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4. *The test item will not be retained for more than 15 days from the date of issue of test report except in case as required by applicable regulations.*
5. *The laboratory's responsibility under this report is limited to; proven willful negligence.*

*** End Report***

Reviewed by

Approved by

TEST REPORT

Test Report No: ENVLAB/25-26/TR-02052 *Date: 05.05.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**28.04.2025**
			Sample Received on	:	**29.04.2025**
Sample Description	:	**Ambient Air**	Sampling Procedure	:	VCSPL/F-SOP/001, Dt. 04.09.2021
			Sampling Location	:	**MRSS**
Environment Condition during Sampling	:	Atmospheric Temp.: 29 – 33°C Barometric Pressure : 755 mm of Hg	Instrument used for Sampling	:	RDS (APM 460 BL), FPS (APM 550), VOC Sampler
Sample Condition	;	Air Tight Sealed and gaseous Sample Solution Refrigerated	Sampling done by	:	Ashutosh Mohanty
Test Started on	:	**29.04.2025**	Test Completed on	:	**04.05.2025**

1. Chemical Testing

A. Atmospheric Pollution

Sl. No	Parameters	Unit	Test Method	National Ambient Air Quality Standard, CPCB, 18th Nov. 2009	Analysis Result
1	Particulate matter as PM_{10}	($\mu g/m^3$)	IS 5182 : Part 23: 2006, RA 2017	**100**	**65.4**
2	Particulate matter as $PM_{2.5}$	($\mu g/m^3$)	IS 5182 (Part 24):2019	**60**	**33.2**
3	Sulphur Oxides as SO_2	($\mu g/m^3$)	IS 5182 (Part 2): 2001, RA 2017	**80**	**20.1**
4	Nitrogen Oxides as NOx	($\mu g/m^3$)	IS 5182 (Part 6): 2006, RA 2017	**80**	**24.5**
5	Carbon monoxide as CO	(mg/m^3)	IS 5182(Part 10):2019	**2**	**0.098**
6	Ozone as O_3	($\mu g/m^3$)	IS 5182 (Part-09):2019	**180**	**6.5**
7	Ammonia as NH_3	($\mu g/m^3$)	IS 5182 (Part 25): 2018	**400**	**<20**
8	Lead as Pb	($\mu g/m^3$)	IS 5182(Part -22):2019	**1**	**<0.02**
9	Nickel as Ni	(ng/m^3)	IS 5182(Part -22):2019	**20**	**<2.5**
10	Arsenic as As	(ng/m^3)	IS 5182(Part -22):2019	**6**	**<1.0**
11	Benzene as C_6H_6	($\mu g/m^3$)	IS 5182 (Part 11):2006	**5**	**<4**
12	Benzo-a-pyrine as BaP	(ng/m^3)	IS 5182 (Part 12):2017	**1**	**<0.5**

BDL Values: SO_2< 4 $\mu g/m^3$, NO_X< 6 $\mu g/m^3$, O_3<5 $\mu g/m^3$, NH_3<20 $\mu g/m^3$, Ni<2.5 ng/m^3, As <1.0 ng/m^3, C_6H_6<4.0 $\mu g/m^3$, BaP<0.5 ng/m^3, Pb<0.02 $\mu g/m^3$, CO-<0.1 mg/m^3

Remarks: *The above Sample test resultsare within the prescribed standard for the above mentioned parameters.*

TERMS AND CONDITION:-

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5. *The laboratory's responsibility under this report is limited to; proven willful negligence.*

*** End Report***

VISIONTEK CONSULTANCY SERVICES PVT. LTD. BBSR

Reviewed by

VISIONTEK CONSULTANCY SERVICES PVT. LTD. BBSR

Approved by

TEST REPORT

Test Report No: ENVLAB/25-26/TR-02053 *Date: 05.05.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**28.04.2025**
			Sample Received on	:	**29.04.2025**
Sample Description	:	**Ambient Air**	Sampling Procedure	:	VCSPL/F-SOP/001, Dt. 04.09.2021
			Sampling Location	:	**R & C LABORATORY**
Environment Condition during Sampling	:	Atmospheric Temp.: 29 – 33°C Barometric Pressure : 755 mm of Hg	Instrument used for Sampling	:	RDS (APM 460 BL), FPS (APM 550), VOC Sampler
Sample Condition	;	Air Tight Sealed and gaseous Sample Solution Refrigerated	Sampling done by	:	Ashutosh Mohanty
Test Started on	:	**29.04.2025**	Test Completed on	:	**04.05.2025**

1. Chemical Testing

A. Atmospheric Pollution

Sl. No	Parameters	Unit	Test Method	National Ambient Air Quality Standard, CPCB, 18th Nov. 2009	Analysis Result
1	Particulate matter as PM_{10}	($\mu g/m^3$)	IS 5182 : Part 23: 2006, RA 2017	**100**	**67.8**
2	Particulate matter as $PM_{2.5}$	($\mu g/m^3$)	IS 5182 (Part 24):2019	**60**	**34.9**
3	Sulphur Oxides as SO_2	($\mu g/m^3$)	IS 5182 (Part 2): 2001, RA 2017	**80**	**21.2**
4	Nitrogen Oxides as NOx	($\mu g/m^3$)	IS 5182 (Part 6): 2006, RA 2017	**80**	**25.8**
5	Carbon monoxide as CO	(mg/m^3)	IS 5182(Part 10):2019	**2**	**0.090**
6	Ozone as O_3	($\mu g/m^3$)	IS 5182 (Part-09):2019	**180**	**7.8**
7	Ammonia as NH_3	($\mu g/m^3$)	IS 5182 (Part 25): 2018	**400**	**<20**
8	Lead as Pb	($\mu g/m^3$)	IS 5182(Part -22):2019	**1**	**<0.02**
9	Nickel as Ni	(ng/m^3)	IS 5182(Part -22):2019	**20**	**<2.5**
10	Arsenic as As	(ng/m^3)	IS 5182(Part -22):2019	**6**	**<1.0**
11	Benzene as C_6H_6	($\mu g/m^3$)	IS 5182 (Part 11):2006	**5**	**<4**
12	Benzo-a-pyrine as BaP	(ng/m^3)	IS 5182 (Part 12):2017	**1**	**<0.5**

BDL Values: SO_2< 4 $\mu g/m^3$, NO_X< 6 $\mu g/m^3$, O_3<5 $\mu g/m^3$, NH_3<20 $\mu g/m^3$, Ni<2.5 ng/m^3, As <1.0 ng/m^3, C_6H_6<4.0 $\mu g/m^3$, BaP<0.5 ng/m^3, Pb<0.02 $\mu g/m^3$, CO-<0.1 mg/m^3

Remarks: *The above Sample test resultsare within the prescribed standard for the above mentioned parameters.*

TERMS AND CONDITION:-

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3. *The laboratory is not responsible for the authenticity of photocopied test report.*
4. *The test item will not be retained for more than 15 days from the date of issue of test report except in case as required by applicable regulations.*
5. *The laboratory's responsibility under this report is limited to: proven willful negligence.*

*** End Report***

Reviewed by

Approved by

TEST REPORT

Test Report No: ENVLAB/25-26/TR-08820 *Date: 06.06.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**21.05.2025**
			Sample Received on	:	**22.05.2025**
Sample Description	:	**Ambient Air**	Sampling Procedure	:	VCSPL/F-SOP/001, Dt. 04.09.2021
			Sampling Location	:	**AUTO GARAGE**
Environment Condition during Sampling	:	Atmospheric Temp.: 29 – 33°C Barometric Pressure : 755 mm of Hg	Instrument used for Sampling	:	RDS (APM 460 BL), FPS (APM 550), VOC Sampler
Sample Condition	;	Air Tight Sealed and gaseous Sample Solution Refrigerated	Sampling done by	:	Ashutosh Mohanty
Test Started on	:	**22.05.2025**	Test Completed on	:	**26.05.2025**

1. Chemical Testing

A. Atmospheric Pollution

Sl. No	Parameters	Unit	Test Method	National Ambient Air Quality Standard, CPCB, 18th Nov. 2009	Analysis Result
1	Particulate matter as PM_{10}	($\mu g/m^3$)	IS 5182 : Part 23: 2006, RA 2017	**100**	**60.4**
2	Particulate matter as $PM_{2.5}$	($\mu g/m^3$)	IS 5182 (Part 24):2019	**60**	**31.1**
3	Sulphur Oxides as SO_2	($\mu g/m^3$)	IS 5182 (Part 2): 2001, RA 2017	**80**	**19.8**
4	Nitrogen Oxides as NOx	($\mu g/m^3$)	IS 5182 (Part 6): 2006, RA 2017	**80**	**21.6**
5	Carbon monoxide as CO	(mg/m^3)	IS 5182(Part 10):2019	**2**	**0.72**
6	Ozone as O_3	($\mu g/m^3$)	IS 5182 (Part-09):2019	**180**	**6.9**
7	Ammonia as NH_3	($\mu g/m^3$)	IS 5182 (Part 25): 2018	**400**	**<20**
8	Lead as Pb	($\mu g/m^3$)	IS 5182(Part -22):2019	**1**	**<0.02**
9	Nickel as Ni	(ng/m^3)	IS 5182(Part -22):2019	**20**	**<2.5**
10	Arsenic as As	(ng/m^3)	IS 5182(Part -22):2019	**6**	**<1.0**
11	Benzene as C_6H_6	($\mu g/m^3$)	IS 5182 (Part 11):2006	**5**	**<4**
12	Benzo-a-pyrine as BaP	(ng/m^3)	IS 5182 (Part 12):2017	**1**	**<0.5**

BDL Values: SO_2< 4 $\mu g/m^3$, NO_X< 6 $\mu g/m^3$, O_3<5 $\mu g/m^3$, NH_3<20 $\mu g/m^3$, Ni<2.5 ng/m^3, As <1.0 ng/m^3, C_6H_6<4.0 $\mu g/m^3$, BaP<0.5 ng/m^3, Pb<0.02 $\mu g/m^3$, CO-<0.1 mg/m^3

Remarks: *The above Sample test results are within the prescribed standard for the above mentioned parameters.*

TERMS AND CONDITION:-

1. *The Test result is relevant only to the item tested.*
2. *This report shall not be reproduced in full or part without written approval of Visiontek consultancy services.(P) Ltd*
3. *The laboratory is not responsible for the authenticity of photocopied test report.*
4. *The test item will not be retained for more than 15 days from the date of issue of test report except in case as required by applicable regulations.*
5. *The laboratory's responsibility under this report is limited to; proven willful negligence.*

*** End Report***

Reviewed by

Approved by

TEST REPORT

Test Report No: ENVLAB/25-26/TR-08821 *Date: 06.06.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**21.05.2025**
			Sample Received on	:	**22.05.2025**
Sample Description	:	**Ambient Air**	Sampling Procedure	:	VCSPL/F-SOP/001, Dt. 04.09.2021
			Sampling Location	:	**MRP**
Environment Condition during Sampling	:	Atmospheric Temp.: 29 – 33°C Barometric Pressure : 755 mm of Hg	Instrument used for Sampling	:	RDS (APM 460 BL), FPS (APM 550), VOC Sampler
Sample Condition	;	Air Tight Sealed and gaseous Sample Solution Refrigerated	Sampling done by	:	Ashutosh Mohanty
Test Started on	:	**22.05.2025**	Test Completed on	:	**26.05.2025**

1. Chemical Testing

A. Atmospheric Pollution

Sl. No	Parameters	Unit	Test Method	National Ambient Air Quality Standard, CPCB, 18th Nov. 2009	Analysis Result
1	Particulate matter as PM_{10}	($\mu g/m^3$)	IS 5182 : Part 23: 2006, RA 2017	**100**	**65.4**
2	Particulate matter as $PM_{2.5}$	($\mu g/m^3$)	IS 5182 (Part 24):2019	**60**	**33.1**
3	Sulphur Oxides as SO_2	($\mu g/m^3$)	IS 5182 (Part 2): 2001, RA 2017	**80**	**19.5**
4	Nitrogen Oxides as NOx	($\mu g/m^3$)	IS 5182 (Part 6): 2006, RA 2017	**80**	**22.1**
5	Carbon monoxide as CO	(mg/m^3)	IS 5182(Part 10):2019	**2**	**0.25**
6	Ozone as O_3	($\mu g/m^3$)	IS 5182 (Part-09):2019	**180**	**6.8**
7	Ammonia as NH_3	($\mu g/m^3$)	IS 5182 (Part 25): 2018	**400**	**<20**
8	Lead as Pb	($\mu g/m^3$)	IS 5182(Part -22):2019	**1**	**<0.02**
9	Nickel as Ni	(ng/m^3)	IS 5182(Part -22):2019	**20**	**<2.5**
10	Arsenic as As	(ng/m^3)	IS 5182(Part -22):2019	**6**	**<1.0**
11	Benzene as C_6H_6	($\mu g/m^3$)	IS 5182 (Part 11):2006	**5**	**<4**
12	Benzo-a-pyrine as BaP	(ng/m^3)	IS 5182 (Part 12):2017	**1**	**<0.5**

BDL Values: SO_2< 4 $\mu g/m^3$, NO_X< 6 $\mu g/m^3$, O_3<5 $\mu g/m^3$, NH_3<20 $\mu g/m^3$, Ni<2.5 ng/m^3, As <1.0 ng/m^3, C_6H_6<4.0 $\mu g/m^3$, BaP<0.5 ng/m^3, Pb<0.02 $\mu g/m^3$, CO-<0.1 mg/m^3

Remarks: *The above Sample test resultsare within the prescribed standard for the above mentioned parameters.*

TERMS AND CONDITION: -

1. *The Test result is relevant only to the item tested.*
2. *This report shall not be reproduced in full or part without written approval of Visiontek consultancy services. (P) Ltd*
3. *The laboratory is not responsible for the authenticity of photocopied test report.*
4. *The test item will not be retained for more than 15 days from the date of issue of test report except in case as required by applicable regulations.*
5. *The laboratory's responsibility under this report is limited to; proven willful negligence.*

*** End Report***

Reviewed by

Approved by

TEST REPORT

Test Report No: ENVLAB/25-26/TR-08822 *Date: 06.06.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**21.05.2025**
			Sample Received on	:	**22.05.2025**
Sample Description	:	**Ambient Air**	Sampling Procedure	:	VCSPL/F-SOP/001, Dt. 04.09.2021
			Sampling Location	:	**MRSS**
Environment Condition during Sampling	:	Atmospheric Temp.: 29 – 33°C Barometric Pressure : 755 mm of Hg	Instrument used for Sampling	:	RDS (APM 460 BL), FPS (APM 550), VOC Sampler
Sample Condition	;	Air Tight Sealed and gaseous Sample Solution Refrigerated	Sampling done by	:	Ashutosh Mohanty
Test Started on	:	**22.05.2025**	Test Completed on	:	**26.05.2025**

1. Chemical Testing

A. Atmospheric Pollution

Sl. No	Parameters	Unit	Test Method	National Ambient Air Quality Standard, CPCB, 18th Nov. 2009	Analysis Result
1	Particulate matter as PM_{10}	($\mu g/m^3$)	IS 5182 : Part 23: 2006, RA 2017	**100**	**63.2**
2	Particulate matter as $PM_{2.5}$	($\mu g/m^3$)	IS 5182 (Part 24):2019	**60**	**32.1**
3	Sulphur Oxides as SO_2	($\mu g/m^3$)	IS 5182 (Part 2): 2001, RA 2017	**80**	**20.5**
4	Nitrogen Oxides as NOx	($\mu g/m^3$)	IS 5182 (Part 6): 2006, RA 2017	**80**	**24.2**
5	Carbon monoxide as CO	(mg/m^3)	IS 5182(Part 10):2019	**2**	**0.090**
6	Ozone as O_3	($\mu g/m^3$)	IS 5182 (Part-09):2019	**180**	**6.2**
7	Ammonia as NH_3	($\mu g/m^3$)	IS 5182 (Part 25): 2018	**400**	**<20**
8	Lead as Pb	($\mu g/m^3$)	IS 5182(Part -22):2019	**1**	**<0.02**
9	Nickel as Ni	(ng/m^3)	IS 5182(Part -22):2019	**20**	**<2.5**
10	Arsenic as As	(ng/m^3)	IS 5182(Part -22):2019	**6**	**<1.0**
11	Benzene as C_6H_6	($\mu g/m^3$)	IS 5182 (Part 11):2006	**5**	**<4**
12	Benzo-a-pyrine as BaP	(ng/m^3)	IS 5182 (Part 12):2017	**1**	**<0.5**

BDL Values: SO_2< 4 $\mu g/m^3$, NO_X< 6 $\mu g/m^3$, O_3<5 $\mu g/m^3$, NH_3<20 $\mu g/m^3$, Ni<2.5 ng/m^3, As <1.0 ng/m^3, C_6H_6<4.0 $\mu g/m^3$, BaP<0.5 ng/m^3, Pb<0.02 $\mu g/m^3$, CO-<0.1 mg/m^3

Remarks: *The above Sample test resultsare within the prescribed standard for the above mentioned parameters.*

TERMS AND CONDITION: -

1. *The Test result is relevant only to the item tested.*
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5. *The laboratory's responsibility under this report is limited to: proven willful negligence.*

*** End Report***

Reviewed by

VISIONTEK CONSULTANCY SERVICES PVT. LTD. BBSR

Approved by

VISIONTEK CONSULTANCY SERVICES PVT. LTD. BBSR

TEST REPORT

Test Report No: ENVLAB/25-26/TR-08823 *Date: 06.06.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**21.05.2025**
			Sample Received on	:	**22.05.2025**
Sample Description	:	**Ambient Air**	Sampling Procedure	:	VCSPL/F-SOP/001, Dt. 04.09.2021
			Sampling Location	:	**R & C LABORATORY**
Environment Condition during Sampling	:	Atmospheric Temp.: 29 – 33°C Barometric Pressure : 755 mm of Hg	Instrument used for Sampling	:	RDS (APM 460 BL), FPS (APM 550), VOC Sampler
Sample Condition	;	Air Tight Sealed and gaseous Sample Solution Refrigerated	Sampling done by	:	Ashutosh Mohanty
Test Started on	:	**22.05.2025**	Test Completed on	:	**26.05.2025**

1. Chemical Testing

A. Atmospheric Pollution

Sl. No	Parameters	Unit	Test Method	National Ambient Air Quality Standard, CPCB, 18th Nov. 2009	Analysis Result
1	Particulate matter as PM_{10}	($\mu g/m^3$)	IS 5182 : Part 23: 2006, RA 2017	**100**	**64.4**
2	Particulate matter as $PM_{2.5}$	($\mu g/m^3$)	IS 5182 (Part 24):2019	**60**	**32.9**
3	Sulphur Oxides as SO_2	($\mu g/m^3$)	IS 5182 (Part 2): 2001, RA 2017	**80**	**20.8**
4	Nitrogen Oxides as NOx	($\mu g/m^3$)	IS 5182 (Part 6): 2006, RA 2017	**80**	**24.6**
5	Carbon monoxide as CO	(mg/m^3)	IS 5182(Part 10):2019	**2**	**0.095**
6	Ozone as O_3	($\mu g/m^3$)	IS 5182 (Part-09):2019	**180**	**7.5**
7	Ammonia as NH_3	($\mu g/m^3$)	IS 5182 (Part 25): 2018	**400**	**<20**
8	Lead as Pb	($\mu g/m^3$)	IS 5182(Part -22):2019	**1**	**<0.02**
9	Nickel as Ni	(ng/m^3)	IS 5182(Part -22):2019	**20**	**<2.5**
10	Arsenic as As	(ng/m^3)	IS 5182(Part -22):2019	**6**	**<1.0**
11	Benzene as C_6H_6	($\mu g/m^3$)	IS 5182 (Part 11):2006	**5**	**<4**
12	Benzo-a-pyrine as BaP	(ng/m^3)	IS 5182 (Part 12):2017	**1**	**<0.5**

BDL Values: SO_2< 4 $\mu g/m^3$, NO_X< 6 $\mu g/m^3$, O_3<5 $\mu g/m^3$, NH_3<20 $\mu g/m^3$, Ni<2.5 ng/m^3, As <1.0 ng/m^3, C_6H_6<4.0 $\mu g/m^3$, BaP<0.5 ng/m^3, Pb<0.02 $\mu g/m^3$, CO-<0.1 mg/m^3

Remarks: *The above Sample test resultsare within the prescribed standard for the above mentioned parameters.*

TERMS AND CONDITION: -

1. *The Test result is relevant only to the item tested.*
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5. *The laboratory's responsibility under this report is limited to; proven willful negligence.*

*** End Report***

Reviewed by

Approved by

TEST REPORT

Test Report No: ENVLAB/25-26/TR-09596 *Date: 07.07.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**25.06.2025**
			Sample Received on	:	**26.06.2025**
Sample Description	:	**Ambient Air**	Sampling Procedure	:	VCSPL/F-SOP/001, Dt. 04.09.2021
			Sampling Location	:	**AUTO GARAGE**
Environment Condition during Sampling	:	Atmospheric Temp.: 29 – 33°C Barometric Pressure : 755 mm of Hg	Instrument used for Sampling	:	RDS (APM 460 BL), FPS (APM 550), VOC Sampler
Sample Condition	;	Air Tight Sealed and gaseous Sample Solution Refrigerated	Sampling done by	:	**Biswajeet Bhoi**
Test Started on	:	**26.06.2025**	Test Completed on	:	**29.06.2025**

1. Chemical Testing

A. Atmospheric Pollution

Sl. No	Parameters	Unit	Test Method	National Ambient Air Quality Standard, CPCB, 18th Nov. 2009	Analysis Result
1	Particulate matter as PM_{10}	($\mu g/m^3$)	IS 5182 : Part 23: 2006, RA 2017	**100**	**58.2**
2	Particulate matter as $PM_{2.5}$	($\mu g/m^3$)	IS 5182 (Part 24):2019	**60**	**31.4**
3	Sulphur Oxides as SO_2	($\mu g/m^3$)	IS 5182 (Part 2): 2001, RA 2017	**80**	**20.2**
4	Nitrogen Oxides as NOx	($\mu g/m^3$)	IS 5182 (Part 6): 2006, RA 2017	**80**	**21.1**
5	Carbon monoxide as CO	(mg/m^3)	IS 5182(Part 10):2019	**2**	**0.65**
6	Ozone as O_3	($\mu g/m^3$)	IS 5182 (Part-09):2019	**180**	**6.7**
7	Ammonia as NH_3	($\mu g/m^3$)	IS 5182 (Part 25): 2018	**400**	**<20**
8	Lead as Pb	($\mu g/m^3$)	IS 5182(Part -22):2019	**1**	**<0.02**
9	Nickel as Ni	(ng/m^3)	IS 5182(Part -22):2019	**20**	**<2.5**
10	Arsenic as As	(ng/m^3)	IS 5182(Part -22):2019	**6**	**<1.0**
11	Benzene as C_6H_6	($\mu g/m^3$)	IS 5182 (Part 11):2006	**5**	**<4**
12	Benzo-a-pyrine as BaP	(ng/m^3)	IS 5182 (Part 12):2017	**1**	**<0.5**

BDL Values: SO_2< 4 $\mu g/m^3$, NO_X< 6 $\mu g/m^3$, O_3<5 $\mu g/m^3$, NH_3<20 $\mu g/m^3$, Ni<2.5 ng/m^3, As <1.0 ng/m^3, C_6H_6<4.0 $\mu g/m^3$, BaP<0.5 ng/m^3, Pb<0.02 $\mu g/m^3$, CO-<0.1 mg/m^3

Remarks: *The above Sample test results are within the prescribed standard for the above mentioned parameters.*

TERMS AND CONDITION: -

1. *The Test result is relevant only to the item tested.*
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4. *The test item will not be retained for more than 15 days from the date of issue of test report except in case as required by applicable regulations.*
5. *The laboratory's responsibility under this report is limited to: proven willful negligence.*

*** End Report***

Reviewed by

Approved by

TEST REPORT

Test Report No: ENVLAB/25-26/TR-09597 *Date: 07.07.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**25.06.2025**
			Sample Received on	:	**26.06.2025**
Sample Description	:	**Ambient Air**	Sampling Procedure	:	VCSPL/F-SOP/001, Dt. 04.09.2021
			Sampling Location	:	**MRP**
Environment Condition during Sampling	:	Atmospheric Temp.: 29 – 33°C Barometric Pressure : 755 mm of Hg	Instrument used for Sampling	:	RDS (APM 460 BL), FPS (APM 550), VOC Sampler
Sample Condition	;	Air Tight Sealed and gaseous Sample Solution Refrigerated	Sampling done by	:	**Biswajeet Bhoi**
Test Started on	:	**26.06.2025**	Test Completed on	:	**29.06.2025**

1. Chemical Testing

A. Atmospheric Pollution

Sl. No	Parameters	Unit	Test Method	National Ambient Air Quality Standard, CPCB, 18th Nov. 2009	Analysis Result
1	Particulate matter as PM_{10}	($\mu g/m^3$)	IS 5182 : Part 23: 2006, RA 2017	**100**	**59.7**
2	Particulate matter as $PM_{2.5}$	($\mu g/m^3$)	IS 5182 (Part 24):2019	**60**	**32.2**
3	Sulphur Oxides as SO_2	($\mu g/m^3$)	IS 5182 (Part 2): 2001, RA 2017	**80**	**18.8**
4	Nitrogen Oxides as NOx	($\mu g/m^3$)	IS 5182 (Part 6): 2006, RA 2017	**80**	**21.9**
5	Carbon monoxide as CO	(mg/m^3)	IS 5182(Part 10):2019	**2**	**0.21**
6	Ozone as O_3	($\mu g/m^3$)	IS 5182 (Part-09):2019	**180**	**6.5**
7	Ammonia as NH_3	($\mu g/m^3$)	IS 5182 (Part 25): 2018	**400**	**<20**
8	Lead as Pb	($\mu g/m^3$)	IS 5182(Part -22):2019	**1**	**<0.02**
9	Nickel as Ni	(ng/m^3)	IS 5182(Part -22):2019	**20**	**<2.5**
10	Arsenic as As	(ng/m^3)	IS 5182(Part -22):2019	**6**	**<1.0**
11	Benzene as C_6H_6	($\mu g/m^3$)	IS 5182 (Part 11):2006	**5**	**<4**
12	Benzo-a-pyrine as BaP	(ng/m^3)	IS 5182 (Part 12):2017	**1**	**<0.5**

BDL Values: SO_2< 4 $\mu g/m^3$, NO_X< 6 $\mu g/m^3$, O_3<5 $\mu g/m^3$, NH_3<20 $\mu g/m^3$, Ni<2.5 ng/m^3, As <1.0 ng/m^3, C_6H_6<4.0 $\mu g/m^3$, BaP<0.5 ng/m^3, Pb<0.02 $\mu g/m^3$, CO-<0.1 mg/m^3

Remarks: *The above Sample test resultsare within the prescribed standard for the above mentioned parameters.*

TERMS AND CONDITION: -

1. *The Test result is relevant only to the item tested.*
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4. *The test item will not be retained for more than 15 days from the date of issue of test report except in case as required by applicable regulations.*
5. *The laboratory's responsibility under this report is limited to: proven willful negligence.*

*** End Report***

Reviewed by

Approved by

TEST REPORT

Test Report No: ENVLAB/25-26/TR-09598 *Date: 07.07.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**25.06.2025**
			Sample Received on	:	**26.06.2025**
Sample Description	:	**Ambient Air**	Sampling Procedure	:	VCSPL/F-SOP/001, Dt. 04.09.2021
			Sampling Location	:	**MRSS**
Environment Condition during Sampling	:	Atmospheric Temp.: 29 – 33°C Barometric Pressure : 755 mm of Hg	Instrument used for Sampling	:	RDS (APM 460 BL), FPS (APM 550), VOC Sampler
Sample Condition	;	Air Tight Sealed and gaseous Sample Solution Refrigerated	Sampling done by	:	**Biswajeet Bhoi**
Test Started on	:	**26.06.2025**	Test Completed on	:	**29.06.2025**

1. Chemical Testing

A. Atmospheric Pollution

Sl. No	Parameters	Unit	Test Method	National Ambient Air Quality Standard, CPCB, 18th Nov. 2009	Analysis Result
1	Particulate matter as PM_{10}	($\mu g/m^3$)	IS 5182 : Part 23: 2006, RA 2017	**100**	**58.9**
2	Particulate matter as $PM_{2.5}$	($\mu g/m^3$)	IS 5182 (Part 24):2019	**60**	**31.5**
3	Sulphur Oxides as SO_2	($\mu g/m^3$)	IS 5182 (Part 2): 2001, RA 2017	**80**	**20.1**
4	Nitrogen Oxides as NOx	($\mu g/m^3$)	IS 5182 (Part 6): 2006, RA 2017	**80**	**23.9**
5	Carbon monoxide as CO	(mg/m^3)	IS 5182(Part 10):2019	**2**	**0.12**
6	Ozone as O_3	($\mu g/m^3$)	IS 5182 (Part-09):2019	**180**	**6.1**
7	Ammonia as NH_3	($\mu g/m^3$)	IS 5182 (Part 25): 2018	**400**	**<20**
8	Lead as Pb	($\mu g/m^3$)	IS 5182(Part -22):2019	**1**	**<0.02**
9	Nickel as Ni	(ng/m^3)	IS 5182(Part -22):2019	**20**	**<2.5**
10	Arsenic as As	(ng/m^3)	IS 5182(Part -22):2019	**6**	**<1.0**
11	Benzene as C_6H_6	($\mu g/m^3$)	IS 5182 (Part 11):2006	**5**	**<4**
12	Benzo-a-pyrine as BaP	(ng/m^3)	IS 5182 (Part 12):2017	**1**	**<0.5**

BDL Values: SO_2< 4 $\mu g/m^3$, NO_X< 6 $\mu g/m^3$, O_3<5 $\mu g/m^3$, NH_3<20 $\mu g/m^3$, Ni<2.5 ng/m^3, As <1.0 ng/m^3, C_6H_6<4.0 $\mu g/m^3$, BaP<0.5 ng/m^3, Pb<0.02 $\mu g/m^3$, CO-<0.1 mg/m^3

Remarks: *The above Sample test resultsare within the prescribed standard for the above mentioned parameters.*

TERMS AND CONDITION: -

1. *The Test result is relevant only to the item tested.*
2. *This report shall not be reproduced in full or part without written approval of Visiontek consultancy services. (P) Ltd*
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4. *The test item will not be retained for more than 15 days from the date of issue of test report except in case as required by applicable regulations.*
5. *The laboratory's responsibility under this report is limited to: proven willful negligence.*

*** End Report***

Reviewed by

Approved by

TEST REPORT

Test Report No: ENVLAB/25-26/TR-09599 *Date: 07.07.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**25.06.2025**
			Sample Received on	:	**26.06.2025**
Sample Description	:	**Ambient Air**	Sampling Procedure	:	VCSPL/F-SOP/001, Dt. 04.09.2021
			Sampling Location	:	**R & C LABORATORY**
Environment Condition during Sampling	:	Atmospheric Temp.: 29 – 33°C Barometric Pressure : 755 mm of Hg	Instrument used for Sampling	:	RDS (APM 460 BL), FPS (APM 550), VOC Sampler
Sample Condition	;	Air Tight Sealed and gaseous Sample Solution Refrigerated	Sampling done by	:	**Biswajeet Bhoi**
Test Started on	:	**26.06.2025**	Test Completed on	:	**29.06.2025**

1. Chemical Testing

A. Atmospheric Pollution

Sl. No	Parameters	Unit	Test Method	National Ambient Air Quality Standard, CPCB, 18th Nov. 2009	Analysis Result
1	Particulate matter as PM_{10}	($\mu g/m^3$)	IS 5182 : Part 23: 2006, RA 2017	**100**	**57.2**
2	Particulate matter as $PM_{2.5}$	($\mu g/m^3$)	IS 5182 (Part 24):2019	**60**	**31.3**
3	Sulphur Oxides as SO_2	($\mu g/m^3$)	IS 5182 (Part 2): 2001, RA 2017	**80**	**20.2**
4	Nitrogen Oxides as NOx	($\mu g/m^3$)	IS 5182 (Part 6): 2006, RA 2017	**80**	**23.8**
5	Carbon monoxide as CO	(mg/m^3)	IS 5182(Part 10):2019	**2**	**0.09**
6	Ozone as O_3	($\mu g/m^3$)	IS 5182 (Part-09):2019	**180**	**6.6**
7	Ammonia as NH_3	($\mu g/m^3$)	IS 5182 (Part 25): 2018	**400**	**<20**
8	Lead as Pb	($\mu g/m^3$)	IS 5182(Part -22):2019	**1**	**<0.02**
9	Nickel as Ni	(ng/m^3)	IS 5182(Part -22):2019	**20**	**<2.5**
10	Arsenic as As	(ng/m^3)	IS 5182(Part -22):2019	**6**	**<1.0**
11	Benzene as C_6H_6	($\mu g/m^3$)	IS 5182 (Part 11):2006	**5**	**<4**
12	Benzo-a-pyrine as BaP	(ng/m^3)	IS 5182 (Part 12):2017	**1**	**<0.5**

BDL Values: SO_2< 4 $\mu g/m^3$, NO_X< 6 $\mu g/m^3$, O_3<5 $\mu g/m^3$, NH_3<20 $\mu g/m^3$, Ni<2.5 ng/m^3, As <1.0 ng/m^3, C_6H_6<4.0 $\mu g/m^3$, BaP<0.5 ng/m^3, Pb<0.02 $\mu g/m^3$, CO-<0.1 mg/m^3

Remarks: *The above Sample test resultsare within the prescribed standard for the above mentioned parameters.*

TERMS AND CONDITION: -

1. *The Test result is relevant only to the item tested.*
2. *This report shall not be reproduced in full or part without written approval of Visiontek consultancy services. (P) Ltd*
3. *The laboratory is not responsible for the authenticity of photocopied test report.*
4. *The test item will not be retained for more than 15 days from the date of issue of test report except in case as required by applicable regulations.*
5. *The laboratory's responsibility under this report is limited to; proven willful negligence.*

*** End Report***

Reviewed by

Approved by

TEST REPORT

Test Report No: ENVLAB/25-26/TR-11062 *Date: 06.08.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**24.07.2025**
			Sample Received on	:	**25.07.2025**
Sample Description	:	**Ambient Air**	Sampling Procedure	:	VCSPL/F-SOP/001, Dt. 04.09.2021
			Sampling Location	:	**AUTO GARAGE**
Environment Condition during Sampling	:	Atmospheric Temp.: 29 – 33°C Barometric Pressure : 755 mm of Hg	Instrument used for Sampling	:	RDS (APM 460 BL), FPS (APM 550), VOC Sampler
Sample Condition	;	Air Tight Sealed and gaseous Sample Solution Refrigerated	Sampling done by	:	**Bibek Tripathy**
Test Started on	:	**26.07.2025**	Test Completed on	:	**29.07.2025**

1. Chemical Testing

A. Atmospheric Pollution

Sl. No	Parameters	Unit	Test Method	National Ambient Air Quality Standard, CPCB, 18th Nov. 2009	Analysis Result
1	Particulate matter as PM_{10}	($\mu g/m^3$)	IS 5182 : Part 23: 2006, RA 2017	**100**	**55.5**
2	Particulate matter as $PM_{2.5}$	($\mu g/m^3$)	IS 5182 (Part 24):2019	**60**	**30.9**
3	Sulphur Oxides as SO_2	($\mu g/m^3$)	IS 5182 (Part 2): 2001, RA 2017	**80**	**19.9**
4	Nitrogen Oxides as NOx	($\mu g/m^3$)	IS 5182 (Part 6): 2006, RA 2017	**80**	**20.8**
5	Carbon monoxide as CO	(mg/m^3)	IS 5182(Part 10):2019	**2**	**0.64**
6	Ozone as O_3	($\mu g/m^3$)	IS 5182 (Part-09):2019	**180**	**6.5**
7	Ammonia as NH_3	($\mu g/m^3$)	IS 5182 (Part 25): 2018	**400**	**<20**
8	Lead as Pb	($\mu g/m^3$)	IS 5182(Part -22):2019	**1**	**<0.02**
9	Nickel as Ni	(ng/m^3)	IS 5182(Part -22):2019	**20**	**<2.5**
10	Arsenic as As	(ng/m^3)	IS 5182(Part -22):2019	**6**	**<1.0**
11	Benzene as C_6H_6	($\mu g/m^3$)	IS 5182 (Part 11):2006	**5**	**<4**
12	Benzo-a-pyrine as BaP	(ng/m^3)	IS 5182 (Part 12):2017	**1**	**<0.5**

BDL Values: SO_2< 4 $\mu g/m^3$, NO_X< 6 $\mu g/m^3$, O_3<5 $\mu g/m^3$, NH_3<20 $\mu g/m^3$, Ni<2.5 ng/m^3, As <1.0 ng/m^3, C_6H_6<4.0 $\mu g/m^3$, BaP<0.5 ng/m^3, Pb<0.02 $\mu g/m^3$, CO-<0.1 mg/m^3

Remarks: *The above Sample test results are within the prescribed standard for the above mentioned parameters.*

TERMS AND CONDITION: -

1. *The Test result is relevant only to the item tested.*
2. *This report shall not be reproduced in full or part without written approval of Visiontek consultancy services. (P) Ltd*
3. *The laboratory is not responsible for the authenticity of photocopied test report.*
4. *The test item will not be retained for more than 15 days from the date of issue of test report except in case as required by applicable regulations.*
5. *The laboratory's responsibility under this report is limited to: proven willful negligence.*

*** End Report***

Reviewed by

VISIONTEK CONSULTANCY SERVICES PVT. LTD. BBSR

Approved by

VISIONTEK CONSULTANCY SERVICES PVT. LTD. BBSR

TEST REPORT

Test Report No: ENVLAB/25-26/TR-11063 *Date: 06.08.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**24.07.2025**
			Sample Received on	:	**25.07.2025**
Sample Description	:	**Ambient Air**	Sampling Procedure	:	VCSPL/F-SOP/001, Dt. 04.09.2021
			Sampling Location	:	**MRP**
Environment Condition during Sampling	:	Atmospheric Temp.: 29 – 33°C Barometric Pressure : 755 mm of Hg	Instrument used for Sampling	:	RDS (APM 460 BL), FPS (APM 550), VOC Sampler
Sample Condition	;	Air Tight Sealed and gaseous Sample Solution Refrigerated	Sampling done by	:	**Bibek Tripathy**
Test Started on	:	**26.07.2025**	Test Completed on	:	**29.07.2025**

1. Chemical Testing

A. Atmospheric Pollution

Sl. No	Parameters	Unit	Test Method	National Ambient Air Quality Standard, CPCB, 18th Nov. 2009	Analysis Result
1	Particulate matter as PM_{10}	($\mu g/m^3$)	IS 5182 : Part 23: 2006, RA 2017	**100**	**56.2**
2	Particulate matter as $PM_{2.5}$	($\mu g/m^3$)	IS 5182 (Part 24):2019	**60**	**31.8**
3	Sulphur Oxides as SO_2	($\mu g/m^3$)	IS 5182 (Part 2): 2001, RA 2017	**80**	**18.4**
4	Nitrogen Oxides as NOx	($\mu g/m^3$)	IS 5182 (Part 6): 2006, RA 2017	**80**	**21.3**
5	Carbon monoxide as CO	(mg/m^3)	IS 5182(Part 10):2019	**2**	**0.20**
6	Ozone as O_3	($\mu g/m^3$)	IS 5182 (Part-09):2019	**180**	**6.53**
7	Ammonia as NH_3	($\mu g/m^3$)	IS 5182 (Part 25): 2018	**400**	**<20**
8	Lead as Pb	($\mu g/m^3$)	IS 5182(Part -22):2019	**1**	**<0.02**
9	Nickel as Ni	(ng/m^3)	IS 5182(Part -22):2019	**20**	**<2.5**
10	Arsenic as As	(ng/m^3)	IS 5182(Part -22):2019	**6**	**<1.0**
11	Benzene as C_6H_6	($\mu g/m^3$)	IS 5182 (Part 11):2006	**5**	**<4**
12	Benzo-a-pyrine as BaP	(ng/m^3)	IS 5182 (Part 12):2017	**1**	**<0.5**

BDL Values: SO_2< 4 $\mu g/m^3$, NO_X< 6 $\mu g/m^3$, O_3<5 $\mu g/m^3$, NH_3<20 $\mu g/m^3$, Ni<2.5 ng/m^3, As <1.0 ng/m^3, C_6H_6<4.0 $\mu g/m^3$, BaP<0.5 ng/m^3, Pb<0.02 $\mu g/m^3$, CO-<0.1 mg/m^3

Remarks: *The above Sample test resultsare within the prescribed standard for the above mentioned parameters.*

TERMS AND CONDITION: -

1. *The Test result is relevant only to the item tested.*
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5. *The laboratory's responsibility under this report is limited to; proven willful negligence.*

*** End Report***

Reviewed by

VISIONTEK CONSULTANCY SERVICES PVT. LTD. BBSR

Approved by

VISIONTEK CONSULTANCY SERVICES PVT. LTD. BBSR

TEST REPORT

Test Report No: ENVLAB/25-26/TR-11064 *Date: 06.08.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**24.07.2025**
			Sample Received on	:	**25.07.2025**
Sample Description	:	**Ambient Air**	Sampling Procedure	:	VCSPL/F-SOP/001, Dt. 04.09.2021
			Sampling Location	:	**MRSS**
Environment Condition during Sampling	:	Atmospheric Temp.: 29 – 33°C Barometric Pressure : 755 mm of Hg	Instrument used for Sampling	:	RDS (APM 460 BL), FPS (APM 550), VOC Sampler
Sample Condition	;	Air Tight Sealed and gaseous Sample Solution Refrigerated	Sampling done by	:	**Bibek Tripathy**
Test Started on	:	**26.07.2025**	Test Completed on	:	**29.07.2025**

1. Chemical Testing

A. Atmospheric Pollution

Sl. No	Parameters	Unit	Test Method	National Ambient Air Quality Standard, CPCB, 18th Nov. 2009	Analysis Result
1	Particulate matter as PM_{10}	($\mu g/m^3$)	IS 5182 : Part 23: 2006, RA 2017	**100**	**54.7**
2	Particulate matter as $PM_{2.5}$	($\mu g/m^3$)	IS 5182 (Part 24):2019	**60**	**30.8**
3	Sulphur Oxides as SO_2	($\mu g/m^3$)	IS 5182 (Part 2): 2001, RA 2017	**80**	**19.9**
4	Nitrogen Oxides as NOx	($\mu g/m^3$)	IS 5182 (Part 6): 2006, RA 2017	**80**	**22.4**
5	Carbon monoxide as CO	(mg/m^3)	IS 5182(Part 10):2019	**2**	**0.13**
6	Ozone as O_3	($\mu g/m^3$)	IS 5182 (Part-09):2019	**180**	**6.2**
7	Ammonia as NH_3	($\mu g/m^3$)	IS 5182 (Part 25): 2018	**400**	**<20**
8	Lead as Pb	($\mu g/m^3$)	IS 5182(Part -22):2019	**1**	**<0.02**
9	Nickel as Ni	(ng/m^3)	IS 5182(Part -22):2019	**20**	**<2.5**
10	Arsenic as As	(ng/m^3)	IS 5182(Part -22):2019	**6**	**<1.0**
11	Benzene as C_6H_6	($\mu g/m^3$)	IS 5182 (Part 11):2006	**5**	**<4**
12	Benzo-a-pyrine as BaP	(ng/m^3)	IS 5182 (Part 12):2017	**1**	**<0.5**

BDL Values: SO_2< 4 $\mu g/m^3$, NO_X< 6 $\mu g/m^3$, O_3<5 $\mu g/m^3$, NH_3<20 $\mu g/m^3$, Ni<2.5 ng/m^3, As <1.0 ng/m^3, C_6H_6<4.0 $\mu g/m^3$, BaP<0.5 ng/m^3, Pb<0.02 $\mu g/m^3$, CO-<0.1 mg/m^3

Remarks: *The above Sample test resultsare within the prescribed standard for the above mentioned parameters.*

TERMS AND CONDITION: -

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VISIONTEK CONSULTANCY SERVICES PVT. LTD. BBSR

Approved by

VISIONTEK CONSULTANCY SERVICES PVT. LTD. BBSR

TEST REPORT

Test Report No: ENVLAB/25-26/TR-11065 *Date: 06.08.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**24.07.2025**
			Sample Received on	:	**25.07.2025**
Sample Description	:	**Ambient Air**	Sampling Procedure	:	VCSPL/F-SOP/001, Dt. 04.09.2021
			Sampling Location	:	**R & C LABORATORY**
Environment Condition during Sampling	:	Atmospheric Temp.: 29 – 33°C Barometric Pressure : 755 mm of Hg	Instrument used for Sampling	:	RDS (APM 460 BL), FPS (APM 550), VOC Sampler
Sample Condition	;	Air Tight Sealed and gaseous Sample Solution Refrigerated	Sampling done by	:	**Bibek Tripathy**
Test Started on	:	**26.07.2025**	Test Completed on	:	**29.07.2025**

1. Chemical Testing

A. Atmospheric Pollution

Sl. No	Parameters	Unit	Test Method	National Ambient Air Quality Standard, CPCB, 18th Nov. 2009	Analysis Result
1	Particulate matter as PM_{10}	($\mu g/m^3$)	IS 5182 : Part 23: 2006, RA 2017	**100**	**53.8**
2	Particulate matter as $PM_{2.5}$	($\mu g/m^3$)	IS 5182 (Part 24):2019	**60**	**30.6**
3	Sulphur Oxides as SO_2	($\mu g/m^3$)	IS 5182 (Part 2): 2001, RA 2017	**80**	**19.7**
4	Nitrogen Oxides as NOx	($\mu g/m^3$)	IS 5182 (Part 6): 2006, RA 2017	**80**	**22.9**
5	Carbon monoxide as CO	(mg/m^3)	IS 5182(Part 10):2019	**2**	**0.10**
6	Ozone as O_3	($\mu g/m^3$)	IS 5182 (Part-09):2019	**180**	**6.4**
7	Ammonia as NH_3	($\mu g/m^3$)	IS 5182 (Part 25): 2018	**400**	**<20**
8	Lead as Pb	($\mu g/m^3$)	IS 5182(Part -22):2019	**1**	**<0.02**
9	Nickel as Ni	(ng/m^3)	IS 5182(Part -22):2019	**20**	**<2.5**
10	Arsenic as As	(ng/m^3)	IS 5182(Part -22):2019	**6**	**<1.0**
11	Benzene as C_6H_6	($\mu g/m^3$)	IS 5182 (Part 11):2006	**5**	**<4**
12	Benzo-a-pyrine as BaP	(ng/m^3)	IS 5182 (Part 12):2017	**1**	**<0.5**

BDL Values: SO_2< 4 $\mu g/m^3$, NO_X< 6 $\mu g/m^3$, O_3<5 $\mu g/m^3$, NH_3<20 $\mu g/m^3$, Ni<2.5 ng/m^3, As <1.0 ng/m^3, C_6H_6<4.0 $\mu g/m^3$, BaP<0.5 ng/m^3, Pb<0.02 $\mu g/m^3$, CO-<0.1 mg/m^3

Remarks: *The above Sample test resultsare within the prescribed standard for the above mentioned parameters.*

TERMS AND CONDITION: -

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*** End Report***

Reviewed by

VISIONTEK CONSULTANCY SERVICES PVT. LTD. BBSR

Approved by

VISIONTEK CONSULTANCY SERVICES PVT. LTD. BBSR

TEST REPORT

Test Report No: ENVLAB/25-26/TR-11969 *Date: 05.09.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**21.08.2025**
			Sample Received on	:	**22.08.2025**
Sample Description	:	**Ambient Air**	Sampling Procedure	:	VCSPL/F-SOP/001, Dt. 04.09.2021
			Sampling Location	:	**AUTO GARAGE**
Environment Condition during Sampling	:	Atmospheric Temp.: 29 – 33°C Barometric Pressure : 755 mm of Hg	Instrument used for Sampling	:	RDS (APM 460 BL), FPS (APM 550), VOC Sampler
Sample Condition	;	Air Tight Sealed and gaseous Sample Solution Refrigerated	Sampling done by	:	**Asutosh Mohanty**
Test Started on	:	**23.08.2025**	Test Completed on	:	**26.08.2025**

1. Chemical Testing

A. Atmospheric Pollution

Sl. No	Parameters	Unit	Test Method	National Ambient Air Quality Standard, CPCB, 18th Nov. 2009	Analysis Result
1	Particulate matter as PM_{10}	($\mu g/m^3$)	IS 5182 : Part 23: 2006, RA 2017	**100**	**56.2**
2	Particulate matter as $PM_{2.5}$	($\mu g/m^3$)	IS 5182 (Part 24):2019	**60**	**31.5**
3	Sulphur Oxides as SO_2	($\mu g/m^3$)	IS 5182 (Part 2): 2001, RA 2017	**80**	**20.4**
4	Nitrogen Oxides as NOx	($\mu g/m^3$)	IS 5182 (Part 6): 2006, RA 2017	**80**	**21.2**
5	Carbon monoxide as CO	(mg/m^3)	IS 5182(Part 10):2019	**2**	**0.65**
6	Ozone as O_3	($\mu g/m^3$)	IS 5182 (Part-09):2019	**180**	**6.4**
7	Ammonia as NH_3	($\mu g/m^3$)	IS 5182 (Part 25): 2018	**400**	**<20**
8	Lead as Pb	($\mu g/m^3$)	IS 5182(Part -22):2019	**1**	**<0.02**
9	Nickel as Ni	(ng/m^3)	IS 5182(Part -22):2019	**20**	**<2.5**
10	Arsenic as As	(ng/m^3)	IS 5182(Part -22):2019	**6**	**<1.0**
11	Benzene as C_6H_6	($\mu g/m^3$)	IS 5182 (Part 11):2006	**5**	**<4**
12	Benzo-a-pyrine as BaP	(ng/m^3)	IS 5182 (Part 12):2017	**1**	**<0.5**

BDL Values: SO_2< 4 $\mu g/m^3$, NO_X< 6 $\mu g/m^3$, O_3<5 $\mu g/m^3$, NH_3<20 $\mu g/m^3$, Ni<2.5 ng/m^3, As <1.0 ng/m^3, C_6H_6<4.0 $\mu g/m^3$, BaP<0.5 ng/m^3, Pb<0.02 $\mu g/m^3$, CO-<0.1 mg/m^3

Remarks: *The above Sample test results are within the prescribed standard for the above mentioned parameters.*

TERMS AND CONDITION: -

1. *The Test result is relevant only to the item tested.*
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5. *The laboratory's responsibility under this report is limited to; proven willful negligence.*

*** End Report***

Reviewed by

Approved by

TEST REPORT

Test Report No: ENVLAB/25-26/TR-11970 *Date: 05.09.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**21.08.2025**
			Sample Received on	:	**22.08.2025**
Sample Description	:	**Ambient Air**	Sampling Procedure	:	VCSPL/F-SOP/001, Dt. 04.09.2021
			Sampling Location	:	**MRP**
Environment Condition during Sampling	:	Atmospheric Temp.: 29 – 33°C Barometric Pressure : 755 mm of Hg	Instrument used for Sampling	:	RDS (APM 460 BL), FPS (APM 550), VOC Sampler
Sample Condition	;	Air Tight Sealed and gaseous Sample Solution Refrigerated	Sampling done by	:	**Asutosh Mohanty**
Test Started on	:	**23.08.2025**	Test Completed on	:	**26.08.2025**

1. Chemical Testing

A. Atmospheric Pollution

Sl. No	Parameters	Unit	Test Method	National Ambient Air Quality Standard, CPCB, 18th Nov. 2009	Analysis Result
1	Particulate matter as PM_{10}	($\mu g/m^3$)	IS 5182 : Part 23: 2006, RA 2017	**100**	**55.9**
2	Particulate matter as $PM_{2.5}$	($\mu g/m^3$)	IS 5182 (Part 24):2019	**60**	**31.4**
3	Sulphur Oxides as SO_2	($\mu g/m^3$)	IS 5182 (Part 2): 2001, RA 2017	**80**	**18.7**
4	Nitrogen Oxides as NOx	($\mu g/m^3$)	IS 5182 (Part 6): 2006, RA 2017	**80**	**20.8**
5	Carbon monoxide as CO	(mg/m^3)	IS 5182(Part 10):2019	**2**	**0.21**
6	Ozone as O_3	($\mu g/m^3$)	IS 5182 (Part-09):2019	**180**	**6.3**
7	Ammonia as NH_3	($\mu g/m^3$)	IS 5182 (Part 25): 2018	**400**	**<20**
8	Lead as Pb	($\mu g/m^3$)	IS 5182(Part -22):2019	**1**	**<0.02**
9	Nickel as Ni	(ng/m^3)	IS 5182(Part -22):2019	**20**	**<2.5**
10	Arsenic as As	(ng/m^3)	IS 5182(Part -22):2019	**6**	**<1.0**
11	Benzene as C_6H_6	($\mu g/m^3$)	IS 5182 (Part 11):2006	**5**	**<4**
12	Benzo-a-pyrine as BaP	(ng/m^3)	IS 5182 (Part 12):2017	**1**	**<0.5**

BDL Values: SO_2< 4 $\mu g/m^3$, NO_X< 6 $\mu g/m^3$, O_3<5 $\mu g/m^3$, NH_3<20 $\mu g/m^3$, Ni<2.5 ng/m^3, As <1.0 ng/m^3, C_6H_6<4.0 $\mu g/m^3$, BaP<0.5 ng/m^3, Pb<0.02 $\mu g/m^3$, CO-<0.1 mg/m^3

Remarks: *The above Sample test resultsare within the prescribed standard for the above mentioned parameters.*

TERMS AND CONDITION: -

1. *The Test result is relevant only to the item tested.*
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5. *The laboratory's responsibility under this report is limited to: proven willful negligence.*

*** End Report***

Reviewed by

Approved by

TEST REPORT

Test Report No: ENVLAB/25-26/TR-11971 *Date: 05.09.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**21.08.2025**
			Sample Received on	:	**22.08.2025**
Sample Description	:	**Ambient Air**	Sampling Procedure	:	VCSPL/F-SOP/001, Dt. 04.09.2021
			Sampling Location	:	**MRSS**
Environment Condition during Sampling	:	Atmospheric Temp.: 29 – 33°C Barometric Pressure : 755 mm of Hg	Instrument used for Sampling	:	RDS (APM 460 BL), FPS (APM 550), VOC Sampler
Sample Condition	;	Air Tight Sealed and gaseous Sample Solution Refrigerated	Sampling done by	:	**Asutosh Mohanty**
Test Started on	:	**23.08.2025**	Test Completed on	:	**26.08.2025**

1. Chemical Testing

A. Atmospheric Pollution

Sl. No	Parameters	Unit	Test Method	National Ambient Air Quality Standard, CPCB, 18th Nov. 2009	Analysis Result
1	Particulate matter as PM_{10}	($\mu g/m^3$)	IS 5182 : Part 23: 2006, RA 2017	**100**	**55.2**
2	Particulate matter as $PM_{2.5}$	($\mu g/m^3$)	IS 5182 (Part 24):2019	**60**	**31.3**
3	Sulphur Oxides as SO_2	($\mu g/m^3$)	IS 5182 (Part 2): 2001, RA 2017	**80**	**20.4**
4	Nitrogen Oxides as NOx	($\mu g/m^3$)	IS 5182 (Part 6): 2006, RA 2017	**80**	**21.8**
5	Carbon monoxide as CO	(mg/m^3)	IS 5182(Part 10):2019	**2**	**0.14**
6	Ozone as O_3	($\mu g/m^3$)	IS 5182 (Part-09):2019	**180**	**6.3**
7	Ammonia as NH_3	($\mu g/m^3$)	IS 5182 (Part 25): 2018	**400**	**<20**
8	Lead as Pb	($\mu g/m^3$)	IS 5182(Part -22):2019	**1**	**<0.02**
9	Nickel as Ni	(ng/m^3)	IS 5182(Part -22):2019	**20**	**<2.5**
10	Arsenic as As	(ng/m^3)	IS 5182(Part -22):2019	**6**	**<1.0**
11	Benzene as C_6H_6	($\mu g/m^3$)	IS 5182 (Part 11):2006	**5**	**<4**
12	Benzo-a-pyrine as BaP	(ng/m^3)	IS 5182 (Part 12):2017	**1**	**<0.5**

BDL Values: SO_2< 4 $\mu g/m^3$, NO_X< 6 $\mu g/m^3$, O_3<5 $\mu g/m^3$, NH_3<20 $\mu g/m^3$, Ni<2.5 ng/m^3, As <1.0 ng/m^3, C_6H_6<4.0 $\mu g/m^3$, BaP<0.5 ng/m^3, Pb<0.02 $\mu g/m^3$, CO-<0.1 mg/m^3

Remarks: *The above Sample test resultsare within the prescribed standard for the above mentioned parameters.*

TERMS AND CONDITION: -

1. *The Test result is relevant only to the item tested.*
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*** End Report***

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Approved by

TEST REPORT

Test Report No: ENVLAB/25-26/TR-11972 *Date: 05.09.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**21.08.2025**
			Sample Received on	:	**22.08.2025**
Sample Description	:	**Ambient Air**	Sampling Procedure	:	VCSPL/F-SOP/001, Dt. 04.09.2021
			Sampling Location	:	**R & C LABORATORY**
Environment Condition during Sampling	:	Atmospheric Temp.: 29 – 33°C Barometric Pressure : 755 mm of Hg	Instrument used for Sampling	:	RDS (APM 460 BL), FPS (APM 550), VOC Sampler
Sample Condition	;	Air Tight Sealed and gaseous Sample Solution Refrigerated	Sampling done by	:	**Asutosh Mohanty**
Test Started on	:	**23.08.2025**	Test Completed on	:	**26.08.2025**

1. Chemical Testing

A. Atmospheric Pollution

Sl. No	Parameters	Unit	Test Method	National Ambient Air Quality Standard, CPCB, 18th Nov. 2009	Analysis Result
1	Particulate matter as PM_{10}	($\mu g/m^3$)	IS 5182 : Part 23: 2006, RA 2017	**100**	**54.4**
2	Particulate matter as $PM_{2.5}$	($\mu g/m^3$)	IS 5182 (Part 24):2019	**60**	**31.2**
3	Sulphur Oxides as SO_2	($\mu g/m^3$)	IS 5182 (Part 2): 2001, RA 2017	**80**	**20.2**
4	Nitrogen Oxides as NOx	($\mu g/m^3$)	IS 5182 (Part 6): 2006, RA 2017	**80**	**22.2**
5	Carbon monoxide as CO	(mg/m^3)	IS 5182(Part 10):2019	**2**	**0.11**
6	Ozone as O_3	($\mu g/m^3$)	IS 5182 (Part-09):2019	**180**	**6.3**
7	Ammonia as NH_3	($\mu g/m^3$)	IS 5182 (Part 25): 2018	**400**	**<20**
8	Lead as Pb	($\mu g/m^3$)	IS 5182(Part -22):2019	**1**	**<0.02**
9	Nickel as Ni	(ng/m^3)	IS 5182(Part -22):2019	**20**	**<2.5**
10	Arsenic as As	(ng/m^3)	IS 5182(Part -22):2019	**6**	**<1.0**
11	Benzene as C_6H_6	($\mu g/m^3$)	IS 5182 (Part 11):2006	**5**	**<4**
12	Benzo-a-pyrine as BaP	(ng/m^3)	IS 5182 (Part 12):2017	**1**	**<0.5**

BDL Values: SO_2< 4 $\mu g/m^3$, NO_X< 6 $\mu g/m^3$, O_3<5 $\mu g/m^3$, NH_3<20 $\mu g/m^3$, Ni<2.5 ng/m^3, As <1.0 ng/m^3, C_6H_6<4.0 $\mu g/m^3$, BaP<0.5 ng/m^3, Pb<0.02 $\mu g/m^3$, CO-<0.1 mg/m^3

Remarks: *The above Sample test resultsare within the prescribed standard for the above mentioned parameters.*

TERMS AND CONDITION: -

1. *The Test result is relevant only to the item tested.*
2. *This report shall not be reproduced in full or part without written approval of Visiontek consultancy services. (P) Ltd*
3. *The laboratory is not responsible for the authenticity of photocopied test report.*
4. *The test item will not be retained for more than 15 days from the date of issue of test report except in case as required by applicable regulations.*
5. *The laboratory's responsibility under this report is limited to: proven willful negligence.*

*** End Report***

Reviewed by

VISIONTEK CONSULTANCY SERVICES PVT. LTD. BBSR

Approved by

VISIONTEK CONSULTANCY SERVICES PVT. LTD. BBSR

TEST REPORT

Test Report No: ENVLAB/25-26/TR-13141 *Date: 08.10.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**24.09.2025**
			Sample Received on	:	**25.09.2025**
Sample Description	:	**Ambient Air**	Sampling Procedure	:	VCSPL/F-SOP/001, Dt. 04.09.2021
			Sampling Location	:	**AUTO GARAGE**
Environment Condition during Sampling	:	Atmospheric Temp.: 29 – 33°C Barometric Pressure : 755 mm of Hg	Instrument used for Sampling	:	RDS (APM 460 BL), FPS (APM 550), VOC Sampler
Sample Condition	;	Air Tight Sealed and gaseous Sample Solution Refrigerated	Sampling done by	:	**Asutosh Mohanty**
Test Started on	:	**25.08.2025**	Test Completed on	:	**29.09.2025**

1. Chemical Testing

A. Atmospheric Pollution

Sl. No	Parameters	Unit	Test Method	National Ambient Air Quality Standard, CPCB, 18th Nov. 2009	Analysis Result
1	Particulate matter as PM_{10}	($\mu g/m^3$)	IS 5182 : Part 23: 2006, RA 2017	**100**	**56.2**
2	Particulate matter as $PM_{2.5}$	($\mu g/m^3$)	IS 5182 (Part 24):2019	**60**	**31.5**
3	Sulphur Oxides as SO_2	($\mu g/m^3$)	IS 5182 (Part 2): 2001, RA 2017	**80**	**20.4**
4	Nitrogen Oxides as NOx	($\mu g/m^3$)	IS 5182 (Part 6): 2006, RA 2017	**80**	**21.2**
5	Carbon monoxide as CO	(mg/m^3)	IS 5182(Part 10):2019	**2**	**0.65**
6	Ozone as O_3	($\mu g/m^3$)	IS 5182 (Part-09):2019	**180**	**6.4**
7	Ammonia as NH_3	($\mu g/m^3$)	IS 5182 (Part 25): 2018	**400**	**<20**
8	Lead as Pb	($\mu g/m^3$)	IS 5182(Part -22):2019	**1**	**<0.02**
9	Nickel as Ni	(ng/m^3)	IS 5182(Part -22):2019	**20**	**<2.5**
10	Arsenic as As	(ng/m^3)	IS 5182(Part -22):2019	**6**	**<1.0**
11	Benzene as C_6H_6	($\mu g/m^3$)	IS 5182 (Part 11):2006	**5**	**<4**
12	Benzo-a-pyrine as BaP	(ng/m^3)	IS 5182 (Part 12):2017	**1**	**<0.5**

BDL Values: SO_2< 4 $\mu g/m^3$, NO_X< 6 $\mu g/m^3$, O_3<5 $\mu g/m^3$, NH_3<20 $\mu g/m^3$, Ni<2.5 ng/m^3, As <1.0 ng/m^3, C_6H_6<4.0 $\mu g/m^3$, BaP<0.5 ng/m^3, Pb<0.02 $\mu g/m^3$, CO-<0.1 mg/m^3

Remarks: *The above Sample test results are within the prescribed standard for the above mentioned parameters.*

TERMS AND CONDITION: -

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5. *The laboratory's responsibility under this report is limited to: proven willful negligence.*

*** End Report***

Reviewed by

Approved by

TEST REPORT

Test Report No: ENVLAB/25-26/TR-13142 *Date: 08.10.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**24.09.2025**
			Sample Received on	:	**25.09.2025**
Sample Description	:	**Ambient Air**	Sampling Procedure	:	VCSPL/F-SOP/001, Dt. 04.09.2021
			Sampling Location	:	**MRP**
Environment Condition during Sampling	:	Atmospheric Temp.: 29 – 33°C Barometric Pressure : 755 mm of Hg	Instrument used for Sampling	:	RDS (APM 460 BL), FPS (APM 550), VOC Sampler
Sample Condition	;	Air Tight Sealed and gaseous Sample Solution Refrigerated	Sampling done by	:	**Asutosh Mohanty**
Test Started on	:	**25.09.2025**	Test Completed on	:	**29.09.2025**

1. Chemical Testing

A. Atmospheric Pollution

Sl. No	Parameters	Unit	Test Method	National Ambient Air Quality Standard, CPCB, 18th Nov. 2009	Analysis Result
1	Particulate matter as PM_{10}	($\mu g/m^3$)	IS 5182 : Part 23: 2006, RA 2017	**100**	**55.9**
2	Particulate matter as $PM_{2.5}$	($\mu g/m^3$)	IS 5182 (Part 24):2019	**60**	**31.4**
3	Sulphur Oxides as SO_2	($\mu g/m^3$)	IS 5182 (Part 2): 2001, RA 2017	**80**	**18.7**
4	Nitrogen Oxides as NOx	($\mu g/m^3$)	IS 5182 (Part 6): 2006, RA 2017	**80**	**20.8**
5	Carbon monoxide as CO	(mg/m^3)	IS 5182(Part 10):2019	**2**	**0.21**
6	Ozone as O_3	($\mu g/m^3$)	IS 5182 (Part-09):2019	**180**	**6.3**
7	Ammonia as NH_3	($\mu g/m^3$)	IS 5182 (Part 25): 2018	**400**	**<20**
8	Lead as Pb	($\mu g/m^3$)	IS 5182(Part -22):2019	**1**	**<0.02**
9	Nickel as Ni	(ng/m^3)	IS 5182(Part -22):2019	**20**	**<2.5**
10	Arsenic as As	(ng/m^3)	IS 5182(Part -22):2019	**6**	**<1.0**
11	Benzene as C_6H_6	($\mu g/m^3$)	IS 5182 (Part 11):2006	**5**	**<4**
12	Benzo-a-pyrine as BaP	(ng/m^3)	IS 5182 (Part 12):2017	**1**	**<0.5**

BDL Values: SO_2< 4 $\mu g/m^3$, NO_X< 6 $\mu g/m^3$, O_3<5 $\mu g/m^3$, NH_3<20 $\mu g/m^3$, Ni<2.5 ng/m^3, As <1.0 ng/m^3, C_6H_6<4.0 $\mu g/m^3$, BaP<0.5 ng/m^3, Pb<0.02 $\mu g/m^3$, CO-<0.1 mg/m^3

Remarks: *The above Sample test results are within the prescribed standard for the above mentioned parameters.*

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*** End Report***

Reviewed by

VISIONTEK CONSULTANCY SERVICES PVT. LTD. BBSR

Approved by

VISIONTEK CONSULTANCY SERVICES PVT. LTD. BBSR

TEST REPORT

Test Report No: ENVLAB/25-26/TR-13143 *Date: 08.10.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**24.09.2025**
			Sample Received on	:	**25.09.2025**
Sample Description	:	**Ambient Air**	Sampling Procedure	:	VCSPL/F-SOP/001, Dt. 04.09.2021
			Sampling Location	:	**MRSS**
Environment Condition during Sampling	:	Atmospheric Temp.: 29 – 33°C Barometric Pressure : 755 mm of Hg	Instrument used for Sampling	:	RDS (APM 460 BL), FPS (APM 550), VOC Sampler
Sample Condition	;	Air Tight Sealed and gaseous Sample Solution Refrigerated	Sampling done by	:	**Asutosh Mohanty**
Test Started on	:	**25.09.2025**	Test Completed on	:	**29.09.2025**

1. Chemical Testing

A. Atmospheric Pollution

Sl. No	Parameters	Unit	Test Method	National Ambient Air Quality Standard, CPCB, 18th Nov. 2009	Analysis Result
1	Particulate matter as PM_{10}	($\mu g/m^3$)	IS 5182 : Part 23: 2006, RA 2017	**100**	**55.2**
2	Particulate matter as $PM_{2.5}$	($\mu g/m^3$)	IS 5182 (Part 24):2019	**60**	**31.3**
3	Sulphur Oxides as SO_2	($\mu g/m^3$)	IS 5182 (Part 2): 2001, RA 2017	**80**	**20.4**
4	Nitrogen Oxides as NOx	($\mu g/m^3$)	IS 5182 (Part 6): 2006, RA 2017	**80**	**21.8**
5	Carbon monoxide as CO	(mg/m^3)	IS 5182(Part 10):2019	**2**	**0.14**
6	Ozone as O_3	($\mu g/m^3$)	IS 5182 (Part-09):2019	**180**	**6.3**
7	Ammonia as NH_3	($\mu g/m^3$)	IS 5182 (Part 25): 2018	**400**	**<20**
8	Lead as Pb	($\mu g/m^3$)	IS 5182(Part -22):2019	**1**	**<0.02**
9	Nickel as Ni	(ng/m^3)	IS 5182(Part -22):2019	**20**	**<2.5**
10	Arsenic as As	(ng/m^3)	IS 5182(Part -22):2019	**6**	**<1.0**
11	Benzene as C_6H_6	($\mu g/m^3$)	IS 5182 (Part 11):2006	**5**	**<4**
12	Benzo-a-pyrine as BaP	(ng/m^3)	IS 5182 (Part 12):2017	**1**	**<0.5**

BDL Values: SO_2< 4 $\mu g/m^3$, NO_X< 6 $\mu g/m^3$, O_3<5 $\mu g/m^3$, NH_3<20 $\mu g/m^3$, Ni<2.5 ng/m^3, As <1.0 ng/m^3, C_6H_6<4.0 $\mu g/m^3$, BaP<0.5 ng/m^3, Pb<0.02 $\mu g/m^3$, CO-<0.1 mg/m^3

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*** End Report***

Reviewed by

Approved by

TEST REPORT

Test Report No: ENVLAB/25-26/TR-13144 *Date: 08.10.2025*

Name of the Industry	:	**Ferro Alloys Corporation Ltd., Charge Chrome Plant, D.P. Nagar, Randia, Bhadrak**	Date of Sampling	:	**24.09.2025**
			Sample Received on	:	**25.09.2025**
Sample Description	:	**Ambient Air**	Sampling Procedure	:	VCSPL/F-SOP/001, Dt. 04.09.2021
			Sampling Location	:	**R & C LABORATORY**
Environment Condition during Sampling	:	Atmospheric Temp.: 29 – 33°C Barometric Pressure : 755 mm of Hg	Instrument used for Sampling	:	RDS (APM 460 BL), FPS (APM 550), VOC Sampler
Sample Condition	;	Air Tight Sealed and gaseous Sample Solution Refrigerated	Sampling done by	:	**Asutosh Mohanty**
Test Started on	:	**25.09.2025**	Test Completed on	:	**29.09.2025**

1. Chemical Testing

A. Atmospheric Pollution

Sl. No	Parameters	Unit	Test Method	National Ambient Air Quality Standard, CPCB, 18th Nov. 2009	Analysis Result
1	Particulate matter as PM_{10}	($\mu g/m^3$)	IS 5182 : Part 23: 2006, RA 2017	**100**	**54.4**
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3	Sulphur Oxides as SO_2	($\mu g/m^3$)	IS 5182 (Part 2): 2001, RA 2017	**80**	**20.2**
4	Nitrogen Oxides as NOx	($\mu g/m^3$)	IS 5182 (Part 6): 2006, RA 2017	**80**	**22.2**
5	Carbon monoxide as CO	(mg/m^3)	IS 5182(Part 10):2019	**2**	**0.11**
6	Ozone as O_3	($\mu g/m^3$)	IS 5182 (Part-09):2019	**180**	**6.3**
7	Ammonia as NH_3	($\mu g/m^3$)	IS 5182 (Part 25): 2018	**400**	**<20**
8	Lead as Pb	($\mu g/m^3$)	IS 5182(Part -22):2019	**1**	**<0.02**
9	Nickel as Ni	(ng/m^3)	IS 5182(Part -22):2019	**20**	**<2.5**
10	Arsenic as As	(ng/m^3)	IS 5182(Part -22):2019	**6**	**<1.0**
11	Benzene as C_6H_6	($\mu g/m^3$)	IS 5182 (Part 11):2006	**5**	**<4**
12	Benzo-a-pyrine as BaP	(ng/m^3)	IS 5182 (Part 12):2017	**1**	**<0.5**

BDL Values: SO_2< 4 $\mu g/m^3$, NO_X< 6 $\mu g/m^3$, O_3<5 $\mu g/m^3$, NH_3<20 $\mu g/m^3$, Ni<2.5 ng/m^3, As <1.0 ng/m^3, C_6H_6<4.0 $\mu g/m^3$, BaP<0.5 ng/m^3, Pb<0.02 $\mu g/m^3$, CO-<0.1 mg/m^3

Remarks: *The above Sample test results are within the prescribed standard for the above mentioned parameters.*

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*** End Report***

Reviewed by

VISIONTEK CONSULTANCY SERVICES PVT. LTD. BBSR

Approved by

VISIONTEK CONSULTANCY SERVICES PVT. LTD. BBSR

Ref. No: FACOR/HSE/ES/25-1
Date: 29.09.2025

To,

The Member Secretary,
State Pollution Control Board,
Paribesh Bhawan, A/118,
Nilakantha Nagar, Unit-VIII,
Bhubaneswar.

Sub: **Submission of Environment Statement for the year 2024-25 by M/s Ferro Alloys Corporation Limited (Charge Chrome Plant), Randia, Bhadrak.**

Sir,

With reference to the above cited subject, please find enclosed copy of Environmental Statement for the financial year ending 31st March,2025 in **Form-V** by M/s Ferro Alloys Corporation Limited (Charge Chrome Plant) for your kind perusal.

Thanking you,

Yours faithfully,
For **Ferro Alloys Corporation Limited**
Charge Chrome Plant

Kamod Singh
Factory Manager

Encl: As above

Copy to: The Regional Officer, SPCB, Balasore.

FORM V

(See Rule 14)

Environmental Statement for the Financial Year Ending 31st March 2025.

PART – A

i. **Name and address of the owner/occupier of the industry operation process** : **Mr Pankaj Kumar Sharma**
Chief Executive Officer
M/s. Ferro Alloys Corporation Ltd.,
Charge Chrome Plant,
Randia, Bhadrak-756135, Odisha.

ii. **Industry category Primary** : Large

iii. **Production Capacity-Units** :
High Carbon Ferro Chrome production of 1,45,000 TPA (from 1 X 45 MVA & 1 X 33 MVA SAF) and 11,800 TPA from MRP by M/s Ferro Alloys Corporation Ltd., located at Village-Randia, District-Bhadrak, Odisha

iv. **Year of Establishment** - 7th March, 1983.

v. **Date of the last environmental statement submitted** – 28.09.2024.

PART – B

Water and Raw Material Consumption

1. **Water Consumption:**

Process – 854 **m^3/day**
Cooling – 221 **m^3/day**
Domestic – 39 **m^3/day**

Name of Products	Process Water Consumption Per Unit of Product Output	
	During the Previous Financial Year 2023-24	During the Current Financial Year 2024-25
High Carbon Ferro Chrome	- 3.49 m^3/MT (Process) - 0.98 m3/MT (Cooling) - 0.50 m3/MT (Domestic) - 4.97 m3/MT (Total)	- 3.77 m^3/MT (Process) - 0.97 m3/MT (Cooling) - 0.17 m3/MT (Domestic) - 4.91 m3/MT (Total Consumption)

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Sensitivity: Internal (C3)

2. **Raw Material Consumption**

Name of Raw Materials	Name of Products	Consumption of Raw Material Per Unit of Output (MT)	
		During the Previous Financial Year 2023-24	During the Current Financial Year 2024-2025
Chrome Ore	Charge Chrome/ High Carbon Ferro Chrome (MT)	2.365 MT	2.544 MT
Coke		0.553 MT	0.576 MT
Quartzite		0.011 MT	0.077 MT
Bauxite		0.021 MT	0.044MT
Electrode Paste		12.4 Kg	15 Kg
Hydrated Lime		0.0657 MT	0.064MT

PART – C

Pollution Discharge to Environment/ Unit of Output

(Parameter as Specified in the Consent Issued)

1. **Water**

No Pollution discharge through Water. Zero Liquid Discharge has been maintained.

2. **Air**

Sl. No.	Parameter	Unit	Standard as per CTO	Analysis Results			
				GCP Stack (45 MVA)	GCP Stack (33 MVA)	Dedusting stack	Dryer Stack
1	Particulate Matter as PM	mg/Nm^3	100	74.1	25	55.1	60.4
2	Sulphur Dioxide as SO_2	mg/Nm^3	--	28.8	25.8	32.5	34.2
3	Oxides of Nitrogen as NO_X	mg/Nm^3	--	34.6	32.6	37.8	38.1
4	Carbon Monoxide as CO	mg/m^3	--	0.089	0.081	0.028	0.078
5	Carbon dioxide as (CO_2)	%	--	7.1	7.2	6.7	6.3
6	Mercury (as Hg)	mg/Nm^3	--	0.075	0.07	0.58	0.78

Sensitivity: Internal (C3)

PART – D

Hazardous Waste

(As Specified Under Hazardous Waste (Management and Handling) Rule, 2016)

Hazardous Wastes	Total Quantity Generated (kg)	
	During the Current Financial Year 2023-24	During the Current Financial Year 2024-25
a) Used oil	1700	11710
b) Exhaust Air or Gas Cleaning Residue	964910	1223700
c) Waste Oil Filters	Nil	Nil
d) Waste/Residues Containing Oil	Nil	Nil
e) Empty Barrels	1540	Nil

PART – E

Solid Wastes

Solid Waste		Total Quantity	
		During the Previous Financial Year 2023-24	During the Current Financial Year 2024-25
(a) From Process		82745.71 MT (Slag)	**114332.59** MT (Slag)
(b) From Pollution Control Facility		964910 (GCP dust)	1223700 (GCP dust)
(c) 1) Quantity Recycle and Re-Utilized within the Unit	Slag	Part of Jigging Slag used for Civil Construction Work	Part of Jigging Slag used for Civil Construction Work
	GCP Dust	881220 MT	1127570 MT
2) Sold	Slag	62621.75 MT	91334.46 MT
	GCP Dust	Nil	Nil
3) Disposed	Slag	Used for filling low lying areas inside & outside plant premises	Used for filling low lying areas inside & outside plant premises

FERRO ALLOYS CORPORATION LTD. BHADRAVATI

Sensitivity: Internal (C3)

PART – H

Additional measures / investment proposal for environmental protection Including abatement of pollution

Expenditure for Environmental Protection FY 2024-25

Sl. No.	Description	Amount (Rs.)
i	Engagement of Truck mounted Mist cannon	25,48,660
ii	Modification of Wheel Washing System	6,00,000
iii	CMC of CAAQMS & CEMS with Data Connectivity	6,88,750
iv	Operational & Maintenance of Mechanical Road Sweeping Machine	18,28,925
v	Greenbelt development & engagement of worker for plantation maintenance work	89,57,588
vi	Wastewater Treatment Plant Operation & Maintenance	8,54,734
vii	Gas Cleaning Plant operation and maintenance cost	13,33,987
viii	Gas Cleaning Plant Energy cost	1,05,95,099
ix	Installation of Mist canon	6,80,000
x	Environment Monitoring Expanses (Air, Water, Waste, Noise etc)	5,16,765

PART – I

Any other particulars for improving the quality of the environment.

- FACOR is a certified company of Quality Management System (ISO-9001: 2015), Environmental Management System (ISO-14001: 2015), Occupational Health & ISO 45001:2018 and Energy Management System (ISO-50001:2018).

- FACOR is comprehensively working to achieve ESG Goals on key thematic area of Transforming Communities, Transforming the Planet and Transforming the Workplace. Inline with this we have taken various initiatives towards carbon neutrality, net water positivity, greener business model, biodiversity conservation etc.

- FACOR Charge Chrome Plant has taken various initiatives for abatement of pollution control and environment protection measures. We have installed 10KLD STP at plant and 50KLD STP at colony for sewage water treatment and recycle the water in greenbelt development. Similarly, 1000KLD Surface Runoff Treatment Plant has been installed to treat all runoff water inside the CPP & CCP plant to achieve Zero Liquid Discharge. We have engaged mist canyon and mechanized road sweeping machine to control fugitive emissions.

FERRO ALLOYS CORPORATION LTD.

Sensitivity: Internal (C1)

PART – H

Additional measures / investment proposal for environmental protection Including abatement of pollution

Expenditure for Environmental Protection FY 2024-25

Sl. No.	Description	Amount (Rs.)
i	Engagement of Truck mounted Mist cannon	25,48,660
ii	Modification of Wheel Washing System	6,00,000
iii	CMC of CAAQMS & CEMS with Data Connectivity	6,88,750
iv	Operational & Maintenance of Mechanical Road Sweeping Machine	18,28,925
v	Greenbelt development & engagement of worker for plantation maintenance work	89,57,588
vi	Wastewater Treatment Plant Operation & Maintenance	8,54,734
vii	Gas Cleaning Plant operation and maintenance cost	13,33,987
viii	Gas Cleaning Plant Energy cost	1,05,95,099
ix	Installation of Mist canon	6,80,000
x	Environment Monitoring Expanses (Air, Water, Waste, Noise etc)	5,16,765

PART – I

Any other particulars for improving the quality of the environment.

- FACOR is a certified company of Quality Management System (ISO-9001: 2015), Environmental Management System (ISO-14001: 2015), Occupational Health & ISO 45001:2018 and Energy Management System (ISO-50001:2018).

- FACOR is comprehensively working to achieve ESG Goals on key thematic area of Transforming Communities, Transforming the Planet and Transforming the Workplace. Inline with this we have taken various initiatives towards carbon neutrality, net water positivity, greener business model, biodiversity conservation etc.

- FACOR Charge Chrome Plant has taken various initiatives for abatement of pollution control and environment protection measures. We have installed 10KLD STP at plant and 50KLD STP at colony for sewage water treatment and recycle the water in greenbelt development. Similarly, 1000KLD Surface Runoff Treatment Plant has been installed to treat all runoff water inside the CPP & CCP plant to achieve Zero Liquid Discharge. We have engaged mist canyon and mechanized road sweeping machine to control fugitive emissions.

FERRO ALLOYS CORPORATION LTD. BHADRAK

Sensitivity: Internal (C3)

PH Compliance Details

Charge Chrome Plant of M/s Ferro Alloys Corporation Ltd

SN	Point Raised by Locals/Public	Project Proponent Response	Physical Targets	Actions Taken	Compliance Status	Expenditure Investment Cost (INR)
Environmental Issues						
1	Environmental Protection	Various pollution control measures have been taken towards protection of environment in order to achieve the company's philosophy on Zero harm, zero waste and zero discharge. In this regard we have recently installed. Surface Run-off Treatment Plant (SRTP),	1. Surface Runoff Treatment Plant (SRTP)	SRTP has been installed to ensure Zero discharge from the plant	Complied	17169000
			2. Sewage Treatment Plant (STP)	Sewage Treatment Plant (STP) has been installed to treat domestic wastewater. Treated water is being used for gardening purpose	Complied	4106400
			3. Rainwater harvesting	PP has constructed 5 recharge wells and 3 rainwater harvesting pond	Complied	-
			4. Upgradation of existing Gas Cleaning Plant (GCP) & Installation of new Gas Cleaning Plant (GCP)	Upgradation of existing GCP has been completed. New GCP has been installed.	Complied	155364115
			5.Water channel for ETP & RWH	PP has already been designed as a Zero Liquid Discharge plant. All the runoff water has been treated through SRTP and stored in rainwater harvesting pond. STP has been installed to treat domestic wastewater.	Complied	-
			6.Dust Extraction System (DES) will be installed to control air pollution. Installation of Online CEMS & CAAQMS	Dedusting Systems have been installed to control air pollution. Online CAAQMS have been installed to monitor air quality. CEMS installation is in final stage & will be completed by 30.05.2024.	Complied	29023000
Healthcare Issues						

(S.K. Bansal)

2	Local people demanded for regular health check-ups at village level	We will focus on peripheral development activities by working in the key thematic areas of quality education, health & livelihood. Under health priority will be given to Women and Child health. We have already facilitated our dispensary and ambulance for the benefit of the community and continue to do so.	200 health camps in six Gram Panchayats will be conducted on yearly basis	1. 176 Health Camps conducted in core & periphery gram panchayat providing free doctor consultation and medicine under the CSR budget. 2. Awareness sessions has been conducted on Dengue, Malaria, Tuberculosis, and other disease to spread awareness among the commoners to bring them closer to government health schemes. 3. FACOR also conducted awareness sessions on Menstrual Hygiene Management and Family Planning and distributed mask as a preventive measure from viral diseases. 4. Nutrition kit support provided to TB patients in Bhadrak.	Complied	2498711.35
3	Local Dispensaries are in bad shape without manpower and equipment and hence needs support by the industry.	Local Dispensaries are in bad shape without manpower and equipment and hence needs support by the industry	Basic equipment for two dispensaries will be supplied in Barpada village and Baghurai village	01 no 120 litter RO Water Purifier, 02 nos. Air purifier, and 10 nos. Steel Bench support has been provided to Barpada CHC for improving the overall condition of local CHCs under CSR budget.	Complied	259171.00
Plantation Program						

4	Adequate greenbelt should be developed	We have developed adequate greenbelt of various species in & around the plant and also started plantation in local villages in sync with the villagers.	1. Material Handling Area, Waste dump, Internal Roadsides & Boundary Areas; 9000 trees of Neem, Chakunda, Akasia, Amla, Debadaru types 2. Within Randia Village; 420 trees of Bela & Debadaru Plants 3. Within Koronta Village; 390 trees of Karanja & Mango trees 4. Within Saramanga Village; 340 trees of Chakunda & Mango trees 5. Additional 4000 fruit bearing trees will be distributed to local individuals of five Panchayats under social forestry program	A. 5875 Nos have been planted inside the plant premises. B. 300 trees planted with steel cage in the six gram panchayat of Bhadrak under CSR budget. C. 500 saplings distributed among community members under CSR budget.	Complied	2142515.00
Social Infrastructure Management (Education & Skill Development)						
5	Promoting Primary /Secondary educations for nearby villages	PP shall facilitate Pre Schools at five nearby villages by repairing the classrooms and equipping classrooms as well.	100 numbers of Anganwadi centres for improving Pre-school facility for children in nearby Gram Panchayats	1. Tiles and paint work completed in 19 Anganwadis, Bio-waste dustbin provided to 21 Aganwadi centers, and table chair provided to 23 Anganwadis under CSR budget. 2. Mini Science lab has been installed in 02 government schools to promote STEM learning among the school students under CSR budget. 3. 120 litter RO Water purifier provided to 04 government schools to improve overall school condition under CSR budget.	Complied	1468838.06

6	Some assistance to local SHGs for livelihood Support	1.Capacity Building Training of SHG members 2. SHG meet 3. Micro enterprise promotion 4. Marketing Support 5. Technical know-how support to SHGs	Each year PP would be partnering with local SHGs for their skill enhancement. 250 women entrepreneurs would be supported. **SMEs with market linkage:** Promotion of Local Craft like, Bamboo Craft Making, Pisciculture, Small Trades such as Chappal making, Agarwati etc. Agri based interventions	1. 02 microenterprise (Donapattal and Agarbatti) establised and supported with raw materials, training and market linkage under CSR budget. 2. Training provided to SHG women in bamboo craft including support of materials, and tools required under CSR budget. 3. Support of raw materials, and tools to 05 established SHG microenterprise under CSR budget. 4. Capacity leadership training given to SHG members under CSR budget.	Complied	2990548.09
7	Local Youths need to enhance their skill level	On the job training shall be imparted to chosen local people for their employability and skill enhancement either directly or through Business Partners.	120 Local Youths will be given basic Skill Training every year for four years based on their basic educational qualification chosen from surrounding six number of Panchayats	As of date a total of 108 nos. of apprentices are trained under the skill development campaign of the company. NAPS- 12, NATS- 64 80 community women given training in tailoring trade to enhance their income generation capacity under CSR budget.	Complied	5467422.00
					Grand Total	**220489721**

For Ferro Alloys Corporation Limited

KSM

Chief HSE Officer

Krutisunder Mohapatra