Ref: FACOR/Bhadrak/HSE/02/2023-24
Dtd: 29.11.2023

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 2023 to September-2023.

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 2023 to September 2023.

The monthly Environmental Monitoring data and other required information with respect to compliance of the said Environment Clearance for the period from April 2023 to September 2023 are also enclosed herewith as Annexure for your kind perusal and records.

Thanking you

Yours faithfully

For Ferro Alloys Corporation Ltd.

Factory Manager
Charge Chrome Plant

Enclosed: As above.

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

Six Monthly Environmental Compliance Report for the period from April 2023 upto September 2023			
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.	Agree to abide.
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 and our carbon consumption norms is better than other industry. We are also planning to implement RE power of 2.5MW at our location.
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 & OCEMS has been complied and report has submitted to the Ministry within the stipulated time period. Copy enclosed in **Annexure-1**. ATR compliance status has been submitted to IRO. Copy enclosed in **Annexure-2**.
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.	As per plant scheme whatever liquid effluent is being generated goes to collection pit and from there it is being treated in SRTP. EIA report is already shared with MOEF. Our plant is declared as Zero liquid discharge unit.
5	v	The PP shall undertake flood protection measures due to presence of Salandi river as committed.	Plant MSL is much more higher than the river bed.
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.	a.We are keeping all the raw material like Ferro Chrome Ore and Concentrate in close shed. However, we have installed fixed water sprinkler in raw material storage area to control fugitive emission. b. Vehicles are completely covered during transport of materials. c. Civil construction work for installation of Wheel washing sytem has been started.
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.	Performance test shall be conducted on all pollution control systems after effectively full fledge running of the equipment and report shall be submitted to the Regional Office.
9	ix	Particulate matter emission from stacks shall be less than 30 mg/Nm3.	PM emission from stack is under precribed limit as per latest Consent order no. 7239 IND-I-CON 54611 Dated 04.05.2023.
10	x	PP shall carry out periodically occupational health survey as per the applicable norms.	PP is being carried out periodical occupational health check-up annually.
11	xi	The 4th hole extraction system shall be provided in the Sub Merged Arc Furnaces.	We have 4 suction points at the top of the furnace to collect the fumes and same is connected with Gas Cleaning Plant (GCP). Two Gas handling fans are available (one working & one standby) to take care of furnace suction.
12	xii	100% of the slag generated through the process shall be utilised.	Being followed.
13	xiii	The water requirement for the proposed project is estimated as 2521 KLD, out of which 1750 KLD of fresh water 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.	NOC from CGWA for drawl of 1750KLD has been approved and yet to release. However, the recycle water from rainwater harvesting pond, STP treated water, SRTP treated water etc is being reused in various process to minimize the ground water extraction.
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.	PP has already designed as a Zero Liquid Discharge plant. All the runoff water is been treated through SRTP and store in rainwater harvesting pond. STP has been installed to treat domestic waste water.
15	xv	The company shall also undertake rain water harvesting measures as per the plan submitted in the EIA/EMP report and reduce water dependence from the outside source.	PP has constructed three rainwater harvesting pond to store and reuse water in various process to minimize water abstraction . PP has also constructed five recharge wells for ground water recharge.
16	xvi	PP shall adopt nearby villages and prepare and implement a robust plan to develop them into model villages in next 10 years.	PP 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 plant is already existing and in operational.
18	xviii	A proper action plan must be implemented to dispose of the electronic waste generated in the industry.	E-waste are being disposed to OSPCB authorized 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.	PP is currently having 34.84% of greebelt coverage as per Greenbelt assessment by 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. Report in this regards shall be submitted to Regional Office of the MOEF & CC.
20	xx	Greening and Paving shall be implemented in the plant area to arrest soil erosion and dust pollution from exposed soil surface.	PP has developed greenbelt along with stone patching boundary wall in the periphery of the plant boundaries to arrest soil erossionsand 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.
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.	33 MVA furnace is a Semi Closure. But we have a portable CO sensor to measure the same. In addition to this we are also procuring CO analyzer which will be installed at furnace top floor levels in open area.PP has initiated the process to install CO sensors at the furnace top level and report shall be submitted to IRO, MOEFCC.
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 will be complied and report shall be submitted to Regional Office of MOEF & CC.

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 initating workshop on leadership skill training and conducted health camps near by villages. Compliance report in this regard will be 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.	PP has initiated some awareness session on the ban of single use plastics. Action plan has been prepared on Banning SUP and handling of plastic waste. Report in this regard is enclosed in **Annexure-3**.
26	xxvi	The project proponent shall adopt the Clean Air practices like mechanical collectors, wet scrubbers, fabric filters (bag houses), electrostatic 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.	PP has installed bag filters, dedusting units and dust suppression system to control emissions. PP has implimented mechanical mobile water sprinkler for dust suppression in and around the plant premises.
	B.	**General Conditions**	
	I.	**Statutory compliance:**	
1	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**	
1	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.	PP has installed continuous emission monitoring for stack and one number of Continuous Ambient Air Quality Station has been installed inside the plant premises and the same is been interconnected with SPCB & CPCB online server.
2	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 been monitored quaterly by NABL approved laboratory.
3	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.	PP has installed Gas Cleaning Plant (GCP) to control stack emission and water sprinklers to control fugitive emission.
4	iv	The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.	PP has installed auto pulsing system to dislodge from bags into hopper.
5	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 recycle and reused for briquette & pellets making.
6	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 material are transporting through covered vehicle and conveying of ore & other raw material through covered conveyors.
7	vii	The project proponent shall provide primary and secondary fume extraction system at all melting furnaces.	PP has installed fume extraction system to control primary and secondary emission.
8	viii	Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.	Ventilation system has been designed as per requirement.
	III.	**Water quality monitoring and preservation**	
1	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 recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.	Effluent quality from Surface runoff treatment plant (SRTP) and Sewage treatment plant (STP) is being monitored on a monthly basis by NABL accredited laboratories. Parameters are under prescribed limit and montly report is being shared with OSPCB.
2	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. Report enclosed in **Annexure-4**.
3	iii	Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.	PP has installed 10KLD Sewage Treatment Plant (STP) for treatment of domestic waste water and treated water are being utilized in gardening purpose.
4	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.
5	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.	PP has installed Surface Run-off Treatment Plant (SRTP) to collect all the runoff water during rain and after treatment water is being stored in rainwater harvesting pond and reuse in process.
6	vi	Tyre washing facilities shall be provided at the entrance/exit of the plant gates.	Civil construction work for installation of Wheel washing sytem has been started.
	IV.	**Noise monitoring and prevention**	
1	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 are being carried out regularly as per Noise Pollution (Regulation and Control) Rules,2000. Report is enclosed in **Annexure-5**.

	V.	**Energy Conservation measures**	
1	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, Installation of RE 2.5 MW Solar energy in process, Solar street lights has been provided to various villages and convention lights replaced by LED etc
	VI.	**Waste management**	
1	i.	Used refractories shall be recycled.	PP will ensure to recycle the used refractories when generates
2	ii.	Kitchen waste shall be composted or converted to biogas for further use	Kitchen waste are being composted and use in plantation as a organic
	VII.	**Green Belt**	
1	i.	The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration including plantation	GHG Inventory is prepared and is under assurance process by M/s EY for FY23. PP will submit the programme for reduction of GHG emission including carbon sequestration.
2	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 monitor able 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. Action plan in this regard will be initiated.
	VIII.	**Public hearing and Human health issues**	
1	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.
2	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.
3	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**	
1	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.
2	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 regard shall be submitted to the MoEF&CC as a part of six-monthly report.	Environment policy duly approved by the Board of Directors and Board resolution in this regard is being submitted herewith in **Annexure-6**.
3	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 environment management
	X.	**Miscellaneous**	
1	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 along with **Annexure-7**.
2	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 period. Copy enclosed in **Annexure-7**
3	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.
4	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 accreditated lab. Copy enclosed in **Annexure-8** Digital display board has been installed at main entrance point for public view and same shall be displayed in the website of the company as well.
5	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.
6	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-9**
7	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.
8	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
9	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.	We will comply the stipulated condition

10	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
11	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

ANNEXURE – 1

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transforming elements

FACOR

FACOR / [illegible] / Legal / [illegible] / 2022 Dt. [illegible].09.2022

To

The Deputy Director General of Forests (C)
Ministry of Environment, Forest & Climate Change
Integrated Regional Office, A/3, Chandrasekharpur
Bhubaneswar – [illegible],
Email : [illegible]

Ref : 1. Environment Clearance Proposal No. IA/OR/IND/[illegible]/2009.
2. Meeting dtd. 14.09.2022 and 15.09.2022 of Expert Appraisal Committee of MOEF.
3. Affidavit dtd. 14.09.2022 regarding undertaking for installation of OCEMS & OAAQMS.

Sub : Compliance to the Affidavit dtd. 14.09.2022 submitted to MOEF & CC during EAC meeting dtd. 14.09.2022 regarding undertaking for installation of OCEMS & OAAQMS in the Charge Chrome Plant of M/s Ferro Alloys Corporation Ltd.

Dear Sir,

We have applied extension for existing Environment Clearance of our Charge Chrome Plant, Randia, Bhadrak of M/s Ferro Alloys Corporation Ltd. vide Proposal No. IA/OR/IND/58[illegible]/2009. During meeting dtd. 14.09.2022 of Expert Appraisal Committee (EAC) of Ministry of Environment, Forest & Climate Change, Government of India, we have submitted Affidavit cum Undertaking in Non Judicial Stamp paper that we will install Online Continuous Emission Monitoring Systems (OCEMS) in our Gas Cleaning Plant (GCP) and Online Ambient Air Quality Monitoring Stations (OAAQMS) in our Charge Chrome Plant by 30th September 2022 without fail.

In compliance to the above Affidavit-cum-Undertaking dtd. 14.09.2022 we do hereby intimate your good office that today i.e. dtd. 30.09.2022, we have successfully installed the Online Continuous Emission Monitoring Systems (OCEMS) in our Gas Cleaning Plant (GCP) and Online Ambient Air Quality Monitoring Stations (OAAQMS) near our Administrative Building of our Charge Chrome Plant of M/s Ferro Alloys Corporation Ltd. The latest photographs of the same are enclosed herewith as a proof of installation of OCEMS and OAAQMS.

Further we also do hereby confirm that now all pollutant's level analyser of OCEMS and OAAQMS have been operating smoothly and real time data are being successfully transferred to the [illegible] server of M/s [illegible] Inc.

Trust the Affidavit-cum-Undertaking dtd. 14.09.2022 submitted to MOEF is complied herewith.

For Ferro Alloys Corporation Limited

[signature]

Authorised Signatory

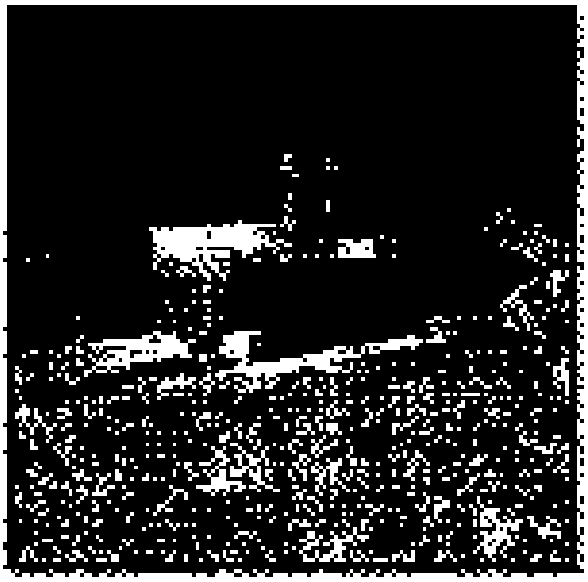
Copy to (1) The Member Secretary, Dr. R. B. Lal, Scientist 'E'/Additional Director, MOEF & CC, Indira Paryavaran Bhawan, Room No. V-304, Jor Bag Road, New Delhi, E-mail: [illegible]

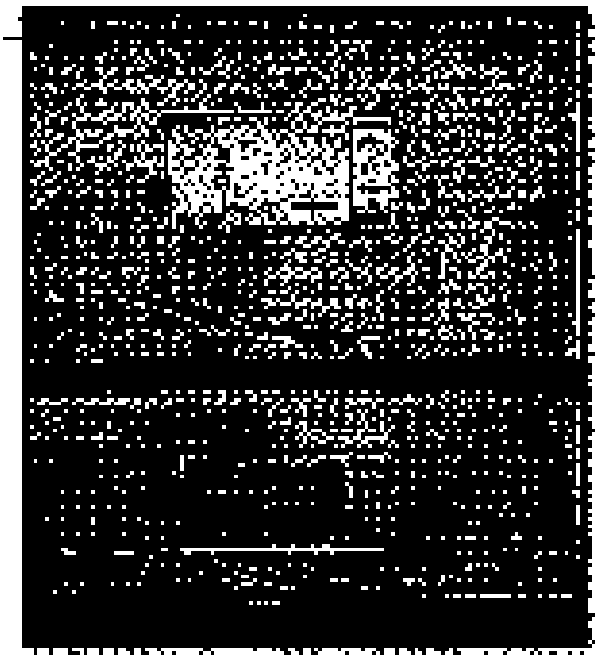
(2) Member Secretary, Odisha Pollution Control Board, A-118, Nilakantha Nagar, Unit – VIII, Bhubaneswar – 751012. E-mail : [illegible]

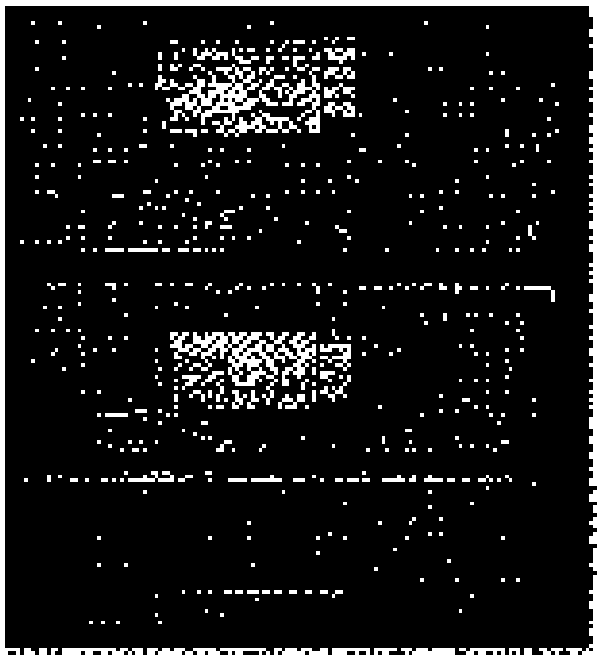
Online Ambient Air Quality Monitoring Station (OAAQMS)

Charge Chrome Plant
of M/S Ferro Alloys Corporation Ltd

Location: Near Administrative building
Date: 30.09.2022







Online Continuous Emission Monitoring Systems (OCEMS)

Charge Chrome Plant
of M/s Ferro Alloys Corporation Ltd

Location: Gas Cleaning Plant (GCP)

Date: 30.09.2022

ANNEXURE -2.

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FACOR

Ref No: FACOR/HSE/EC/22/02
Date: 29/08/2022

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

Sub: Action taken report for the observations of RO visit on dated 24.06.2022 vide letter no 101-449/EPE/1080 of M/s Ferro Alloys Corporation Ltd. at Village-Randia, District-Bhadrak, Odisha

Ref: Letter issued by MoEFCC vide letter number 101-449/EPE/1080 dated 04.06.2022.

Respected Sir,

With reference to the above cited subject, we are enclosing herewith our Action Plan for the identified observations given in your above-mentioned report and our sincere commitment to comply all the conditions as deemed fit for your kind perusal, necessitating closure of all your observations to your satisfaction.

This is for your kind information and necessary action please.

Thanking You
Sincerely

For M/s Ferro Alloys Corporation Ltd.

Authorized Signatory

Encl: As above.

Action Taken Status Report of M/s Ferro Alloys Corporation Limited (Charge Chrome Plant) Based on the RO Visit Report			
Sl No	**Observations**	**Action Taken Status**	**Commitments with Timeline**
1	Continuous stack emission monitoring system has not been provided. During visit emission was also observed from one of the four emergency stack. Fume extraction system during tapping was found to be inadequate	Continuous stack emission monitoring system **is been ordered for installation along with AAQMS as on 06-08-2022. The copies of which are attached in** Annexure 1 During the visit a schedule outage was taken for the furnace rebuild. After completion of rebuild job, the emission from emergency stack and tapping points **are controlled.**	31.12.2022
2	During visit metal recovery plant was not in operation. Dry fog dust suppression system yet to be provided at the metal recovery plant. Dust extraction system yet to be provided at the material unloading area.	We have installed **18** water sprinkling system for dust suppression in MRP **area,** which has **been** controlling our fugitive **emission to remain** within the stipulated standard. However we will install Dry Fog system in MRP and material unloading area **by December 2022.**	31.12.2022
3	Raw materials were found to be stored in covered shed as well as in open.	We have constructed one additional raw material covered shed of 85m x 15m size which can accommodate around 15420MT raw material and all the raw material storage area are concreted to act as a impervious layer. Photograph is enclosed in Annexure-2.	Already Complied
4	Maximum water use was in the month of July, 2021 for 38567KL, higher than the stipulated in the condition.	With reference to the permission accorded by CGWA vide letter no. 21-4(74)/SER/CGWA/2008-1281, dated 24th October'2008, the project proponent had obtained NOC for **withdrawal** of 1422m3/day ground water, based on which the EC was granted on 2009 and subsequently on 15th April'2014 and 19th September'2017 respectively. The observed quantity for the month of July'21 translate to 1244m3/day of water consumption which is within the **permissible** limit of 1422m3/day.	Justified as given

5	Secured landfills have not been constructed as per the condition of EC	After recovery of the metal slag tailings are being stored in the slag storage yard. After due TCLP test 100% of the slag is been utilized in various construction, road making & low lying area development inside & outside the premises as per the authorization from OSPCB. Copy enclosed in Annexure-3. Therefore there is no need of a SLF for the slag to be stored as hazardous material.	Justified as given
6	As per the report submitted by the PP total 37,730 seedling have been planted in an area of 21.3 Ha. (52.63 acre). PP furnished an undertaking to achieve 33% greenbelt by 31st July. 2023	During filing of application for Environment Clearance, the earlier submitted data regarding Green Belt area of our Charge Chrome Plant of M/s. Ferro Alloys Corporation Ltd. located at Randia of Bhadrak District was collected from the old records maintained and available with the ex-promoters of FACOR. After completion of CIRP process and approval of Resolution Plan vide order dtd. 30.01.2020 of Hon'ble Court of NCLT Cuttack Bench, the new Board has been constituted on 21.09.2020. To implement the provision of the approved Resolution Plan and to comply all statutory requirements, the present management has recently conducted the Drone DGPS Survey of the total plant area from the authorized and empanelled agency of Orissa Space Application Centre (ORSAC). Now according to the latest Drone DGPS Survey report, the total Green belt area of the plant is around 67.918 Acre which is 33.05 % out of the total plant area of 205.50 Acre. Latest DGPS Survey Map is enclosed herewith for your reference and records in **Annexure - 4.** Apart from the above, we have started regular plantation drive in our plant site and also have targeted to plant around 30,000 saplings by the end of September 2022 to intensify the plantation program as well as to fill out the Gaps.	**Complied**

		GAPs have been covered with greenbelt in admin building, canteen, agglomerarion plant, MRP area, boundary side, colony area, internal roadside etc. Photograph of which is attached in **Annexure- 5.**	
7	Utilization of solid waste, installation of continuous stack monitoring and setting up of online ambient air quality monitoring station, to study the possibility of slag transportation back to the abandoned mines, etc. are yet to be implemented satisfactorily	We are utilizing 100% of the slag as alternative construction material as well as land filling for which authorization has been obtained from OSPCB. As per clause no.1 above, we are committing to complete the installation of online CEMS by 31st December '2022, for which PO has already been placed as on 6-08-2022.	31.12.2022
8	During visit some construction work has been observed in the premises. It has been reported that the date of land development work for expansion as 29th April, 2017. As per the document furnished piling work at the location of furnace has been initiated during 2017. On perusal of the accorded Environmental clearance and amendment issued to the project it was observed that the validity of the environmental clearance dated 04.05.2009 was extended till 03.05.2019 vide letter dated 13.01.2017. As per the EC accorded production capacity of one furnace is 65,000 TPA. Production detail reported for the year 2019-20, 2020-21 and 2021-22 as 72766 MT, 68331.01 MT and 74995.58 MT respectively.	The observations and respective document verifications during RO visit indicates that the observed constructions were done during the validity of EC period i.e, as on 03/05/2019. For the then proposed expansion project. The production quantity has always been maintained within the permissible limit as per CTO in line with accorded EC.	Justified as given

	PP furnished no increase pollution load certificate from NIT Rourkela for change in production from 65000TPA to 75000TPA. PP also furnished a copy of the acknowledgement slip for Expansion of Production of HC Ferro Chrome from 75000 TPA to 80000 TPA plus 6300 TPA from Metal Recovery Plant for which certificate has not been issued by SPCB with a direction to submit the copy of acknowledgement in support of no increase in pollution load certificate application in Paribesh portal for 65000TPA to 75000TPA. CTO has been accorded by OSPCB vide letter No.4949 dated 29.03.2022 for Charge chrome/High Carbon Ferro Chrome of 750000 metric tonne/annum (Arc furnace of 45 MVA) and charge chrome (metal recovery plant of 6300 metric tonne/annum). The specification/direction issued by SPCB in this matter should be strictly adhered to.		
9	Copy of EIA/EMP of the project to be submitted to the Regional Office	Copy of EIA/EMP of the project is already submitted for your kind reference.	17.08.2022

10	The date of financial closure and final approval of the project may be communicated to this office.	M/s. Ferro Alloys Corporation Limited (FACOR) was under Corporate Insolvency Resolution Process (CIRP) under the Insolvency and Bankruptcy Code, 2016. Hon'ble National Company Law Tribunal, Cuttack Bench, *vide* its order dated 30.01.2020 has approved the Resolution Plan of Vedanta Group. Pursuant to the said order of NCLT Cuttack, the Board of Directors of the Company has been newly constituted on dt.21.09.2020 to implement the approved Resolution Plan. Hence the date of financial closure and final approval of the project by the authority of the Project Proponent was on 21.09.2020. The closure document is attached for your perusal. This boad resolution is attached in **Annexure- 6**	The Financial closure of the proposed expansion shall be submitted after due implementation of the project.

Place: Randia, Bhadrak

Date: 29th August 2022

Encl: As above.

Thanking You
Sincerely

For M/s Ferro Alloys Corporation Ltd.

Authorized Signatory

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.

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.

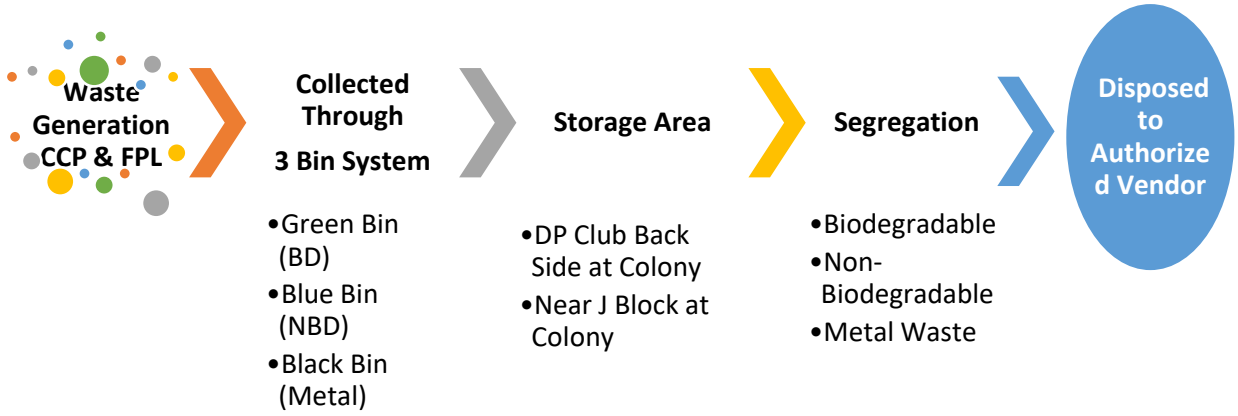
Types of Plastic Waste Generation

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.

Figure 3: Awareness campaign at conference hall

Figure 2: Conducting awareness campaign on site

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.

KALYANI LABORATORIES PVT. LTD.

Kalyani Laboratories

PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-751032, ODISHA

TEST REPORT

Test Report No	:	**KLPL/6/23/WATER/08080A**	*Issue Date:*	03-Jul-2023
Amendment No	:	-	*Amendment Date :*	-
Reference	:	PO NUMBER :4920054932,PO DATE :24.05.2022		
Customer Name	:	FERRO ALLOYS CORPORATION LTD.		
Address	:	CHARGE CHROME PLANT ,D.P. NAGAR, RANDIA-756135,BHADRAK,ODISHA.		
Date of receipt	:	29-Jun-2023 Test Commenced On : 29-Jun-2023	*Test Completion On:*	03-Jul-2023
Sample Description	:	**DRINKING WATER**		
Sample Condition	:	SEALED		
*Sample Identification * :*		**FILTER WATER**	*Sampling Date :*	26-Jun-2023
Batch No , Lot No	:	NA *MFG Date :* NA	*EXP Date :*	NA
Received Quantity	:	1LTR X 2 NOS	Location:- Guest House Aqua Guard	
Sample Collected By	:	By KLPL		
Ref.To Sampling Procedure:		QSP-07		

Parameters		*Unit*	*Requirement*	*Result*	*Test Method*
BATERIOLOGICAL QUALITY					
i	E.coli	MPN/100ml.	Shall not be detected in any100ml. Sample	<2	IS 1622:1981 RA 2009
ii	Total Coliforms	MPN/100 ml	Shall not be detected in any 100 ml sample	<2	IS 1622:1981 RA 2009
CHEMICAL PARAMETER					
i	Chloride (as Cl)	mg/l, Max	250	26	IS 3025 (Part 32):1988 RA 2009
ii	Free residual chlorine	mg/l, Min	0.2	0.32	IS 3025 (Part 26):1986 RA 2009
iii	Iron (as Fe)	mg/l, Max	1	<0.05	IS 3025 (Part 53):2003 RA 2014
iv	Total hardness (as CaCO3),	mg/l, Max	200	132	IS 3025 (Part 21):2009
v	Nitrate as NO3	mg/l, Max	45	0.32	IS 3025 (PART 34): 1988 RA 2003
vi	Calcium (as Ca)	mg/l, Max	75	48	IS 3025 (Part 40):1991 RA 2009
vii	Copper (as Cu)	mg/l, Max	0.05	<0.02	IS 3025 (Part 42):1992 RA 2009
viii	Fluoride (as F)	mg/l, Max	1	0.42	IS 3025 (Part 60):2008
ix	Magnesium (as Mg)	mg/l, Max	30	2.92	IS 3025 (Part 46):1994 RA 2003
x	Manganese (as Mn)	mg/l, Max	0.1	<0.05	IS 3025 (Part 59):2006 RA 2012
xi	Phenolic compounds (as C6H5OH)	mg/l, Max	0.001	<0.001	IS 3025 (Part 43):1992 RA 2009
xii	Sulphate (as SO4)	mg/l, Max	200	18	IS 3025 (Part 24):1986 RA 2009
xiii	Ammonia	mg/l, Max	0.5	<0.03	IS 3025 (Part 34): 1988 RA 2003
xiv	Mineral oil	mg/l, Max	0.5	<0.5	Clause 6 of IS 3025 (Part- 39):1991 RA 2003
xv	Selenium (as Se)	mg/l, Max	0.01	<0.005	IS 3025 (Part 56):2003 RA 2009
xvi	Total alkalinity (as CaCO3),	mg/l, Max	200	148	IS 3025 (Part 23):1986 RA 2009
xvii	Zinc (as Zn)	mg/l, Max	5	<0.05	IS 3025 (Part 49):1994 RA 2009
xviii	Sulphide	mg/l, Max	0.05	<0.05	APHA 22nd Edition (4500-S2--F)
xix	Aluminum (as Al)	mg/l,Max	0.03	<0.02	IS 3025 (part-55)
xx	Anionic Surface Active Agents (as MBAS)	mg/l, Max	0.2	<0.1	Annex - K OF IS 13428:2005 RA 2009

Kalyani Laboratories Pvt. Ltd. BBSR

KLPL- 363447A

Test Report No : **KLPL/6/23/WATER/08080A**

Parameters		Unit	Requirement	Result	Test Method
xxii	Butachlor	µg/l, Max	125	<0.01	USEPA 8141 A
xxiii	Alachlor	µg/l, Max	20	<0.01	USEPA 507
xxiv	Atrazine	µg/l, Max	2.0	<0.01	USEPA 8141 A
xxv	Dieldrin	µg/l, Max	0.03	<0.01	USEPA 508
xxvi	Ethion(Residue to be Determined as ethion and its oxygen analogue and expressed as ethion)	µg/l, Max	3.0	<0.01	USEPA 1657 A
PHYSICAL PARAMETER					
i	Colour.	Hazen, Max	5	<1.0	IS 3025 (Part 4:1983 RA 2012
ii	Odour	--	Agreeable	AGREEABLE	IS 3025 (Part 5):1983 RA 2012
iii	pH value	---	6.5-8.5	6.85	IS 3025 (Part-11):1983, RA 2012
iv	Taste	--	Agreeable	AGREEABLE	IS 3025 (Parts 8):1984 RA 2006
v	Turbidity	NTU, Max	1	0.4	IS 3025 (Part 10):1984 RA 2006
vi	Total dissolved solids	mg/l, Max	500	268	IS 3025 (Part 16):1984 RA 2006
TOXIC SUBSTANCES					
i	Cadmium (as Cd)	mg/l, Max	0.003	<0.001	IS 3025 (Part 41):1992 RA 2009
ii	Cyanide (as CN)	mg/l, Max	0.05	<0.02	IS 3025 (Part 27):1986 RA 2009
iii	Lead (as Pb)	mg/l, Max	0.01	<0.005	IS 3025 (Part 47):1994 RA 2009
iv	Mercury (as Hg)	mg/l, Max	0.001	<0.0005	IS 3025 (Part 48):1994 RA 2009
v	Total arsenic (as As)	mg/l, Max	0.01	<0.001	IS 3025 (Part 37):1988 RA 2009
vi	Nickel (as Ni)	mg/l, Max	0.02	<0.01	IS 3025 (Part 54): 2003 RA 2009

Remarks :

Any unusual feature observed during determination :

Analysed By

Mr. Digambar Arukha
For Kalyani Laboratories Pvt. Ltd.

Kalyani Laboratories Pvt. Ltd. BBSR

Authorized Signatory

Dr. Debasis Biswal
For Kalyani Laboratories Pvt. Ltd

********** End of Test Report **********

KALYANI LABORATORIES PVT. LTD.

Kalyani Laboratories

PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-751032, ODISHA

TEST REPORT

Test Report No	:	**KLPL/8/23/WATER/09248A**	*Issue Date:* 02-Sep-2023
Amendment No	:	-	*Amendment Date :* -
Reference	:	PO NUMBER :4920054932,PO DATE :24.05.2022	
Customer Name	:	FERRO ALLOYS CORPORATION LTD.	
Address	:	CHARGE CHROME PLANT ,D.P. NAGAR, RANDIA-756135,BHADRAK,ODISHA.	
Date of receipt	:	27-Aug-2023 Test Commenced On : 27-Aug-2023	*Test Completion On:* 02-Sep-2023
Sample Description	:	**DRINKING WATER**	
Sample Condition	:	SEALED	
*Sample Identification * :*		**GROUND WATER (BOREWELL-01)**	*Sampling Date :* 26-Aug-2023
Batch No , Lot No	:	NA *MFG Date :* NA	*EXP Date :* NA
Received Quantity	:	1LTR X 2 NOS	
Sample Collected By	:	By KLPL(MR. SUDHIR KUMAR BARIK)	
Ref.To Sampling Procedure:		*KLPL/QSP-07*	

Parameters		*Unit*	*Requirement*	*Result*	*Test Method*
BATERIOLOGICAL QUALITY					
i	E.coli	MPN/100ml.	Shall not be detected in any100ml. Sample	<2	IS 1622:1981 RA 2009
ii	Total Coliforms	MPN/100 ml	Shall not be detected in any 100 ml sample	<2	IS 1622:1981 RA 2009
CHEMICAL PARAMETER					
i	Chloride (as Cl)	mg/l, Max	250	32	IS 3025 (Part 32):1988 RA 2009
ii	Free residual chlorine	mg/l, Min	0.2	<0.04	IS 3025 (Part 26):1986 RA 2009
iii	Iron (as Fe)	mg/l, Max	1	<0.05	IS 3025 (Part 53):2003 RA 2014
iv	Total hardness (as CaCO3),	mg/l, Max	200	148	IS 3025 (Part 21):2009
v	Nitrate as NO3	mg/l, Max	45	0.38	IS 3025 (PART 34): 1988 RA 2003
vi	Calcium (as Ca)	mg/l, Max	75	46.4	IS 3025 (Part 40):1991 RA 2009
vii	Copper (as Cu)	mg/l, Max	0.05	<0.02	IS 3025 (Part 42):1992 RA 2009
viii	Fluoride (as F)	mg/l, Max	1	0.55	IS 3025 (Part 60):2008
ix	Magnesium (as Mg)	mg/l, Max	30	7.78	IS 3025 (Part 46):1994 RA 2003
x	Manganese (as Mn)	mg/l, Max	0.1	<0.05	IS 3025 (Part 59):2006 RA 2012
xi	Phenolic compounds (as C6H5OH)	mg/l, Max	0.001	<0.001	IS 3025 (Part 43):1992 RA 2009
xii	Sulphate (as SO4)	mg/l, Max	200	20	IS 3025 (Part 24):1986 RA 2009
xiii	Ammonia	mg/l, Max	0.5	<0.03	IS 3025 (Part 34): 1988 RA 2003
xiv	Mineral oil	mg/l, Max	0.5	<0.5	Clause 6 of IS 3025 (Part- 39):1991 RA 2003
xv	Selenium (as Se)	mg/l, Max	0.01	<0.005	IS 3025 (Part 56):2003 RA 2009
xvi	Total alkalinity (as CaCO3),	mg/l, Max	200	156	IS 3025 (Part 23):1986 RA 2009
xvii	Zinc (as Zn)	mg/l, Max	5	<0.05	IS 3025 (Part 49):1994 RA 2009
xviii	Sulphide	mg/l, Max	0.05	<0.05	APHA 22nd Edition (4500-S2--F)
xix	Aluminum (as Al)	mg/l,Max	0.03	<0.02	IS 3025 (part-55)
xx	Anionic Surface Active Agents (as MBAS)	mg/l, Max	0.2	<0.1	Annex - K OF IS 13428:2005 RA 2009

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KLPL- 363444A

Test Report No : **KLPL/8/23/WATER/09248A**

Parameters		Unit	Requirement	Result	Test Method
xxi	Boron (as B)	mg/l, Max	0.5	<0.1	Annex H OF IS 13428 : 2005 RA 2009
xxii	Chromium (as Cr)	mg/l, Max	0.05	<0.02	Annex J OF IS 13428 : 2005 RA 2009
xxiii	Barium (as Ba)	mg/l, Max	0.7	<0.2	Annex F of IS 13428 RA 2012
xxiv	Silver (as Ag)	mg/l, Max	0.1	<0.005	Annex J of IS 13428 : 2005 RA 2009
xxv	Molybdenum (as Mo)	mg/l, Max	0.07	<0.01	IS 3025 (Part 2): 2002
xxvi	Chloramines (Cl2)	mg/l, Max	4.0	<1.0	IS 3025 (Part 26):2009
xxvii	Total Chromium	mg/l, Max	0.05	<0.02	IS 3025 (PART 52): 2003 RA 2009
xxviii	Polynuclear Aromatic Hydrocarbon	mg/l, Max	0.0001	<0.00005	APHA 22nd Edition (6440)
xxix	Polyclorinatedbiphenyls	mg/l, Max	0.0005	<0.00005	APHA 22nd Edition 6630
xxx	Bromoform	mg/l, Max	0.1	<0.1	APHA 22nd Edition 6232
xxxi	Dibromochloromethane	mg/l, Max	0.1	<0.1	APHA 22nd Edition 6232
xxxii	Chloroform	mg/l, Max	0.2	<0.2	APHA 22nd Edition 6232
xxxiii	Bromodichloromethane	mg/l, Max	0.06	<0.06	APHA 22nd Edition 6232
PESTISIDE					
i	p p DDE	µg/l, Max	1.0	<0.05	USEPA 508
ii	p p DDD	µg/l, Max	1.0	<0.05	USEPA 508
iii	p p DDT	µg/l, Max	1.0	<0.05	USEPA 508
iv	o p DDT	µg/l, Max	1.0	<0.05	USEPA 508
v	o p DDD	µg/l, Max	1.0	<0.05	USEPA 508
vi	o p DDE	µg/l, Max	1.0	<0.05	USEPA 508
vii	a-HCH	µg/l, Max	0.01	<0.01	USEPA 508
viii	ß -HCH	µg/l, Max	0.04	<0.01	USEPA 508
ix	§-HCH	µg/l, Max	0.04	<0.01	USEPA 508
x	Lindane	µg/l, Max	2.0	<0.01	USEPA 508
xi	Endosulfan a	µg/l, Max	0.4	<0.01	USEPA 508
xii	Endosulfan sulphate	µg/l, Max	0.4	<0.01	USEPA 508
xiii	Monocrotophos	µg/l, Max	1.0	<0.01	USEPA 8141 A
xiv	Chlorpyrifos	µg/l, Max	30	<0.01	USEPA 8141 A
xv	Phorate	µg/l, Max	2.0	<0.01	USEPA 8141 A
xvi	Isoproturon	µg/l, Max	9.0	<0.01	USEPA 532
xvii	Methyl Parathion	µg/l, Max	0.3	<0.01	USEPA 8141 A
xviii	Malathion	µg/l, Max	190	<0.01	USEPA 8141 A
xix	Aldrin	µg/l, Max	0.03	<0.01	USEPA 508
xx	Endosulfan ß	µg/l, Max	0.4	<0.01	USEPA 508
xxi	2,4-D	µg/l, Max	30	<0.05	USEPA 515.1

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KALYANI LABORATORIES PVT. LTD.

Kalyani Laboratories

PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-751032, ODISHA

TEST REPORT

NABL ULR NO	: **TC704323000016631F**		
Test Report No	**KLPL/4/23/ENVN/02227**	*Issue Date*	: 28-Apr-2023
Amendment No	: -	*Amendment Date*	-
Reference	: PO NUMBER :4920054932,PO DATE :24.05.2022		
Customer Name	: **FERRO ALLOYS CORPORATION LTD.**		
Address	: CHARGE CHROME PLANT ,D.P. NAGAR, RANDIA-756135,BHADRAK,ODISHA.		
Date of receipt	: 17-Apr-2023 Commenced On : 17-Apr-2023	*Completion*	27-Apr-2023
Sample Name	: **NOISE**		
Sample Condition	-		
Quantity	17NOS		
Ref.To Sampling Procedure:	QSP-07		

Parameters	Unit	Standard Value	Results	Test Method
Location & Date : ***NEAR 45MVA FURNACE – 05.04.2023***				
Noise Level Indl. Area (Day)	dB	---	**72.8**	IS 9989:1981 (RA 2014)
Noise Level Indl. Area (Night)	dB	--	**65.7**	IS 9989:1981 (RA 2014)
Location & Date : ***NEAR ADMINISTRATIVE BUILDING - 05.04.2023***				
Noise Level Indl. Area (Day)	dB	---	**54.6**	IS 9989:1981 (RA 2014)
Noise Level Indl. Area (Night)	dB	--	**45.4**	IS 9989:1981 (RA 2014)
Location & Date : ***NEAR AGGLOMERATION PLANT - 05.04.2023***				
Noise Level Indl. Area (Day)	dB	---	**77.6**	IS 9989:1981 (RA 2014)
Noise Level Indl. Area (Night)	dB	---	**67.8**	IS 9989:1981 (RA 2014)
Location & Date : ***NEAR AUTO GARAGE- 05.04.2023***				
Noise Level Indl. Area (Day)	dB	---	**61.7**	IS 9989:1981 (RA 2014)
Noise Level Indl. Area (Night)	dB	---	**54.4**	IS 9989:1981 (RA 2014)
Location & Date : ***NEAR BRIQUETTE STORAGE AREA - 05.04.2023***				
Noise Level Indl. Area (Day)	dB	---	**70.7**	IS 9989:1981 (RA 2014)
Noise Level Indl. Area (Night)	dB	---	**62.6**	IS 9989:1981 (RA 2014)
Location & Date : ***NEAR CENTRAL STORE - 05.04.2023***				
Noise Level Indl. Area (Day)	dB	---	**54.2**	IS 9989:1981 (RA 2014)
Noise Level Indl. Area (Night)	dB	---	**42.5**	IS 9989:1981 (RA 2014)
Location & Date : ***NEAR DRYER PLANT (AGGLOMERATION) - 05.04.2023***				
Noise Level Indl. Area (Day)	dB	---	**80.1**	IS 9989:1981 (RA 2014)
Noise Level Indl. Area (Night)	dB	---	**70.6**	IS 9989:1981 (RA 2014)
Location & Date : ***NEAR FACOR COLONEY - 05.04.2023***				
Noise Level Indl. Area (Day)	dB	---	**51.6**	IS 9989:1981 (RA 2014)
Noise Level Indl. Area (Night)	dB	---	**42.8**	IS 9989:1981 (RA 2014)
Location & Date : ***NEAR FINISHED PRODUCT HANDLING- 05.04.2023***				
Noise Level Indl. Area (Day)	dB	---	**73.2**	IS 9989:1981 (RA 2014)

Kalyani Laboratories Pvt. Ltd. BBSR

KALYANI LABORATORIES PVT. LTD.

PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-751032, ODISHA

TEST REPORT

NABL ULR NO : **TC704323000016631F**

Test Report No : **KLPL/4/23/ENVN/02227** *Issue Date* : 28-Apr-2023

Amendment No : - *Amendment Date* : -

Reference : PO NUMBER :4920054932,PO DATE :24.05.2022

Customer Name : **FERRO ALLOYS CORPORATION LTD.**

Address : CHARGE CHROME PLANT ,D.P. NAGAR, RANDIA-756135,BHADRAK,ODISHA.

Date of receipt : 17-Apr-2023 Commenced On : 17-Apr-2023 *Completion* 27-Apr-2023

Sample Name : **NOISE**

Sample Condition : -

Quantity : 17NOS

Ref.To Sampling Procedure: QSP-07

Parameters	Unit	Standard Value	Results	Test Method
Noise Level Indl. Area (Night)	dB	---	**59.6**	IS 9989:1981 (RA 2014)
Location & Date : ***NEAR GCP- 05.04.2023***				
Noise Level Indl. Area (Day)	dB	---	**78.9**	IS 9989:1981 (RA 2014)
Noise Level Indl. Area (Night)	dB	---	**73.1**	IS 9989:1981 (RA 2014)
Location & Date : ***NEAR MAIN GATE - 05.04.2023***				
Noise Level Indl. Area (Day)	dB	---	**60.5**	IS 9989:1981 (RA 2014)
Noise Level Indl. Area (Night)	dB	---	**49.6**	IS 9989:1981 (RA 2014)
Location & Date : ***NEAR MATERIAL RECOVERY PLANT - 05.04.2023***				
Noise Level Indl. Area (Day)	dB	---	**76.6**	IS 9989:1981 (RA 2014)
Noise Level Indl. Area (Night)	dB	---	**67.5**	IS 9989:1981 (RA 2014)
Location & Date : ***NEAR MRSS SWITCH YARD - 05.04.2023***				
Noise Level Indl. Area (Day)	dB	---	**65.9**	IS 9989:1981 (RA 2014)
Noise Level Indl. Area (Night)	dB	---	**57.1**	IS 9989:1981 (RA 2014)
Location & Date : ***NEAR STORAGE AREA - 05.04.2023***				
Noise Level Indl. Area (Day)	dB	---	**51.5**	IS 9989:1981 (RA 2014)
Noise Level Indl. Area (Night)	dB	---	**40.8**	IS 9989:1981 (RA 2014)
Location & Date : ***NEAR VEHICLE PARKING AREA- 05.04.2023***				
Noise Level Indl. Area (Day)	dB	---	**48.9**	IS 9989:1981 (RA 2014)
Noise Level Indl. Area (Night)	dB	---	**42.5**	IS 9989:1981 (RA 2014)
Location & Date : ***NEAR WATER COOLING TOWER AREA- 05.04.2023***				
Noise Level Indl. Area (Day)	dB	---	**78.8**	IS 9989:1981 (RA 2014)
Noise Level Indl. Area (Night)	dB	---	**70.6**	IS 9989:1981 (RA 2014)
Location & Date : ***OHC - 05.04.2023***				
Noise Level Indl. Area (Day)	dB	---	**53.2**	IS 9989:1981 (RA 2014)
Noise Level Indl. Area (Night)	dB	---	**45.5**	IS 9989:1981 (RA 2014)

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KALYANI LABORATORIES PVT. LTD.

Kalyani Laboratories

PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-751032, ODISHA

TEST REPORT

NABL ULR NO	:	**TC704323000016631F**			
Test Report No		**KLPL/4/23/ENVN/02227**		*Issue Date*	: 28-Apr-2023
Amendment No	:	-		*Amendment Date*	-
Reference	:	PO NUMBER :4920054932,PO DATE :24.05.2022			
Customer Name	:	**FERRO ALLOYS CORPORATION LTD.**			
Address	:	CHARGE CHROME PLANT ,D.P. NAGAR, RANDIA-756135,BHADRAK,ODISHA.			
Date of receipt	:	17-Apr-2023	Commenced On : 17-Apr-2023	*Completion*	27-Apr-2023
Sample Name	:	**NOISE**			
Sample Condition		-			
Quantity		17NOS			
Ref.To Sampling Procedure:		QSP-07			

Parameters	*Unit*	*Standard Value*	*Results*	*Test Method*

Remarks

Any unusual feature observed during determination

Analysed By

D Anukha

Mr. Digambar Anukha
For Kalyani Laboratories Pvt. Ltd.

Authorised Signatory

Dr. Debasis Biswal
For Kalyani Laboratories Pvt. Ltd.

Kalyani Laboratories Pvt. Ltd. BBSR

End of Test Report

KALYANI LABORATORIES PVT. LTD.

PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-751032, ODISHA

TEST REPORT

ABL ULR NO	: TC704323000016934F		
Test Report No	KLPL/5/23/ENVN/02288	Issue Date	: 03-Jun-2023
Amendment No	: -	Amendment Date	-
Reference	: PO NUMBER :4920054932,PO DATE :24.05.2022		
Customer Name	: FERRO ALLOYS CORPORATION LTD.		
Address	: CHARGE CHROME PLANT ,D.P. NAGAR, RANDIA-756135,BHADRAK,ODISHA.		
Date of receipt	: 29-May-2023 Commenced On : 29-May-2023	Completion	03-Jun-2023
Sample Name	: NOISE		
Sample Condition	-		
Quantity	17NOS		
Ref To Sampling Procedure:	QSP-07		

Parameters	Unit	Standard Value	Results	Test Method
Location & Date : *NEAR 45MVA FURNACE – 30.05.2023*				
Noise Level Indl. Area (Day)	dB	---	72.0	IS 9989:1981 (RA 2014)
Noise Level Indl. Area (Night)	dB	--	65.1	IS 9989:1981 (RA 2014)
Location & Date : *NEAR ADMINISTRATIVE BUILDING - 30.05.2023*				
Noise Level Indl. Area (Day)	dB	---	54.0	IS 9989:1981 (RA 2014)
Noise Level Indl. Area (Night)	dB	--	45.0	IS 9989:1981 (RA 2014)
Location & Date : *NEAR AGGLOMERATION PLANT - 30.05.2023*				
Noise Level Indl. Area (Day)	dB	---	77.1	IS 9989:1981 (RA 2014)
Noise Level Indl. Area (Night)	dB	---	67.3	IS 9989:1981 (RA 2014)
Location & Date : *NEAR AUTO GARAGE- 30.05.2023*				
Noise Level Indl. Area (Day)	dB	---	61.1	IS 9989:1981 (RA 2014)
Noise Level Indl. Area (Night)	dB	---	54.0	IS 9989:1981 (RA 2014)
Location & Date : *NEAR BRIQUETTE STORAGE AREA - 30.05.2023*				
Noise Level Indl. Area (Day)	dB	---	70.1	IS 9989:1981 (RA 2014)
Noise Level Indl. Area (Night)	dB	---	62.0	IS 9989:1981 (RA 2014)
Location & Date : *NEAR CENTRAL STORE - 30.05.2023*				
Noise Level Indl. Area (Day)	dB	---	53.7	IS 9989:1981 (RA 2014)
Noise Level Indl. Area (Night)	dB	---	42.0	IS 9989:1981 (RA 2014)
Location & Date : *NEAR DRYER PLANT (AGGLOMERATION) - 30.05.2023*				
Noise Level Indl. Area (Day)	dB	---	79.6	IS 9989:1981 (RA 2014)
Noise Level Indl. Area (Night)	dB	---	70.0	IS 9989:1981 (RA 2014)
Location & Date : *NEAR FACOR COLONEY - 30.05.2023*				
Noise Level Indl. Area (Day)	dB	---	51.0	IS 9989:1981 (RA 2014)
Noise Level Indl. Area (Night)	dB	---	42.2	IS 9989:1981 (RA 2014)
Location & Date : *NEAR FINISHED PRODUCT HANDLING- 30.05.2023*				
Noise Level Indl. Area (Day)	dB	---	72.7	IS 9989:1981 (RA 2014)

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PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-751032, ODISHA

TEST REPORT

NABL ULR NO : TC704323000016934F

Test Report No : KLPL/5/23/ENVN/02288 Issue Date : 03-Jun-2023

Amendment No : - Amendment Date -

Reference : PO NUMBER :4920054932,PO DATE :24.05.2022

Customer Name : **FERRO ALLOYS CORPORATION LTD.**

Address : CHARGE CHROME PLANT ,D.P. NAGAR, RANDIA-756135,BHADRAK,ODISHA.

Date of receipt : 29-May-2023 Commenced On : 29-May-2023 Completion 03-Jun-2023

Sample Name : **NOISE**

Sample Condition -

Quantity 17NOS

Ref.To Sampling Procedure: QSP-07

Parameters	Unit	Standard Value	Results	Test Method
Noise Level Indl. Area (Night)	dB	---	59.0	IS 9989:1981 (RA 2014)
Location & Date : *NEAR GCP- 30.05.2023*				
Noise Level Indl. Area (Day)	dB	---	78.3	IS 9989:1981 (RA 2014)
Noise Level Indl. Area (Night)	dB	---	72.7	IS 9989:1981 (RA 2014)
Location & Date : *NEAR MAIN GATE - 30.05.2023*				
Noise Level Indl. Area (Day)	dB	---	60.0	IS 9989:1981 (RA 2014)
Noise Level Indl. Area (Night)	dB	---	49.0	IS 9989:1981 (RA 2014)
Location & Date : *NEAR MATERIAL RECOVERY PLANT - 30.05.2023*				
Noise Level Indl. Area (Day)	dB	---	76.0	IS 9989:1981 (RA 2014)
Noise Level Indl. Area (Night)	dB	---	67.0	IS 9989:1981 (RA 2014)
Location & Date : *NEAR MRSS SWITCH YARD - 30.05.2023*				
Noise Level Indl. Area (Day)	dB	---	65.2	IS 9989:1981 (RA 2014)
Noise Level Indl. Area (Night)	dB	---	56.8	IS 9989:1981 (RA 2014)
Location & Date : *NEAR STORAGE AREA - 30.05.2023*				
Noise Level Indl. Area (Day)	dB	---	51.0	IS 9989:1981 (RA 2014)
Noise Level Indl. Area (Night)	dB	---	40.3	IS 9989:1981 (RA 2014)
Location & Date : *NEAR VEHICLE PARKING AREA- 30.05.2023*				
Noise Level Indl. Area (Day)	dB	---	48.3	IS 9989:1981 (RA 2014)
Noise Level Indl. Area (Night)	dB	---	42.0	IS 9989:1981 (RA 2014)
Location & Date : *NEAR WATER COOLING TOWER AREA- 30.05.2023*				
Noise Level Indl. Area (Day)	dB	---	78.3	IS 9989:1981 (RA 2014)
Noise Level Indl. Area (Night)	dB	---	70.1	IS 9989:1981 (RA 2014)
Location & Date : *OHC - 30.05.2023*				
Noise Level Indl. Area (Day)	dB	---	52.7	IS 9989:1981 (RA 2014)
Noise Level Indl. Area (Night)	dB	---	45.0	IS 9989:1981 (RA 2014)

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PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-751032, ODISHA

TEST REPORT

NABL ULR NO	: TC704323C000017203F		
Test Report No	KLPL/6/23/ENVN/02326	Issue Date	: 05-Jul-2023
Amendment No	: -	Amendment Date	-
Reference	: PO NUMBER :4920054932,PO DATE :24.05.2022		
Customer Name	: FERRO ALLOYS CORPORATION LTD.		
Address	: CHARGE CHROME PLANT ,D.P. NAGAR, RANDIA-756135,BHADRAK,ODISHA.		
Date of receipt	: 29-Jun-2023 Commenced On : 29-Jun-2023	Completion	04-Jul-2023
Sample Name	: NOISE		
Sample Condition	-		
Quantity	17NOS		
Ref.To Sampling Procedure:	KLPL/NOISE/SOP-23		

Parameters	Unit	Standard Value	Results	Test Method
Location & Date : NEAR 45MVA FURNACE – 27.06.2023				
Noise Level Indl. Area (Day)	dB	---	71.4	IS 9989:1981 (RA 2014)
Noise Level Indl. Area (Night)	dB	--	64.7	IS 9989:1981 (RA 2014)
Location & Date : NEAR ADMINISTRATIVE BUILDING – 27.06.2023				
Noise Level Indl. Area (Day)	dB	---	53.5	IS 9989:1981 (RA 2014)
Noise Level Indl. Area (Night)	dB	--	44.5	IS 9989:1981 (RA 2014)
Location & Date : NEAR AGGLOMERATION PLANT – 27.06.2023				
Noise Level Indl. Area (Day)	dB	---	76.6	IS 9989:1981 (RA 2014)
Noise Level Indl. Area (Night)	dB	---	66.3	IS 9989:1981 (RA 2014)
Location & Date : NEAR AUTO GARAGE- 27.06.2023				
Noise Level Indl. Area (Day)	dB	---	60.7	IS 9989:1981 (RA 2014)
Noise Level Indl. Area (Night)	dB	---	53.5	IS 9989:1981 (RA 2014)
Location & Date : NEAR BRIQUETTE STORAGE AREA – 27.06.2023				
Noise Level Indl. Area (Day)	dB	---	69.6	IS 9989:1981 (RA 2014)
Noise Level Indl. Area (Night)	dB	---	61.5	IS 9989:1981 (RA 2014)
Location & Date : NEAR CENTRAL STORE – 27.06.2023				
Noise Level Indl. Area (Day)	dB	---	53.2	IS 9989:1981 (RA 2014)
Noise Level Indl. Area (Night)	dB	---	41.5	IS 9989:1981 (RA 2014)
Location & Date : NEAR DRYER PLANT (AGGLOMERATION) – 27.06.2023				
Noise Level Indl. Area (Day)	dB	---	79.0	IS 9989:1981 (RA 2014)
Noise Level Indl. Area (Night)	dB	---	69.4	IS 9989:1981 (RA 2014)
Location & Date : NEAR FACOR COLONEY – 28.06.2023				
Noise Level Indl. Area (Day)	dB	---	50.4	IS 9989:1981 (RA 2014)
Noise Level Indl. Area (Night)	dB	---	41.6	IS 9989:1981 (RA 2014)
Location & Date : NEAR FINISHED PRODUCT HANDLING- 28.06.2023				
Noise Level Indl. Area (Day)	dB	---	72.3	IS 9989:1981 (RA 2014)

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PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-751032, ODISHA

TEST REPORT

NABL ULR NO	: TC704323000017203F		
Test Report No	KLPL/6/23/ENVN/02326	Issue Date	: 05-Jul-2023
Amendment No	: -	Amendment Date	-
Reference	: PO NUMBER :4920054932,PO DATE :24.05.2022		
Customer Name	: FERRO ALLOYS CORPORATION LTD.		
Address	: CHARGE CHROME PLANT ,D.P. NAGAR, RANDIA-756135,BHADRAK,ODISHA.		
Date of receipt	: 29-Jun-2023 Commenced On : 29-Jun-2023	Completion	04-Jul-2023
Sample Name	: NOISE		
Sample Condition	-		
Quantity	17NOS		
Ref.To Sampling Procedure:	KLPL/NOISE/SOP-23		

Parameters	Unit	Standard Value	Results	Test Method
Noise Level Indl. Area (Night)	dB	---	58.5	IS 9989:1981 (RA 2014)
Location & Date : *NEAR GCP- 28.06.2023*				
Noise Level Indl. Area (Day)	dB	---	77.6	IS 9989:1981 (RA 2014)
Noise Level Indl. Area (Night)	dB	---	72.2	IS 9989:1981 (RA 2014)
Location & Date : *NEAR MAIN GATE – 28.06.2023*				
Noise Level Indl. Area (Day)	dB	---	59.4	IS 9989:1981 (RA 2014)
Noise Level Indl. Area (Night)	dB	---	48.5	IS 9989:1981 (RA 2014)
Location & Date : *NEAR MATERIAL RECOVERY PLANT – 28.06.2023*				
Noise Level Indl. Area (Day)	dB	---	75.4	IS 9989:1981 (RA 2014)
Noise Level Indl. Area (Night)	dB	---	66.4	IS 9989:1981 (RA 2014)
Location & Date : *NEAR MRSS SWITCH YARD – 28.06.2023*				
Noise Level Indl. Area (Day)	dB	---	64.7	IS 9989:1981 (RA 2014)
Noise Level Indl. Area (Night)	dB	---	56.3	IS 9989:1981 (RA 2014)
Location & Date : *NEAR STORAGE AREA – 28.06.2023*				
Noise Level Indl. Area (Day)	dB	---	50.4	IS 9989:1981 (RA 2014)
Noise Level Indl. Area (Night)	dB	---	39.6	IS 9989:1981 (RA 2014)
Location & Date : *NEAR VEHICLE PARKING AREA- 28.06.2023*				
Noise Level Indl. Area (Day)	dB	---	47.6	IS 9989:1981 (RA 2014)
Noise Level Indl. Area (Night)	dB	---	41.5	IS 9989:1981 (RA 2014)
Location & Date : *NEAR WATER COOLING TOWER AREA- 28.06.2023*				
Noise Level Indl. Area (Day)	dB	---	77.6	IS 9989:1981 (RA 2014)
Noise Level Indl. Area (Night)	dB	---	69.6	IS 9989:1981 (RA 2014)
Location & Date : *OHC – 28.06.2023*				
Noise Level Indl. Area (Day)	dB	---	52.2	IS 9989:1981 (RA 2014)
Noise Level Indl. Area (Night)	dB	---	44.4	IS 9989:1981 (RA 2014)

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PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-751032, ODISHA

TEST REPORT

Test Report No		**KLPL/7/23/ENVN/02385**		*Issue Date*	: 04-Aug-2023
Amendment No	:	-		*Amendment Date*	-
Reference	:	PO NUMBER :4920054932,PO DATE :24.05.2022			
Customer Name	:	**FERRO ALLOYS CORPORATION LTD.**			
Address	:	CHARGE CHROME PLANT ,D.P. NAGAR, RANDIA-756135,BHADRAK,ODISHA.			
Date of receipt	:	29-Jul-2023	Commenced On : 29-Jul-2023	*Completion*	04-Aug-2023
Sample Name	:	**NOISE**			
Sample Condition		-			
Sample Collected By	:	By KLPL(MR. SUDHIR KUMAR BARIK)			
Ref.To Sampling Procedure:		KLPL/NOISE/SOP-23			

Parameters	*Unit*	*Standard Value*	*Results*	*Test Method*
Location & Date : ***NEAR 45MVA FURNACE – 27.07.2023***				
Noise Level Indl. Area (Day)	dB	---	70.4	IS 9989:1981 (RA 2014) 2014
Noise Level Indl. Area (Night)	dB	--	63.7	IS 9989:1981 (RA 2014) 2014
Location & Date : ***NEAR ADMINISTRATIVE BUILDING – 27.07.2023***				
Noise Level Indl. Area (Day)	dB	---	55.5	IS 9989:1981 (RA 2014) 2014
Noise Level Indl. Area (Night)	dB	--	44.5	IS 9989:1981 (RA 2014) 2014
Location & Date : ***NEAR AGGLOMERATION PLANT – 27.07.2023***				
Noise Level Indl. Area (Day)	dB	---	72.6	IS 9989:1981 (RA 2014) 2014
Noise Level Indl. Area (Night)	dB	---	66.8	IS 9989:1981 (RA 2014) 2014
Location & Date : ***NEAR AUTO GARAGE- 27.07.2023***				
Noise Level Indl. Area (Day)	dB	---	62.7	IS 9989:1981 (RA 2014) 2014
Noise Level Indl. Area (Night)	dB	---	53.5	IS 9989:1981 (RA 2014) 2014
Location & Date : ***NEAR BRIQUETTE STORAGE AREA – 27.07.2023***				
Noise Level Indl. Area (Day)	dB	---	68.6	IS 9989:1981 (RA 2014) 2014
Noise Level Indl. Area (Night)	dB	---	61.5	IS 9989:1981 (RA 2014) 2014
Location & Date : ***NEAR CENTRAL STORE – 27.07.2023***				
Noise Level Indl. Area (Day)	dB	---	55.2	IS 9989:1981 (RA 2014) 2014
Noise Level Indl. Area (Night)	dB	---	41.5	IS 9989:1981 (RA 2014) 2014
Location & Date : ***NEAR DRYER PLANT (AGGLOMERATION) – 27.07.2023***				
Noise Level Indl. Area (Day)	dB	---	78.0	IS 9989:1981 (RA 2014) 2014
Noise Level Indl. Area (Night)	dB	---	67.4	IS 9989:1981 (RA 2014) 2014
Location & Date : ***NEAR FACOR COLONEY – 28.07.2023***				
Noise Level Indl. Area (Day)	dB	---	52.4	IS 9989:1981 (RA 2014) 2014
Noise Level Indl. Area (Night)	dB	---	41.6	IS 9989:1981 (RA 2014) 2014
Location & Date : ***NEAR FINISHED PRODUCT HANDLING- 28.07.2023***				
Noise Level Indl. Area (Day)	dB	---	72.3	IS 9989:1981 (RA 2014) 2014

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KLPL- 362874A

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PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-751032, ODISHA

TEST REPORT

Test Report No	**KLPL/7/23/ENVN/02385**	*Issue Date*	: 05-Aug-2023
Amendment No	: -	*Amendment Date*	-
Reference	: PO NUMBER :4920054932,PO DATE :24.05.2022		
Customer Name	: **FERRO ALLOYS CORPORATION LTD.**		
Address	: CHARGE CHROME PLANT ,D.P. NAGAR, RANDIA-756135,BHADRAK,ODISHA.		
Date of receipt	: 29-Jul-2023 Commenced On : 29-Jul-2023	*Completion*	04-Aug-2023
Sample Name	: **NOISE**		
Sample Condition	: -		
Sample Collected By	: By KLPL(MR. SUDHIR KUMAR BARIK)		
Ref.To Sampling Procedure:	KLPL/NOISE/SOP-23		

Parameters	*Unit*	*Standard Value*	*Results*	*Test Method*
Noise Level Indl. Area (Night)	dB	---	58.5	IS 9989:1981 (RA 2014):2014
Location & Date : ***NEAR GCP- 28.07.2023***				
Noise Level Indl. Area (Day)	dB	---	78.6	IS 9989:1981 (RA 2014):2014
Noise Level Indl. Area (Night)	dB	---	72.2	IS 9989:1981 (RA 2014):2014
Location & Date : ***NEAR MAIN GATE – 28.07.2023***				
Noise Level Indl. Area (Day)	dB	---	58.4	IS 9989:1981 (RA 2014):2014
Noise Level Indl. Area (Night)	dB	---	48.5	IS 9989:1981 (RA 2014):2014
Location & Date : ***NEAR MATERIAL RECOVERY PLANT – 28.07.2023***				
Noise Level Indl. Area (Day)	dB	---	74.4	IS 9989:1981 (RA 2014):2014
Noise Level Indl. Area (Night)	dB	---	66.4	IS 9989:1981 (RA 2014):2014
Location & Date : ***NEAR MRSS SWITCH YARD – 28.07.2023***				
Noise Level Indl. Area (Day)	dB	---	65.7	IS 9989:1981 (RA 2014):2014
Noise Level Indl. Area (Night)	dB	---	56.3	IS 9989:1981 (RA 2014):2014
Location & Date : ***NEAR STORAGE AREA – 28.07.2023***				
Noise Level Indl. Area (Day)	dB	---	52.4	IS 9989:1981 (RA 2014):2014
Noise Level Indl. Area (Night)	dB	---	39.6	IS 9989:1981 (RA 2014):2014
Location & Date : ***NEAR VEHICLE PARKING AREA- 28.07.2023***				
Noise Level Indl. Area (Day)	dB	---	47.6	IS 9989:1981 (RA 2014):2014
Noise Level Indl. Area (Night)	dB	---	41.5	IS 9989:1981 (RA 2014):2014
Location & Date : ***NEAR WATER COOLING TOWER AREA- 28.07.2023***				
Noise Level Indl. Area (Day)	dB	---	76.6	IS 9989:1981 (RA 2014):2014
Noise Level Indl. Area (Night)	dB	---	69.6	IS 9989:1981 (RA 2014):2014
Location & Date : ***OHC – 28.07.2023***				
Noise Level Indl. Area (Day)	dB	---	52.2	IS 9989:1981 (RA 2014):2014
Noise Level Indl. Area (Night)	dB	---	44.4	IS 9989:1981 (RA 2014):2014

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PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-751032, ODISHA

TC-12063

TEST REPORT

NABL ULR NO	:	**TC1206323000017709**		
Test Report No	:	**1860 | KLPL/8/23/ENVN/02460**	*Issue Date*	: 31-Aug-2023
Amendment No	:	-	*Amendment Date*	: -
Reference	:	PO NUMBER :4920054932,PO DATE :24.05.2022		
Customer Name	:	**FEERO ALLOYS CORPORATION LTD.**		
Address	:	CHARGE CHROME PLANT ,D.P. NAGAR, RANDIA-756135,BHADRAK,ODISHA.		
Date of receipt	:	28-Aug-2023 Commenced On : 28-Aug-2023	*Completion On:*	30-Aug-2023
Sample Name	:	**NOISE**		
Sample Condition	:	--		
Sample Collected By		By KLPL(MR. SUDHIR KUMAR BARIK)		
Ref.To Sampling Procedure:		KLPL/NOISE/SOP-23		

Parameters	*Unit*	*Standard Value*	*Results*	*Test Method*
Location & Date : ***NEAR 45MVA FURNACE,DATE-28.08.2023***				
Noise Level Indl. Area (Day)	dB(A)	75	70.8	IS 9989:1981 (RA 2014):2014
Noise Level Indl. Area (Night)	dB(A)	70	65.2	IS 9989:1981 (RA 2014):2014
Location & Date : ***NEAR ADMINISTRATIVE BUILDING,DATE-28.08.2023***				
Noise Level Indl. Area (Day)	dB(A)	75	53.1	IS 9989:1981 (RA 2014):2014
Noise Level Indl. Area (Night)	dB(A)	70	43.7	IS 9989:1981 (RA 2014):2014
Location & Date : ***NEAR AGGLOMERATION PLANT,DATE-28.08.2023***				
Noise Level Indl. Area (Day)	dB(A)	75	76.1	IS 9989:1981 (RA 2014):2014
Noise Level Indl. Area (Night)	dB(A)	70	66.2	IS 9989:1981 (RA 2014):2014
Location & Date : ***NEAR AUTO GARAGE,DATE-28.08.2023***				
Noise Level Indl. Area (Day)	dB(A)	75	59.2	IS 9989:1981 (RA 2014):2014
Noise Level Indl. Area (Night)	dB(A)	70	54.1	IS 9989:1981 (RA 2014):2014
Location & Date : ***NEAR BRIQUETTE STORAGE AREA,DATE-28.08.2023***				
Noise Level Indl. Area (Day)	dB(A)	75	69.9	IS 9989:1981 (RA 2014):2014
Noise Level Indl. Area (Night)	dB(A)	70	62.7	IS 9989:1981 (RA 2014):2014
Location & Date : ***NEAR CENTRAL STORE,DATE-28.08.2023***				
Noise Level Indl. Area (Day)	dB(A)	75	54.2	IS 9989:1981 (RA 2014):2014
Noise Level Indl. Area (Night)	dB(A)	70	42.6	IS 9989:1981 (RA 2014):2014
Location & Date : ***NEAR DRYER PLANT (AGGLOMERATION),DATE-28.08.2023***				
Noise Level Indl. Area (Day)	dB(A)	75	79.7	IS 9989:1981 (RA 2014):2014
Noise Level Indl. Area (Night)	dB(A)	70	68.8	IS 9989:1981 (RA 2014):2014
Location & Date : ***NEAR FACOR COLONEY,DATE-28.08.2023***				
Noise Level Indl. Area (Day)	dB(A)	75	51.3	IS 9989:1981 (RA 2014):2014
Noise Level Indl. Area (Night)	dB(A)	70	42.8	IS 9989:1981 (RA 2014):2014
Location & Date : ***NEAR FINISHED PRODUCT HANDLING,DATE-28.08.2023***				
Noise Level Indl. Area (Day)	dB(A)	75	73.2	IS 9989:1981 (RA 2014):2014

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KALYANI LABORATORIES PVT. LTD.

Kalyani Laboratories

PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-751032, ODISHA

TC-12063

TEST REPORT

NABL ULR NO	:	**TC1206323000017709**		
Test Report No	:	**1860 | KLPL/8/23/ENVN/02460**	*Issue Date*	: 31-Aug-2023
Amendment No	:	-	*Amendment Date*	: -
Reference	:	PO NUMBER :4920054932,PO DATE :24.05.2022		
Customer Name	:	**FEERO ALLOYS CORPORATION LTD.**		
Address	:	CHARGE CHROME PLANT ,D.P. NAGAR, RANDIA-756135,BHADRAK,ODISHA.		
Date of receipt	:	28-Aug-2023 Commenced On : 28-Aug-2023	*Completion On:*	30-Aug-2023
Sample Name	:	**NOISE**		
Sample Condition	:	--		
Sample Collected By		By KLPL(MR. SUDHIR KUMAR BARIK)		
Ref.To Sampling Procedure:		KLPL/NOISE/SOP-23		

Parameters	*Unit*	*Standard Value*	*Results*	*Test Method*
Noise Level Indl. Area (Night)	dB(A)	70	59.7	IS 9989:1981 (RA 2014):2014
Location & Date : ***NEAR GCP,DATE-28.08.2023***				
Noise Level Indl. Area (Day)	dB(A)	75	78.2	IS 9989:1981 (RA 2014):2014
Noise Level Indl. Area (Night)	dB(A)	70	73.5	IS 9989:1981 (RA 2014):2014
Location & Date : ***NEAR MAIN GATE,DATE-28.08.2023***				
Noise Level Indl. Area (Day)	dB(A)	75	60.7	IS 9989:1981 (RA 2014):2014
Noise Level Indl. Area (Night)	dB(A)	70	49.4	IS 9989:1981 (RA 2014):2014
Location & Date : ***NEAR MATERIAL RECOVERY PLANT,DATE-28.08.2023***				
Noise Level Indl. Area (Day)	dB(A)	75	74.8	IS 9989:1981 (RA 2014):2014
Noise Level Indl. Area (Night)	dB(A)	70	67.6	IS 9989:1981 (RA 2014):2014
Location & Date : ***NEAR MRSS SWITCH YARD,DATE-28.08.2023***				
Noise Level Indl. Area (Day)	dB(A)	75	65.3	IS 9989:1981 (RA 2014):2014
Noise Level Indl. Area (Night)	dB(A)	70	56.8	IS 9989:1981 (RA 2014):2014
Location & Date : ***NEAR STORAGE AREA,DATE-28.08.2023***				
Noise Level Indl. Area (Day)	dB(A)	75	51.8	IS 9989:1981 (RA 2014):2014
Noise Level Indl. Area (Night)	dB(A)	70	40.2	IS 9989:1981 (RA 2014):2014
Location & Date : ***NEAR VEHICLE PARKING AREA,DATE-28.08.2023***				
Noise Level Indl. Area (Day)	dB(A)	75	49.2	IS 9989:1981 (RA 2014):2014
Noise Level Indl. Area (Night)	dB(A)	70	42.7	IS 9989:1981 (RA 2014):2014
Location & Date : ***NEAR WATER COOLING TOWER AREA,DATE-28.08.2023***				
Noise Level Indl. Area (Day)	dB(A)	75	77.1	IS 9989:1981 (RA 2014):2014
Noise Level Indl. Area (Night)	dB(A)	70	68.2	IS 9989:1981 (RA 2014):2014
Location & Date : ***OHC,DATE-28.08.2023***				
Noise Level Indl. Area (Day)	dB(A)	75	53.7	IS 9989:1981 (RA 2014):2014
Noise Level Indl. Area (Night)	dB(A)	70	45.9	IS 9989:1981 (RA 2014):2014

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vedanta
transforming for good

FACOR

EXTRACT FROM THE MINUTES OF THE MEETING OF THE BOARD OF DIRECTORS OF FERRO ALLOYS CORPORATION LIMITED CONVENED AND CONDUCTED AS A MEETING HELD THROUGH ELECTRONIC MODE AND VENUE RECORDED AS D.P. NAGAR, RANDIA, BHADRAK-756135, ODISHA ON THURSDAY, OCTOBER 19, 2023 AT 12.10 P.M.

Adoption of Vedanta Environmental Policy for the Company

"**RESOLVED THAT** the Board accorded its approval for adoption of Vedanta Environmental Policy along with other related policies viz. biodiversity policy, water management policy and carbon energy policy.

RESOLVED FURTHER THAT Mr. Pankaj Kumar Sharma, Whole-Time Director be and is hereby authorised to implement this environmental policy in the Company.

RESOLVED FURTHER THAT the Board of Directors of the Company be and is hereby authorized to adopt the revised environmental policy deem fit and suggest the changes and/or improvements therein, if any, required from time to time by Vedanta Ltd."

Certified to be true
Ferro Alloys Corporation Limited,

Company Secretary
Sambit Kumar Sarangi
ACS 11105

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

Vedanta Resources Plc

Sustainability Governance System

Technical Standard
Water Management

Technical Standard – Water Management

Standard Title:	**Water Management**	**Date of Revision**	02/12/11
Standard:	VED/CORP/SUST/TS 14	**Revision:**	v.1

Document Issue and Revision History		
DATE	**REVISION NUMBER**	**CHANGE SUMMARY**
02/12/11	1	Initial issue.

Authorised by:	Tony Henshaw
Signature	
Position:	Chief Sustainability Officer

Contents Page

1. INTRODUCTION

Vedanta recognises the social, economic and environmental value of water and the impacts that its operations and activities may have on water resources. Protecting water resources is a priority for Vedanta and it is integral to our commitment to sustainable development. In recognition of this commitment and in accordance with our Water Management Policy this Standard aims to facilitate the integration of water management into decision making processes for new and existing projects and to help ensure that all necessary measures are taken to avoid, minimize and in some cases compensate for the impacts of our projects. This Standard supports Vedanta's *Water Management Policy.*

The assessment and management of impacts of new projects shall be considered as part of the overarching environmental and social impact assessment and therefore this document should be read in conjunction with the *Conducting ESIA to International Standards* Technical Standard for such purposes. For existing projects, reference shall also be made to existing environmental management provisions adopted at a Company and site level.

2. SCOPE

This Technical Standard is mandatory and applies to all Vedanta subsidiaries and their operational or managed sites, including new acquisitions, corporate offices and research facilities, and to all new and existing employees and contractor employees. This Standard is applicable to the entire operation lifecycle (including exploration and planning, evaluation, operation and closure).

3. DEFINITIONS

Definitions of key terms used in this document are shown in the following table.

Term	Definition
Affected Communities	Local communities directly affected by the new or existing project.
CAO	The Office of the Compliance Advisor/Ombudsman, an independent post that reports directly to the President of the World Bank Group.
Cumulative Effects	Based on the IFC description, cumulative impacts are those that result from the incremental impact of the project when added to other existing, planned and reasonably predictable future projects and developments. Water-related effects include: cumulative quantity (over-abstraction) and cumulative quality (impairment of water bodies) impacts.
ICMM (International Council on Mining and Metals)	The International Council on Mining and Metals (ICMM) was established in 2001 and seeks to drive performance improvement through its members which comprise 20 mining and metals companies as well as 30 national and regional mining associations and global commodity associations.

Term	Definition
WHO Drinking Water Guidelines	The revised Guidelines for Drinking Water Quality were published by the World Health Organisation (WHO) on 4th July 2011 and are typically used in the absence of any local/national standards for drinking water quality. These guidelines establish the quality standards that should be achieved for water to be classified as drinking water, as well as broader water safety considerations.
IFC (International Finance Corporation)	Member of the World Bank that finances and provides advice to private sector ventures and projects in developing countries.
Lifecycle	The phases of a Vedanta mining project including exploration and planning, evaluation, operation and closure.
Operation(s)	A location or activity that is operated by a Vedanta Company and is part of the Vedanta Group. Locations could include mines, refineries, ports or transportation activities, wind farms, oil and gas development sites, offices including corporate head offices and research and development facilities.
Participatory Water Monitoring	Based on the CAO description, this is a collaborative process of collecting and analysing water data, and communicating the results, in an attempt to identify and solve problems as a partnership between the Vedanta site and its affected communities. It includes a variety of people in all stages of the monitoring process, and incorporates methods and indicators meaningful to the stakeholders concerned.
Stakeholders	Persons or groups that are directly or indirectly affected by a project as well as those that may have interests in a project and/or the ability to influence its outcome, either positively or negatively. This can refer to shareholders, lenders, employees, communities, industry, governments and interested third parties.
Vedanta Company	A subsidiary of Vedanta Group either fully or majority owned that has its own management structure (e.g. Hindustan Zinc Limited, Vedanta Aluminium Limited, Sterlite Industries limited, etc.)
Water Accounting	The systematic collation of the water balance information from each site within each Company to enable the Group Sustainability Committee to measure, record and report aspects of water resources management associated with its operations and activities.
Water Balance	A calculation of the total volume of water inputs (for direct and indirect uses) and outputs (i.e. wastewater) for each Vedanta site.

4. PROGRAMME REQUIREMENTS

This technical standard has been prepared in order to protect water resources from the impacts that its operations and activities may have on them. It describes mechanisms for identifying, evaluating, managing and protecting water resources that may be impacted by an existing or proposed Vedanta activity or operation.

4.1. General Requirements

a) The requirements included in this Technical Standard shall be adhered to by all Vedanta Companies as applicable.

b) Arrangements shall be created, implemented and maintained so that the requirements of applicable local, regional, national legislation are complied with.

c) Arrangements shall also be implemented to ensure conformance to the requirements of the *IFC Performance Standards.*

d) The key IFC provisions are summarised as follows*:*

- *Performance Standard 1 – Assessment and Management of Social and Environmental Risks and Impacts* – The relevant objectives of this standard are to identify and assess social and environment impacts, both adverse and beneficial, in the project's area of influence; to avoid, or where avoidance is not possible, minimize, mitigate, or compensate for adverse impacts on workers, affected communities, and the environment; to ensure that affected communities are appropriately engaged on issues that could potentially affect them and to promote improved social and environment performance through the effective use of management systems. The key considerations in so far as they relate to this Technical Standard are: the need to undertake a risk and impact assessment; the need for a management programme of mitigation and performance improvement measures; community engagement; monitoring and reporting;

- *Performance Standard 3 – Pollution Prevention and Abatement* – The relevant objective of this standard is to avoid or minimize adverse impacts on human health and the environment by avoiding or minimizing pollution from project activities. The key considerations in so far as they relate to this Technical Standard are: use of pollution prevention and control technologies and techniques during all stages of the project lifecycle; resource conservation; emergency preparedness and response and existing ambient conditions (of surface and groundwater resources), and

- *Performance Standard 6 – Biodiversity Conservation and Sustainable Natural Resource Management* – The relevant objectives of this standard are to protect and conserve biodiversity and to promote sustainable management and use of natural resources through the adoption of practices that integrate conservation needs and development priorities. The key considerations in so far as they relate to this Technical Standard are: natural resources impact assessment; impact management / mitigation in areas of modified, natural and critical habitats; protection, promotion and enhancement of legally protected areas (all of which may comprise water-based habitats); and sustainable management and use of renewable natural resources.

4.2. Existing Projects and Operations

All existing Vedanta companies shall create, implement and maintain arrangements for sustainable water management at all locations including but not limited to offices, manufacturing sites, distribution infrastructure, mines, etc.

4.3. Water Resources Risk Screening Assessment

a) All Vedanta Companies shall conduct a basic screening assessment to identify sensitive water resources and aquatic habitats and any known or suspected water resources constraints within and in proximity to each owned/managed operation and facility.

b) Constraints that shall be considered include (but not limited to):

- a naturally water stressed environment, with a high prevalence of droughts and water shortages;
- the presence or planned development of other water intensive industrial and/or agricultural activities, in particular commercial agriculture, agro-processing facilities and power generation and supply;
- any planned infrastructure in the river basin, such as hydropower schemes, river diversions etc;
- a highly polluted water environment, e.g. where there are significant and poorly regulated industrial or agricultural activities upstream of the operation; or
- groundwater resources that may be at risk from induced saline intrusion or other sources of contamination if pumping activities occur.

c) This screening assessment shall be achieved using for example the World Business Council for Sustainable Development Water Tool (or other internationally recognised proprietary) database as well as by referring to other available sources of information as appropriate such as government management strategies or action plans, media and the internet to determine the need and priority to further examine water constraints, biodiversity attributes in so far as they relate to water and aquatic ecosystem services issues.

d) The outcome of this exercise shall be a prioritised list of all sites on the basis of risk. Sites situated in an area of high water resources value and/or with vulnerable aquatic ecosystem services, and sites located outside an area of high water resources value but which impact such an area will be classified as high risk. Medium and low risk sites shall be classified on the basis of distance from such areas, and extent of impact.

4.3.1. Water Resources Management Plan

a) On the basis of the assigned priority rating of each site a Water Resources Management Plan (WRMP) shall be prepared and implemented to eliminate, minimize, mitigate and manage impacts on water resources and shall be commensurate with the level of risk.

b) For operations and facilities that have been identified as high risk, the collection of further information shall be undertaken in order to inform the development of the WRMP.

c) For high risk operations and facilities, the WRMP shall include provision for the following issues. For medium and low risk facilities the following issues may be included as appropriate on the basis of an assessment of local needs and requirements:

- Withdrawals from sensitive water bodies;
- Operational activities and arrangements for preventing the discharge of harmful substances into the soil and groundwater;
- Security of supply and forecasted changes in demand;
- Planning and preparation for potential climate change impacts that could disrupt or change the availability of water resources;
- Societal values and conflicting uses in the context of ecosystem services;
- Affected communities' ownership and access rights to water resources;
- Impacts on landscape / ecological processes as a result of major long term changes in water use arising from site operations and activities (e.g. impact on habitat function of water catchments due to reduced flow);
- Transboundary impacts such as water pollution of international surface waters;
- Cumulative effects and the impacts of mining and minerals processing on operational, local and regional water systems, and
- Strategies that contribute to the improvement of ambient conditions when the project has the potential to constitute a significant source of emissions in an already degraded area.

d) The WRMP shall detail the arrangements for the periodic internal and external measurement and reporting (as required) of the impact management activities.

e) The WRMP shall be integrated into the Company, Operation or Project Social and Environmental Management Plan.

4.3.2. Legal and Other Requirements

a) All Vedanta Companies shall identify all relevant local, regional and national legislative requirements on water management and biodiversity conservation that are relevant to each of its owned and/or managed operations and facilities.

b) Arrangements shall be established to ensure compliance with all such requirements, and to surpass them where practicable.

c) All applicable international conventions shall be identified and complied with in all jurisdictions in which it operates.

d) Vedanta shall consider opportunities to protect and enhance water resources and aquatic environments in modified and natural habitats beyond the scope of legal compliance and the requirements of international standards.

4.3.3. Provision of Drinking Water and Sanitation

a) All Vedanta Companies shall ensure that all sites and facilities (including contractor camps; refer to the *Supplier and Contractor Management* Technical Standard TS06) are supplied with a secure supply of drinking water and with adequate sanitation facilities.

b) Where drinking water is provided by the Company, it shall be treated to conform with WHO and / or national standards, whichever are the more stringent.

c) In the absence of a municipal sewerage connection alternative infrastructure for sanitary waste disposal shall be established such as piped connection to septic tanks and provisions for appropriate disposal of waste.

d) Documentation shall be maintained that details the sources of the site's water supply, the drinking water and sanitation network, the quantity and quality of water abstracted for use and the quality of the wastewater discharged by the site.

e) Arrangements shall be established to maintain the water and sanitation infrastructure.

4.3.4. Water Balance

a) A water balance shall be calculated and maintained by each Company location. This shall consider the following:

- Identification of the total volume of water withdrawn from any water source (surface waters, groundwater, rainwater, waste water from another company, municipal water);
- Water withdrawn directly by the Company or through intermediaries such as water utilities;

- Volumes used for each different purpose (e.g. drinking water, sanitation, process);
- Volume of returns to the environment through leakage, treated wastewater discharges, evaporation etc, and
- Volume of reused / recycled water and as a percentage of the total water used or withdrawn.

b) The water footprint shall be reviewed on an annual basis and updated as required and reported to the Company head office.

c) Each Company shall collate the annual water balances from all its facilities and use these to determine Company-level performance goals and water resources targets for the forthcoming year.

d) The water balances collated by each Company or Operation shall be submitted to the Group Sustainability Committee for the purposes of the annual Group management review, performance reporting and continual improvement in accordance with the *Sustainability Data Management* Technical Standard TS21 and the *Management Review and Continual Performance* Management Standard MS14.

4.3.5. Water Use Reduction

a) As part of the annual sustainability performance improvement review, an annual assessment shall be conducted to identify opportunities for minimising the amount of water consumed including direct reduction of freshwater demand by using alternative supplies (such as recycled process water).

b) Identify and act upon opportunities to upgrade the design of site infrastructure to enhance water conservation measures (such as replacement of old pipe work to reduce leakage) as part of the planned preventative maintenance programme.

c) Identify and act upon opportunities to assist the local communities to better manage their water consumption (such as through maintenance of storage and distribution infrastructure) such that additional water becomes available for use by the site (referred to as water consumption offsetting).

d) All Vedanta companies shall identify and implement measures for recycling and reuse of wastewater such as recirculation of process water for cooling or rain water harvesting.

e) The findings of the assessment shall be incorporated as appropriate into the proposed improvement plan for the forthcoming reporting year in the form of objectives and targets.

f) For sites that extract water (ground and surface water), measures shall be implemented where possible to promote groundwater recharge in order to counter the impact of water removal and augment supply (referred to as rainwater harvesting).

4.3.6. Wastewater Treatment and Discharge

a) All process waste water shall be treated to international best practice standards through the application of best available techniques (BAT) before being discharged to the environment.

b) Surface water runoff shall be controlled so as to prevent soil erosion, protect water bodies and aquatic biodiversity from impact due to sediment loading and pollutants, and to prevent localised flooding.

c) Sanitary waste shall be treated in such a manner that it does not present a risk to the environment or to human health.

d) Prior to discharging any water to the environment, the quality of the water shall be verified to ensure that it meets any applicable legal, corporate and permitting obligations.

e) A zero discharge philosophy shall be applied at all sites.

4.3.7. Emergency Preparedness and Response

a) Each Vedanta operation and facility shall, on the basis of an assessment of risk, include in its emergency response plan a section designed to to prevent, mitigate and control the unplanned or uncontrolled release of waste water into the natural environment.

b) Each Vedanta operation and facility shall establish the necessary arrangements for ensuring adequate and appropriate training, resources, responsibilities, communication, procedures and other aspects are available to effectively respond to emergency situations.

4.3.8. Participatory Monitoring

a) Arrangements shall be established to facilitate participatory water monitoring with affected communities in order to constructively monitor and manage any conflicting water use issues that may arise during the project lifecycle. Reference shall be made to relevant guidance provided by the CAO.

b) Arrangements shall be established for the regular reporting to stakeholders on the Company's management of water resources and the progress towards water conservation achievements.

c) Vedanta companies shall participate in local or regional water catchment planning activities to secure sustainable water resources for Vedanta operations and the activities of other users outside of the organisation.

d) All engagement with affected communities shall be conducted in line with the *Stakeholder Engagement* Technical Standard TS05 and issues shall be managed in accordance with the *Grievance Mechanisms* Technical Standard TS04.

4.3.9. Measuring and Monitoring

a) Using the GRI Mining and Metals Sector Supplement each Vedanta Company shall monitor performance in managing water resources issues.

b) Each Vedanta Company shall develop performance indicators on the basis of corporate and legal requirements and using the following GRI Mining and Metals Performance Indicators:

- EN8 - Total water withdrawal by source;
- EN9 - Water sources significantly affected by withdrawal of water, and
- EN10 - Percentage and total volume of water recycled and reused.

c) On the basis of the risk classification, each operation or facility shall also establish arrangements for monitoring its performance against the relevant indicators established by the Company.

d) Every facility shall regularly monitor water flows and compare these against performance targets to manage abstraction and consumption and to identify opportunities to reduce it.

e) Every operation shall establish and monitor performance against targets for water consumption reduction and for improving the quality of produced waste water. Targets shall be set in accordance with the *Data Management, Performance Monitoring and Reporting* Management Standard MS 10.

4.3.10. Knowledge and Awareness

a) Arrangements shall be implemented to support water resources, aquatic environments, ecosystem services and conservation research efforts carried out by local, regional and national research groups in order to further knowledge and understanding of such attributes in Vedanta's areas of operation.

b) Mechanisms shall be created and implemented to provide information and raise awareness among employees, customers and suppliers and other stakeholders to enhance knowledge and understanding of water resources, aquatic environments and conservation issues.

4.4. New Projects

4.4.1. Impact Assessment

a) For any new project that is planned, an initial assessment shall be undertaken to determine if it will be necessary to undertake a formal international standard Environmental and Social Impact Assessment (ESIA). Reference shall be made to the provisions of local legislative requirements and to the IFC Performance Standard PS1 on the Assessment and Management of Social and Environmental Risks and Impacts.

b) For projects that require an ESIA the *Conducting ESIAs to International Standards* Technical Standard TS08 shall be followed.

c) For projects that do not fall within the scope of an ESIA, a water resources risk screening assessment shall be undertaken as described in 4.3 and the potential impacts subsequently managed as required in accordance with the provisions of a water resources management plan as described in Section 4.3.1.

4.4.2. Impact Assessment

a) The scope of the ESIA will depend on the nature and scale of the project and sensitivities of water resources attributes in the project area but in any case shall include:

- Desktop study and consultations;
- Baseline water resources survey;
- Assessment of ecosystem services;
- Impact and dependency assessment;
- Reporting, and
- A Management Plan.

b) For all new projects water resource attributes and ecosystem services in the proposed area shall be identified and potential project impacts and dependencies assessed.

c) Vedanta shall ensure that the Baseline Water Resources Survey establishes a core set of assessment criteria (indicators) which will form the basis of impact analysis and the definition of mitigation and management measures.

4.4.3. Water Resources Management Plan

a) A Water Resources Management Plan (WRMP) shall be prepared that details the actions that are identified during the impact assessment to prevent, minimise and mitigate impact to vulnerable water resources during the project lifecycle.

b) The WRMP shall include as appropriate those considerations detailed in Section 4.3.1 (for water resources management associated with existing projects) as well as other considerations that arise out of the impact assessment and mitigation planning for the new project.

c) The WRMP shall also include all items as necessary to ensure conformance with Vedanta's Water Management Policy.

d) The WRMP shall be integrated into the Social and Environmental Management Plan described in the *Conducting ESIAs to International Standards* Technical Standard TS08.

5. ROLES AND RESPONSIBILITIES

Vedanta Resources, subsidiaries, businesses, operations and sites shall ensure that roles and responsibilities for implementing and complying with this Standard are allocated. Key responsibilities shall be included in job descriptions, procedures and/or other appropriate documentation.

6. COMPLIANCE AND PERFORMANCE

Each Vedanta operation shall ensure they comply with the requirements of this standard. Performance against meeting the requirements of this Standard shall be assessed periodically, documented and, where required, reported to Vedanta Group. The assessment of performance shall include setting and reporting on key performance indicators (KPIs) where these have been established at Vedanta Group, Company or local level. The evaluation of performance shall include, as a minimum, confirmation that:

- All existing projects have arrangements in place to ensure safe drinking water and sanitation services are provided at all sites and facilities.
- A water balance is prepared annually by each site and is reported to the Company Head Office.
- A water account is prepared annually by each Company and reported to the Group Sustainability Committee to enable it to fulfil its duties for data reporting and continual improvement.
- Clear, transparent and formal arrangements are implemented and followed for participatory water monitoring and evidence is available to document consultations with affected communities and implementation of actions to address issues and concerns as part of this process.
- Evidence is available to demonstrate the actions taken to reduce and monitor sustainable water management initiatives regarding water consumption reduction, water reuse and recycling, water treatment, and minimum or zero discharges.
- Regular monitoring of company-supplied drinking water and of waste water discharges is conducted to ensure that local/national or international standards are complied with as appropriate, and that any non-conformances are managed appropriately.
- A water resources impact assessment is incorporated into the ESIA conducted for all new projects.

7. SUPPORTING INFORMATION

Reference	Description
ICMM (International Council of Mining and Metals)	The ICMM has recently produced and published a good practice guidance document ‘Indigenous Peoples and Mining’ which whilst it is written for indigenous peoples and therefore may not be relevant to all projects, contains useful guidance and references to cultural heritage. The ICMM has also produced many other best practice documents on a range of health,

Reference	Description
	safety, environment and community issues relating to mining. http://www.icmm.com/library
Global Reporting Initiative (GRI)	The Global Reporting Initiative (GRI) is a network-based organization that produced an internationally applicable sustainability reporting and disclosure framework. The GRI periodically updates the framework and also provides sector-specific guidance on its application to environmental, social and governance performance. http://www.globalreporting.org/Home
IFC Performance Standards Guidance Notes	Provides detailed guidance for adopting and implementing the requirements of the different Performance Standards. http://www.ifc.org/ifcext/sustainability.nsf/Content/PerformanceStandards
The Office of the Compliance Advisor/Ombudsman (CAO)	An independent post that reports directly to the President of the World Bank Group. The CAO reviews complaints from communities affected by development projects undertaken by the private sector lending and insurance members of the World Bank Group, the International Finance Corporation (IFC) and the Multilateral Investment Guarantee Agency (MIGA). The CAO also offers advice and guidance to IFC and MIGA, and to the World Bank Group President, about improving the social and environmental outcomes of IFC and MIGA projects. The CAO has issued an advisory note on preventing and managing water conflict through participatory water monitoring (see Section 9 below for reference).
World Business Council for Sustainable Development (WBCSD) Water Tool	The WBCSD has created a tool which is freely available online to enable companies and organisations to map their water use and assess risks relative to their global operations and supply chains. http://www.wbcsd.org/work-program/sector-projects/water/global-water-tool.aspx
World Health Organisation (WHO)	WHO is the directing and coordinating authority for health within the United Nations system. It is responsible for providing leadership on global health matters, shaping the health research agenda, setting norms and standards, articulating evidence-based policy options, providing technical support to countries and monitoring and assessing health trends. http://www.who.int/en/

8. REVIEW

This Technical Standard shall be periodically audited and reviewed to determine its accuracy and relevance with regard to legislation, education, training and technological changes. In all other circumstances, it shall be reviewed no later than 12 months since the previous review.

9. RELATED DOCUMENTATION

A summary of the references and supporting documents relevant to this document is provided in the following table.

Doc. Ref.	Document name
	Vedanta Code of Conduct
POL 07	Water Management
MS 10	Data Management, Performance Monitoring and Reporting
MS 14	Management Review and Continual Performance
TS 04	Grievance Mechanisms
TS 05	Stakeholder Engagement
TS 06	Supplier and Contractor Management
TS 08	Conducting ESIA to International Standards Technical Standard
TS 21	Sustainability Data Management
CAO Advisory Note	Participatory Water Monitoring – A Guide for Preventing and Managing Conflict
GRI version 3	Indicator Protocols Set – Environment - Mining and Metals Sector Supplement

Energy & Climate Change Policy

Purpose

Vedanta Limited ("Vedanta") is committed to minimizing the impact of climate change on its own business as well as on the environment and society. We aim to collaborate with stakeholders to drive timely, meaningful action on climate change.

This Energy & Climate Change policy shall help us to define, strategize, plan, and implement essential roadmap, towards achieving climate goals. This policy is forward looking and sets an energy and climate 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 upstream and operations, including the distribution, logistics, and sale of products and services up to the customer.

Objectives of the Energy & Climate Change Policy

Vedanta will strive to:

- Adopt and maintain global best practices on climate and energy management and minimizing greenhousegas (GHG) emissions throughout our operations, including:
    - aligning with the overall objectives of the Paris Agreement.
    - measuring energy usage and greenhouse gas emissions (Scope 1&2) across all operations and geographies and maintain year-on-year efforts to reduce energy consumption and GHGemissions.
    - measuring and disclosing greenhouse gases emissions (Scope 3) across the entire value chain-including upstream and downstream emissions.
    - defining energy and GHG reduction roadmap in alignment with Vedanta's commitment to become a net zero carbon business by 2050.
- Conduct risk assessments to understand the impact of climate change on the business under differentscenarios and time periods.
- Integrate climate change considerations into our strategic approach, financial planning and analyzing theclimate-related risks and opportunities (both physical and transition).
- Adapt and futureproof our facilities to the physical risks of climate change and to achieve an orderlytransition to a world in which GHG emissions are constrained.
- Include the adoption of carbon pricing or similar mechanisms into our investment decision-making.
- Promote, engage, and invest in energy consumption reduction projects including energy conservation,energy efficiency, fuel switch and clean energy and maximize benefits from energy by waste recovery.
- Foster research and innovation techniques within our operations leading to optimal utilization of resources which continuously improve the efficiency of operations, minimizing energy consumption and resource use.
- Report GHG emissions, climate trajectory scenario analysis and climate change risk analysis on yearly basis in alignment with internationally recognized protocols (like Taskforce on Climate Financial Disclosure TCFD and CDP) and work closely with other stakeholders to reduce energy consumption and carbon intensity.
- Communicate our approach and achievements actively to stakeholders, and work closely with national and

global policy makers to encourage effective and equitable abatement policies within the sectors of our operation.

- Support joint efforts by the private and public sectors to reduce the impacts of climate change.
- Collaborate with our employees, wider communities, business partners, customers, and other stakeholders to achieve our commitment to energy and greenhouse gas emission reduction.
- Encourage and influence our business partners including supply chain to adopt energy conservation practices, set energy and climate targets and report on their practices.
- Review the performance against the policy on a periodic basis to ensure management of energy & climate change as per our objectives including the sharing of good practices throughout the organization and stakeholders.

Responsibility & Review

This policy is part of the Vedanta Sustainability Framework, and each Vedanta business shall implement this policy. 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: *Environmental Policy, Biodiversity Policy, Water Policy*

Signed by:

Sunil Duggal

Group CEO, Vedanta Limited

Date: 27 July 2023

Biodiversity Policy

Purpose

Protecting and enhancing biodiversity is an integral part of Vedanta's commitment to sustainable development. We are conscious of the potential impacts and dependencies of our business on the environment in general and on biodiversity. Integrating the need for biodiversity conservation into operational decision-making processes and taking measures to minimize impacts is a commitment across the company with a vision of Nature Positive.

Biodiversity is a complex phenomenon that needs to be identified, understood, and valued from a biological and societal (i.e., in terms of ecosystem services) perspective and the Company is conscious of the potential impacts and dependencies of our business on the environment in general and on biodiversity in particular. This Biodiversity policy shall help us define, strategize, plan, and implement the essential roadmap, guidance, and measurement towards achieving sustainability goals.

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 value chain.

Objectives of the Biodiversity Policy

Vedanta will strive to:

- Achieve nature positive impacts to biodiversity values by implementing intense management actions either on site or off site, to compensate for any project impacts to areas recognized nationally or internationally for their high values of threatened, endemic or migratory / congregatory species or unique and threatenedecosystems.
- Comply with, and exceed whenever feasible, the local, regional, and national legislative requirements concerning land management and biodiversity conservation, as well as relevant international agreements,in all jurisdictions where we operate.
- Avoid deforestation and habitat loss in internationally recognized areas such as World Heritage Sites andIUCN Protected Area Management Categories 1a, b and 2.
- Compensate with future reforestation (no net deforestation) by appropriate on or off-site habitat
- restoration. Achieve No-Net Loss (NNL) at our project operations and ensure that we will operate on the principles of Net Positive Impact (NPI) for critical habitat (when we operate in or near areas declared as biodiversity hotspot areas, ecologically sensitive zones, International Union for the Conservation of Nature IUCN Category I-IV protected areas, nearby world heritage sites & areas
- having critical habitat and ecosystems). Set targets and objectives to avoid, reduce or mitigate biodiversity and nature-based impacts on people and planet.
- Integrate biodiversity & nature considerations into our strategic approach, financial planning and analyzing the nature-related risks and opportunities throughout the project lifecycle, including decommissioning, closure, and rehabilitation.
- Conduct biodiversity risk assessment and apply the mitigation hierarchy to avoid or minimize biodiversity and nature-based risks.
- Ensure continuous improvements in biodiversity performance through effective management and

implementation of action plans in alignment with the "Nature-Based Solutions" approach.

- Review the performance against the policy on a periodic basis to ensure management of biodiversity as per our objectives including the sharing of good practices throughout the organization and stakeholders.
- Engage with local, national, and global conservation initiatives, conservation experts and organizations. Support joint efforts by the private and public sectors, and foster knowledge, awareness, and participation among relevant stakeholders, including employees, to collectively address biodiversity and nature-related challenges.
- Engage and raise awareness amongst our employees, business partners, supply chain and other stakeholders to enhance their knowledge and understanding of biodiversity and ecosystem management practices.
- Actively encourage value chain partners and suppliers to align with this policy and avoid operational activities near sites containing globally or nationally important biodiversity

Responsibility & Review

This policy is part of the Vedanta Sustainability Framework, and each Vedanta business shall implement this policy. 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 will review this policy annually and recommend appropriate revisions to the Board as may deem necessary.

Signed by:

Sunil Duggal

Group CEO, Vedanta Limited

Date: 27 July 2023

ANNEXURE-7

vedanta
transforming elements

FACOR/[illegible]/2022 Dt. [illegible]

To

The Deputy Director General of Forests (C)
Ministry of Environment, Forest & Climate Change
Integrated Regional Office, [illegible]
Bhubaneswar - 751 02[illegible]
Email: [illegible]

Ref: Environment Clearance Identification No. EC22A[illegible] dated [illegible].10.2022

Sub: Submission of Compliance report with respect to General conditions no. [illegible] of the Environmental Clearance [illegible] the Charge Chrome Plant of M/s Ferro Alloys Corporation Ltd. (FACOR) granted vide EC Identification No. EC22A[illegible] dated 31.10.2022

Dear Sir,

[illegible] General conditions no. [illegible] of the Environment Clearance (EC) [illegible] of the EC issued for expansion of the Charge Chrome Plant of M/s Ferro Alloys Corporation Ltd. (FACOR) [illegible] vide EC Identification No. EC22A[illegible] dt. 31.10.2022, we are submitting [illegible] the compliance status [illegible] as under :

General Condition – Miscellaneous (Para no. [illegible] of the EC) :

Condition No. [illegible] : "The project proponent shall [illegible] environmental clearance [illegible] their project [illegible] environmental [illegible] by [illegible] local newspapers of the [illegible] in the [illegible] language [illegible] in [illegible] shall also be displayed in the [illegible] proponent's website permanently."

Our Compliance of Condition No. [illegible]

We have published [illegible] in the English daily newspaper "The [illegible]" in English language [illegible] in Odia daily newspaper namely "The Sambad" in vernacular language [illegible] regarding [illegible] of Environment Clearance for the expansion project of Charge Chrome Plant of M/s Ferro Alloys Corporation Ltd. vide EC Identification No. EC22A[illegible] dat. 31.10.2022. The copy of the said advertisement [illegible] as Annexure-[illegible] for your [illegible] records.

Further, in compliance [illegible] condition [illegible] copy of the EC [illegible] company website [illegible] public. The [illegible] purpose of [illegible].

[illegible]

Condition No. [illegible] : "The copies of the environmental clearance shall be submitted by the project proponent 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."

Page 1 of [illegible]

Ferro Alloys Corporation Limited
Charge Chrome Plant, D.P. Nagar, Randia - 756135, Dist. Bhadrak, Odisha, India.
Phone : 06784 240320/240347/240272 Fax : [illegible]
E-mail : [illegible]@vedanta.co.in | Website : [illegible]
CIN [illegible]

Compliance status of Condition No. XXI(i):

We have submitted the copies of the Environment Clearance dtd. 21.10.2022 to the Heads of the local Bodies, Panchayats and Municipal Bodies, and other concerned offices as per the table below:

Sl No.	Letter No.	Date	Submitted to	Acknowledged on
01	FACOR / Bhadrak / Legal / 172 / 2022	05.11.2022	Collector, Bhadrak	05.11.2022
02	FACOR / Bhadrak / Legal / 173 / 2022	05.11.2022	Sub-Collector, Bhadrak	05.11.2022
03	FACOR / Bhadrak / Legal / 174 / 2022	05.11.2022	Tahasildar, Bhadrak	05.11.2022
04	FACOR / Bhadrak / Legal / 175 / 2022	05.11.2022	Sarpanch, [illegible]	05.11.2022
05	FACOR / Bhadrak / Legal / 176 / 2022	05.11.2022	Sarpanch, Ollaga	05.11.2022
06	FACOR / Bhadrak / Legal / 177 / 2022	05.11.2022	Sarpanch, [illegible]	07.11.2022
07	FACOR / Bhadrak / Legal / 178 / 2022	05.11.2022	Sarpanch, [illegible]	05.11.2022
08	FACOR / Bhadrak / Legal / 179 / 2022	05.11.2022	Sarpanch, [illegible]	07.11.2022
09	FACOR / Bhadrak / Legal / 180 / 2022	05.11.2022	Sarpanch, [illegible]	07.11.2022
10	FACOR / Bhadrak / Legal / 181 / 2022	05.11.2022	OSPCB, Bhubaneswar	14.11.2022
11	FACOR / Bhadrak / Legal / 182 / 2022	05.11.2022	DFO, Bhadrak	07.11.2022

Copy of acknowledgement of the above letters are enclosed herewith as Annexure-2 for your records please.

Condition No. XXI(j): 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. XXI(j):

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

[illegible]

In addition to the above submissions, we do hereby assure you that we have already initiated action for compliance of all the Specified Conditions as well as General conditions of the Environment Clearance dtd 21.10.2022 issued to M/s. Ferro Alloys Corporation Ltd. & we are willing to submit compliance status report of the same in the six monthly compliance report for the period ending from October 2022 to March 2023 in due time.

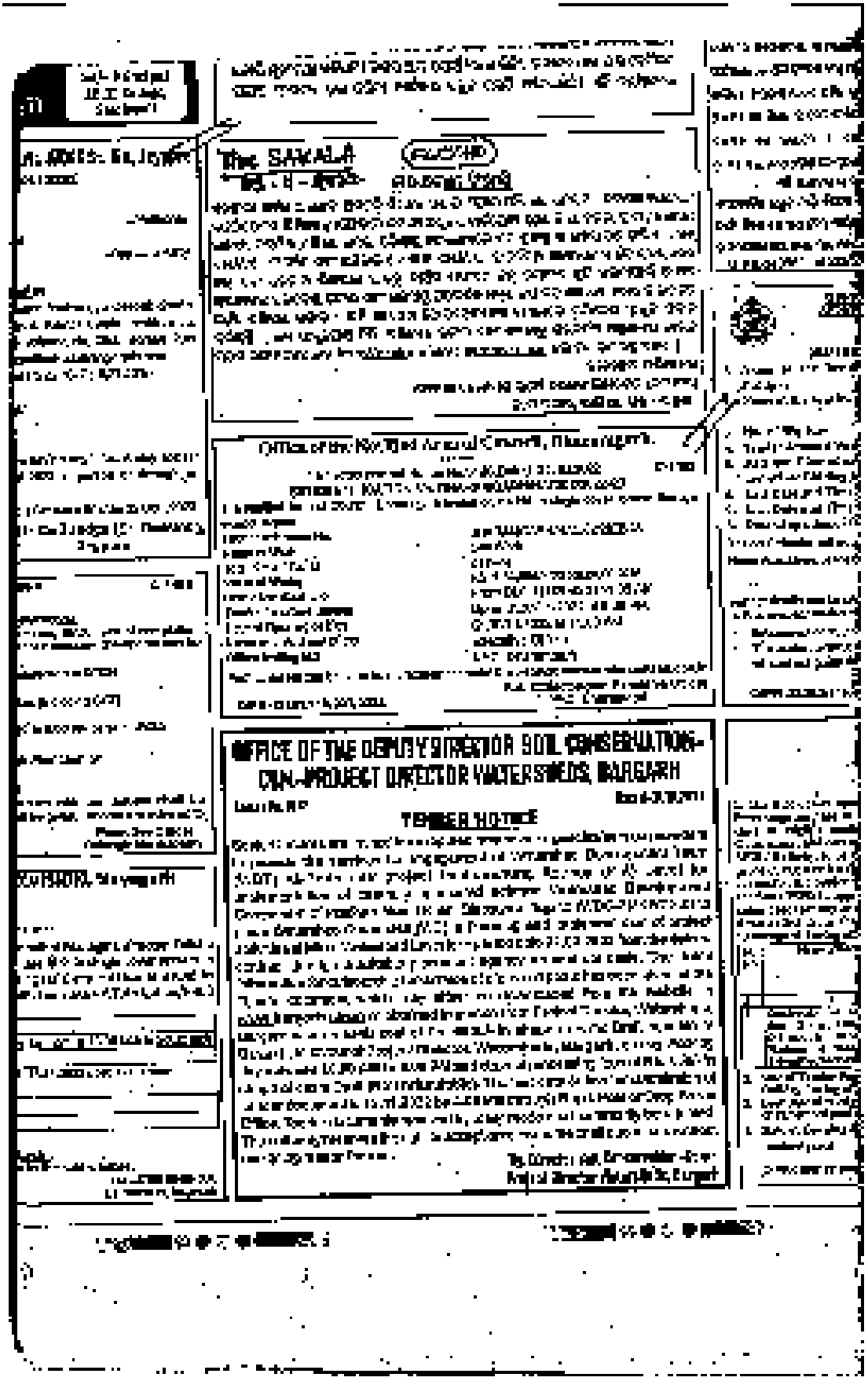
This is for your kind information and records please.

Thanking you,
Yours faithfully,
For Ferro Alloys Corporation Ltd.

[illegible]
[illegible]
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 - 756135, Dist. Bhadrak, Odisha, India
Phone : 06784 240320/240847/240272, Fax : [illegible]
E-mail : [illegible]@vedanta.co.in | Website : www.[illegible]
CIN [illegible]



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

TENDER NOTICE

PUBLIC NOTICE

KALYANI LABORATORIES PVT. LTD.

Kalyani Laboratories
PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-751032, ODISHA

TEST REPORT

NABL ULR NO : **TC704323000016630F**

Test Report No **KLPL/04/23/ENVN/02226** *Issue Date* : 28-Apr-2023

Amendment No : - *Amendment Date* -

Reference : PO NUMBER :4920054932,PO DATE :24.05.2022

Customer Name : **FERRO ALLOYS CORPORATION LTD.**

Address : CHARGE CHROME PLANT ,D.P. NAGAR, RANDIA-756135,BHADRAK,ODISHA.

Date of receipt : 17-Apr-2023 Commenced On : 17-Apr-2023 *Completion* 27-Apr-2023

Sample Name : **AMBIENT AIR QUALITY MONITORING**

Sample Condition GASEOUS SAMPLE ABSORBING SOLUTIONS REFRIGERATED

Quantity 4 NOS

Ref.To Sampling Procedure: QSP-07

Parameters	Unit	Standard Value	Results	Test Method
Location & Date : **AUTO GARAGE DT-05.04.2023**				
Sulphur Dioxide	µg/m³	80	6.58	IS 5182(PART-2) : 2001
Nitrogen Dioxide	µg/m³	80	12.93	IS 5182 (PART 6) : 2006
Particulate Matter (PM10)	µg/m³	100	50.71	IS 5182(PART-23) : 2006
Particulate Matter (PM2.5)	µg/m³	60	27.89	KLPL/SOP/AIR-02
Carbon Monoxide (CO) (01 Hrs.)	mg/m³	04	0.351	KLPL/SOP/AIR-19
Ozone (O3) (01 Hrs.)	µg/m³	180	7.3	KLPL/SOP/AIR-19
Lead (Pb)	µg/m³	1.0	<0.02	KLPL/SOP/AIR-10
Ammonia (NH3)	µg/m³	400	<10	KLPL/SOP/AIR-05
Benzene (C6 H6)	µg/m³	05	<1	KLPL/SOP/AIR-07
Benza (a) Pyrene (BaP)	ng/m³	01	<1	KLPL/SOP/AIR-07
Arsenic (As)	ng/m³	06	<1	KLPL/SOP/AIR-10
Nickel (Ni)	ng/m³	20	<4	KLPL/SOP/AIR-10
Location & Date : **FPHS & MRP PLANT DT-05.04.2023**				
Sulphur Dioxide	µg/m³	80	9.48	IS 5182(PART-2) : 2001
Nitrogen Dioxide	µg/m³	80	13.54	IS 5182 (PART 6) : 2006
Particulate Matter (PM10)	µg/m³	100	63.37	IS 5182(PART-23) : 2006
Particulate Matter (PM2.5)	µg/m³	60	34.85	KLPL/SOP/AIR-02
Carbon Monoxide (CO) (01 Hrs.)	mg/m³	04	0.363	KLPL/SOP/AIR-19
Ozone (O3) (01 Hrs.)	µg/m³	180	5.8	KLPL/SOP/AIR-19
Lead (Pb)	µg/m³	1.0	<0.02	KLPL/SOP/AIR-10
Ammonia (NH3)	µg/m³	400	<10	KLPL/SOP/AIR-05
Benzene (C6 H6)	µg/m³	05	<1	KLPL/SOP/AIR-07
Benza (a) Pyrene (BaP)	ng/m³	01	<1	KLPL/SOP/AIR-07
Arsenic (As)	ng/m³	06	<1	KLPL/SOP/AIR-10
Nickel (Ni)	ng/m³	20	<4	KLPL/SOP/AIR-10

Kalyani Laboratories Pvt. Ltd. BBSR

KALYANI LABORATORIES PVT. LTD.

PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-751032, ODISHA

TEST REPORT

KABL ULR NO : TC704323000016630F

Test Report No : KLPL/4/23/ENVN/02226 Issue Date : 28-Apr-2023

Amendment No : - Amendment Date : -

Reference : PO NUMBER :4920054932,PO DATE :24.05.2022

Customer Name : FERRO ALLOYS CORPORATION LTD.

Address : CHARGE CHROME PLANT ,D.P. NAGAR, RANDIA-756135,BHADRAK,ODISHA.

Date of receipt : 17-Apr-2023 Commenced On : 17-Apr-2023 Completion 27-Apr-2023

Sample Name : **AMBIENT AIR QUALITY MONITORING**

Sample Condition : GASEOUS SAMPLE ABSORBING SOLUTIONS REFRIGERATED

Quantity : 4 NOS

Ref To Sampling Procedure: QSP-07

Parameters	Unit	Standard Value	Results	Test Method
Location & Date : *MRSS & CPP DT-05.04.2023*				
Sulphur Dioxide	µg/m³	80	8.54	IS 5182(PART-2) : 2001
Nitrogen Dioxide	µg/m³	80	14.68	IS 5182 (PART 6) :2006
Particulate Matter (PM10)	µg/m³	100	67.28	IS 5182(PART-23) :2006
Particulate Matter (PM2.5)	µg/m³	60	37.00	KLPL/SOP/AIR-02
Carbon Monoxide (CO) (01 Hrs.)	mg/m³	04	0.367	KLPL/SOP/AIR-19
Ozone (O3) (01 Hrs.)	µg/m³	180	6.6	KLPL/SOP/AIR-19
Lead (Pb)	µg/m³	1.0	<0.02	KLPL/SOP/AIR-10
Ammonia (NH3)	µg/m³	400	<10	KLPL/SOP/AIR-05
Benzene (C6 H6)	µg/m³	05	<1	KLPL/SOP/AIR-07
Benza (a) Pyrene (BaP)	ng/m³	01	<1	KLPL/SOP/AIR-07
Arsenic (As)	ng/m³	06	<1	KLPL/SOP/AIR-10
Nickel (Ni)	ng/m³	20	<4	KLPL/SOP/AIR-10
Location & Date : *R & C LAB DT-05.04.2023*				
Sulphur Dioxide	µg/m³	80	7.19	IS 5182(PART-2) : 2001
Nitrogen Dioxide	µg/m³	80	11.64	IS 5182 (PART 6) :2006
Particulate Matter (PM10)	µg/m³	100	53.35	IS 5182(PART-23) :2006
Particulate Matter (PM2.5)	µg/m³	60	20.84	KLPL/SOP/AIR-02
Carbon Monoxide (CO) (01 Hrs.)	mg/m³	04	0.353	KLPL/SOP/AIR-19
Ozone (O3) (01 Hrs.)	µg/m³	180	3.6	KLPL/SOP/AIR-19
Lead (Pb)	µg/m³	1.0	<0.02	KLPL/SOP/AIR-10
Ammonia (NH3)	µg/m³	400	<10	KLPL/SOP/AIR-05
Benzene (C6 H6)	µg/m³	05	<1	KLPL/SOP/AIR-07
Benza (a) Pyrene (BaP)	ng/m³	01	<1	KLPL/SOP/AIR-07
Arsenic (As)	ng/m³	06	<1	KLPL/SOP/AIR-10
Nickel (Ni)	ng/m³	20	<4	KLPL/SOP/AIR-10

Kalyani Laboratories Pvt. Ltd. BBSR

KALYANI LABORATORIES PVT. LTD.

PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-751032, ODISHA

TEST REPORT

KABL ULR NO	:	TC704323000016630F			
Test Report No		KLPL/4/23/ENVN/02226	Issue Date	: 28-Apr-2023	
Amendment No	:	-	Amendment Date	-	
Reference	:	PO NUMBER :4920054932,PO DATE :24.05.2022			
Customer Name	:	**FERRO ALLOYS CORPORATION LTD.**			
Address	:	CHARGE CHROME PLANT ,D.P. NAGAR, RANDIA-756135,BHADRAK,ODISHA.			
Date of receipt	:	17-Apr-2023 Commenced On : 17-Apr-2023	Completion	27-Apr-2023	
Sample Name	:	**AMBIENT AIR QUALITY MONITORING**			
Sample Condition		GASEOUS SAMPLE ABSORBING SOLUTIONS REFRIGERATED			
Quantity		4 NOS			
Ref.To Sampling Procedure:		QSP-07			

Parameters	Unit	Standard Value	Results	Test Method

Remarks

Any unusual feature observed during determination

Analysed By

D Arukha

Mr. Digambar Arukha
For Kalyani Laboratories Pvt. Ltd.

Authorised Signatory

Dr. Debasis Biswal
For Kalyani Laboratories Pvt. Ltd.

Kalyani Laboratories Pvt. Ltd. BBSR

End of Test Report

KALYANI LABORATORIES PVT. LTD.

Kalyani Laboratories

PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-751032, ODISHA

TEST REPORT

NABL ULR NO	:	**TC704323000016930F**	
Test Report No	:	**KLPL/5/23/ENVN/02287**	*Issue Date* : 09-Jun-2023
Amendment No	:	-	*Amendment Date* : -
Reference	:	PO NUMBER :4920054932,PO DATE :24.05.2022	
Customer Name	:	**FERRO ALLOYS CORPORATION LTD.**	
Address	:	CHARGE CHROME PLANT ,D.P. NAGAR, RANDIA-756135,BHADRAK,ODISHA.	
Date of receipt	:	29-May-2023 Commenced On : 29-May-2023	*Completion On:* 09-Jun-2023
Sample Name	:	**AMBIENT AIR QUALITY MONITORING**	
Sample Condition	:	-	
Quantity	:	4 NOS	
Ref.To Sampling Procedure:		-	

Parameters	*Unit*	*Standard Value*	*Results*	*Test Method*
Location & Date : ***AUTO GARAGE, DATE-30-31/05/2023***				
Sulphur Dioxide	µg/m³	80	6.83	IS 5182(PART-2) : 2001
Nitrogen Dioxide	µg/m³	80	10.48	IS 5182 (PART 6) :2006
Particulate Matter (PM10)	µg/m³	100	44.85	IS 5182(PART-23) :2006
Particulate Matter (PM2.5)	µg/m³	60	24.67	KLPL/SOP/AIR-02
Carbon Monoxide (CO) (01 Hrs.)	mg/m³	04	0.345	KLPL/SOP/AIR-19
Ozone (O3) (01 Hrs.)	µg/m³	180	7.3	KLPL/SOP/AIR-19
Lead (Pb)	µg/m³	1.0	< 0.02	KLPL/SOP/AIR-10
Ammonia (NH_3)	µg/m³	400	< 4	KLPL/SOP/AIR-05
Benza (a) Pyrene (BaP)	µg/m³	01	< 1	KLPL/SOP/AIR-07
Arsenic (As)	µg/m³	06	< 1	KLPL/SOP/AIR-10
Nickel (Ni)	µg/m³	20	< 4	KLPL/SOP/AIR-10
Location & Date : ***FPHS & MRP, DATE-30-31/05/2023***				
Sulphur Dioxide	µg/m³	80	8.99	IS 5182(PART-2) : 2001
Nitrogen Dioxide	µg/m³	80	14.05	IS 5182 (PART 6) :2006
Particulate Matter (PM10)	µg/m³	100	68.68	IS 5182(PART-23) :2006
Particulate Matter (PM2.5)	µg/m³	60	38.44	KLPL/SOP/AIR-02
Carbon Monoxide (CO) (01 Hrs.)	mg/m³	04	0.369	KLPL/SOP/AIR-19
Ozone (O3) (01 Hrs.)	µg/m³	180	5.8	KLPL/SOP/AIR-19
Lead (Pb)	µg/m³	1.0	< 0.02	KLPL/SOP/AIR-10
Ammonia (NH3)	µg/m³	400	< 4	KLPL/SOP/AIR-05
Benza (a) Pyrene (BaP)	µg/m³	01	< 1	KLPL/SOP/AIR-07
Arsenic (As)	µg/m³	06	< 1	KLPL/SOP/AIR-10
Nickel (Ni)	µg/m³	20	< 4	KLPL/SOP/AIR-10
Location & Date : ***MRSS & CPP, DATE-30-31/05/2023***				
Sulphur Dioxide	µg/m³	80	9.48	IS 5182(PART-2) : 2001

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KALYANI LABORATORIES PVT. LTD.

Kalyani Laboratories

PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-751032, ODISHA

TEST REPORT

NABL ULR NO	: **TC704323000016930F**		
Test Report No	: **KLPL/5/23/ENVN/02287**	*Issue Date*	: 03-Jun-2023
Amendment No	: -	*Amendment Date*	: -
Reference	: PO NUMBER :4920054932,PO DATE :24.05.2022		
Customer Name	: **FERRO ALLOYS CORPORATION LTD.**		
Address	: CHARGE CHROME PLANT ,D.P. NAGAR, RANDIA-756135,BHADRAK,ODISHA.		
Date of receipt	: 29-May-2023 Commenced On : 29-May-2023	*Completion On:*	03-Jun-2023
Sample Name	: **AMBIENT AIR QUALITY MONITORING**		
Sample Condition	: -		
Quantity	: 4 NOS		
Ref.To Sampling Procedure:	-		

Parameters	*Unit*	*Standard Value*	*Results*	*Test Method*
Nitrogen Dioxide	µg/m³	80	13.36	IS 5182 (PART 6) :2006
Particulate Matter (PM10)	µg/m³	100	64.95	IS 5182(PART-23) :2006
Particulate Matter (PM2.5)	µg/m³	60	37.34	KLPL/SOP/AIR-02
Carbon Monoxide (CO) (01 Hrs.)	mg/m³	04	0.365	KLPL/SOP/AIR-19
Ozone (O3) (01 Hrs.)	µg/m³	180	6.6	KLPL/SOP/AIR-19
Lead (Pb)	µg/m³	1.0	< 0.02	KLPL/SOP/AIR-10
Ammonia (NH3)	µg/m³	400	< 4	KLPL/SOP/AIR-05
Benza (a) Pyrene (BaP)	µg/m³	01	< 1	KLPL/SOP/AIR-07
Arsenic (As)	µg/m³	06	< 1	KLPL/SOP/AIR-10
Nickel (Ni)	µg/m³	20	< 4	KLPL/SOP/AIR-10
Location & Date : ***R & C LABORATORY, DATE-30-31/05/2023***				
Sulphur Dioxide	µg/m³	80	6.00	IS 5182(PART-2) : 2001
Nitrogen Dioxide	µg/m³	80	11.00	IS 5182 (PART 6) :2006
Particulate Matter (PM10)	µg/m³	100	50.43	IS 5182(PART-23) :2006
Particulate Matter (PM2.5)	µg/m³	60	29.08	KLPL/SOP/AIR-02
Carbon Monoxide (CO) (01 Hrs.)	mg/m³	04	0.351	KLPL/SOP/AIR-19
Ozone (O3) (01 Hrs.)	µg/m³	180	3.6	KLPL/SOP/AIR-19
Lead (Pb)	µg/m³	1.0	< 0.02	KLPL/SOP/AIR-10
Ammonia (NH3)	µg/m³	400	< 4	KLPL/SOP/AIR-05
Benza (a) Pyrene (BaP)	µg/m³	01	< 1	KLPL/SOP/AIR-07
Arsenic (As)	µg/m³	06	< 1	KLPL/SOP/AIR-10
Nickel (Ni)	µg/m³	20	< 4	KLPL/SOP/AIR-10

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PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-751032, ODISHA

TEST REPORT

NABL ULR NO	:	**TC704323000016930F**		
Test Report No	:	**KLPL/5/23/ENVN/02287**	*Issue Date*	: 09-Jun-2023
Amendment No	:	-	*Amendment Date*	: -
Reference	:	PO NUMBER :4920054932,PO DATE :24.05.2022		
Customer Name	:	**FERRO ALLOYS CORPORATION LTD.**		
Address	:	CHARGE CHROME PLANT ,D.P. NAGAR, RANDIA-756135,BHADRAK,ODISHA.		
Date of receipt	:	29-May-2023 Commenced On : 29-May-2023	*Completion On:*	09-Jun-2023
Sample Name	:	**AMBIENT AIR QUALITY MONITORING**		
Sample Condition	:	-		
Quantity	:	4 NOS		
Ref.To Sampling Procedure:		-		

Parameters	*Unit*	*Standard Value*	*Results*	*Test Method*

Remarks :

Any unusual feature observed during determination :

Analysed By

D Arukha

Mr. Digambar Arukha
For Kalyani Laboratories Pvt. Ltd.

Kalyani Laboratories Pvt. Ltd. BBSR

Authorised Signatory

Dr. Debasis Biswal
For Kalyani Laboratories Pvt. Ltd.

End of Test Report

42221693041042

KLPL- 362613A

KALYANI LABORATORIES PVT. LTD.

Kalyani Laboratories

PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-751032, ODISHA

TEST REPORT

NABL ULR NO	:	TC7C4323C00017202F	
Test Report No	:	KLPL/6/23/ENVN/02325	Issue Date : 05-Jul-2023
Amendment No	:	-	Amendment Date : -
Reference	:	PO NUMBER :4920054932,PO DATE :24.05.2022	
Customer Name	:	FERRO ALLOYS CORPORATION LTD.	
Address	:	CHARGE CHROME PLANT ,D.P. NAGAR, RANDIA-756135,BHADRAK,ODISHA.	
Date of receipt	:	29-Jun-2023 Commenced On : 29-Jun-2023	Completion On: 04-Jul-2023
Sample Name	:	AMBIENT AIR QUALITY MONITORING	
Sample Condition	:	GASEOUS SAMPLE ABSORBING SOLUTIONS REFRIGERATED	
Quantity	:	4 NOS	
Ref.To Sampling Procedure:		KLPL/QSP-07	

Parameters	Unit	Standard Value	Results	Test Method
Location & Date : AUTO GARAGE, DATE-27-28/06/2023				
Sulphur Dioxide	µg/m³	80	5.77	IS 5182(PART-2) : 2001
Nitrogen Dioxide	µg/m³	80	12.46	IS 5182 (PART 6) :2006
Particulate Matter (PM10)	µg/m³	100	43.20	IS 5182(PART-23) :2006
Particulate Matter (PM2.5)	µg/m³	60	24.23	KLPL/SOP/AIR-02 , ISSUE NO.1:2017
Carbon Monoxide (CO) (01 Hrs.)	mg/m³	04	0.343	KLPL/SOP/AIR-19 :2019
Ozone (O3) (01 Hrs.)	µg/m³	180	7.3	KLPL/SOP/AIR-13 , ISSUE NO.1:2019
Lead (Pb)	µg/m³	1.0	< 0.02	KLPL/SOP/AIR-10 , ISSUE NO.1:2017
Ammonia (NH3)	µg/m³	400	< 4	KLPL/SOP/AIR-05 , ISSUE NO.1:2017
Benza (a) Pyrene (BaP)	µg/m³	01	< 1	KLPL/SOP/AIR-07 , ISSUE NO.1:2019
Arsenic (As)	µg/m³	06	< 1	KLPL/SOP/AIR-10 , ISSUE NO.1:2017
Nickel (Ni)	µg/m³	20	< 4	KLPL/SOP/AIR-10 , ISSUE NO.1:2017
Location & Date : FPHS & MRP, DATE-27-28/06/2023				
Sulphur Dioxide	µg/m³	80	7.17	IS 5182(PART-2) : 2001
Nitrogen Dioxide	µg/m³	80	12.52	IS 5182 (PART 6) :2006
Particulate Matter (PM10)	µg/m³	100	54.40	IS 5182(PART-23) :2006
Particulate Matter (PM2.5)	µg/m³	60	29.92	KLPL/SOP/AIR-02 , ISSUE NO.1:2017
Carbon Monoxide (CO) (01 Hrs.)	mg/m³	04	0.354	KLPL/SOP/AIR-19 :2019
Ozone (O3) (01 Hrs.)	µg/m³	180	5.8	KLPL/SOP/AIR-13 , ISSUE NO.1:2019
Lead (Pb)	µg/m³	1.0	< 0.02	KLPL/SOP/AIR-10 , ISSUE NO.1:2017
Ammonia (NH3)	µg/m³	400	< 4	KLPL/SOP/AIR-05 , ISSUE NO.1:2017
Benza (a) Pyrene (BaP)	µg/m³	01	< 1	KLPL/SOP/AIR-07 , ISSUE NO.1:2019
Arsenic (As)	µg/m³	06	< 1	KLPL/SOP/AIR-10 , ISSUE NO.1:2017
Nickel (Ni)	µg/m³	20	< 4	KLPL/SOP/AIR-10 , ISSUE NO.1:2017
Location & Date : MRSS & CPP, DATE-27-28/06/2023				
Sulphur Dioxide	µg/m³	80	8.32	IS 5182(PART-2) : 2001

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PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-751032, ODISHA

TEST REPORT

NABL ULR NO	:	TC704323000017202F		
Test Report No	:	KLPL/6/23/ENVN/02325	Issue Date	: 05-Jul-2023
Amendment No	:	-	Amendment Date	: -
Reference	:	PO NUMBER :4920054932,PO DATE :24.05.2022		
Customer Name	:	FERRO ALLOYS CORPORATION LTD.		
Address	:	CHARGE CHROME PLANT ,D.P. NAGAR, RANDIA-756135,BHADRAK,ODISHA.		
Date of receipt	:	29-Jun-2023 Commenced On : 29-Jun-2023	Completion On:	04-Jul-2023
Sample Name	:	AMBIENT AIR QUALITY MONITORING		
Sample Condition	:	GASEOUS SAMPLE ABSORBING SOLUTIONS REFRIGERATED		
Quantity	:	4 NOS		
Ref.To Sampling Procedure:		KLPL/QSP-07		

Parameters	Unit	Standard Value	Results	Test Method
Nitrogen Dioxide	µg/m³	80	10.21	IS 5182 (PART 6) :2006
Particulate Matter (PM10)	µg/m³	100	61.15	IS 5182(PART-23) :2006
Particulate Matter (PM2.5)	µg/m³	60	32.49	KLPL/SOP/AIR-02 , ISSUE NO.1:2017
Carbon Monoxide (CO) (01 Hrs.)	mg/m³	04	0.361	KLPL/SOP/AIR-19 :2019
Ozone (O3) (01 Hrs.)	µg/m³	180	6.6	KLPL/SOP/AIR-13 , ISSUE NO.1:2019
Lead (Pb)	µg/m³	1.0	< 0.02	KLPL/SOP/AIR-10 , ISSUE NO.1:2017
Ammonia (NH3)	µg/m³	400	< 4	KLPL/SOP/AIR-05 , ISSUE NO.1:2017
Benza (a) Pyrene (BaP)	µg/m³	01	< 1	KLPL/SOP/AIR-07 , ISSUE NO.1:2019
Arsenic (As)	µg/m³	06	< 1	KLPL/SOP/AIR-10 , ISSUE NO.1:2017
Nickel (Ni)	µg/m³	20	< 4	KLPL/SOP/AIR-10 , ISSUE NO.1:2017
Location & Date :	**R & C LABORATORY, DATE-27-28/06/2023**			
Sulphur Dioxide	µg/m³	80	6.16	IS 5182(PART-2) : 2001
Nitrogen Dioxide	µg/m³	80	11.29	IS 5182 (PART 6) :2006
Particulate Matter (PM10)	µg/m³	100	47.42	IS 5182(PART-23) :2006
Particulate Matter (PM2.5)	µg/m³	60	26.08	KLPL/SOP/AIR-02 , ISSUE NO.1:2017
Carbon Monoxide (CO) (01 Hrs.)	mg/m³	04	0.347	KLPL/SOP/AIR-19 :2019
Ozone (O3) (01 Hrs.)	µg/m³	180	3.6	KLPL/SOP/AIR-13 , ISSUE NO.1:2019
Lead (Pb)	µg/m³	1.0	< 0.02	KLPL/SOP/AIR-10 , ISSUE NO.1:2017
Ammonia (NH3)	µg/m³	400	< 4	KLPL/SOP/AIR-05 , ISSUE NO.1:2017
Benza (a) Pyrene (BaP)	µg/m³	01	< 1	KLPL/SOP/AIR-07 , ISSUE NO.1:2019
Arsenic (As)	µg/m³	06	< 1	KLPL/SOP/AIR-10 , ISSUE NO.1:2017
Nickel (Ni)	µg/m³	20	< 4	KLPL/SOP/AIR-10 , ISSUE NO.1:2017

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PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-751032, ODISHA

TEST REPORT

NABL ULR NO	:	TC704323000017202F
Test Report No	:	KLPL/6/23/ENVN/02325
Amendment No	:	-
Reference	:	PO NUMBER :4920054932,PO DATE :24.05.2022
Customer Name	:	**FERRO ALLOYS CORPORATION LTD.**
Address	:	CHARGE CHROME PLANT ,D.P. NAGAR, RANDIA-756135,BHADRAK,ODISHA.
Date of receipt	:	29-Jun-2023 Commenced On : 29-Jun-2023 Completion On: 04-Jul-2023
Sample Name	:	**AMBIENT AIR QUALITY MONITORING**
Sample Condition	:	GASEOUS SAMPLE ABSORBING SOLUTIONS REFRIGERATED
Quantity	:	4 NOS
Ref.To Sampling Procedure:		KLPL/QSP-07

Issue Date : 05-Jul-2023

Amendment Date : -

Parameters	Unit	Standard Value	Results	Test Method

Remarks :

Any unusual feature observed during determination :

Analysed By

D Arukha

Mr. Digambar Arukha
For Kalyani Laboratories Pvt. Ltd.

Authorised Signatory

Dr. Debasis Biswal
For Kalyani Laboratories Pvt. Ltd.

Kalyani Laboratories Pvt. Ltd. BBSR

End of Test Report

KLPL- 362055A

KALYANI LABORATORIES PVT. LTD.

Kalyani Laboratories

PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-751032, ODISHA

TEST REPORT

Test Report No	: KLPL/7/23/ENVN/02382	Issue Date	: 04-Aug-2023
Amendment No	: -	Amendment Date	: -
Reference	: PO NUMBER :4920054932,PO DATE :24.05.2022		
Customer Name	: **FERRO ALLOYS CORPORATION LTD.**		
Address	: CHARGE CHROME PLANT ,D.P. NAGAR, RANDIA-756135,BHADRAK,ODISHA.		
Date of receipt	: 29-Jul-2023 Commenced On : 29-Jul-2023	Completion On:	04-Aug-2023
Sample Name	: **AMBIENT AIR QUALITY MONITORING**		
Sample Condition	: GASEOUS SAMPLE ABSORBING SOLUTIONS REFRIGERATED/FILTER PAPER SEALED IN ZIP LOCK POLYTHENE BAG		
Sample Collected By	: By KLPL(MR. SUDHIR KUMAR BARIK)		
Ref.To Sampling Procedure:	KLPL/QSP-07		

Parameters	Unit	Standard Value	Results	Test Method
Location & Date : *AUTO GARAGE, DATE-25-26/07/2023*				
Sulphur Dioxide	µg/m³	80	5.55	IS 5182(PART-2) : 2001
Nitrogen Dioxide	µg/m³	80	10.48	IS 5182 (PART 6) :2006
Particulate Matter (PM10)	µg/m³	100	40.37	IS 5182(PART-23) :2006
Particulate Matter (PM2.5)	µg/m³	60	22.20	KLPL/SOP/AIR-02 , ISSUE NO.1:2017
Carbon Monoxide (CO) (01 Hrs.)	mg/m³	04	0.344	KLPL/SOP/AIR-19 :2019
Ozone (O3) (01 Hrs.)	µg/m³	180	3.9	KLPL/SOP/AIR-13 , ISSUE NO.1:2019
Lead (Pb)	µg/m³	1.0	< 0.02	KLPL/SOP/AIR-10 , ISSUE NO.1:2017
Ammonia (NH3)	µg/m³	400	< 4	KLPL/SOP/AIR-05 , ISSUE NO.1:2017
Benza (a) Pyrene (BaP)	ng/m³	01	< 0.1	KLPL/SOP/AIR-07 , ISSUE NO.1:2019
Arsenic (As)	ng/m³	06	< 1	KLPL/SOP/AIR-10 , ISSUE NO.1:2017
Nickel (Ni)	ng/m³	20	< 4	KLPL/SOP/AIR-10 , ISSUE NO.1:2017
Location & Date : *FPHS & MRP, DATE-26-27/07/2023*				
Sulphur Dioxide	µg/m³	80	8.95	IS 5182(PART-2) : 2001
Nitrogen Dioxide	µg/m³	80	11.99	IS 5182 (PART 6) :2006
Particulate Matter (PM10)	µg/m³	100	55.56	IS 5182(PART-23) :2006
Particulate Matter (PM2.5)	µg/m³	60	30.56	KLPL/SOP/AIR-02 , ISSUE NO.1:2017
Carbon Monoxide (CO) (01 Hrs.)	mg/m³	04	0.355	KLPL/SOP/AIR-19 :2019
Ozone (O3) (01 Hrs.)	µg/m³	180	5.8	KLPL/SOP/AIR-13 , ISSUE NO.1:2019
Lead (Pb)	µg/m³	1.0	< 0.02	KLPL/SOP/AIR-10 , ISSUE NO.1:2017
Ammonia (NH3)	µg/m³	400	< 4	KLPL/SOP/AIR-05 , ISSUE NO.1:2017
Benza (a) Pyrene (BaP)	ng/m³	01	< 0.1	KLPL/SOP/AIR-07 , ISSUE NO.1:2019
Arsenic (As)	ng/m³	06	< 1	KLPL/SOP/AIR-10 , ISSUE NO.1:2017
Nickel (Ni)	ng/m³	20	< 4	KLPL/SOP/AIR-10 , ISSUE NO.1:2017
Location & Date : *MRSS & CPP, DATE-27-28/07/2023*				
Sulphur Dioxide	µg/m³	80	8.17	IS 5182(PART-2) : 2001

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KALYANI LABORATORIES PVT. LTD.

Kalyani Laboratories

PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-751032, ODISHA

TEST REPORT

Test Report No	: KLPL/7/23/ENVN/02382	*Issue Date*	: 04-Aug-2023
Amendment No	: -	*Amendment Date*	: -
Reference	: PO NUMBER :4920054932,PO DATE :24.05.2022		
Customer Name	: **FERRO ALLOYS CORPORATION LTD.**		
Address	: CHARGE CHROME PLANT ,D.P. NAGAR, RANDIA-756135,BHADRAK,ODISHA.		
Date of receipt	: 29-Jul-2023 Commenced On : 29-Jul-2023	*Completion On:*	04-Aug-2023
Sample Name	: **AMBIENT AIR QUALITY MONITORING**		
Sample Condition	: GASEOUS SAMPLE ABSORBING SOLUTIONS REFRIGERATED		
Quantity	: By KLPL(MR. SUDHIR KUMAR BARIK)		
Ref.To Sampling Procedure:	KLPL/QSP-07		

Parameters	*Unit*	*Standard Value*	*Results*	*Test Method*
Nitrogen Dioxide	µg/m³	80	11.99	IS 5182 (PART 6) :2006
Particulate Matter (PM10)	µg/m³	100	55.45	IS 5182(PART-23) :2006
Particulate Matter (PM2.5)	µg/m³	60	32.49	KLPL/SOP/AIR-02 , ISSUE NO.1:2017
Carbon Monoxide (CO) (01 Hrs.)	mg/m³	04	0.361	KLPL/SOP/AIR-19 :2019
Ozone (O3) (01 Hrs.)	µg/m³	180	5.1	KLPL/SOP/AIR-13 , ISSUE NO.1:2019
Lead (Pb)	µg/m³	1.0	< 0.02	KLPL/SOP/AIR-10 , ISSUE NO.1:2017
Ammonia (NH3)	µg/m³	400	< 4	KLPL/SOP/AIR-05 , ISSUE NO.1:2017
Benza (a) Pyrene (BaP)	ng/m³	01	< 0.1	KLPL/SOP/AIR-07 , ISSUE NO.1:2019
Arsenic (As)	ng/m³	06	< 1	KLPL/SOP/AIR-10 , ISSUE NO.1:2017
Nickel (Ni)	ng/m³	20	< 4	KLPL/SOP/AIR-10 , ISSUE NO.1:2017
Location & Date	: ***R & C LABORATORY, DATE-27-28/07/2023***			
Sulphur Dioxide	µg/m³	80	6.05	IS 5182(PART-2) : 2001
Nitrogen Dioxide	µg/m³	80	11.09	IS 5182 (PART 6) :2006
Particulate Matter (PM10)	µg/m³	100	42.38	IS 5182(PART-23) :2006
Particulate Matter (PM2.5)	µg/m³	60	23.31	KLPL/SOP/AIR-02 , ISSUE NO.1:2017
Carbon Monoxide (CO) (01 Hrs.)	mg/m³	04	0.347	KLPL/SOP/AIR-19 :2019
Ozone (O3) (01 Hrs.)	µg/m³	180	4.4	KLPL/SOP/AIR-13 , ISSUE NO.1:2019
Lead (Pb)	µg/m³	1.0	< 0.02	KLPL/SOP/AIR-10 , ISSUE NO.1:2017
Ammonia (NH3)	µg/m³	400	< 4	KLPL/SOP/AIR-05 , ISSUE NO.1:2017
Benza (a) Pyrene (BaP)	ng/m³	01	< 0.1	KLPL/SOP/AIR-07 , ISSUE NO.1:2019
Arsenic (As)	ng/m³	06	< 1	KLPL/SOP/AIR-10 , ISSUE NO.1:2017
Nickel (Ni)	ng/m³	20	< 4	KLPL/SOP/AIR-10 , ISSUE NO.1:2017

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KALYANI LABORATORIES PVT. LTD.

Kalyani Laboratories

PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-751032, ODISHA

TEST REPORT

Test Report No	:	**KLPL/7/23/ENVN/02382**		*Issue Date*	: 04-Aug-2023
Amendment No	:	-		*Amendment Date*	: -
Reference	:	PO NUMBER :4920054932,PO DATE :24.05.2022			
Customer Name	:	**FERRO ALLOYS CORPORATION LTD.**			
Address	:	CHARGE CHROME PLANT ,D.P. NAGAR, RANDIA-756135,BHADRAK,ODISHA.			
Date of receipt	:	29-Jul-2023	Commenced On : 29-Jul-2023	*Completion On:*	04-Aug-2023
Sample Name	:	**AMBIENT AIR QUALITY MONITORING**			
Sample Condition	:	GASEOUS SAMPLE ABSORBING SOLUTIONS REFRIGERATED/FILTER PAPER SEALED IN ZIP LOCK POLYTHENE BAG			
Sample Collected By	:	4 NOS			
Ref.To Sampling Procedure:		KLPL/QSP-07			

Parameters	*Unit*	*Standard Value*	*Results*	*Test Method*

Remarks :

Any unusual feature observed during determination :

Analysed By

D Arukha

Mr. Digambar Arukha
For Kalyani Laboratories Pvt. Ltd.

Authorised Signatory

Dr. Debasis Biswal
For Kalyani Laboratories Pvt. Ltd.

Kalyani Laboratories Pvt. Ltd. BBSR

End of Test Report

KALYANI LABORATORIES PVT. LTD.

Kalyani Laboratories

PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-751032, ODISHA

TC-12063

TEST REPORT

NABL ULR NO	:	**TC1206323000017706**		
Test Report No	:	**1857 | KLPL/8/23/ENVN/02459**	*Issue Date*	: 31-Aug-2023
Amendment No	:	-	*Amendment Date*	: -
Reference	:	PO NUMBER :4920054932,PO DATE :24.05.2022		
Customer Name	:	**FEERO ALLOYS CORPORATION LTD.**		
Address	:	CHARGE CHROME PLANT ,D.P. NAGAR, RANDIA-756135,BHADRAK,ODISHA.		
Date of receipt	:	28-Aug-2023 Commenced On : 28-Aug-2023	*Completion On:*	26-Aug-2023
Sample Name	:	**AMBIENT AIR QUALITY MONITORING**		
Sample Condition	:	GASEOUS SAMPLE ABSORBING SOLUTIONS REFRIGERATED/FILTER PAPER SEALED IN ZIP LOCK POLYTHENE BAG		
Sample Collected By		By KLPL(MR. SUDHIR KUMAR BARIK)		
Ref.To Sampling Procedure:		KLPL/QSP-07		

Parameters	*Unit*	*Standard Value*	*Results*	*Test Method*
Location & Date :	***AUTO GARAGE, DATE-26.08.2023***			
Sulphur Dioxide	µg/m³	80	6.83	IS 5182(PART-2) : 2001
Nitrogen Dioxide	µg/m³	80	10.48	IS 5182 (PART 6) :2006
Particulate Matter (PM10)	µg/m³	100	50.37	IS 5182(PART-23) :2006
Particulate Matter (PM2.5)	µg/m³	60	24.23	KLPL/SOP/AIR-02,Issue No.01:2017
Carbon Monoxide (CO) (01 Hrs.)	mg/m³	04	0.051	KLPL/SOP/AIR-19:2019
Ozone (O3) (01 Hrs.)	µg/m³	180	2.9	KLPL/SOP/AIR-19:2019
Lead (Pb)	µg/m³	1.0	<0.02	KLPL/SOP/AIR-10,Issue No.01:2017
Ammonia (NH3)	µg/m³	400	<4	KLPL/SOP/AIR-05,Issue No.01: 2017
Benza (a) Pyrene (BaP)	µg/m³	01	<0.1	KLPL/SOP/AIR-07,Issue No.01: 2019
Arsenic (As)	µg/m³	06	<1	KLPL/SOP/AIR-10,Issue No.01: 2017
Nickel (Ni)	µg/m³	20	<4	KLPL/SOP/AIR-10,Issue No.01:2017
Location & Date :	***FPHS & MRP, DATE-26.08.2023***			
Sulphur Dioxide	µg/m³	80	8.99	IS 5182(PART-2) : 2001
Nitrogen Dioxide	µg/m³	80	14.05	IS 5182 (PART 6) :2006
Particulate Matter (PM10)	µg/m³	100	58.99	IS 5182(PART-23) :2006
Particulate Matter (PM2.5)	µg/m³	60	29.92	KLPL/SOP/AIR-02,Issue No.01:2017
Carbon Monoxide (CO) (01 Hrs.)	mg/m³	04	0.058	KLPL/SOP/AIR-19:2019
Ozone (O3) (01 Hrs.)	µg/m³	180	5.8	KLPL/SOP/AIR-19:2019
Lead (Pb)	µg/m³	1.0	<0.02	KLPL/SOP/AIR-10,Issue No.01:2017
Ammonia (NH3)	µg/m³	400	<4	KLPL/SOP/AIR-05,Issue No.01: 2017
Benza (a) Pyrene (BaP)	µg/m³	01	<0.1	KLPL/SOP/AIR-07,Issue No.01: 2019
Arsenic (As)	µg/m³	06	<1	KLPL/SOP/AIR-10,Issue No.01: 2017
Nickel (Ni)	µg/m³	20	<4	KLPL/SOP/AIR-10,Issue No.01:2017
Location & Date :	***MRSS & CPP, DATE-26.08.2023***			
Sulphur Dioxide	µg/m³	80	9.48	IS 5182(PART-2) : 2001

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Kalyani Laboratories

PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-751032, ODISHA

TC-12063

TEST REPORT

NABL ULR NO	:	TC1206323000017706		
Test Report No	:	1857 | KLPL/8/23/ENVN/02459	*Issue Date*	: 31-Aug-2023
Amendment No	:	-	*Amendment Date*	: -
Reference	:	PO NUMBER :4920054932,PO DATE :24.05.2022		
Customer Name	:	**FEERO ALLOYS CORPORATION LTD.**		
Address	:	CHARGE CHROME PLANT ,D.P. NAGAR, RANDIA-756135,BHADRAK,ODISHA.		
Date of receipt	:	28-Aug-2023 Commenced On : 28-Aug-2023	*Completion On:*	26-Aug-2023
Sample Name	:	**AMBIENT AIR QUALITY MONITORING**		
Sample Condition	:	GASEOUS SAMPLE ABSORBING SOLUTIONS REFRIGERATED/FILTER PAPER SEALED IN ZIP LOCK		
Sample Collected By		By KLPL(MR. SUDHIR KUMAR BARIK)		
Ref.To Sampling Procedure:		KLPL/QSP-07		

Parameters	*Unit*	*Standard Value*	*Results*	*Test Method*
Nitrogen Dioxide	µg/m³	80	13.36	IS 5182 (PART 6) :2006
Particulate Matter (PM10)	µg/m³	100	63.85	IS 5182(PART-23) :2006
Particulate Matter (PM2.5)	µg/m³	60	32.49	KLPL/SOP/AIR-02,Issue No.01:2017
Carbon Monoxide (CO) (01 Hrs.)	mg/m³	04	0.063	KLPL/SOP/AIR-19:2019
Ozone (O3) (01 Hrs.)	µg/m³	180	6.6	KLPL/SOP/AIR-19:2019
Lead (Pb)	µg/m³	1.0	<0.02	KLPL/SOP/AIR-10,Issue No.01:2017
Ammonia (NH3)	µg/m³	400	<4	KLPL/SOP/AIR-05,Issue No.01: 2017
Benza (a) Pyrene (BaP)	µg/m³	01	<0.1	KLPL/SOP/AIR-07,Issue No.01: 2019
Arsenic (As)	µg/m³	06	<1	KLPL/SOP/AIR-10,Issue No.01: 2017
Nickel (Ni)	µg/m³	20	<4	KLPL/SOP/AIR-10,Issue No.01:2017
Location & Date :	***R & C LABORATORY, DATE-26.08.2023***			
Sulphur Dioxide	µg/m³	80	6.0	IS 5182(PART-2) : 2001
Nitrogen Dioxide	µg/m³	80	11.0	IS 5182 (PART 6) :2006
Particulate Matter (PM10)	µg/m³	100	53.10	IS 5182(PART-23) :2006
Particulate Matter (PM2.5)	µg/m³	60	26.08	KLPL/SOP/AIR-02,Issue No.01:2017
Carbon Monoxide (CO) (01 Hrs.)	mg/m³	04	0.044	KLPL/SOP/AIR-19:2019
Ozone (O3) (01 Hrs.)	µg/m³	180	3.6	KLPL/SOP/AIR-19:2019
Lead (Pb)	µg/m³	1.0	<0.02	KLPL/SOP/AIR-10,Issue No.01:2017
Ammonia (NH3)	µg/m³	400	<4	KLPL/SOP/AIR-05,Issue No.01: 2017
Benza (a) Pyrene (BaP)	µg/m³	01	<0.1	KLPL/SOP/AIR-07,Issue No.01: 2019
Arsenic (As)	µg/m³	06	<1	KLPL/SOP/AIR-10,Issue No.01: 2017
Nickel (Ni)	µg/m³	20	<4	KLPL/SOP/AIR-10,Issue No.01:2017

Kalyani Laboratories Pvt. Ltd. BBSR

KALYANI LABORATORIES PVT. LTD.

Kalyani Laboratories

PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-751032, ODISHA

TC-12063

TEST REPORT

NABL ULR NO	:	**TC1206323000017706**			
Test Report No	:	**1857 | KLPL/8/23/ENVN/02459**	*Issue Date*	:	31-Aug-2023
Amendment No	:	-	*Amendment Date*	:	-
Reference	:	PO NUMBER :4920054932,PO DATE :24.05.2022			
Customer Name	:	**FEERO ALLOYS CORPORATION LTD.**			
Address	:	CHARGE CHROME PLANT ,D.P. NAGAR, RANDIA-756135,BHADRAK,ODISHA.			
Date of receipt	:	28-Aug-2023 Commenced On : 28-Aug-2023	*Completion On:*		26-Aug-2023
Sample Name	:	**AMBIENT AIR QUALITY MONITORING**			
Sample Condition	:	GASEOUS SAMPLE ABSORBING SOLUTIONS REFRIGERATED/FILTER PAPER SEALED IN ZIP LOCK			
Sample Collected By		By KLPL(MR. SUDHIR KUMAR BARIK)			
Ref.To Sampling Procedure:		KLPL/QSP-07			

Parameters	*Unit*	*Standard Value*	*Results*	*Test Method*

Remarks :

Any unusual feature observed during determination :
REQUIREMENT IS AS PER STANDARD SPECIFICATION NAAQS:2009

Analysed By

Mr. Digambar Arukha
For Kalyani Laboratories Pvt. Ltd.

Kalyani Laboratories Pvt. Ltd. BBSR

Authorised Signatory

Dr. Debasis Biswal
For Kalyani Laboratories Pvt. Ltd.

********** End of Test Report **********

KALYANI LABORATORIES PVT. LTD.

Kalyani Laboratories

PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-751032, ODISHA

TEST REPORT

NABL ULR NO	:	**TC704323000016632F**		
Test Report No	:	**KLPL/4/23/ENVN/02228A**	*Issue Date*	: 28-Apr-2023
Amendment No	:	-	*Amendment Date*	: -
Reference	:	PO NUMBER :4920054932,PO DATE :24.05.2022		
Customer Name	:	**FERRO ALLOYS CORPORATION LTD.**		
Address	:	CHARGE CHROME PLANT ,D.P. NAGAR, RANDIA-756135,BHADRAK,ODISHA.		
Date of receipt	:	17-Apr-2023 Commenced On : 17-Apr-2023	*Completion On:*	27-Apr-2023
Sample Name	:	**FLUE GAS | STACK MONITORING**		
Sample Condition	:	GASEOUS SAMPLE ABSORBING SOLUTIONS REFRIGERATED		
Quantity	:	1 NO		
Ref.To Sampling Procedure:		QSP-07		

Parameters	*Unit*	*Standard Value*	*Results*	*Test Method*
Location & Date :	***GCP STACK DT-05.04.2023***			
Sulphur Dioxide	mg/Nm³	--	**15.8**	IS 11255(part-2):1985(RA 2014)
Oxide of Nitrogen as NOx	mg/Nm³	--	**23.5**	KLPL/SOP/AIR-20
Particulate Matter	mg/Nm³	--	**38.55**	IS 11255(part-1):1985(RA 2014)
Carbon Monoxide (CO)	%	--	**0.058**	KLPL/SOP/AIR-20
Velocity	m/sec	--	**8.5**	KLPL/SOP/AIR-16
Stack Temperature in Deg kelvin	--	--	**409**	KLPL/SOP/AIR-16
carbon Dioxide	%	--	**7.2**	KLPL/SOP/AIR-20
Quantity of Gas Flow	Nm3 / hr	--	**865**	KLPL/SOP/AIR-16
Mercury	mg/Nm3	--	**0.011**	KLPL/SOP/AIR-21

Remarks :

Any unusual feature observed during determination :

Analysed By

Mr. Digambar Arukha
For Kalyani Laboratories Pvt. Ltd.

Kalyani Laboratories Pvt. Ltd. BBSR

Authorised Signatory

Dr. Debasis Biswal
For Kalyani Laboratories Pvt. Ltd.

********** End of Test Report **********

KALYANI LABORATORIES PVT. LTD.

Kalyani Laboratories

PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-751032, ODISHA

TEST REPORT

NABL ULR NO	:	**TC704323000016633F**			
Test Report No		**KLPL/4/23/ENVN/02229**		*Issue Date*	: 28-Apr-2023
Amendment No	:	-		*Amendment Date*	-
Reference	:	PO NUMBER :4920054932,PO DATE :24.05.2022			
Customer Name	:	**FERRO ALLOYS CORPORATION LTD.**			
Address	:	CHARGE CHROME PLANT ,D.P. NAGAR, RANDIA-756135,BHADRAK,ODISHA.			
Date of receipt	:	17-Apr-2023	Commenced On : 17-Apr-2023	*Completion*	27-Apr-2023
Sample Name	:	**FLUE GAS | STACK MONITORING**			
Sample Condition		ASEOUS SAMPLE ABSORBING SOLUTIONS REFRIGERATED			
Quantity		2 NOS			
Ref.To Sampling Procedure:		QSP-07			

Parameters	*Unit*	*Standard Value*	*Results*	*Test Method*
Location & Date :	***DEDUSTING SYSTEM – 05.04.2023***			
Sulphur Dioxide	mg/Nm³	--	**22.5**	IS 11255(part-2):1985(RA 2014)
Oxide of Nitrogen as NOx	mg/Nm³	--	**27.6**	KLPL/SOP/AIR-20
Particulate Matter	mg/Nm³	--	**55.65**	IS 11255(part-1):1985(RA 2014)
Carbon Monoxide	%	--	**0.068**	KLPL/SOP/AIR-20
Velocity	m/sec	--	**7.2**	KLPL/SOP/AIR-16
Stack Temperature in Deg kelvin	--	--	**349**	KLPL/SOP/AIR-16
carbon Dioxide	%	--	**8.3**	KLPL/SOP/AIR-20
Quantity of Gas Flow	Nm3 / hr	--	**1370.52**	KLPL/SOP/AIR-16
Mercury	mg/Nm3	--	**0.018**	KLPL/SOP/AIR-21
Location & Date :	***DRYER STACK-4 DT-05.04.2023***			
Sulphur Dioxide	mg/Nm³	--	**18.9**	IS 11255(part-2):1985(RA 2014)
Oxide of Nitrogen as NOx	mg/Nm³	--	**26.6**	KLPL/SOP/AIR-20
Particulate Matter	mg/Nm³	--	**51.5**	IS 11255(part-1):1985(RA 2014)
Carbon Monoxide	%	--	**0.058**	KLPL/SOP/AIR-20
Velocity	m/sec	--	**5.80**	KLPL/SOP/AIR-16
Stack Temperature in Deg kelvin	--	--	**325**	KLPL/SOP/AIR-16
carbon Dioxide	%	--	**8.7**	KLPL/SOP/AIR-20
Quantity of Gas Flow	Nm3 / hr	--	**4701.50**	KLPL/SOP/AIR-16
Mercury	mg/Nm3	--	**0.017**	KLPL/SOP/AIR-21

Remarks

Any unusual feature observed during determination

Analysed By

D Arukha

Mr. Digambar Arukha
For Kalyani Laboratories Pvt. Ltd.

Kalyani Laboratories Pvt. Ltd. BBSR

Authorised Signatory

Dr. Debasis Biswal
For Kalyani Laboratories Pvt. Ltd.

End of Test Report

KALYANI LABORATORIES PVT. LTD.

Kalyani Laboratories

PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-751032, ODISHA

TEST REPORT

NABL ULR NO	: **TC704323000016632F**		
Test Report No	: **KLPL/4/23/ENVN/02228**	*Issue Date*	: 28-Apr-2023
Amendment No	: -	*Amendment Date*	: -
Reference	: PO NUMBER :4920054932,PO DATE :24.05.2022		
Customer Name	: **FERRO ALLOYS CORPORATION LTD.**		
Address	: CHARGE CHROME PLANT ,D.P. NAGAR, RANDIA-756135,BHADRAK,ODISHA.		
Date of receipt	: 17-Apr-2023 Commenced On : 17-Apr-2023	*Completion On:*	27-Apr-2023
Sample Name	: **FLUE GAS | STACK MONITORING**		
Sample Condition	: GASEOUS SAMPLE ABSORBING SOLUTIONS REFRIGERATED		
Quantity	: 1 NO		
Ref.To Sampling Procedure:	QSP-07		

Parameters	*Unit*	*Standard Value*	*Results*	*Test Method*
Location & Date :	***DG STACK DT-05.04.2023***			
Sulphur Dioxide	mg/Nm³	--	**25.5**	IS 11255(part-2) 1985(RA 2014)
Oxide of Nitrogen as NOx	mg/Nm³	--	**33.6**	KLPL/SOP/AIR-20
Particulate Matter	mg/Nm³	--	**64.55**	IS 11255(part-1) 1985(RA 2014)
Carbon Monoxide (CO)	%	--	**0.072**	KLPL/SOP/AIR-20
Velocity	m/sec	--	**7.6**	KLPL/SOP/AIR-16
Stack Temperature in Deg kelvin	--	--	**340**	KLPL/SOP/AIR-16
carbon Dioxide	%	--	**8.4**	KLPL/SOP/AIR-20
Quantity of Gas Flow	Nm3 / hr	--	**1150**	KLPL/SOP/AIR-16
Mercury	mg/Nm3	--	**0.019**	KLPL/SOP/AIR-21

Remarks :

Any unusual feature observed during determination :

Analysed By

Mr. Digambar Arukha
For Kalyani Laboratories Pvt. Ltd.

Authorised Signatory

Dr. Debasis Biswal
For Kalyani Laboratories Pvt. Ltd.

Kalyani Laboratories Pvt. Ltd. BBSR

End of Test Report

KALYANI LABORATORIES PVT. LTD.

Kalyani Laboratories

PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-751032, ODISHA

TEST REPORT

NABL ULR NO	:	**TC704323000016935F**		
Test Report No		**KLPL/5/23/ENVN/02289**	*Issue Date*	: 03-Jun-2023
Amendment No	:	-	*Amendment Date*	-
Reference	:	PO NUMBER :4920054932,PO DATE :24.05.2022		
Customer Name	:	**FERRO ALLOYS CORPORATION LTD.**		
Address	:	CHARGE CHROME PLANT ,D.P. NAGAR, RANDIA-756135,BHADRAK,ODISHA.		
Date of receipt	:	29-May-2023 Commenced On : 29-May-2023	*Completion*	03-Jun-2023
Sample Name	:	**FLUE GAS | STACK MONITORING**		
Sample Condition		ASEOUS SAMPLE ABSORBING SOLUTIONS REFRIGERATED		
Quantity		2 NOS		
Ref.To Sampling Procedure:		QSP-07		

Parameters	*Unit*	*Standard Value*	*Results*	*Test Method*
Location & Date :	***DEDUSTING SYSTEM – 30.05.2023***			
Sulphur Dioxide	mg/Nm³	--	**24.6**	IS 11255(part-2):1985(RA 2014)
Oxide of Nitrogen as NOx	mg/Nm³	--	**29.2**	KLPL/SOP/AIR-20
Particulate Matter	mg/Nm³	--	**53.42**	IS 11255(part-1):1985(RA 2014)
Carbon Monoxide	%	--	**0.066**	KLPL/SOP/AIR-20
Velocity	m/sec	--	**7.1**	KLPL/SOP/AIR-16
Stack Temperature in Deg kelvin	--	--	**355**	KLPL/SOP/AIR-16
carbon Dioxide	%	--	**8.1**	KLPL/SOP/AIR-20
Quantity of Gas Flow	Nm3 / hr	--	**1355**	KLPL/SOP/AIR-16
Mercury	mg/Nm3	--	**0.017**	KLPL/SOP/AIR-21
Location & Date :	***DRYER STACK-4 DT-30.05.2023***			
Sulphur Dioxide	mg/Nm³	--	**16.9**	IS 11255(part-2):1985(RA 2014)
Oxide of Nitrogen as NOx	mg/Nm³	--	**24.8**	KLPL/SOP/AIR-20
Particulate Matter	mg/Nm³	--	**48.5**	IS 11255(part-1):1985(RA 2014)
Carbon Monoxide	%	--	**0.055**	KLPL/SOP/AIR-20
Velocity	m/sec	--	**5.7**	KLPL/SOP/AIR-16
Stack Temperature in Deg kelvin	--	--	**329**	KLPL/SOP/AIR-16
carbon Dioxide	%	--	**8.5**	KLPL/SOP/AIR-20
Quantity of Gas Flow	Nm3 / hr	--	**4715**	KLPL/SOP/AIR-16
Mercury	mg/Nm3	--	**0.016**	KLPL/SOP/AIR-21

Remarks

Any unusual feature observed during determination

Kalyani Laboratories Pvt. Ltd. BBSR

Analysed By

Mr. Digambar Arukha
For Kalyani Laboratories Pvt. Ltd.

Authorised Signatory

Dr. Debasis Biswal
For Kalyani Laboratories Pvt. Ltd.

End of Test Report

KLPL- 362612A

KALYANI LABORATORIES PVT. LTD.

Kalyani Laboratories

PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-751032, ODISHA

TEST REPORT

NABL ULR NO	: TC704323000016935F		
Test Report No	: KLPL/5/23/ENVN/02289	Issue Date	: 03-Jun-2023
Amendment No	: -	Amendment Date	: -
Reference	: PO NUMBER :4920054932,PO DATE :24.05.2022		
Customer Name	: **FERRO ALLOYS CORPORATION LTD.**		
Address	: CHARGE CHROME PLANT ,D.P. NAGAR, RANDIA-756135,BHADRAK,ODISHA.		
Date of receipt	: 29-May-2023 Commenced On : 29-May-2023	Completion On:	03-Jun-2023
Sample Name	: **FLUE GAS | STACK MONITORING**		
Sample Condition	: GASEOUS SAMPLE ABSORBING SOLUTIONS REFRIGERATED		
Quantity	: 1 NO		
Ref.To Sampling Procedure:	QSP-07		

Parameters	Unit	Standard Value	Results	Test Method
Location & Date : GCP STACK DT-30.05.2023				
Sulphur Dioxide	mg/Nm³	--	**17.6**	IS 11255(part-2):1985(RA 2014)
Oxide of Nitrogen as NOx	mg/Nm³	--	**25.8**	KLPL/SOP/AIR-20
Particulate Matter	mg/Nm³	--	**42.25**	IS 11255(part-1):1985(RA 2014)
Carbon Monoxide (CO)	%	--	**0.061**	KLPL/SOP/AIR-20
Velocity	m/sec	--	**8.7**	KLPL/SOP/AIR-16
Stack Temperature in Deg kelvin	--	--	**387**	KLPL/SOP/AIR-16
carbon Dioxide	%	--	**6.9**	KLPL/SOP/AIR-20
Quantity of Gas Flow	Nm3 / hr	--	**845**	KLPL/SOP/AIR-16
Mercury	mg/Nm3	--	**0.010**	KLPL/SOP/AIR-21

Remarks :

Any unusual feature observed during determination :

Analysed By

D Arukha

Mr. Digambar Arukha
For Kalyani Laboratories Pvt. Ltd.

Kalyani Laboratories Pvt. Ltd. BBSR

Authorised Signatory

Dr. Debasis Biswal
For Kalyani Laboratories Pvt. Ltd.

End of Test Report

KALYANI LABORATORIES PVT. LTD.

Kalyani Laboratories

PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-751032, ODISHA

TEST REPORT

NABL ULR NO	:	TC704323000017204F	
Test Report No		KLPL/6/23/ENVN/02327	Issue Date : 05-Jul-2023
Amendment No	:	-	Amendment Date -
Reference	:	PO NUMBER :4920054932,PO DATE :24.05.2022	
Customer Name	:	FERRO ALLOYS CORPORATION LTD.	
Address	:	CHARGE CHROME PLANT ,D.P. NAGAR, RANDIA-756135,BHADRAK,ODISHA.	
Date of receipt	:	29-Jun-2023 Commenced On : 29-Jun-2023	Completion 04-Jul-2023
Sample Name	:	FLUE GAS | STACK MONITORING	
Sample Condition		GASEOUS SAMPLE ABSORBING SOLUTIONS REFRIGERATED	
Quantity		2 NOS	
Ref.To Sampling Procedure:		KLPL/SOP/AIR-20	

Parameters	Unit	Standard Value	Results	Test Method
Location & Date : *DEDUSTING SYSTEM – 29.06.2023*				
Sulphur Dioxide	mg/Nm³	--	22.5	IS 11255(part-2):1985(RA 2014)
Oxide of Nitrogen as NOx	mg/Nm³	--	27.2	KLPL/SOP/AIR-20 : 2019
Particulate Matter	mg/Nm³	--	48.42	IS 11255(part-1):1985(RA 2014)
Carbon Monoxide	%	--	0.062	KLPL/SOP/AIR-20 : 2019
Velocity	m/sec	--	7.3	IS 11255(part-1):1985(RA 2014)
Stack Temperature in Deg kelvin	--	--	350	IS 11255(part-1):1985(RA 2014)
carbon Dioxide	%	--	8.0	KLPL/SOP/AIR-20 : 2019
Quantity of Gas Flow	Nm3 / hr	--	1330	IS 11255(part-1):1985(RA 2014)
Location & Date : *DRYER STACK-4 DT-28.06.2023*				
Sulphur Dioxide	mg/Nm³	--	14.2	IS 11255(part-2):1985(RA 2014)
Oxide of Nitrogen as NOx	mg/Nm³	--	21.8	KLPL/SOP/AIR-20 : 2019
Particulate Matter	mg/Nm³	--	44.6	IS 11255(part-1):1985(RA 2014)
Carbon Monoxide	%	--	0.051	KLPL/SOP/AIR-20 : 2019
Velocity	m/sec	--	5.5	IS 11255(part-1):1985(RA 2014)
Stack Temperature in Deg kelvin	--	--	327	IS 11255(part-1):1985(RA 2014)
carbon Dioxide	%	--	8.3	KLPL/SOP/AIR-20 : 2019
Quantity of Gas Flow	Nm3 / hr	--	4640	IS 11255(part-1):1985(RA 2014)

Remarks

Any unusual feature observed during determination

Analysed By

Mr. Digambar Arukha
For Kalyani Laboratories Pvt. Ltd.

Kalyani Laboratories Pvt. Ltd. BBSR

Authorised Signatory

Dr. Debasis Biswal
For Kalyani Laboratories Pvt. Ltd.

KLPL- 362074A

KALYANI LABORATORIES PVT. LTD.

Kalyani Laboratories

PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-751032, ODISHA

TEST REPORT

NABL ULR NO	: TC704323C00017205F		
Test Report No	: KLPL/6/23/ENVN/02328	Issue Date	: 05-Jul-2023
Amendment No	: -	Amendment Date	: -
Reference	: PO NUMBER :4920054932,PO DATE :24.05.2022		
Customer Name	: FERRO ALLOYS CORPORATION LTD.		
Address	: CHARGE CHROME PLANT ,D.P. NAGAR, RANDIA-756135,BHADRAK,ODISHA.		
Date of receipt	: 29-Jun-2023 Commenced On : 29-Jun-2023	Completion On:	04-Jul-2023
Sample Name	: FLUE GAS | STACK MONITORING		
Sample Condition	: GASEOUS SAMPLE ABSORBING SOLUTIONS REFRIGERATED		
Quantity	: 1 NO		
Ref.To Sampling Procedure:	KLPL/SOP/AIR-20		

Parameters	Unit	Standard Value	Results	Test Method
Location & Date : GCP STACK DT-27.06.2023				
Sulphur Dioxide	mg/Nm³	--	19.5	IS 11255(part-2):1985(RA 2014)
Oxide of Nitrogen as NOx	mg/Nm³	--	27.6	KLPL/SOP/AIR-20 : 2019
Particulate Matter	mg/Nm³	--	45.25	IS 11255(part-1):1985(RA 2014)
Carbon Monoxide (CO)	%	--	0.064	KLPL/SOP/AIR-20 : 2019
Velocity	m/sec	--	8.3	IS 11255(part-1):1985(RA 2014)
Stack Temperature in Deg kelvin	--	--	385	IS 11255(part-1):1985(RA 2014)
carbon Dioxide	%	--	7.2	KLPL/SOP/AIR-20 : 2019
Quantity of Gas Flow	Nm3 / hr	--	847	IS 11255(part-1):1985(RA 2014)

Remarks :

Any unusual feature observed during determination :

Analysed By

Mr. Digambar Arukha
For Kalyani Laboratories Pvt. Ltd.

Authorised Signatory

Dr. Debasis Biswal
For Kalyani Laboratories Pvt. Ltd.

Kalyani Laboratories Pvt. Ltd. BBSR

End of Test Report

KLPL- 382070A

KALYANI LABORATORIES PVT. LTD.

Kalyani Laboratories

PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-751032, ODISHA

TEST REPORT

Test Report No	**KLPL/7/23/ENVN/02383**	*Issue Date*	: 04-Aug-2023
Amendment No	: -	*Amendment Date*	-
Reference	: PO NUMBER :4920054932,PO DATE :24.05.2022		
Customer Name	: **FERRO ALLOYS CORPORATION LTD.**		
Address	: CHARGE CHROME PLANT ,D.P. NAGAR, RANDIA-756135,BHADRAK,ODISHA.		
Date of receipt	: 29-Jul-2023 Commenced On : 29-Jul-2023	*Completion*	04-Aug-2023
Sample Name	: **FLUE GAS | STACK MONITORING**		
Sample Condition	GASEOUS SAMPLE ABSORBING SOLUTIONS REFRIGERATED		
Sample Collected By	: By KLPL(MR. SUDHIR KUMAR BARIK)		
Ref.To Sampling Procedure:	KLPL/SOP/AIR-20		

Parameters	*Unit*	*Standard Value*	*Results*	*Test Method*
Location & Date : ***DEDUSTING SYSTEM – 26 .07.2023***				
Sulphur Dioxide	mg/Nm³	--	**25.5**	IS 11255(part-2):1985(RA 2014)
Oxide of Nitrogen as NOx	mg/Nm³	--	**31.2**	KLPL/SOP/AIR-20 : 2019
Particulate Matter	mg/Nm³	--	**48.80**	IS 11255(part-1):1985(RA 2014)
Carbon Monoxide	%	--	**0.087**	KLPL/SOP/AIR-20 : 2019
Velocity	m/sec	--	**9.6**	IS 11255(part-1):1985(RA 2014)
Stack Temperature in	Deg Kelvin	--	**371**	IS 11255(part-1):1985(RA 2014)
carbon Dioxide	%	--	**7.3**	KLPL/SOP/AIR-20 : 2019
Quantity of Gas Flow	Nm3 / hr	--	**7915**	IS 11255(part-1):1985(RA 2014)
Mercury (as Hg)	mg / Nm³	--	0.92	KLPL/SOP/AIR/21 : 2019
Location & Date : ***DRYER STACK-4 DT-26.07.2023***				
Sulphur Dioxide	mg/Nm³	--	**16.5**	IS 11255(part-2):1985(RA 2014)
Oxide of Nitrogen as NOx	mg/Nm³	--	**23.8**	KLPL/SOP/AIR-20 : 2019
Particulate Matter	mg/Nm³	--	**70.79**	IS 11255(part-1):1985(RA 2014)
Carbon Monoxide	%	--	**0.051**	KLPL/SOP/AIR-20 : 2019
Velocity	m/sec	--	**6.1**	IS 11255(part-1):1985(RA 2014)
Stack Temperature in	Deg Kelvin	--	**358**	IS 11255(part-1):1985(RA 2014)
carbon Dioxide	%	--	**7.5**	KLPL/SOP/AIR-20 : 2019
Quantity of Gas Flow	Nm3 / hr	--	**2323**	IS 11255(part-1):1985(RA 2014)
Mercury (as Hg)	mg / Nm³	--	0.84	KLPL/SOP/AIR/21:2019

Remarks

Any unusual feature observed during determination

Analysed By

Mr. Digambar Arukha
For Kalyani Laboratories Pvt. Ltd.

Kalyani Laboratories Pvt. Ltd. BBSR

Authorised Signatory

Dr. Debasis Biswal
For Kalyani Laboratories Pvt. Ltd.

End of Test Report

KLPL- 362875A

KALYANI LABORATORIES PVT. LTD.

Kalyani Laboratories

PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-751032, ODISHA

TEST REPORT

Test Report No	: **KLPL/7/23/ENVN/02384**	*Issue Date*	: 04-Aug-2023
Amendment No	: -	*Amendment Date*	: -
Reference	: PO NUMBER :4920054932,PO DATE :24.05.2022		
Customer Name	: **FERRO ALLOYS CORPORATION LTD.**		
Address	: CHARGE CHROME PLANT ,D.P. NAGAR, RANDIA-756135,BHADRAK,ODISHA.		
Date of receipt	: 29-Jul-2023 Commenced On : 29-Jul-2023	*Completion On:*	04-Aug-2023
Sample Name	: **FLUE GAS | STACK MONITORING**		
Sample Condition	: GASEOUS SAMPLE ABSORBING SOLUTIONS REFRIGERATED		
Sample Collected By	: By KLPL(MR. SUDHIR KUMAR BARIK)		
Ref.To Sampling Procedure:	KLPL/SOP/AIR-20		

Parameters	*Unit*	*Standard Value*	*Results*	*Test Method*
Location & Date :	***GCP STACK DT-27.07.2023***			
Sulphur Dioxide	mg/Nm³	--	18.5	IS 11255(part-2):1985(RA 2014)
Oxide of Nitrogen as NOx	mg/Nm³	--	27.6	KLPL/SOP/AIR-20 : 2019
Particulate Matter	mg/Nm³	--	53.76	IS 11255(part-1):1985(RA 2014)
Carbon Monoxide (CO)	%	--	0.068	KLPL/SOP/AIR-20 : 2019
Velocity	m/sec	--	7.9	IS 11255(part-1):1985(RA 2014)
Stack Temperature in	Deg Kelvin	--	391	IS 11255(part-1):1985(RA 2014)
carbon Dioxide	%	--	7.5	KLPL/SOP/AIR-20 : 2019
Quantity of Gas Flow	Nm3 / hr	--	839	IS 11255(part-1):1985(RA 2014)
Mercury	mg/Nm3	--	0.038	KLPL/SOP/AIR-21:2019

Remarks :

Any unusual feature observed during determination :

Analysed By

Mr. Digambar Arukha
For Kalyani Laboratories Pvt. Ltd.

Authorised Signatory

Dr. Debasis Biswal
For Kalyani Laboratories Pvt. Ltd.

Kalyani Laboratories Pvt. Ltd. BBSR

End of Test Report

KLPL- 362870A

KALYANI LABORATORIES PVT. LTD.

Kalyani Laboratories

PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-751032, ODISHA

TC-12063

TEST REPORT

NABL ULR NO	:	**TC1206323000017707**		
Test Report No	:	**1858 | KLPL/8/23/ENVN/02461**	*Issue Date*	: 31-Aug-2023
Amendment No	:	-	*Amendment Date*	: -
Reference	:	PO NUMBER :4920054932,PO DATE :24.05.2022		
Customer Name	:	**FEERO ALLOYS CORPORATION LTD.**		
Address	:	CHARGE CHROME PLANT ,D.P. NAGAR, RANDIA-756135,BHADRAK,ODISHA.		
Date of receipt	:	28-Aug-2023 Commenced On : 28-Aug-2023	*Completion On:*	30-Aug-2023
Sample Name	:	**FLUE GAS | STACK MONITORING**		
Sample Condition	:	GASEOUS SAMPLE ABSORBING SOLUTIONS REFRIGERATED		
Sample Collected By		By KLPL(MR. SUDHIR KUMAR BARIK)		
Ref.To Sampling Procedure:		KLPL/QSP-07		

Parameters	*Unit*	*Standard Value*	*Results*	*Test Method*
Location & Date :	***DEDUSTING SYSTEM,DATE-26.08.2023***			
Particulate Matter	mg/Nm³	--	**44.04**	IS 11255(Part-1):1985,RA:2019
Carbon Monoxide (CO) (01 Hrs.)	mg/m³	--	**0.082**	KLPL/SOP/AIR-20:2019
Carbon Dioxide (CO2)	%	--	**07.1**	KLPL/SOP/AIR-20:2019
Oxides of Nitrogen	mg/Nm³	--	**28.9**	KLPL/SOP/AIR-20:2019
Stack Temperature	Deg kelvin	--	**375**	IS 11255(Part-1):1985,RA:2019
Velocity	m/sec	--	**8.5**	IS 11255(Part-1):1985,RA:2019
Quantity of Gas Flow	Nm3 / hr	--	**6973**	IS 11255(Part-1):1985,RA:2019
Mercury (as Hg)	mg/Nm³	--	**0.85**	KLPL/SOP/STACK-HM-21: 2023
Sulphur Dioxide as SO2	mg/Nm³	--	**22.2**	IS 11255(part-2):1985,RA:2019
Location & Date :	***DRYER STACK-4,DATE-26.08.2023***			
Particulate Matter	mg/Nm³	--	**92.83**	IS 11255(Part-1):1985,RA:2019
Carbon Monoxide (CO) (01 Hrs.)	mg/m³	--	**0.058**	KLPL/SOP/AIR-20:2019
Carbon Dioxide (CO2)	%	--	**7.9**	KLPL/SOP/AIR-20:2019
Oxides of Nitrogen	mg/Nm³	--	**30.3**	KLPL/SOP/AIR-20:2019
Stack Temperature	Deg kelvin	--	**355**	IS 11255(Part-1):1985,RA:2019
Velocity	m/sec	--	**6.6**	IS 11255(Part-1):1985,RA:2019
Quantity of Gas Flow	Nm3 / hr	--	**2535**	IS 11255(Part-1):1985,RA:2019
Mercury (as Hg)	mg/Nm³	--	**0.88**	KLPL/SOP/STACK-HM-21: 2023
Sulphur Dioxide as SO2	mg/Nm³	--	**21.5**	IS 11255(part-2):1985,RA:2019
Location & Date :	***GCP STACK,DATE-26.08.2023***			
Particulate Matter	mg/Nm³	--	**80.15**	IS 11255(Part-1):1985,RA:2019
Carbon Monoxide (CO) (01 Hrs.)	mg/m³	--	**0.075**	KLPL/SOP/AIR-20:2019
Carbon Dioxide (CO2)	%	--	**7.7**	KLPL/SOP/AIR-20:2019
Oxides of Nitrogen	mg/Nm³	--	**32.5**	KLPL/SOP/AIR-20:2019
Stack Temperature	Deg kelvin	--	**380**	IS 11255(Part-1):1985,RA:2019

Kalyani Laboratories Pvt. Ltd. BBSR

452B1770742453

KALYANI LABORATORIES PVT. LTD.

Kalyani Laboratories

PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-751032, ODISHA

TC-12063

TEST REPORT

NABL ULR NO	:	**TC1206323000017707**
Test Report No	:	**1858 | KLPL/8/23/ENVN/02461**
Amendment No	:	-
Reference	:	PO NUMBER :4920054932,PO DATE :24.05.2022
Customer Name	:	**FEERO ALLOYS CORPORATION LTD.**
Address	:	CHARGE CHROME PLANT ,D.P. NAGAR, RANDIA-756135,BHADRAK,ODISHA.
Date of receipt	:	28-Aug-2023 Commenced On : 28-Aug-2023 Completion On: 30-Aug-2023
Sample Name	:	**FLUE GAS | STACK MONITORING**
Sample Condition	:	GASEOUS SAMPLE ABSORBING SOLUTIONS REFRIGERATED
Sample Collected By		By KLPL(MR. SUDHIR KUMAR BARIK)
Ref.To Sampling Procedure:		KLPL/QSP-07

Issue Date : 31-Aug-2023

Amendment Date : -

Parameters	Unit	Standard Value	Results	Test Method
Velocity	m/sec	--	**8.0**	IS 11255(Part-1):1985,RA:2019
Quantity of Gas Flow	Nm3 / hr	--	**870.9**	IS 11255(Part-1):1985,RA:2019
Mercury (as Hg)	mg/Nm³	--	**0.045**	KLPL/SOP/STACK-HM-21: 2023
Sulphur Dioxide as SO2	mg/Nm³	--	**20.9**	IS 11255(part-2):1985,RA:2019

Remarks :

Any unusual feature observed during determination :
Requirement Is As Per Standard Specification CTO

Analysed By

Mr. Digambar Arukha
For Kalyani Laboratories Pvt. Ltd.

Authorised Signatory

Dr. Debasis Biswal
For Kalyani Laboratories Pvt. Ltd.

Kalyani Laboratories Pvt. Ltd. BBSR

End of Test Report

452B1770742453

KALYANI LABORATORIES PVT. LTD.

Kalyani Laboratories

PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-751032, ODISHA

TC-12063

TEST REPORT

NABL ULR NO	: TC1206323000017708		
Test Report No	: **1859 | KLPL/8/23/ENVN/02462**	Issue Date	: 31-Aug-2023
Amendment No	: -	Amendment Date	: -
Reference	: PO NUMBER :4920054932,PO DATE :24.05.2022		
Customer Name	: **FEERO ALLOYS CORPORATION LTD.**		
Address	: CHARGE CHROME PLANT ,D.P. NAGAR, RANDIA-756135,BHADRAK,ODISHA.		
Date of receipt	: 28-Aug-2023 Commenced On : 28-Aug-2023	Completion On:	30-Aug-2023
Sample Name	: **FLUE GAS | STACK MONITORING**		
Sample Condition	: GASEOUS SAMPLE ABSORBING SOLUTIONS REFRIGERATED		
Sample Collected By	By KLPL(MR. SUDHIR KUMAR BARIK)		
Ref.To Sampling Procedure:	KLPL/QSP-07		

Location & Date : DG STACK,DATE-26.08.2023

Parameters	Unit	Standard Value	Results	Test Method
Particulate Matter	mg/Nm^3	--	**32.13**	IS 11255(Part-1):1985,RA:2019
Carbon Monoxide (CO) (01 Hrs.)	mg/m^3	--	**0.062**	KLPL/SOP/AIR-20:2019
Carbon Dioxide (CO2)	%	--	**7.4**	KLPL/SOP/AIR-20:2019
Oxides of Nitrogen	mg/Nm^3	--	**25.6**	KLPL/SOP/AIR-20:2019
Stack Temperature	Deg kelvin	--	**391**	IS 11255(Part-1):1985,RA:2019
Velocity	m/sec	--	**5.1**	IS 11255(Part-1):1985,RA:2019
Quantity of Gas Flow	Nm3 / hr	--	**1132**	IS 11255(Part-1):1985,RA:2019
Mercury (as Hg)	mg/Nm^3	--	**0.014**	KLPL/SOP/STACK-HM-21: 2023
Sulphur Dioxide as SO2	mg/Nm^3	--	**18.5**	IS 11255(part-2):1985,RA:2019

Remarks :

Any unusual feature observed during determination :
Requirement Is As Per Standard Specification CTO

Analysed By

Mr. Digambar Arukha
For Kalyani Laboratories Pvt. Ltd.

Kalyani Laboratories Pvt. Ltd. BBSR

Authorised Signatory

Dr. Debasis Biswal
For Kalyani Laboratories Pvt. Ltd.

******************** End of Test Report ********************

452C1770842454

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transforming for good

FACOR

Ref. No: FACOR/HSE/ES/23-1
Date: 29.09.2023

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 2022-23 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,2023 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

Sanjay Pal
Factory Manager

Copy to: The Regional Officer, SPCB, Balasore.

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.

FORM V

(See Rule 14)

Environmental Statement for the Financial Year Ending 31st March 2023.

PART – A

i. **Name and address of the owner/occupier of the industry operation process.**
Shri Balwant Singh Rathore, Director,
M/s. Ferro Alloys Corporation Ltd.,
Charge Chrome Plant, Randia-756135,
Dist. Bhadrak, Orissa.

ii. **Industry category Primary** – Large

i. **Production Capacity-Units** - Charge Chrome/High Carbon Ferro Chrome
68043 MT/Annum of Total Production from Smelting Furnace out of total capacity 75000 MT/A Charge Chrome 2104.9 MT/Annum from Metal Recovery Plant out of total capacity 6300 MT/A.

ii.

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

iv. **Date of the last environmental statement submitted** – 30.09.2022.

PART – B

Water and Raw Material Consumption

1. **Water Consumption m^3 /day**
Process Cooling – 246
Domestic – 958

Name of Products	Process Water Consumption Per Unit of Product Output	
	During the Previous Financial Year 2021-22	During the Current Financial Year 2022-23
Process and Cooling	1.296 m^3/MT	1.278 m^3/MT

2. **Raw Material Consumption**

Name of Raw Materials	Name of Products	Consumption of Raw Material Per Unit of Output	
		During the Previous Financial Year 2021-22	During the Current Financial Year 2022-2023
Chrome Ore	Charge Chrome/ High Carbon Ferro Chrome	2.456 MT	2.28 MT
Coke		0.633 MT	0.581 MT
Quartzite		0.011 MT	0.011 MT
Bauxite		0.060 MT	0.11 MT
Electrode Paste		13.499 Kg	12.54 Kg
Hydrated Lime		0.072 MT	0.068 MT

PART – C

Pollution Discharge to Environment/ Unit of Output
(Parameter as Specified in the Consent Issued)

(1) Pollutants	Quantity of Pollutant Discharged (Mass/Day)	Concentration Pollutants in Discharge (Mg/Ltr)	Percentage of Variation from Prescribed Standards with Reasons (Mg/Ltr) STANDARD
(a) Water			
PH	Zero Discharge	7.4	5.5 – 9.0
BOD		10	30
COD		47	250
TSS		18	100
Cr^{+6}		Less than 0.05	0.1
Oil & grease		Less than 0.025	10
(b) Air (Ambient)		µg/ m^3	µg/ m^3
PM 10	-	59.38	100
PM 2.5	-	31.38	60
SO_2	-	8.07	80
NO_2	-	14.36	80
CO	-	0.38 mg/m^3	4 mg/ m^3

PART – D

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

Hazardous Wastes	Total Quantity (Kg)	
	During the Previous Financial Year 2021-22	During the Current Financial Year 2022-23
a) From Process used oil	0.36 KL	1.94 KL
b) From pollution control facility flue dust from G.C.P.	1924.82 MT are utilized as raw material in the furnace area after making pellets/ Briquettes	2469.9 MT are utilized as raw material in the furnace area after making pellets/ Briquettes

PART – E
Solid Wastes

Solid Waste	Total Quantity	
	During the Previous Financial Year 2021-22	During the Current Financial Year 2022-23
(a) From Process	75,378.00 MT (Slag)	65,811.66 MT (Slag)
(b) From Pollution Control Facility	-	-
(c) 1) Quantity Recycle and Re-Utilized within the Unit	Part of Jigging Slag used for Civil Construction Work	Part of Jigging Slag used for Civil Construction Work
2)Solid	-	-
3) Disposed	Used for filling low lying areas within plant premises	Used for filling low lying areas within plant premises

PART – F

Please specify the characterization (in terms of composition and quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.

- The granulated slag generated from the process is used for filling low lying areas in plant premises.
- Slag generated from the Metal Recovery Plant also used for filling low lying areas. Some portion of the jigging slag also used for civil construction work i.e. road making, floor concreting etc.
- Flue dust generated from the Gas Cleaning Plant is re-used as raw material in the furnace after making pallets/briquettes.
- Solid waste like Waste Cotton, Empty Bottles, Jerry Canes, Rejected Spares and Steel Scrapes etc. are stored in proper manner, so that it shall not pose any threat to Environment. Moreover, some of those items have scrap values and disposed off with price realization.
- The solid waste like Wastepaper, Domestic Waste and Canteen Waste etc. are allowed to decompose in waste pits. The same is used as manure after decomposition.

PART – G

Impact of the pollution statement measures taken on conservation of natural resources and on the cost of production.

- The water used in MRP is re-circulated and make up water is supplied from the rainwater harvesting pond. The water from the rainwater harvesting pond also used for granulation plant, metal cooling, dust suppression and green belt development, thereby saving consumption of fresh water.
- The flue dust collected from the Gas Cleaning Plant and Dryer stacks are reused as raw material in the process.
- By using jigging slag in civil construction work, company saves cost of stone chips.
- The solid waste like waste batteries, E- Waste, steel scraps, empty barrels, jerry canes etc. are disposed off with price realization.
- Biodegradable waste like waste paper, domestic waste and canteen waste are used as manure for gardening after decomposition.
- FACOR being an 14001 & 50001 certified company, doing a lot for the conservation of Energy and Natural Resources.
- Furnace cooling water is re-circulated in a close circuit and make up water is added in to it.

PART – H

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

Expenditure for Environmental Protection FY 2022-23

i)	Installation of New Cooling Tower	:	39,72,120/-
ii)	Installation of STP (10KLD)	:	41,06,400/-
iii)	Installation of Digital flowmeter & Piezometer with Telemetry.		8,62,081/-
iv)	Greenbelt development & engagement of worker for plantation maintenance work	:	80,23,320/-
v)	Engagement of Water Tanker for dust suppression	:	2,16,000/-
vi)	Installation of New GCP for 33MVA project		11,89,21,402/-
vii)	Installation of Digital display board	:	2,20,000/-
viii)	Installation of CAAQMS, CEMS, CWMS & data transmission	:	64,19,200/-
ix)	Maintenance of GCP	:	36442713/-

Investment Proposal for Environmental Protection FY 2023-24

- Connection of ETP pipeline – Rs. 15,00,000/-
- Deployment of Road sweeping machine O&M – Rs. 15,00,000/-
- Installation of wheel washing system – Rs. 18,00,000/-
- Installation of organic waste converter- Rs. 4,00,000/-

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 being an ISO 14001-2015 Company, engaged a dedicated team of members in Environmental Management System for strictly implementing and maintaining the Environment Policy framed by Managing Director.

FERRO ALLOYS CORPORATION LTD. BHADRAK