Date: 31.01.2024

National Green Tribunal,
Principal Bench
New Delhi

Sub: Submission of Response from Gallantt Ispat Limited in context to the order passed by Hon'ble Mr. Justice Arun Kumar Tyagi Judicial Member and Dr. Afroz Ahmad, Expert Member in case of Radhe Shyam Sehara vs State of U. P. & Others.

Ref: NGT O A No. 432 / 2023 and Notice received vide Dispatch No. 1549-1552.

Dear Sir,

With reference to above, Enclosed please find herewith our response in context to the subject matter stated above.

Submitted for your kind information and needful in this regard from your end.

Hope you will find the same in order.

Thanking You,

Yours faithfully,

For Gallantt Ispat Ltd,

(Bhaskar Tiwari)

Sr. General Manager (HR)

Mobile: 9161999199 / 9617701780

Email: hr. gil@gallantt.com

Encl: As above.

GALLANTT ISPAT LIMITED
Registered Office : "GALLANTT HOUSE", I-7, Jangpura Extension, New Delhi - 110 014
Telefax : 011-41645392, E-mail : gil@gallantt.com, Website : www.gallantt.com
Factory : AL-5, Sector 23, Sahjanwa, District-Gorakhpur, Uttar Pradesh
Corporate Office : 1, Crooked Lane, Second Floor, Room Nos. 222 & 223, Kolkata - 700 069, Tel : 033-46004831
Corporate Identification No. : L27109DL2005PLC350524

Date: 08.01.2024

The Director,
Ministry of Environment Forest & Climate Change,
KendriyaBhawan, 5th Floor, Sector "H" Aliganj
Lucknow (Uttar Pradesh)

Sub: Submission of Six monthly compliance reports of the conditions of Environmental Clearance for Expansion of Integrated Steel Plant; Sponge Iron (2,97,000 to 5,94,000 TPA), MS Billet (3,30,000 to 6,53,400 TPA), Captive Power (53 to 80.5 MW), Rolling Mill (3,30,000 TPA) and Installation of new Pellet Plant (792000 TPA) by **Gallantt Ispat Limited** at Plot No. AL-5, Sector: 23, GIDA Industrial Area, Tehsil: Sahjanwa, District: Gorakhpur (U.P.) for the period of April, 2022 to March, 2023.

Ref: EC ref. No: J – 11011/229/2008 – IA II (I) dated October 14th, 2020.

Dear Sir,

With reference to above, Enclosed please finds herewith six-monthly compliance report of the conditions of Environmental Clearance of Integrated Steel Plant by **Gallantt Ispat Limited** at Plot No. AL-5, Sector: 23, GIDA Industrial Area, Tehsil: Sahjanwa, District: Gorakhpur (U.P.), along with annexure.

Thanking You,
Yours faithfully,
For Gallantt Ispat Ltd,

(Navneet Jindal)
General Manager (Commercial)
Mobile: 9936213000 / 7607013000.
Email: navneet@gallantt.com

Encl: As above.

CC: **The Member Secretary,** U. P. Pollution Control Board, TC-12V, Vibhuti Khand, Gomti Nagar, Lucknow for information please.

SIX-MONTHLY ENVIRONMENTAL COMPLIANCE REPORT OF STIPULATED CONDITIONS OF ENVIRONMENTAL CLEARANCE

(April, 2023 to September, 2023)

For

Expansion of Integrated Steel Plant; Sponge Iron (2,97,000 to 5,94,000 TPA), MS Billet (3,30,000 to 6,53,400 TPA), Captive Power (53.0 to 80.5 MW), Rolling Mill (3,30,000 TPA) and Installation of new Pellet Plant (792000 TPA)

By

M/s Gallantt Ispat Limited

At
AL-5, Sector: 23, GIDA Industrial Area,
Tehsil: Sahjanwa, District: Gorakhpur (U.P.)

For Submission to:
Ministry of Environment, Forest & Climate Change
(Regional Office, Lucknow)

Submitted By:
M/s Gallant Ispat Limited

TABLE OF CONTENT

CHAPTER No. 01:
INTRODUCTION AND PROJECT DESCRIPTION

Six monthly environmental compliance/status report is submitted for Expansion of Integrated Steel Plant; Sponge Iron (2,97,000 to 5,94,000 TPA), MS Billet (3,30,000 to 6,53,400 TPA), Captive Power (53.0 to 80.5 MW), Rolling Mill (3,30,000 TPA) and Installation of Pellet Plant (792000 TPA) by Gallantt Ispat Limited for March, 2023. The Project is located at Plot No. AL-5, Sector: 23, GIDA Industrial Area, Tehsil: Sahjanwa, District: Gorakhpur (U.P.).

Prior Environment Clearance was obtained from Ministry of Environment & Forests (MoEF & CC) wide letter no.: **J - 11011/229/2008 - IA II (I), dated October 14th, 2020.** Consent to operate for Air & Water Vide Ref No. **178839/UPPCB/Gorakhpur(UPPCBRO)/CTO/both/GORAKHPUR/2023** dated **17/03/2023.** Copy of CTO is attached here as **Annexure-1**.

Environmental mitigation measures described in Environmental Management Plan are being implemented operation phase. **Gallantt Ispat Limited** management team is fully conscious about Environmental Management and enhancing green belt development in project surrounding area.

Six monthly compliance/status reports for **April, 2023 to September, 2023** for conditions stipulated in the Environmental Clearance letter issued by MoEF is enclosed as **Annexure-2**. Photographs view of implemented mitigation measures are also attached for the ready reference as Photo Documentation.

CHAPTER No. 02: COMPLIANCE OF STIPULATED CONDITIONS OF ENVIRONMENTAL CLEARANCE

Name of the Project: Expansion of Integrated Steel Plant; Sponge Iron (2,97,000 to 5,94,000 TPA), MS Billet (3,30,000 to 6,53,400 TPA), Captive Power (53.0 to 80.5 MW), Rolling Mill (3,30,000 TPA) and Installation of Pellet Plant (792000 TPA) by Gallant Ispat Limited located at AL-5, Sector: 23, GIDA Industrial Area, Tehsil: Sahjanwa, District: Gorakhpur (U.P.).

Clearance Letter No: J - 11011/229/2008 - IA II (I), dated October 14th, 2020.

Period of Compliance Report: (April, 2023 to September, 2023)

Industry again obtained "No increase of Pollution Load" certificate from Uttar Pradesh Pollution Control Board, vide letter no. 90/UPHOC6/EIA/Gorakhpur/2022 dated 19.01.2022 with for its Integrated Steel Plant; Sponge Iron (594000 MTPA to 660000 MTPA), MS Billet (330000 MTPA to 653400 MTPA), Captive Power (53 MW to 80.5 MW), Rolling Mill (3,30,000 MTPA to 6,60,000 MTPA) and Installation of new Pellet Plant (792000 TPA) at same place as per MOEF&CC gazette notification no. SO 980 dated 2nd March 2021 **(Enclosed as Annexure- 3).** After "No increase of Pollution Load" certificate, Project capacities will be as under:

Production Unit	Sanctioned capacity as per existing ECs dated 14.10.2020	Sanctioned capacity as per "No increase of Pollution Load" certificate dated 19.01.2022
Sponge Iron Plant	5,94,000 TPA	6,60,000 TPA
	2x 450 TPD, 1 x 750 TPD & 1 x 150 TPD	2x 450 TPD, 1 x 750 TPD & 1 x 350 TPD,
M.S. Billets	6,53,400 TPA	6,53,400 TPA
	4 x 30 T*, 2 x 22.5 T & 2 x 27.5 T	4 x 30 T, 2 x 22.5 T & 2 x 27.5 T
Captive Power Plant	80.5 MW (44.5 MW of CFBC and 36 MW of WHRB)	80.5 MW (40.5 MW of CFBC and 40 MW of WHRB)
Pellet Plant	7,92,000 TPA	7,92,000 TPA
Rolling Mill	3,30,000 TPA	6,60,000 TPA

Present installed capacities as under:

Production Unit	Sanctioned capacity as per "No increase of Pollution Load" certificate dated 19.01.2022	Capacity Installed and Operational

Sponge Iron Plant	6,60,000 TPA	5,44,500 TPA
	2x 450 TPD & 1 x 750 & 1 x 350 TPD,	2x 450 TPD & 1 x 750 TPD (Rest 350 TPD Kiln under installation)
M.S. Billets	6,53,400 TPA	5,28,000 TPA (Rest capacity under installation)
	4 x 30 T, 2 x 22.5 T & 2 x 27.5 T	2 x 30 T, 2 x 22.5 T & 2 x 27.5 T
Captive Power Plant	80.5 MW (40.5 MW of CFBC and 40 MW of WHRB)	78.0 MW (37.50 MW of CFBC/AFBC and 40.0 MW of WHRB)
Pellet Plant	7,92,000 TPA	7,92,000 TPA
Rolling Mill	6,60,000 TPA	5,28,000 TPA

A - SPECIFIC CONDITIONS

Sr. No.	Details	Action Details
1.	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.	Point is noted and if such condition arises, permission will be obtained from concerned authority.
2.	Air cooled condensers shall be installed in the proposed power plants to reduce water consumption in tum water conservation measure.	Air-cooled condenser facility has been provided for the new power generation capacity (25 MW). Existing Power plant (53 MW) is based on Water cooled Condensers.
3.	Green belt shall be developed in 15.3 ha of land within the plant premises.	Green belt development in 15.3 Hectare of land within the plant premises under process and is regularly being maintaining successfully. **Recent photographs attached as Annexure 4.**
4.	Hot charging of billets shall be at least for 90% of quantity in the rolling mill.	Hot charging of billets is being done for at least for 90% of quantity in the

	Reheating furnace shall be for maximum quantity of 10% of billets in rolling mill.	rolling mill.
5.	Particulate emissions shall be less than 30 mg/Nm^3.	Emission from stack of new established furnace and pellet plant is within 30 mg/Nm^3. Stack emission report is attached for reference.
6.	Industrial vacuum cleaners shall be used to clean roads and shop floors regularly to reduce fugitive emissions.	Industrial Vacuum Cleaner has been deployed in the premises for cleaning of internal roads for prevention of fugitive dust. Dust extraction system has been installed at all transfer points to control the fugitive dust along raw material handling and sponge iron plant. Water sprinkling is done regularly along the points of screening, loading, unloading, handling and storage of raw materials. **Recent photographs attached as Annexure 5.**
7.	Zero Liquid Discharge (ZLD) shall be maintained. Treated waste water from STP shall be reused for green belt development.	Project is achieving Zero Liquid Discharge. Existing STP, treated water is being utilised for Green Belt development.

B - GENERAL CONDITIONS

Sr. No.	Details	Action Details
	I- Statutory compliance	
1.	The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.	Proper handling, storage, utilization and disposal of all the solid waste are being done. We have also obtained Hazardous Waste authorization from UPPCB through letter No. 3201/UPPCB /HWM dated-07.09.2018 and 13827/ UPPCB /Gorakhpur (UPPCBRO) /HWM/ GORAKHPUR/ 2021 dated 28.02.2021.
	II- Air quality monitoring and preservation	
i.	The project proponent shall install 24x7 continuous emission monitoring system at	All the stacks of CPP and DRI plant/WHRB are installed with

	process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.	online continuous stack monitoring devices to monitor air emissions. Third Party monitoring of all the stacks has been conducted quarterly through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories. **Photographs of online equipment is attached as Annexure – 6.**
ii.	The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognized under Environment (Protection) Act, 1986.	Noted and to be complied with under Environment (Protection) Act, 1986. **Fugitive emission analysis report is attached as Annexure- 7.**
iii.	The project proponent shall install system to carryout Continuous Ambient Air Quality monitoring for common/ criterion parameters relevant to the main pollutants released (e.g. PM_{10} and PM_2. in reference to PM emission, and SO_2 and NOx in reference to SO_2 and NOx emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120° each) covering upwind and downwind directions.	Ambient air quality monitoring has been done at four location. Location has been decided on the basis of given condition. **Ambient Air Monitoring report is attached as Annexure – 8.**
iv.	Sampling facility at process stacks and at quenching towers shall be provided as per CPCB guidelines for manual monitoring of emission.	Sampling facility available at all the stacks of CPP, DRI plant/WHRB, Steel Melt Shop and Rolling Mill for manual monitoring of emissions.
v.	The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions to Regional Office of MoEF & CC, Zonal office of CPCB and Regional Office of SPCB along with six monthly monitoring report.	Noted. **Copies of latest third-party test analysis reports are enclosed as Annexure - 9.**
vi.	Air Pollution Control (APC) system shall be provided for all the dust generating points	Dust extraction system has been installed at all transfer points to

	including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.	control the fugitive dust along raw material handling and sponge iron plant. Water sprinkling is done regularly along the points of screening, loading, unloading, handling and storage of raw materials.
vii.	The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.	Leakage detection through false air ingress is being performed, and mechanical cleaning is carried out on a regular basis.
viii.	Secondary emission control system shall be provided at SMS Converters.	We had installed secondary suction arrangement along with primary suction in the SMS Shed to reduce the pollution. The said system consists of Booster Fans to generate initial suction. The fumes which are collected through the suction are conveyed through ducts with the help of ID fan to de-dusting plant.
ix.	Pollution control system in the steel plant shall be provided as per the CREP Guidelines of CPCB.	Industry is complying with the CREP guidelines of CPCB and condition given in Environmental Clearance.
x.	Recycle and reuse iron ore fines, coal fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting / agglomeration.	Iron ore fines and coal fines collected from the Air pollution control device is being recycled / reutilised in process.
xi.	The project proponent use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.	The project-using leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.
xii.	Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.	Iron Ore, Iron fines and coal is being stored in covered sheds and hoppers in shed.
xiii.	Design the ventilation system for adequate air changes as per ACGIH document for all tunnels, motor houses, Oil Cellars.	Noted.
III- Water quality monitoring and preservation		
i.	The project proponent shall install 24x7	All the stacks of CPP and DRI

	continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.	plant/WHRB are installed with online continuous stack monitoring devices to monitor air emissions. Third Party monitoring of all the stacks has been conducted quarterly through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
ii.	The project proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of piezometers/ sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories	Noted and complied. **Copies of latest third-party Water test analysis reports are enclosed as Annexure - 10.**
iii.	The project proponent shall submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.	Continuous online monitoring system is connected to CPCB server and UPPCB server. Project is based on Zero Liquid Discharge. Monthly Summary of Stack emission data and STP outlet, Ground water report is attached as **Annexure – 11.**
iv.	The project proponent shall provide the ETP to meet the standards as amended from time to time.	Project is based on Zero Liquid Discharge.
v.	Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.	We have already installed Sewage Treatment Plant for treatment of domestic waste water to meet the prescribed standards. Treated water is being utilized in Green Belt and Dust suppression (ash quenching). STP outlet report is attached as Annexure – 12.
vi.	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.	Rain water is being collected and treated in WTP.

vii.	Tyre washing facilities shall be provided at the entrance of the plant gates.	Tyre washing system is installed at the factory gate. Photographs is attached as **Annexure – 13.**
viii.	The project proponent shall practice rainwater harvesting to maximum possible extent.	Industry has adopted 16 nos. of pond in nearby villages to recharge 280500 m^3 / Year rain water artificially. Photographs of recharge pond is attached as **Annexure – 14.**
ix.	Water meters shall be provided at the inlet to all unit processes in the steel plants.	Water meters are installed with existing 3 bore wells and monthly reading send to CGWA, Lucknow.
x.	The project proponent shall make efforts to minimize water consumption in the steel plant complex by segregation of used water, practicing cascade use and by recycling treated water.	By practicing cascade use and by recycling treated water, fresh water consumption has been reduced.
IV- Noise monitoring and prevention		
i.	Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.	Following noise pollution prevention & control measures have been adopted: 1. Low noise generating equipment has been installed. 2. Acoustic lagging for the equipment and suction side silencers has been done. 3. Proper greenbelt has been planted around the premises so that the ambient noise levels shall conform to the desired standards. Third party noise reports are attached as **Annexure-15.**
ii.	The ambient noise levels should conform to the standards prescribed under E (P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB (A) during night time.	The ambient noise levels within premises and at boundary conform to the standards prescribed under E (P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB (A) during night time.
V- Energy Conservation measures		
i.	Use torpedo ladle for hot metal transfer as far as possible. If ladles not used, provide covers	Not applicable for induction furnace technology however, ladle is being

	for open top ladles.	handled in closed proximity within the main steel melt shop shed.
ii.	Waste heat recovery systems shall be provided in all units where the flue gas or process gas exceeds 300°C.	Waste Heat Recovery Boiler already been installed at DRI Kilns.
iii.	Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly.	Noted and industry is exploring the possibility & feasibility of installing Solar panel on sheds.
iv.	Provide LED lights in their offices and residential areas.	LED has been installed in Office and residential areas.
v.	Ensure installation of regenerative type burners on all reheating furnaces.	90 – 95 % direct charging is being done in rolling mills.
VI- Waste Management		
i.	Waste recycling Plant shall be installed to recover scrap, metallic and flux for recycling to sinter plant and SMS.	Noted. Not applicable.
ii.	Used refractories shall be recycled as far as possible.	Used refractories is being recycled into the process to the extent possible. Refracties balances is being sold.
iii.	SMS slag after metal recovery in waste recycling facility shall be conditioned and used for road making, railway track ballast and other applications. The project proponent shall install a waste recycling facility to recover metallic and flux for recycle to sinter plant. The project proponent shall establish linkage for 100% reuse of rejects from Waste Recycling Plant.	Slag from SMS is being processed in to magnetic and non-magnetic particles. Magnetic particles will be 100 % reused in SMS and non-magnetic particles are being / will be used as sand in construction activities.
iv.	100% utilization of fly ash shall be ensured. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding in this regard shall be submitted to the Ministry's Regional Office.	100% Fly ash is being sold / supplied for cement plants.
v.	Oil Collection pits shall be provided in oil cellars to collect and reuse/recycle spilled oil. Oil collection trays shall be provided under coils on saddles in cold rolled coil storage area.	Noted and complied.

vi.	The waste oil, grease and other hazardous waste like acidic sludge from pickling, galvanizing, chrome plating mills etc. shall be disposed of as per the Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016. Coal tar sludge / decanter shall be recycled to coke ovens.	Waste oil is being provided to the TSDF for further disposal. Hazardous authorisation for the same is being obtained from Uttar Pradesh pollution control board. Copy of hazardous waste authorisation is attached as **Annexure – 16.**
vii.	Kitchen waste shall be composted or converted to biogas for further use.	Kitchen waste is being provided to vendor for further disposal.
VII- Green Belt		
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 emissions inventory details has been submitted with the EIA EMP report.
VIII- Public hearing and Human health issues		
i.	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan has been implemented.
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).	Heat stress analysis is already been done in all the high temperature work zone and workers are protected with personal protection equipment (PPE) as per the norms. **Report already submitted.**
iii.	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	Already provided at the time of construction phase.
iv.	Occupational health surveillance of the workers shall be done on a regular basis and records maintained.	Occupational health surveillance of the workers is being done on a regular basis and records are being maintained as per the Factories Act. **Summary of health surveillance**

		report is attached as Annexure – 17.
IX- Corporate Environment Responsibility		
i.	The project proponent shall comply with the provisions contained in this Ministry's OM vide F. No. 22-65/2017-IA.III dated 1th May 2018, as applicable, regarding Corporate Environment Responsibility.	Point is noted and complied as per the provision made in EIA report.
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 compliance report.	We have implemented Environmental Policy duly approved from Board of Directors. Copy of the same is attached as annexure-18.
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.	Environmental Cell both at the project and company head quarter level, with qualified personnel has been set up under the control of senior Executive, who is directly to the head of the organization.
iv.	Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six-	Chart has been prepared and implemented.

	Monthly Compliance Report.	
v.	Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.	Suggestion will be implemented.
vi.	All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Iron and Steel plants shall be implemented.	Point is noted and industry is complying the condition of CREP.
X- Miscellaneous		
i.	The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local news papers of the District or State, of which one shall be in vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.	Advertisement made in two local newspapers and EC uploaded over Company's website. Copy of public notice is attached as Annexure – 19.
ii.	The copies of the Environmental Clearance shall be submitted by the project proponents to 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.	Complied.
iii.	The project proponent shall upload the status of the compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.	Is being complied.
iv.	The project proponent shall monitor the criteria pollutants level namely; PM_{10}, SO_2, NO_X, (ambient level as well as stack emission) 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.	Display board has been installed at the main gate. Photograph attached as Annexure- 20.
v.	The project proponent shall submit six monthly reports on the status of the	Is being complied.

	compliance of the stipulated environmental conditions on the website of the Ministry of Environment, Forest and Climate Change at environment clearance portal.	
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.	Environmental Statement already Submitted
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 start of production operation by the project.	Complied.
viii.	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.	Noted.
ix.	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.	Noted.
x.	No further Expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forest & Climate Change (MoEF&CC).	Condition Noted.
xi.	Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.	Condition Noted.
xii.	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Condition Noted.
xiii.	The Ministry reserves the right to stipulate additional conditions if found necessary. The company in a time bound manner shall	Condition Noted.

	implement these conditions.	
xiv.	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.	Condition Noted.
xv.	Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.	Noted.

CHAPTER No. 03, DETAILS OF ENVIRONMENTAL MONITORING

3.1 AMBIENT AIR QUALITY MONITORING

3.1.1 Ambient air Quality Monitoring Stations

Ambient air quality monitoring has been carried out at Village: Sahjanwa (Station No. 01), Village: Johnia (Station No. 02), Village: Domhar (Station No. 03) and Near Main Gate (Station No. 04) to assess the ambient air quality. This will enable to have analytical understanding about air quality and the changes in the air environment in the study area with respect to the condition prevailing. The locations of the ambient air quality monitoring stations are given in **Table-3.1**: -

Table-3.1:
Details of Ambient Air Quality Monitoring Stations

Sr. No.	Location Code	Location Name/Description	Environmental Setting of surrounding
1.	AAQ-1	Village: Sahjanwa (Station No. 01)	Residential
2.	AAQ-2	Village: Johnia (Station No. 02)	Residential
3.	AAQ-3	Village: Domhar (Station No. 03)	Residential
4.	AAQ-4	Near Main Gate (Station No. 04)	Industrial

AAQ-1: Village: Sahjanwa (Station No. 01)
The sampler was placed at Village: Sahjanwa and was free from any obstructions. Surroundings of the sampling site represent residential environmental setting.

AAQ- 2: Village: Johnia (Station No. 02)
The sampler was placed at Village: Johnia and was free from any obstructions. Surroundings of the sampling site represent residential environmental setting.

AAQ-3: Village: Domhar (Station No. 03)
The sampler was placed at Village: Domhar and it was also free from any obstructions. Surroundings of the sampling site represent residential environment setting.

AAQ-4: Near Main Gate (Station No. 04)
The sampler was placed Near Main Gate and it was also free from any obstructions. Surroundings of the sampling site represent industrial environment setting.

3.1.2 Ambient Air Quality Monitoring Methodology

Monitoring was conducted in respect of the following parameters:

- Respirable Suspended Particulate Matter (PM_{10})
- Fine Particulate Matter ($PM_{2.5}$)
- Sulphur Dioxide (SO_2)
- Oxides of Nitrogen (NOx)

The duration of sampling of PM_{10}, $PM_{2.5}$, SO_2 and NO_X was 24 hourly continuous sampling per day duration monitoring. The monitoring was conducted for one day at the location. This is to allow a comparison with the National Ambient Air Quality Standards.

The air samples were analyzed as per standard methods specified by Indian Standards (IS: 5182). The techniques used for ambient air quality monitoring and minimum detectable levels are given in **Table-3.2**.

Fine Particulate Sampler instruments have been used for monitoring Particulate Matter 2.5 ($PM_{2.5}$ i.e. <2.5 microns), and Respirable Dust Sampler with gaseous sampling attachment was used for sampling Respirable fraction (<10 microns), gaseous pollutants like SO_2, and NOx.

Table-3.2
Techniques used for Ambient Air Quality Monitoring

Sr. No.	Parameter	Technique	Range of testing /limit of detection
1.	Respirable Suspended Particulate Matter (PM_{10})	Respirable Dust Sampler, with cyclone separator, Gravimetric Method	5.0 - 1200
2.	Fine Particulate Matter ($PM_{2.5}$)	Fine Particulate Sampler, Gravimetric Method	2.0 - 500
3.	Sulphur dioxide	Improved West and Gaeke	5.0 - 1050
4.	Oxides of Nitrogen	Modified Jacob and Hochheiser (Sodium - Arsenite)	6.0 - 750

3.1.3 Ambient Air Quality Monitoring Results at Station No. 01 (Village: Sahjanwa)

The detailed on-site monitoring results of $PM_{2.5}$, PM_{10}, SO_2 and NO_X are presented in **Table-3.3**.

Table-3.3:
Ambient Air Quality Monitoring Results at Station No. 01 (Village: Sahjanwa)

Sr. No	Particulars	Protocol	Unit	Result	Standard as per NAAQS; dated 18/11/ 2009
1	**Particulate matters size less than 10 µm (PM_{10})**	IS: 5182 (Part-23): 2006 Reaffirmed: 2017	µg/m^3	**79.2**	For 24 hour =100
2	**Particulate matters size less than 2.5 µm ($PM_{2.5}$)**	IS: 5182 (Part-24): 2019	µg/m^3	**46.07**	For 24 hour =60
3	**Sulphur Dioxides (SO_2)**	IS: 5182 (Part-2): 2001 Reaffirmed: 2017	µg/m^3	**13.12**	For 24 hour =80
4	**Oxides of nitrogen (NO_X)**	IS: 5182 (Part-6): 2006 Reaffirmed: 2017	µg/m^3	**17.46**	For 24 hour =80

3.1.4 Ambient Air Quality Monitoring Results at Station No. 02 (Village: Johnia)

The detailed on-site monitoring results of $PM_{2.5}$, PM_{10}, SO_2 and NOx are presented in **Table-3.4**.

Table-3.4:
Ambient Air Quality Monitoring Results at Station No. 02 (Village: Johnia)

Sr. No	Particulars	Protocol	Unit	Result	Standard as per NAAQS; dated 18/11/ 2009
1	**Particulate matters size less than 10 µm (PM_{10})**	IS: 5182 (Part-23): 2006 Reaffirmed: 2017	µg/m^3	**78.9**	For 24 hour =100
2	**Particulate matters size less than 2.5 µm ($PM_{2.5}$)**	IS: 5182 (Part-24): 2019	µg/m^3	**48.45**	For 24 hour =60
3	**Sulphur Dioxides (SO_2)**	IS: 5182 (Part-2): 2001 Reaffirmed: 2017	µg/m^3	**13.23**	For 24 hour =80
4	**Oxides of nitrogen (NO_X)**	IS: 5182 (Part-6): 2006 Reaffirmed: 2017	µg/m^3	**18.54**	For 24 hour =80

3.1.5 Ambient Air Quality Monitoring Results at Station No. 03 (Village: Domhar)

The detailed on-site monitoring results of $PM_{2.5}$, PM_{10}, SO_2 and NO_X are presented in **Table-3.5**.

Table-3.5:
Ambient Air Quality Monitoring Results at Station No. 03 (Village: Domhar)

Sr. No	Particulars	Protocol	Unit	Result	Standard as per NAAQS; dated 18/11/ 2009
1	**Particulate matters size less than 10 µm (PM_{10})**	IS: 5182 (Part-23): 2006 Reaffirmed: 2017	µg/m^3	**77.8**	For 24 hour =100
2	**Particulate matters size less than 2.5 µm ($PM_{2.5}$)**	IS: 5182 (Part-24): 2019	µg/m^3	**47.52**	For 24 hour =60
3	**Sulphur Dioxides (SO_2)**	IS: 5182 (Part-2): 2001 Reaffirmed: 2017	µg/m^3	**13.36**	For 24 hour =80
4	**Oxides of nitrogen (NO_X)**	IS: 5182 (Part-6): 2006 Reaffirmed: 2017	µg/m^3	**19.14**	For 24 hour =80

3.1.6 Ambient Air Quality Monitoring Results Station No. 04 (Near Main Gate)

The detailed on-site monitoring results of $PM_{2.5}$, PM_{10}, SO_2 and NO_X are presented in **Table-3.6**.

Table-3.6:
Ambient Air Quality Monitoring Results Station No. 04 (Near Main Gate)

Sr. No	Particulars	Protocol	Unit	Result	Standard as per NAAQS; dated 18/11/ 2009
1	**Particulate matters size less than 10 µm (PM_{10})**	IS: 5182 (Part-23): 2006 Reaffirmed: 2017	µg/m^3	**84.6**	For 24 hour =100
2	**Particulate matters size less than 2.5 µm ($PM_{2.5}$)**	IS: 5182 (Part-24): 2019	µg/m^3	**52.08**	For 24 hour =60
3	**Sulphur Dioxides (SO_2)**	IS: 5182 (Part-2): 2001 Reaffirmed: 2017	µg/m^3	**14.84**	For 24 hour =80
4	**Oxides of nitrogen (NO_X)**	IS: 5182 (Part-6): 2006 Reaffirmed: 2017	µg/m^3	**20.45**	For 24 hour =80

3.1.7 Discussion on Ambient Air Quality in the Study Area

The value of PM_{10} at Ambient Air Monitoring Station No: 1, 2, 3 & 4 are 79.2 µg/m^3, 78.9 µg/m^3, 77.8 µg/m^3 & 84.6 µg/m^3 respectively which were within permissible limit of 100 µg/m^3 and $PM_{2.5}$ levels are 46.07 µg/m^3 at Station No: 1, 48.45 µg/m^3 at Station No: 2, 47.52 µg/m^3 at Station No: 3 and 52.08 µg/m^3 at Station No: 4, were also observed within permissible limit of 60 µg/m^3 (for residential, rural and other areas as stipulated in the National Ambient Air Quality Standards). SO_2 ranges between 13.12 µg/m^3 to 14.84 µg/m^3 and NO_X ranges between 17.46 µg/m^3 to 20.45 µg/m^3 was also observed within the corresponding stipulated limits (Limit for SO_2 and NO_X; 80 µg/m^3) at all of the 04 monitoring locations. Station wise variation of ambient air quality parameters has been graphically shown in **Figure-3.1 to 3.4**.

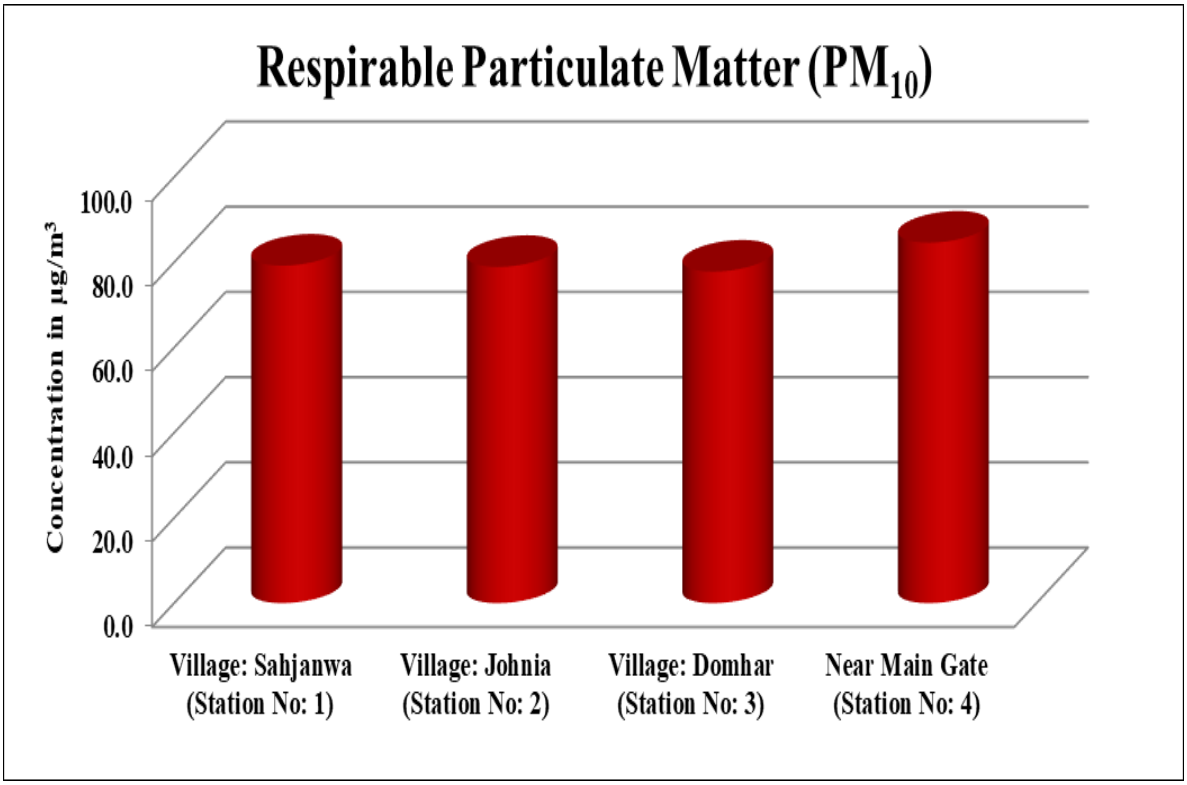

Figure-3.1: Graphs Showing PM_{10} Concentration at all sites

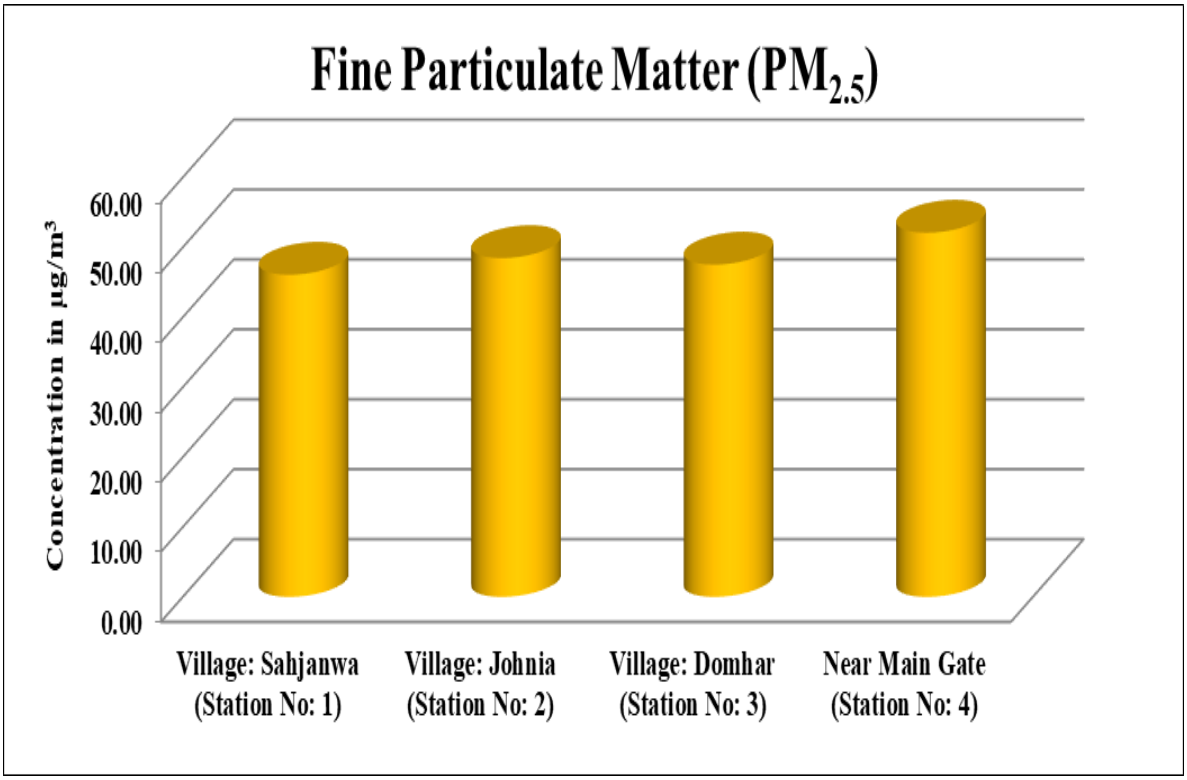

Figure-3.2: Graphs Showing $PM_{2.5}$ Concentration at all sites

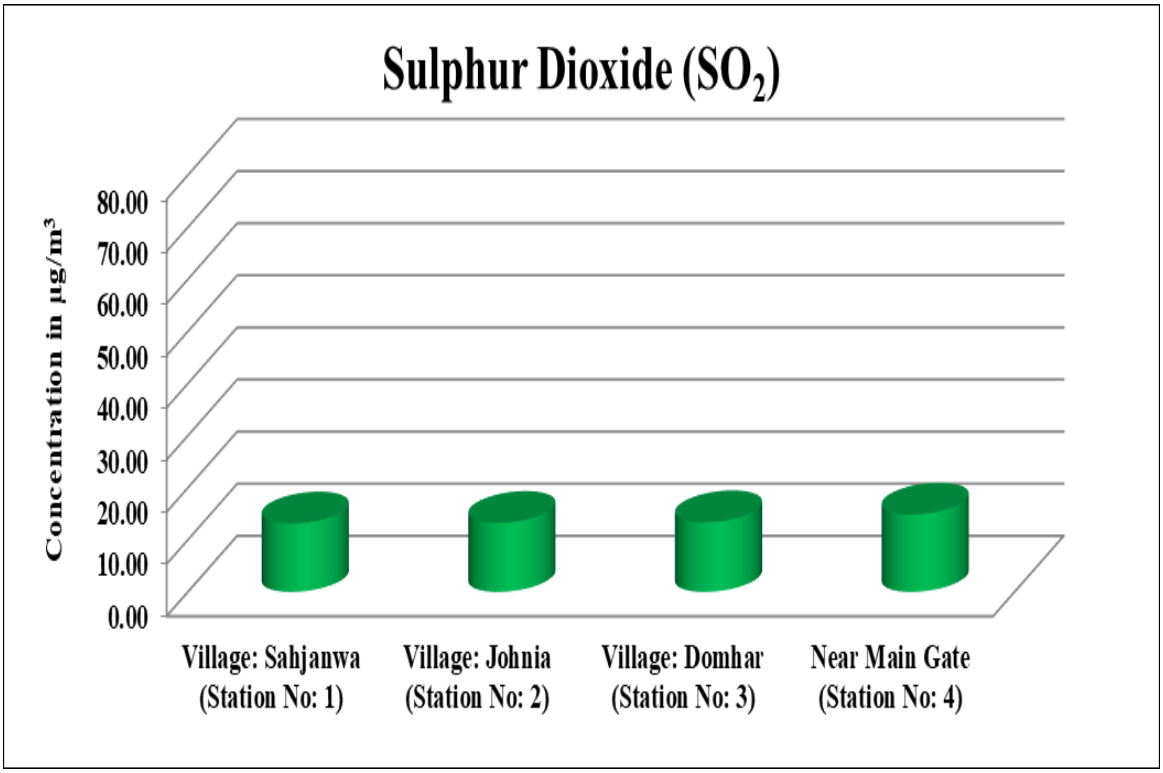

Figure-3.3: Graphs Showing SO_2 Concentration at all sites

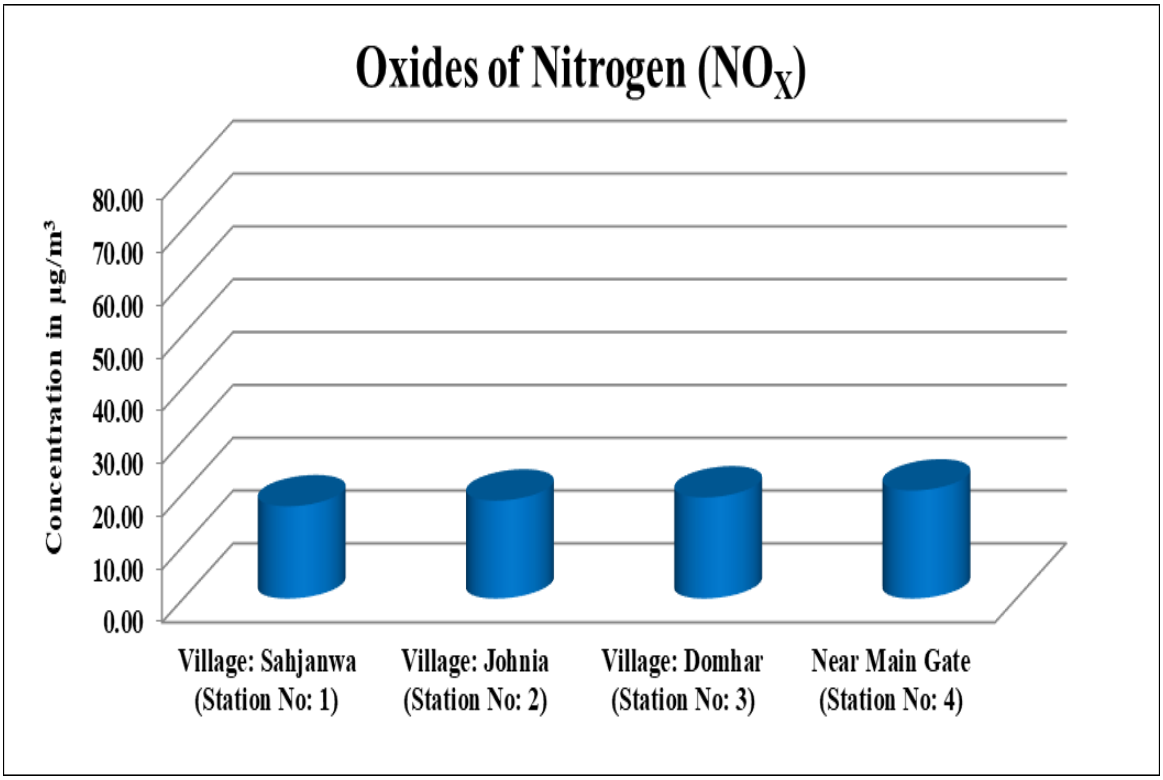

Figure-3.4: Graphs Showing NO_X Concentration at all sites

3.2 STACK EMISSION MONITORING

Stack Emission monitoring was carried out by EPA approved Laboratory on date 01.09.2023 to 03.09.2023 for following stacks.

- Stack No. 1 attached with Crucible: 02 Nos., 30 T/Batch/heat (Bag Filters is used as Air Pollution Control Device with a stack height of 30.0 meter)
- Stack No. 2 attached with Crucible: 02 Nos., 22 T/heat (Bag Filters is used as Air Pollution Control Device with a stack height of 30.0 meter)
- Stack No. 3 attached with Boiler; 01 Nos., 40 T/hr (ESP is used as Air Pollution Control Device with a stack height of 80.0 meter)
- Stack No. 4 attached with Rotary Kiln: 02 Nos. (ESP is used as Air Pollution Control Device with a stack height of 50.0 meter)
- Stack No. 5 attached with Boiler (CFBC): 01 No., 110 T/hr (ESP is used as Air Pollution Control Device with a stack height of 100.0 meter)

3.2.1 Stack Emission Monitoring Methodology

Stack Monitoring was conducted for five no. of stacks in respect of the following parameters:

- Particulate Matter (PM)

The Method used for Stack Emission monitoring and range of testing with CPCB standard are given in **Table-3.7.**

Table-3.7:
Details of Stack Emission Monitoring Results

Sr. No.	Parameter	Unit	Protocol	Result	Range of Testing/ Limit of Detection	Standard (as per CPCB)
Stack No. 1						
1	Particulate Matter	mg/Nm^3	IS: 11255 (Part-1): 1985 Reaffirmed: 2019	**45.82**	2 - 1000	150
Stack No. 2						
2	Particulate Matter	mg/Nm^3	IS: 11255 (Part-1): 1985 Reaffirmed: 2019	**46.02**	2 - 1000	150
Stack No. 3						
3	Particulate Matter	mg/Nm^3	IS: 11255 (Part-1): 1985 Reaffirmed: 2019	**47.20**	2 - 1000	50
Stack No. 4						
4	Particulate Matter	mg/Nm^3	IS: 11255 (Part-1): 1985 Reaffirmed: 2019	**43.92**	2 - 1000	150
Stack No. 5						
5	Particulate Matter	mg/Nm^3	IS: 11255 (Part-1): 1985 Reaffirmed: 2019	**27.20**	2 - 1000	30

3.3 AMBIENT NOISE MONITORING

3.3.1 Ambient Noise Monitoring Locations

The main objective of noise monitoring in the study area is to assess the present ambient noise levels near project site due to various operational activities and increased vehicular movement. A preliminary reconnaissance survey has been undertaken to identify the major noise generating sources in the area. Ambient noise monitoring was conducted at 1 location as given in **Table-3.8**.

Table-3.8:
Details of Ambient Noise Monitoring Stations

Sr. No	Location Code	Location name and description	Date of Monitoring
1.	NQ-1	Near admin block	02/09/2023 to 03/09/2023

3.3.2 Methodology of Noise Monitoring

Noise levels were measured using sound level meter. Noise level monitoring was carried out continuously for 24-hours with one hour interval starting at 06:00 hrs to 06:00 hrs next day. The noise levels were monitored on working days only. During each hour Leq were directly computed by the instrument based on the sound pressure levels. Monitoring was carried out at 'A' response.

3.3.3 Ambient Noise Monitoring Results

The location wise ambient noise monitoring results is summarized in **Table-3.9**. The noise levels are graphically presented in **Figure-3.5**.

Table-3.9:
Ambient Noise Monitoring Results

Ambient Noise Level				
Sr. No.	**Parameter**	**Unit**	**DAY TIME (6:00 AM - 10:00 PM)**	**NIGHT TIME (10:00 PM - 6:00 AM)**
1	**Equivalent Sound level**	**dB(A)**	63.18	49.82

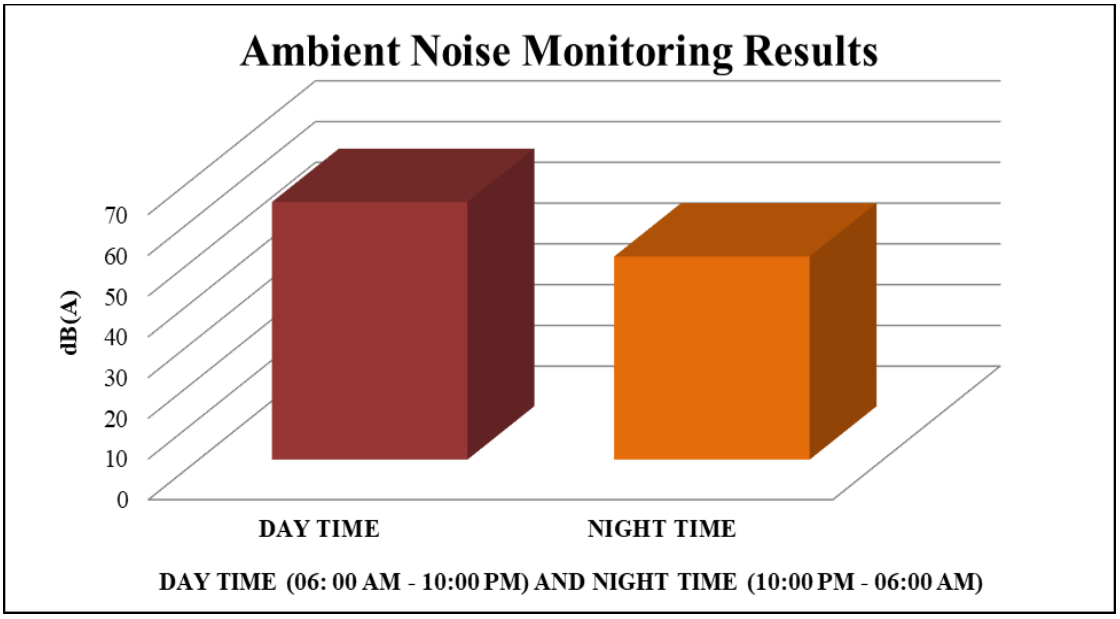

Figure 3.5: Day and Night Time noise Level at Near admin block

Table-3.10: Noise Standards as per CPCB Schedule rule 3(1) and 4(1)

Area Code	Category of Area/Zone	Limits in dB(A) Leq	
		Day Time	Night Time
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40

3.3.4 Discussion on Ambient Noise Levels in the Study Area

Day Time Noise Levels (L_{day}):

The day time noise level at monitoring station was found 63.18 dB(A), which is within limits prescribed for industrial area i.e., 75 db (A).

Night Time Noise Levels (L_{night}):

The night time noise level at monitoring station was found 49.82 dB(A), which is within limit prescribed for industrial area i.e., 70 dB (A).

3.4 GROUND WATER QUALITY MONITORING

3.4.1 Ground water Quality Monitoring Locations

Keeping in view the importance of ground water, sample of ground water was collected from the project site for the assessment of impacts of the project on the groundwater quality.

Water sample was collected from the project site. The sample was analyzed for various parameters to compare with the standards for Ground water as per IS: 10500 for Groundwater sources. The details of water sampling locations are given in **Table-3.11.**

Table-3.11:
Details of Water Quality Monitoring Station

Sr. No	Location Code	Location name and description	Date of Monitoring
1.	GW-1	**Borewell No.- 02, Near Bank of Pond**	**05th April, 2023**
2.	GW-1	**Borewell No.- 02, Near Bank of Pond**	**11th May, 2023**
3.	GW-1	**Borewell No.- 02, Near Bank of Pond**	**05th June, 2023**
4.	GW-1	**Borewell No.- 02, Near Bank of Pond**	**10th July, 2023**
5.	GW-1	**Borewell No.- 02, Near Bank of Pond**	**07th August, 2023**
6.	GW-1	**Borewell No.- 02, Near Bank of Pond**	**03rd September, 2023**

3.4.2 Methodology of ground water Quality Monitoring

Sampling of ground water was carried out on 05.04.2023, 11.05.2023, 05.06.2023, 10.07.2023, 07.08.2023 and 03.09.2023. Samples were collected as grab sample and sampling forms are filled in as per the sampling plan. The preservative sample were properly added to preserve as per standard operating procedures (SOP) and stored immediately in ice boxes, which were ensured for appropriate temperatures.

Sample for chemical analysis was collected in polyethylene carboys. Sample collected for metal content were acidified to <2 pH with 1 ml HNO_3. A sample for bacteriological analysis was collected in sterilized glass bottles.

Soon after the completion of sampling, chain of custody sheets for the samples are filled in and then they were transported by road to Environmental & Technical Research Centre, Lucknow for further analysis. Proper care was taken during packing and transportation of samples. All the samples reached the central laboratory within the holding times for different parameters. After ensuring the same the samples were forwarded immediately for analysis.

The samples were analyzed as per the standard procedures specified in 'Standard Methods for the Examination of Water and Wastewater' published by American Public Health Association (APHA) and CPCB. The analytical techniques and the test methods adopted for testing of ground water are given in **Table-3.12 to Table-3.17.**

3.4.3 Ground water Quality Monitoring Results

The detailed Ground water quality monitoring results are presented in **Table-3.12 to Table-3.17.**

Table-3.12:
Ground water Quality Results at Borewell No. - 02, Near Bank of Pond (April, 2023)

Sr. No	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing /limit of detection	Indian Standard 10500: 2012	
						Desirable	Permissible
Physico-chemical Parameters							
1	**Colour**	Hazen	IS: 3025 (Part-4): 1983 Reaffirmed: 2017	**<5.0**	5 - 30	5	15
2	**Odour**	-	IS: 3025 (Part-5): 1983 Reaffirmed: 2017	**Agreeable**	Qualitative	Agreeable	Agreeable
3	**pH**	-	APHA 23rd Ed. 2017-4500 H^+	**7.4**	1 - 14	6.5-8.5	No Relaxation
4	**Turbidity**	NTU	APHA 23rd Ed. 2017-2130 B	**<2.0**	2 - 40	1	5
5	**Total Dissolved Solids (TDS)**	mg/l	IS: 3025 (Part-16): 1984 Reaffirmed: 2017	**402.6**	10 - 5000	500	2000
6	**Ammonia (as total ammonia-N)**	mg/l	APHA 23rd Ed. 2017-4500-NH_3 F	**<0.5**	0.5 - 10	0.5	No Relaxation
7	**Anionic Detergents (as MBAS)**	mg/l	APHA 23rd Ed. 2017-5540 C	**<0.05**	0.05 - 0.5	0.2	1.0
8	**Calcium as Ca**	mg/l	IS: 3025 (Part-40): 1991 Reaffirmed: 2019	**54.4**	2.0 - 600	75	200
9	**Magnesium as Mg**	mg/l	APHA 23rd Ed. 2017-3500 Mg, B	**31.10**	0.1 - 200	30	100
10	**Chloride as Cl**	mg/l	APHA 23rd Ed. 2017-4500-Cl^- B	**22.0**	2.0 - 2000	250	1000
11	**Fluoride as F**	mg/l	APHA 23rd Ed. 2017-4500 F^- C	**0.39**	0.02 - 5.0	1.0	1.5
12	**Free Residual Chlorine**	mg/l	IS: 3025 (Part-26): 1986 Reaffirmed: 2019	**<0.1**	0.1 - 5.0	0.2	1.0
13	**Nitrate as NO_3**	mg/l	IS: 3025 (Part-34): 1986 Reaffirmed: 2019	**<1.0**	1.0 - 70	45	No Relaxation
14	**Phenolic Compound (as C_6H_5OH)**	mg/l	APHA 23rd Ed. 2017-5530 C	**<0.001**	0.001 - 0.005	0.001	0.002
15	**Sulphate as SO_4**	mg/l	APHA 23rd Ed. 2017-4500- SO_4^{2-}	**27.0**	1.0 - 500	200	400
16	**Alkalinity as $CaCO_3$**	mg/l	APHA 23rd Ed. 2017-2320 B	**288.0**	2.0 - 1000	200	600
17	**Total Hardness as $CaCO_3$**	mg/l	APHA 23rd Ed. 2017-2340 C	**264.0**	5.0 - 800	200	600
18	**Aluminium as Al**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**<0.015**	0.015 - 5.0	0.03	0.2
19	**Boron as B**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**<0.05**	0.05 - 2.0	0.5	1.0
20	**Copper as Cu**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**<0.03**	0.03 - 10	0.05	1.5
21	**Iron as Fe**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**0.12**	0.05 - 20	0.3	No Relaxation
22	**Manganese as Mn**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**0.04**	0.02 - 5.0	0.1	0.3
23	**Zinc as Zn**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**0.38**	0.05 - 15	5	15
24	**Cadmium as Cd**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**<0.05**	0.05 - 2.0	0.003	No Relaxation
25	**Lead as Pb**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**<0.01**	0.01 - 10	0.01	No Relaxation
26	**Mercury as Hg**	µg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**<0.5**	0.5 - 1000	1.0	No Relaxation
27	**Nickel as Ni**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**<0.05**	0.05 - 5.0	0.02	No Relaxation
28	**Arsenic as As**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**<0.02**	0.02 - 2.0	0.01	0.05
29	**Total Chromium**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**<0.03**	0.03 - 5.0	0.05	No Relaxation
Microbiological Parameters							
30	***E. coli***	MPN/ 100 ml	IS: 1622 - 1981 Reaffirmed: 2019	**Absent**	≥ 2 MPN Present or Absent per 100 ml	Shall not be detected in any 100 ml sample	
31	***T. coli***	MPN/ 100 ml	IS: 1622 - 1981 Reaffirmed: 2019	**Absent**	≥ 2 MPN Present or Absent per 100 ml	Shall not be detected in any 100 ml sample	

Table-3.13:
Ground water Quality Results at Borewell No.- 02, Near Bank of Pond (May, 2023)

Sr. No	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing /limit of detection	Indian Standard 10500: 2012	
						Desirable	Permissible
Physico-chemical Parameters							
1	**Colour**	Hazen	IS: 3025 (Part-4): 1983 Reaffirmed: 2017	**<5.0**	5 - 30	5	15
2	**Odour**	-	IS: 3025 (Part-5): 1983 Reaffirmed: 2017	**Agreeable**	Qualitative	Agreeable	Agreeable
3	**pH**	-	APHA 23rd Ed. 2017-4500 H^+	**7.5**	1 - 14	6.5-8.5	No Relaxation
4	**Turbidity**	NTU	APHA 23rd Ed. 2017-2130 B	**<2.0**	2 - 40	1	5
5	**Total Dissolved Solids (TDS)**	mg/l	IS: 3025 (Part-16): 1984 Reaffirmed: 2017	**398.4**	10 - 5000	500	2000
6	**Ammonia (as total ammonia-N)**	mg/l	APHA 23rd Ed. 2017-4500-NH_3 F	**<0.5**	0.5 - 10	0.5	No Relaxation
7	**Anionic Detergents (as MBAS)**	mg/l	APHA 23rd Ed. 2017-5540 C	**<0.05**	0.05 - 0.5	0.2	1.0
8	**Calcium as Ca**	mg/l	IS: 3025 (Part-40): 1991 Reaffirmed: 2019	**52.8**	2.0 - 600	75	200
9	**Magnesium as Mg**	mg/l	APHA 23rd Ed. 2017-3500 Mg, B	**28.18**	0.1 - 200	30	100
10	**Chloride as Cl**	mg/l	APHA 23rd Ed. 2017-4500-Cl^- B	**28.0**	2.0 - 2000	250	1000
11	**Fluoride as F**	mg/l	APHA 23rd Ed. 2017-4500 F^- C	**0.36**	0.02 - 5.0	1.0	1.5
12	**Free Residual Chlorine**	mg/l	IS: 3025 (Part-26): 1986 Reaffirmed: 2019	**<0.1**	0.1 - 5.0	0.2	1.0
13	**Nitrate as NO_3**	mg/l	IS: 3025 (Part-34): 1986 Reaffirmed: 2019	**<1.0**	1.0 - 70	45	No Relaxation
14	**Phenolic Compound (as C_6H_5OH)**	mg/l	APHA 23rd Ed. 2017-5530 C	**<0.001**	0.001 - 0.005	0.001	0.002
15	**Sulphate as SO_4**	mg/l	APHA 23rd Ed. 2017-4500- SO_4^{2-}	**29.0**	1.0 - 500	200	400
16	**Alkalinity as $CaCO_3$**	mg/l	APHA 23rd Ed. 2017-2320 B	**280.0**	2.0 - 1000	200	600
17	**Total Hardness as $CaCO_3$**	mg/l	APHA 23rd Ed. 2017-2340 C	**248.0**	5.0 - 800	200	600
18	**Aluminium as Al**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**<0.015**	0.015 - 5.0	0.03	0.2
19	**Boron as B**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**<0.05**	0.05 - 2.0	0.5	1.0
20	**Copper as Cu**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**<0.03**	0.03 - 10	0.05	1.5
21	**Iron as Fe**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**0.13**	0.05 - 20	0.3	No Relaxation
22	**Manganese as Mn**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**0.05**	0.02 - 5.0	0.1	0.3
23	**Zinc as Zn**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**0.34**	0.05 - 15	5	15
24	**Cadmium as Cd**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**<0.05**	0.05 - 2.0	0.003	No Relaxation
25	**Lead as Pb**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**<0.01**	0.01 - 10	0.01	No Relaxation
26	**Mercury as Hg**	µg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**<0.5**	0.5 - 1000	1.0	No Relaxation
27	**Nickel as Ni**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**<0.05**	0.05 - 5.0	0.02	No Relaxation
28	**Arsenic as As**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**<0.02**	0.02 - 2.0	0.01	0.05
29	**Total Chromium**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**<0.03**	0.03 - 5.0	0.05	No Relaxation
Microbiological Parameters							
30	***E. coli***	MPN/ 100 ml	IS: 1622 - 1981 Reaffirmed: 2019	**Absent**	≥ 2 MPN Present or Absent per 100 ml	Shall not be detected in any 100 ml sample	
31	***T. coli***	MPN/ 100 ml	IS: 1622 - 1981 Reaffirmed: 2019	**Absent**	≥ 2 MPN Present or Absent per 100 ml	Shall not be detected in any 100 ml sample	

Table-3.14:
Ground water Quality Results at Borewell No.- 02, Near Bank of Pond (June, 2023)

Sr. No	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing /limit of detection	Indian Standard 10500: 2012	
						Desirable	Permissible
Physico-chemical Parameters							
1	**Colour**	Hazen	IS: 3025 (Part-4): 1983 Reaffirmed: 2017	**<5.0**	5 - 30	5	15
2	**Odour**	-	IS: 3025 (Part-5): 1983 Reaffirmed: 2017	**Agreeable**	Qualitative	Agreeable	Agreeable
3	**pH**	-	APHA 23rd Ed. 2017-4500 H^+	**7.4**	1 - 14	6.5-8.5	No Relaxation
4	**Turbidity**	NTU	APHA 23rd Ed. 2017-2130 B	**<2.0**	2 - 40	1	5
5	**Total Dissolved Solids (TDS)**	mg/l	IS: 3025 (Part-16): 1984 Reaffirmed: 2017	**412.0**	10 - 5000	500	2000
6	**Ammonia (as total ammonia-N)**	mg/l	APHA 23rd Ed. 2017-4500-NH_3 F	**<0.5**	0.5 - 10	0.5	No Relaxation
7	**Anionic Detergents (as MBAS)**	mg/l	APHA 23rd Ed. 2017-5540 C	**<0.05**	0.05 - 0.5	0.2	1.0
8	**Calcium as Ca**	mg/l	IS: 3025 (Part-40): 1991 Reaffirmed: 2019	**51.2**	2.0 - 600	75	200
9	**Magnesium as Mg**	mg/l	APHA 23rd Ed. 2017-3500 Mg, B	**30.13**	0.1 - 200	30	100
10	**Chloride as Cl**	mg/l	APHA 23rd Ed. 2017-4500-Cl^- B	**28.0**	2.0 - 2000	250	1000
11	**Fluoride as F**	mg/l	APHA 23rd Ed. 2017-4500 F^- C	**0.38**	0.02 - 5.0	1.0	1.5
12	**Free Residual Chlorine**	mg/l	IS: 3025 (Part-26): 1986 Reaffirmed: 2019	**<0.1**	0.1 - 5.0	0.2	1.0
13	**Nitrate as NO_3**	mg/l	IS: 3025 (Part-34): 1986 Reaffirmed: 2019	**<1.0**	1.0 - 70	45	No Relaxation
14	**Phenolic Compound (as C_6H_5OH)**	mg/l	APHA 23rd Ed. 2017-5530 C	**<0.001**	0.001 - 0.005	0.001	0.002
15	**Sulphate as SO_4**	mg/l	APHA 23rd Ed. 2017-4500- SO_4^{2-}	**31.0**	1.0 - 500	200	400
16	**Alkalinity as $CaCO_3$**	mg/l	APHA 23rd Ed. 2017-2320 B	**296.0**	2.0 - 1000	200	600
17	**Total Hardness as $CaCO_3$**	mg/l	APHA 23rd Ed. 2017-2340 C	**252.0**	5.0 - 800	200	600
18	**Aluminium as Al**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**<0.015**	0.015 - 5.0	0.03	0.2
19	**Boron as B**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**<0.05**	0.05 - 2.0	0.5	1.0
20	**Copper as Cu**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**<0.03**	0.03 - 10	0.05	1.5
21	**Iron as Fe**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**0.11**	0.05 - 20	0.3	No Relaxation
22	**Manganese as Mn**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**0.07**	0.02 - 5.0	0.1	0.3
23	**Zinc as Zn**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**0.49**	0.05 - 15	5	15
24	**Cadmium as Cd**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**<0.05**	0.05 - 2.0	0.003	No Relaxation
25	**Lead as Pb**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**<0.01**	0.01 - 10	0.01	No Relaxation
26	**Mercury as Hg**	µg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**<0.5**	0.5 - 1000	1.0	No Relaxation
27	**Nickel as Ni**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**<0.05**	0.05 - 5.0	0.02	No Relaxation
28	**Arsenic as As**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**<0.02**	0.02 - 2.0	0.01	0.05
29	**Total Chromium**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**<0.03**	0.03 - 5.0	0.05	No Relaxation
Microbiological Parameters							
30	***E. coli***	MPN/ 100 ml	IS: 1622 - 1981 Reaffirmed: 2019	**Absent**	≥ 2 MPN Present or Absent per 100 ml	Shall not be detected in any 100 ml sample	
31	***T. coli***	MPN/ 100 ml	IS: 1622 - 1981 Reaffirmed: 2019	**Absent**	≥ 2 MPN Present or Absent per 100 ml	Shall not be detected in any 100 ml sample	

Table-3.15:
Ground water Quality Results at Borewell No.- 02, Near Bank of Pond (July, 2023)

Sr. No	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing /limit of detection	Indian Standard 10500: 2012	
						Desirable	Permissible
Physico-chemical Parameters							
1	**Colour**	Hazen	IS: 3025 (Part-4): 1983 Reaffirmed: 2017	**<5.0**	5 - 30	5	15
2	**Odour**	-	IS: 3025 (Part-5): 1983 Reaffirmed: 2017	**Agreeable**	Qualitative	Agreeable	Agreeable
3	**pH**	-	APHA 23rd Ed. 2017-4500 H^+	**7.5**	1 - 14	6.5-8.5	No Relaxation
4	**Turbidity**	NTU	APHA 23rd Ed. 2017-2130 B	**<2.0**	2 - 40	1	5
5	**Total Dissolved Solids (TDS)**	mg/l	IS: 3025 (Part-16): 1984 Reaffirmed: 2017	**396.4**	10 - 5000	500	2000
6	**Ammonia (as total ammonia-N)**	mg/l	APHA 23rd Ed. 2017-4500-NH_3 F	**<0.5**	0.5 - 10	0.5	No Relaxation
7	**Anionic Detergents (as MBAS)**	mg/l	APHA 23rd Ed. 2017-5540 C	**<0.05**	0.05 - 0.5	0.2	1.0
8	**Calcium as Ca**	mg/l	IS: 3025 (Part-40): 1991 Reaffirmed: 2019	**56.0**	2.0 - 600	75	200
9	**Magnesium as Mg**	mg/l	APHA 23rd Ed. 2017-3500 Mg, B	**33.0**	0.1 - 200	30	100
10	**Chloride as Cl**	mg/l	APHA 23rd Ed. 2017-4500-Cl^- B	**32.0**	2.0 - 2000	250	1000
11	**Fluoride as F**	mg/l	APHA 23rd Ed. 2017-4500 F^- C	**0.41**	0.02 - 5.0	1.0	1.5
12	**Free Residual Chlorine**	mg/l	IS: 3025 (Part-26): 1986 Reaffirmed: 2019	**<0.1**	0.1 - 5.0	0.2	1.0
13	**Nitrate as NO_3**	mg/l	IS: 3025 (Part-34): 1986 Reaffirmed: 2019	**<1.0**	1.0 - 70	45	No Relaxation
14	**Phenolic Compound (as C_6H_5OH)**	mg/l	APHA 23rd Ed. 2017-5530 C	**<0.001**	0.001 - 0.005	0.001	0.002
15	**Sulphate as SO_4**	mg/l	APHA 23rd Ed. 2017-4500- SO_4^{2-}	**28.0**	1.0 - 500	200	400
16	**Alkalinity as $CaCO_3$**	mg/l	APHA 23rd Ed. 2017-2320 B	**304.0**	2.0 - 1000	200	600
17	**Total Hardness as $CaCO_3$**	mg/l	APHA 23rd Ed. 2017-2340 C	**276.0**	5.0 - 800	200	600
18	**Aluminium as Al**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**<0.015**	0.015 - 5.0	0.03	0.2
19	**Boron as B**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**<0.05**	0.05 - 2.0	0.5	1.0
20	**Copper as Cu**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**<0.03**	0.03 - 10	0.05	1.5
21	**Iron as Fe**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**0.12**	0.05 - 20	0.3	No Relaxation
22	**Manganese as Mn**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**0.03**	0.02 - 5.0	0.1	0.3
23	**Zinc as Zn**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**0.52**	0.05 - 15	5	15
24	**Cadmium as Cd**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**<0.05**	0.05 - 2.0	0.003	No Relaxation
25	**Lead as Pb**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**<0.01**	0.01 - 10	0.01	No Relaxation
26	**Mercury as Hg**	µg/l	APHA 23rd Ed. 2017-3112 B	**<0.5**	0.5 - 1000	1.0	No Relaxation
27	**Nickel as Ni**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**<0.05**	0.05 - 5.0	0.02	No Relaxation
28	**Arsenic as As**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**<0.02**	0.02 - 2.0	0.01	0.05
29	**Total Chromium**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**<0.03**	0.03 - 5.0	0.05	No Relaxation
Microbiological Parameters							
30	***E. coli***	MPN/ 100 ml	IS: 1622 - 1981 Reaffirmed: 2019	**Absent**	≥ 2 MPN Present or Absent per 100 ml	Shall not be detected in any 100 ml sample	
31	***T. coli***	MPN/ 100 ml	IS: 1622 - 1981 Reaffirmed: 2019	**Absent**	≥ 2 MPN Present or Absent per 100 ml	Shall not be detected in any 100 ml sample	

Table-3.16:
Ground water Quality Results at Borewell No.- 02, Near Bank of Pond (August, 2023)

Sr. No	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing /limit of detection	Indian Standard 10500: 2012	
						Desirable	Permissible
Physico-chemical Parameters							
1	**Colour**	Hazen	IS: 3025 (Part-4): 1983 Reaffirmed: 2017	**<5.0**	5 - 30	5	15
2	**Odour**	-	IS: 3025 (Part-5): 1983 Reaffirmed: 2017	**Agreeable**	Qualitative	Agreeable	Agreeable
3	**pH**	-	APHA 23rd Ed. 2017-4500 H^+	**7.5**	1 - 14	6.5-8.5	No Relaxation
4	**Turbidity**	NTU	APHA 23rd Ed. 2017-2130 B	**<2.0**	2 - 40	1	5
5	**Total Dissolved Solids (TDS)**	mg/l	IS: 3025 (Part-16): 1984 Reaffirmed: 2017	**404.6**	10 - 5000	500	2000
6	**Ammonia (as total ammonia-N)**	mg/l	APHA 23rd Ed. 2017-4500-NH_3 F	**<0.5**	0.5 - 10	0.5	No Relaxation
7	**Anionic Detergents (as MBAS)**	mg/l	APHA 23rd Ed. 2017-5540 C	**<0.05**	0.05 - 0.5	0.2	1.0
8	**Calcium as Ca**	mg/l	IS: 3025 (Part-40): 1991 Reaffirmed: 2019	**54.4**	2.0 - 600	75	200
9	**Magnesium as Mg**	mg/l	APHA 23rd Ed. 2017-3500 Mg, B	**27.21**	0.1 - 200	30	100
10	**Chloride as Cl**	mg/l	APHA 23rd Ed. 2017-4500-Cl^- B	**28.0**	2.0 - 2000	250	1000
11	**Fluoride as F**	mg/l	APHA 23rd Ed. 2017-4500 F^- C	**0.39**	0.02 - 5.0	1.0	1.5
12	**Free Residual Chlorine**	mg/l	IS: 3025 (Part-26): 1986 Reaffirmed: 2019	**<0.1**	0.1 - 5.0	0.2	1.0
13	**Nitrate as NO_3**	mg/l	IS: 3025 (Part-34): 1986 Reaffirmed: 2019	**<1.0**	1.0 - 70	45	No Relaxation
14	**Phenolic Compound (as C_6H_5OH)**	mg/l	APHA 23rd Ed. 2017-5530 C	**<0.001**	0.001 - 0.005	0.001	0.002
15	**Sulphate as SO_4**	mg/l	APHA 23rd Ed. 2017-4500- SO_4^{2-}	**24.0**	1.0 - 500	200	400
16	**Alkalinity as $CaCO_3$**	mg/l	APHA 23rd Ed. 2017-2320 B	**284.0**	2.0 - 1000	200	600
17	**Total Hardness as $CaCO_3$**	mg/l	APHA 23rd Ed. 2017-2340 C	**248.0**	5.0 - 800	200	600
18	**Aluminium as Al**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**<0.015**	0.015 - 5.0	0.03	0.2
19	**Boron as B**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**<0.05**	0.05 - 2.0	0.5	1.0
20	**Copper as Cu**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**<0.03**	0.03 - 10	0.05	1.5
21	**Iron as Fe**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**0.15**	0.05 - 20	0.3	No Relaxation
22	**Manganese as Mn**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**0.02**	0.02 - 5.0	0.1	0.3
23	**Zinc as Zn**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**0.56**	0.05 - 15	5	15
24	**Cadmium as Cd**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**<0.05**	0.05 - 2.0	0.003	No Relaxation
25	**Lead as Pb**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**<0.01**	0.01 - 10	0.01	No Relaxation
26	**Mercury as Hg**	µg/l	APHA 23rd Ed. 2017-3112 B	**<0.5**	0.5 - 1000	1.0	No Relaxation
27	**Nickel as Ni**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**<0.05**	0.05 - 5.0	0.02	No Relaxation
28	**Arsenic as As**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**<0.02**	0.02 - 2.0	0.01	0.05
29	**Total Chromium**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**<0.03**	0.03 - 5.0	0.05	No Relaxation
Microbiological Parameters							
30	***E. coli***	MPN/ 100 ml	IS: 1622 - 1981 Reaffirmed: 2019	**Absent**	≥ 2 MPN Present or Absent per 100 ml	Shall not be detected in any 100 ml sample	
31	***T. coli***	MPN/ 100 ml	IS: 1622 - 1981 Reaffirmed: 2019	**Absent**	≥ 2 MPN Present or Absent per 100 ml	Shall not be detected in any 100 ml sample	

Table-3.17:
Ground water Quality Results at Borewell No.- 02, Near Bank of Pond (September, 2023)

Sr. No	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing /limit of detection	Indian Standard 10500: 2012	
						Desirable	Permissible
Physico-chemical Parameters							
1	**Colour**	Hazen	IS: 3025 (Part-4): 1983 Reaffirmed: 2017	**<5.0**	5 - 30	5	15
2	**Odour**	-	IS: 3025 (Part-5): 1983 Reaffirmed: 2017	**Agreeable**	Qualitative	Agreeable	Agreeable
3	**pH**	-	APHA 23rd Ed. 2017-4500 H^+	**7.4**	1 - 14	6.5-8.5	No Relaxation
4	**Turbidity**	NTU	APHA 23rd Ed. 2017-2130 B	**<2.0**	2 - 40	1	5
5	**Total Dissolved Solids (TDS)**	mg/l	IS: 3025 (Part-16): 1984 Reaffirmed: 2017	**410.2**	10 - 5000	500	2000
6	**Ammonia (as total ammonia-N)**	mg/l	APHA 23rd Ed. 2017-4500-NH_3 F	**<0.5**	0.5 - 10	0.5	No Relaxation
7	**Anionic Detergents (as MBAS)**	mg/l	APHA 23rd Ed. 2017-5540 C	**<0.05**	0.05 - 0.5	0.2	1.0
8	**Calcium as Ca**	mg/l	IS: 3025 (Part-40): 1991 Reaffirmed: 2019	**57.6**	2.0 - 600	75	200
9	**Magnesium as Mg**	mg/l	APHA 23rd Ed. 2017-3500 Mg, B	**30.13**	0.1 - 200	30	100
10	**Chloride as Cl**	mg/l	APHA 23rd Ed. 2017-4500-Cl^- B	**26.0**	2.0 - 2000	250	1000
11	**Fluoride as F**	mg/l	APHA 23rd Ed. 2017-4500 F^- C	**0.36**	0.02 - 5.0	1.0	1.5
12	**Free Residual Chlorine**	mg/l	IS: 3025 (Part-26): 1986 Reaffirmed: 2019	**<0.1**	0.1 - 5.0	0.2	1.0
13	**Nitrate as NO_3**	mg/l	IS: 3025 (Part-34): 1986 Reaffirmed: 2019	**<1.0**	1.0 - 70	45	No Relaxation
14	**Phenolic Compound (as C_6H_5OH)**	mg/l	APHA 23rd Ed. 2017-5530 C	**<0.001**	0.001 - 0.005	0.001	0.002
15	**Sulphate as SO_4**	mg/l	APHA 23rd Ed. 2017-4500- SO_4^{2-}	**26.0**	1.0 - 500	200	400
16	**Alkalinity as $CaCO_3$**	mg/l	APHA 23rd Ed. 2017-2320 B	**292.0**	2.0 - 1000	200	600
17	**Total Hardness as $CaCO_3$**	mg/l	APHA 23rd Ed. 2017-2340 C	**268.0**	5.0 - 800	200	600
18	**Aluminium as Al**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**<0.015**	0.015 - 5.0	0.03	0.2
19	**Boron as B**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**<0.05**	0.05 - 2.0	0.5	1.0
20	**Copper as Cu**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**<0.03**	0.03 - 10	0.05	1.5
21	**Iron as Fe**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**0.12**	0.05 - 20	0.3	No Relaxation
22	**Manganese as Mn**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**0.04**	0.02 - 5.0	0.1	0.3
23	**Zinc as Zn**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**0.63**	0.05 - 15	5	15
24	**Cadmium as Cd**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**<0.05**	0.05 - 2.0	0.003	No Relaxation
25	**Lead as Pb**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**<0.01**	0.01 - 10	0.01	No Relaxation
26	**Mercury as Hg**	µg/l	APHA 23rd Ed. 2017-3112 B	**<0.5**	0.5 - 1000	1.0	No Relaxation
27	**Nickel as Ni**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**<0.05**	0.05 - 5.0	0.02	No Relaxation
28	**Arsenic as As**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**<0.02**	0.02 - 2.0	0.01	0.05
29	**Total Chromium**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**<0.03**	0.03 - 5.0	0.05	No Relaxation
Microbiological Parameters							
30	***E. coli***	MPN/ 100 ml	IS: 1622 - 1981 Reaffirmed: 2019	**Absent**	≥ 2 MPN Present or Absent per 100 ml	Shall not be detected in any 100 ml sample	
31	***T. coli***	MPN/ 100 ml	IS: 1622 - 1981 Reaffirmed: 2019	**Absent**	≥ 2 MPN Present or Absent per 100 ml	Shall not be detected in any 100 ml sample	

Uttar Pradesh Pollution Control Board
Building. No TC-12V Vibhuti Khand, Gomti Nagar, Lucknow-226010
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178839/UPPCB/Gorakhpur(UPPCBRO)/CTO/both/GORAKHPUR/2023 **Date: 17/03/2023**

To,

M/s

GALLANTT ISPAT LIMITED INTEGRATED STEEL PLANT

AL 5, Sector 23, GIDA Industrial Area, Tehsil - Sahjanwa, District Gorakhpur, Uttar Pradesh,GORAKHPUR,273209

Application Id-20046853

Consolidated Consent to Operate and Authorisation hereinafter referred to as the CCA (Consolidated Consent & authorization) (Fresh) under Section-25 of the Water (Prevention & Control of Pollution) Act, 1974 and under Section-21 of the Air (Prevention & Control of Pollution) Act, 1981

CCA is hereby granted to **GALLANTT ISPAT LIMITED INTEGRATED STEEL PLANT** located at **AL 5, Sector 23, GIDA Industrial Area, Tehsil - Sahjanwa, District Gorakhpur, Uttar Pradesh,GORAKHPUR,273209**. subject to the provisions of **the Water Act, Air Act** and the orders that may be made further and subject to following terms and conditions :-

1. This CCA GALLANTT ISPAT LIMITED INTEGRATED STEEL PLANT **granted for the period from 17/03/2023 to 31/12/2024** and valid for manufacturing of following products.

S No	Product	Quantity	Unit
1	MS Bar	528000	Metric Tonnes/Year
2	Pelletization Plant	792000	Metric Tonnes/Year
3	MS Billets	5,28,000	Metric Tonnes/Year
4	Sponge Iron	544500	Metric Tonnes/Year
5	Captive power	78	Megawatt

2. Conditions under Water(Prevention and Control of Pollution) Act -1974 as amended :-

(i) The daily quantity of effluent discharge (KLD) :-

Kind of Effluent	Quantity(KLD)	Treatment facility	Discharge point
Domestic	**90 KLD**	**STP**	
Industrial	**Recycling of Cooling Water**	**ETP**	

(ii) Trade Effluent Treatment and Disposal :-The applicant shall operate Effluent Treatment Plant consisting of primary/secondary and tertiary treatment as is required with reference to influent quantity and quality.

In case of stoppage of functioning of ETP, production has to be stopped immediately and this Board has to be intimated by fax/phone/email with a report in this regard to be dispatched immediately.

(iii) The treated effluent shall be recycled to the maximum extent and should be reused within the premises for gardening etc. Quality of the treated effluent shall meet to the following general and specific standards as prescribed under Environment (Protection) Rules, 1986 and applicable to the unit from time-to-time :-

Industrial Effluent Quality Standard

S.No.	Parameter	Standard

(iv) Sewage Treatment and Disposal :- The applicant shall provide comprehensive STP as is required with reference to influent quantity and quality.In case of stoppage of functioning of STP, production has to be stopped immediately and this Board has to be intimated by fax/phone/email with a report in this regard to be dispatched immediately.

(v) The treated sewage shall be reused in gardening as far as possible. The STP shall be maintained continuously so as to achieve the quality of the treated sewage to the following standards.

S No.	Parameters	Standards
1	pH	As per E(P)A Rules, 1986
2	BOD (mg/L)	As per E(P)A Rules, 1986
3	TSS (mg/L)	As per E(P)A Rules, 1986
4	Fecal Coliform (MPN/100ml)	As per E(P)A Rules, 1986
5	Remarks	90 KLD Treated Effluent

3. Conditions under Air (Prevention and Control of Pollution) Act -1981 as amended :-

i) The applicant shall use following fuel and install a comprehensive control system consisting of control equipment as required with reference to generation of emissions and operate and maintain the same continuously so as to achieve the level of pollutants to the following standards.

Air Pollution Source Details

S No.	Air Pollution Source	Type of fuel	Stack no	Control Device	Height of Stack
1	22.5 TPH Furnace (02 no.)	Electric	1	Particulate Matter	As per E(P)A Rules, 1986
2	27.5 TPH Furnace (02 no.)	Electric	2	Particulate Matter	As per E(P)A Rules, 1986
3	30 TPH Furnace (02 no.)	Electric	3	Particulate Matter	As per E(P)A Rules, 1986
4	Sponge Iron Plant	Electric	4	Particulate Matter	As per E(P)A Rules, 1986
5	50 TPH Boiler	Coal, Rice Husk and Dolechar	5	Particulate Matter	As per E(P)A Rules, 1986
6	02 Boilers having Capacity 110 TPH and 35 TPH each	Coal, Rice Husk and Dolechar	6	Particulate Matter	As per E(P)A Rules, 1986
7	2000 KVA DG Set	Diesel Oil	7	Sulphur Dioxide	As per E(P)A Rules, 1986
8	1250 KVA DG Set	Diesel Oil	8	Sulphur Dioxide	As per E(P)A Rules, 1986

9	1250 KVA DG Set	Diesel Oil	9	Sulphur Dioxide	As per E(P)A Rules, 1986
10	1250 KVA DG Set	Diesel Oil	10	Sulphur Dioxide	As per E(P)A Rules, 1986
11	1250 KVA DG Set	Diesel Oil	11	Sulphur Dioxide	As per E(P)A Rules, 1986
12	1000 KVA DG Set	Diesel Oil	12	Sulphur Dioxide	As per E(P)A Rules, 1986
13	1000 KVA DG Set	Diesel Oil	13	Sulphur Dioxide	As per E(P)A Rules, 1986
14	630 KVA DG Set	Diesel Oil	14	Sulphur Dioxide	As per E(P)A Rules, 1986
15	Pellet Plant having capacity 792000 TPA	Coal	15	Particulate Matter	As per E(P)A Rules, 1986

Emmission Quality Standards

S No.	Stack no	Parameters	Standards
1	1	Particulate Matter	As per E(P)A Rules, 1986
2	2	Particulate Matter	As per E(P)A Rules, 1986
3	3	Particulate Matter	As per E(P)A Rules, 1986
4	4	Particulate Matter	As per E(P)A Rules, 1986
5	5	Particulate Matter	As per E(P)A Rules, 1986
6	6	Particulate Matter	As per E(P)A Rules, 1986
7	7	Sulphur Dioxide	As per E(P)A Rules, 1986
8	8	Sulphur Dioxide	As per E(P)A Rules, 1986
9	9	Sulphur Dioxide	As per E(P)A Rules, 1986
10	10	Sulphur Dioxide	As per E(P)A Rules, 1986
11	11	Sulphur Dioxide	As per E(P)A Rules, 1986
12	12	Sulphur Dioxide	As per E(P)A Rules, 1986
13	13	Sulphur Dioxide	As per E(P)A Rules, 1986
14	14	Sulphur Dioxide	As per E(P)A Rules, 1986
15	15	Particulate Matter	As per E(P)A Rules, 1986

In case of stoppage of functioning of air pollution control equipment, production has to be stopped immediately and this Board has to be intimated by fax/phone/email with a report in this regard to be dispatched immediately

(ii) The unit will not use any type of restricted fuel.

iii) Noise from the D.G. Set and other source(s) should be controlled by providing an acoustic enclosure as is required for meeting the ambient noise standards for night and day time as prescribed for respective areas/zones (Industrial, Commercial, Residential, Silence) which are as follows :-

Day time : from 6.00 a.m. to 10.00 p.m., Night time: from 10.00 p.m. to 6.00 a.m.

Standards for Noise level in db(A) Leq	**Industrial Area**		**Commercial Area**		**Residential Area**		**Silence Zone**	
	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time
	75	70	65	55	55	45	50	40

4. Essential documents to be submitted by the Industry/Unit as Applicable :-

(i) Environment Statement in Form-V of Environment (Protection) Rules, 1986.

(ii) Quarterly compliance report of the CCA, photograph of ETP/APCs/Waste Storage Area.

5. Competent Authority reserves the right to change/modify/add any time any condition of this CCA.

6. Unit has to comply with the following specific & general conditions. Non compliance of any provision of this CCA and provisions of the Water Act, Air Act and Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 will results in legal action under the aforesaid Acts and Rules.

7. In compliance to the G.O 1011/81-7-2021-09 (Writ)/2016 dated.13.10.2021 issued by Department of Environment, Forest and Climate Change, Uttar Pradesh. You are directed to develop Miyawaki Forest as per the SOP available at URL:-http://www.upecp.in/TrainingSession.aspx for ensuring timely compliance of this direction, you are hereby directed to submit a bank guarantee with minimum validity of one year of the amount equivalent to the sum of initial consent fees (Air and Water) or Rs. 50,000/- (Rs. Fifty Thousand Only) whichever is more, within 30 days from the date of issuance of this certificate. In case of non-compliance of this direction, your consent will be revoked by the Board.

8. If the unit uses the ground water and requires the permission from SGWA/CGWA for water abstraction then the industry will have to obtain No objection certificate for abstraction of ground water. It will be the responsibility of the industry to comply with the various conditions of the NOC obtained from the competent authority and submit to the Board, within 3 months time failing which CTO will be revoked.

General Conditions:-

1. The applicant shall get analysed the samples of effluent/emission/hazardous wastes at least once in a three month from the laboratory recognized by the MoEF and shall report to the UPPCB.

2. The applicant shall however, not without the prior consent of the Board bring into use any new or altered outlet for the discharge of effluent or gases emission or sewage waste from the unit.

3. Treated Industial waste water and domestic waste water shall be disposed jointly at one disposal point. The applicant shall provide discharge measurement equipment at final disposal point.

4. The applicant shall strictly comply with conditions of this CCA and submit compliance report of stipulated conditions within 30 days of receipt of this CCA. If at any point of time, it is found that the industry is not complying with stipulated conditions or any further direction/instruction issued by the Board, legal action shall be initiated against the applicant.

5. The applicant shall maintain good house keeping. All valves/pipes/sewer/drains etc. must be leak-proof

6. The industry shall provide uninterrupted entry to the STP/ETP inlet and outlet points, Air Pollution Control equipment and stack for smooth sampling/monitoring of efficiency of pollution control systems.

7. The industry shall provide Inspection Book at the time of inspection to the Board's officials.

8. Whenever due to any accident or other unforeseen act or event, such emission occurs or is apprehended to occur in excess of standards laid down, such information shall be reported to the Board's offices and all

other concerned offices. In case of failure of pollution control equipment, the production process connected to it shall be stopped with immediate effect.
9. The industry shall operate in a manner so that all emissions be emitted through designated chimney/stack only.
10. In case of any damage to the agriculture productivity, human habitation etc. by the operation of industry, it shall be imperative to stop production in the industry with immediate effect and such information shall be reported to Board's offices. The industry shall be liable to pay compensation also in such cases as decided by the Competent Authority.
11. The applicant shall apply before the 60 days of expiry of CCA or any change in production types/ production capacity/manufacturing process/capacity enhancement etc. or any change in effluent discharge point or emission point
12. The Board reserves the right to revoke/add/modify any stipulated condition issued along with CCA, as may be necessary.

Specific Conditions:-
1. This consent is valid for production of MS Billets (5,28,000 MTA), Sponge Iron (5,44,500 MTA), MS Bar (5,28,000 MTA), Pelletization plant 792000 TPA and Captive power (78 MW) maximum.

2. The Earlier CTO issued by UPPCB vide office letter dated 13.12.2022 is stand canceled from the issuance of this CTO and this CTO will be effective.

3. The all conditions mentioned in the environmental clearance issued vide letter no- J11011/229/2008-IA II (I) dated 14.12.2020 by MOEF & CC and No Increase In Pollution Certificate vide UPPCB letter dated 19.01.2022 shall prevail.

4. This consent is issued only for discharging of domestic effluent. The industry is not allowed to discharged any industrial effluent.

5. Industry shall submit Environment Statement to this Board as per provision of Environment (Protection) amendment Rule, 1993 for the previous year ending 31st March on or before 30th September every year.

6. Implementation report of Compliance of consent conditions must be submitted within one month.

7. The consumption of electricity, nutrient and chemicals in operation of STP must record on logbook regularly.

8. The industry is directed to reuse the maximum treated domestic effluent.

9. The industry is directed to continuously operate all units of S.T.P. regularly.

10. The cooling water shall recycle in closed circuit. It should not discharge in any condition.

11. The industry shall construct pucca to rest storm water drain inside the factory premises.

12. Industry shall submit analysis report of treated domestic effluent after interval of every three months dully analysed by Board or N.A.B.L. accredited laboratory.

13. The industry shall ensure in the provision of charter for Integrated Steel Plant made by CPCB.

14. Audited Balance Sheet/ C.A. Certificate should be submitted within one month from the date of issue of this Certificate for verification of Consent fee payable.

15. This consent is being issued under consideration the order passed by Hon’ble NGT in OA no. 116/2014 Meera Shukla V/s Municipal Corporation Gorakhpur and others.

16. The unit shall comply with the provisions of Hazardous & Other Waste (Management & Trans boundary Movement) Rules, 2016.

17. The industry shall develop green belt as per the protocol attached with Board's office order dated 16.02.2018 which is available on Board's Website.

18. The conditions mentioned in the consent must be complied by the industry and submit the compliance report to UPPCB within the stipulated time period.

19. Air Pollution Control System (i.e. bag filters, electro static precipitators) must be operated regularly and logbook of energy consumed for the same shall be maintained.

20. OCEMS shall be connected from the server of CPCB and UPPCB by the unit.

21. The unit shall comply with the provisions of Solid and other Waste Management Rules, 2016.

22. The industry shall ensure the regular water sprinkling for control of dust emission generated from storage of raw material and loading of product and unloading of raw material.

23. Industry shall ensure the regular water sprinkling in industry premises and near the railway siding.

24. The industry shall install proper capacity of ash dyke for disposal of Ash generated from power plant and sponge iron plant.

25. The industry shall ensure safe disposal of slag generated from induction furnace plant in future.

26. The industry shall ensure the storage of fly ash, boiler bottom ash and slag in covered shed for disposal. So the fugitive emission be minimum. For disposal of solid waste industry shall use covered trucks.

27. The industry shall store raw material in covered shed.

28. The industry shall construct pucca to rest storm water drain inside the factory premises.

29. Ash generated by the industry should be disposed off in a scientific manner in such a way that it shall not adversely affect the soil and nearby area.

30. The Order issued by Hon'ble Courts/Hon'ble NGT, MoEF & CC, Central Pollution Control Board, U.P Pollution Control Board and directions issued by Hon'ble National Green Tribunal, New Delhi in Order dated 13.07.2017 in OA no. 200/2014, M.C. Mehta v/s Union of India. Shall be complied with.

31. Concealing factual data or submission of false/fabricated data and failure to comply with any of the

conditions mentioned above may result in withdrawal of this CTO and attract action under the provisions of Law.

32. If closure order is issued by CPCB or UPPCB against any defaulting unit, then CTO issued earlier will suspended during the pendency of the closure period and after ensuring the compliance and after revocation of closure order, the CTO will be deemed to be restore subject to the effective date of revocation of the closure order, with imposed conditions thereof.

ATULESH YADAV
Digitally signed by ATULESH YADAV
Date: 2023.03.17 20:50:30 +05'30'

Chief Environmental Officer, Circle-6

Copy to:

Regional Officer, U.P. Pollution Control Board, Gorakhpur for information and necessary action.

ATULESH YADAV
Digitally signed by ATULESH YADAV
Date: 2023.03.17 20:50:55 +05'30'

Chief Environmental Officer, Circle-6

F. No. J-11011/229/2008-IA.II(I)
Government of India
Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)

Indira Paryavaran Bhawan
JorBagh Road, Aliganj,
New Delhi - 110003
E-mail: dirind-moefcc@gov.in
Tel: 011-24695368
Dated: 14.10.2020

To

M/s. Gallantt Ispat Limited
Gallantt House, I-7, Jangpura Extension,
New Delhi-110014.
Email: gil@gallantt.com

Subject: Expansion of Integrated Steel Plant; Sponge Iron (2,97,000 to 5,94,000 TPA), MS Billet (3,30,000 to 6,53,400 TPA), Captive power (53 to 80.5 MW), Rolling mill (3,30,000 TPA) and Installation of Pellet plant (792000TPA) by **M/s. GallanttIspat Limited** located at AL 5, Sector 23, GIDA Industrial Area, Tehsil Sahjanwa, **District Gorakhpur, Uttar Pradesh- Environment Clearance– regarding.**

Sir,

M/s Gallant Ispat Ltd made online application vide proposal no. IA/UP/IND/119401/2016 dated 26th September, 2019 in the prescribed Form -2 along with copies of EIA/EMP report, other documents and additional details submitted on PARIVESH portal on 04.01.2020, 05.02.2020 and 10.06.2020 seeking Environmental Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 3(a) Metallurgical Industries (Ferrous and Non-ferrous) under Category "A" EIA Notification, 2006 and the proposal is appraised at Central level.

2. The existing steel plant of M/s Gallantt Ispat Ltd is located at AL-5, Sector 23, GIDA Industrial Area, Tehsil Sahjanwa, District Gorakhpur, Uttar Pradesh. Project proposal for expansion of existing steel plant of M/s. Gallantt Ispat Ltd was initially received in the Ministry on 28thJanuary, 2019 for obtaining Terms of Reference (ToR) as per EIA Notification, 2006. The project was appraised by the Reconstitute Expert Appraisal Committee (Industry) [EAC (I)] during its 4th meeting held on 20-22nd February 2019 and prescribed ToRs to the project for undertaking detailed EIA study for obtaining environmental clearance. Accordingly, the Ministry had prescribed ToRs to the project on 27th May 2019 vide Lr. No. J-11011/229/2008-IA II (I).

3. Based on the ToRs prescribed to the project, the project proponent submitted an application for EC to the Ministry on 26th September 2019.

Details submitted by the project proponent

4. Proposal of M/s Gallantt Ispat Limited is for expansion of Integrated Steel Plant; Sponge Iron (297000 to 594000 MTPA), MS Billet (30000 to 653400 MTPA), Captive power (53 to 80.5 MW) and New Pellet plant establishment 792000 MTPA. The existing project was accorded EC vide Lr.no J-11011/229/2008-IA-II (I) dated 18thOctober, 2017.

5. The Status of compliance of earlier EC was obtained from Regional Office, Lucknow vide

letter no. IV/Env/UP/Ind-154/459/ 2017/104 dated 19thSeptember, 2019. No non-compliances were reported by Regional officer.

6. Proposed capacity and configuration of expansion project is given as below:

Unit	Existing Capacity and configuration	Additional Capacity and configuration	Capacity after expansion and configuration
Sponge Iron Plant	2,97,000 MTPA	2,97,000 MTPA	5,94,000 MTPA
	2 x 450 TPD	1 x 750 TPD & 1 x 150 TPD	2x 450 TPD, 1 x 750 TPD & 1 x 150 TPD
M.S. Billets	3,30,000MTPA	3,23,400 MTPA	6,53,400 MTPA
	2 x 20 T* & 2 X 30 T	2x 22.5 T & 2 x 27.5 T	4 x 30 T, 2 x 22.5 T & 2 x 27.5 T
Captive Power Plant	53 MW (35 MW of FBC and 18 MW of WHRB)	27.5 MW (FBC & WHRB)	80.5 MW (44.5 MW of CFBC and 36 MW of WHRB)
Pelletization Plant	-	7,92,000 MTPA	7,92,000 MTPA
Rolling Mill	3,30,000 TPA	-	3,30,000 TPA

7. The expansion will be in the existing plant premises of 45.903 ha which is an industrial land. No forest land is involved. It has been reported that no water body exists around the project and modification/diversion in the existing natural drainage pattern at any stage has not been proposed.

8. The topography of the area is flat and reported to lie between 26°45'16.12" to 26°45'44.48"N Latitude and 83°11'37.63" to 83°12'15.71" E Longitude in Survey of India topo sheet No. 63N1, 63 N2, 63 N5 and 63 N6, at an elevation of 84 m AMSL.

9. The ground water table reported to range between 2.5 m to 4.49 m below the land surface during the post-monsoon season and 2.13 m to 6.5 m below the land surface during the pre-monsoon season. The project area falls in Sahjanwa block which falls under Safe Category and stage of ground water development is 68.44%.

10. No National Park/Wildlife Sanctuary/Biosphere Reserve/Tiger Reserve etc. are reported to be located in the study area of the project. The area also does not report to corridor for Schedule-I fauna.

11. The process of project showing the basic raw material used and the various processes involved to produce the final output, waste generated in process are shown below.

S. No.	Raw Material	Consumption (TPA)			Source of Supply	Mode of Transport
		Existing	Additional	Total after Expansion		
SPONGE IRON PLANT						
1.	Iron Ore	237600	-	66528	Open market	Rail
2.	Pellets	237600	557172	794772	Self/ Manufacturer	Conveyer/Rail
3.	Coal	267300	267300	534600	Import/ Linkage auction/ Open Market	Rail

S. No.	Raw Material	Consumption (TPA)			Source of Supply	Mode of Transport
		Existing	Additional	Total after Expansion		
4.	Dolomite	14850	14850	29700	Open Market	Road
PELLETIZATION PLANT						
1.	Iron Ore Fines	-	883872	883872	Open Market	Rail
2.	Bentonite	-	6336	6336	Open Market	Road
3.	Lime Stone	-	7920	7920	Open Market	Road
4.	Dolomite	-	3960	3960	Open Market	Road
5.	Coal (for PGP/ mix)	-	43560	43560	Open Market	Rail
STEEL MELT SHOP DIVISION (INDUCTION FURNACE WITH CONTINUOS CASTER)						
1.	Sponge Iron	297000	297000	594000	In House	Conveyers
2.	MS Scraps	109267	91512	200779	Local Market	Road
3.	Ferro Alloy	4950	2891	7841	From Local Manufacturer	Road
CAPTIVE POWER PLANT						
1.	Coal	124740	89760	214500	Linkage auction/open market	Rail
2.	Rice Husk	83160	-	35244	Local Market	Road
3.	Dolochar	41580	38610	80190	In house	Conveyers

12. The targeted production capacity after expansion will be Sponge iron from 297000 to 594000 MTPA, MS Billet from 330000 to 653400 MTPA, Captive Power from 53.0 to 80.5 MW. A new pellet plant,792000 MTPA capacity, will be installed. Iron ore fines/ coal for the plant will be procured from Open Market. The major raw materials viz., iron ore, coal will be transported through Rail.

13. The total water requirement of the project is estimated as 6776 m^3/day (Existing - 4254 m^3/ day + Proposed - 2522 m^3/ day) which will be obtained from groundwater. Permission for withdrawal of required groundwater has been obtained by CGWA NOC no. 21-4 (161)/NR/CGWA/2008-831 dated 13th Nov., 2019.

14. Power Requirement – 53 MW Existing for Integrated steel Plant + 27.5 MW additional for proposed expansion of Integrated steel plant = 80.5 MW which will met from Captive power plant. Additional 5 MW power requirement for re-rolling mill is met from Purvanchal Vidyut Vitran Nigam Limited. Thus, after integration of two units power requirement will be 85.5 MW which will be met from Captive Power plant and Purvanchal Vidyut Vitran Nigam Limited.

15. Baseline environmental studies were conducted during summer season i.e. from March to May 2019. Ambient air quality monitoring has been carried out at eight locations during March to May, 2019 and the data submitted indicated: PM_{10} (58.3 to 93.6 µg/m^3), $PM_{2.5}$ (26.5 to 54.5 µg/m^3), SO_2 (7.0 to 20.6 µg/m^3) and NOx (12.9 to 36.7 µg/m^3). The results of the modelling study indicates that the maximum increase of GLC for the proposed project is 3.65 µg/m^3 with respect to the PM_{10}, 1.51 µg/m^3 with respect to the SO_2 and 0.9 µg/m^3 with respect to the NOx.

16. Ground water quality has been monitored in eight locations in the study area and analyzed. pH: 7.35 to 8.02, Total Hardness: 164.9 to 414.8 mg/l, Chlorides: 27.07 to 192.47 mg/l, Fluoride: 0.57 to 0.84 mg/l. Heavy metals are within the limits. Surface water samples

were analyzed from four locations. pH: 7.45 to 8.08; DO: 5.2 to 7 mg/l and BOD: 2.4 to 14.0 mg/l. COD from 10.8 to 52.4 mg/l.

17. Noise levels (L_{eq}) are in the range of 52.6 to 68.9 dB(A) for day time and 41.4 to 62.6 dB(A) for Night time.

18. The expansion project will be within the existing plant premises & additional land (industrial) which is already acquired by the company and thus no R &R is involved.

19. The details of existing and additional solid & hazardous waste generation have been shown in the table below.

Solid waste	Existing (TPD)	Total after Expansion (TPD)	Management
Dolochar	126.0	243	Dolochar is being/will be utilized in AFBC boiler for captive power generation and after expansion it would be managed through the same technique.
Slag	111.0	198	SMS Slag is being used in filling of Low-lying area and in road making and after expansion will be utilized in same way.
Ash & Dust	239.0	350	Fly ash from the Boiler and APCS is being/will be sold to Cement industry and brick manufacturing unit
Ash-Pellet plant	-	20	Ash will be sold to cement manufacturers.

20. It has been envisaged that greenbelt has already been developed in an area of 13.41 ha i.e. 33 % of the total plant area. During expansion, additional greenbelt will be developed in an area of 1.88 ha to attenuate the noise levels and trap the dust generated due to the project development activities. Therefore, 15.29 ha i.e. ~ 33.3% of the total plant area (45.903 ha) will be developed as greenbelt as per CPCB/ MoEF&CC, New Delhi guidelines.

21. It has been reported that the Consent to Operate from the Uttar Pradesh Pollution Control Board (UPPCB) has been obtained for air vide letter no. H12172/C-6/Air Pollution/121/17/GKP dated 17.11.2017 and valid from 01.01.2018 to 31.12.2019 and for water vide letter no. H12171/C-6/Water Pollution- 121/17/GKP dated 17.11.2017 and valid from 01.01.2018 to 31.12.2019.

22. The capital cost of the project is ₹ 602.53 Cr and the capital cost for environmental protection measures is proposed as ₹ 35.44 Cr. The annual recurring cost towards the environmental protection measures is proposed as ₹ 4 Crores/annum.

23. Additional employment generation from the expansion will be for 405 nos. of persons. With the existing 860 nos. of employees including re-rolling mill, total employment generation after expansion will be for 1265 nos. of persons.

24. Public hearing for the expansion project was held on 22nd August, 2019 at 04:00 pm in plant premises under the chairmanship of Shree Rakesh Kumar Shrivastav (Additional District Magistrate City, Gorakhpur) for expansion of Integrated Steel Plant; Sponge Iron (297000 to 594000 MTPA), MS Billet (330000 to 653400 MTPA), Captive power (53 to 80.5 MW) and installation of Pellet plant (792000 MTPA). The issues raised during public hearing are employment and environmental pollution. An amount of ₹ 452 Lakhs (of total

capital cost i.e. ₹. 602.53 Cr) has been earmarked for CER activities based on public hearing issues.

25. Project proponent mentioned that a court case bearing Original Application No. 116/2014; Meera Shukla Vs Municipal Corporation, Gorakhpur &Ors. was filed in Hon'ble National Green Tribunal wherein M/s Gallantt Ispat Ltd was not an impleaded party. There is no court case or violation under EIA Notification to the project or related activity.

26. EIA Consultant - M/s. J.M. Enviro Net Pvt. Ltd. (Serial. No. 88).

27. The proposal was considered Reconstituted Expert Appraisal Committee (Industry -1) meetings held during 21-23rd October 2019, 16-17th January 2020, 24-25th February 2020 and 25-26th June 2020.

Observations of the committee (EAC meeting held during 25-26th June 2020)

28. The committee has discussed the revised proposal considering aspects of integration of the rolling mill, energy savings, additional power requirements, complaint revived in the Ministry related to tree cut, condenser in power plant etc., *vis-a-vis*, impacts of the revised proposal. The committee observed the following:

    i. In accordance with decision of EAC, revised proposal by integrating 330000 TPA Rolling mill has been submitted and accordingly the EIA report has been revised.

    ii. Hot charging of 90% billets to rolling is proposed with relevant retrofitting /modifications as required for. The existing reheating furnace shall be used only for 10 % time i.e. for remaining billets and proposed to operate with furnace oil.

    iii. Coal usage shall be phased out immediately which reduces 27000 TPA coal of coal consumption in turn reduction in pollution load.

    iv. Water consumption in furnace will also get reduced.

    v. Power consumption shall be reduced by 45000 kwh/year in rolling mill due to hot charging.

    vi. Additional plantation is proposed which increases total plantation from 13.41 ha to 15.3 ha.

    vii. It is reconfirmed that trees cut reported in the complaint letter is not the part of the old green belt and no new construction has been taken up by them for this project so far.

    viii. Railway siding for transport of raw materials and products is available.

    ix. During the discussions, project proponent mentioned that no space is available in the existing layout of the power plant to replace water cooled condenser with air cooled condenser.

Recommendations of the committee (EAC meeting held during 25-26th June 2020)

29. EAC after detailed deliberations recommended the proposal for environmental clearance with the following specific conditions in addition to the applicable general conditions as per the Ministry's Office Memorandum No. 22-34/2018-III dated 9/8/2018 pertaining to integrated steel plants.

    i. Air cooled condensers shall be installed in the proposed power plants to reduce water consumption in turn water conservation measure.

    ii. Green belt shall be developed in 15.3 ha of land within the plant premises.

    iii. Hot charging of billets shall be at least for 90% of quantity in the rolling mill. Reheating furnace shall be for maximum quantity of 10% of billets in rolling mill.

iv. Particulate emissions shall be less than 30 mg/Nm^3.

v. Industrial vacuum cleaners shall be used to clean roads and shop floors regularly to reduce fugitive emissions.

vi. Zero Liquid Discharge (ZLD) shall be maintained. Treated wastewater from STP shall be reused for green belt development.

Decision of MoEF&CC

30. The Ministry considered the recommendation of EAC and hereby decide to accord EC to M/s Gallantt Ispat Ltd for the proposed expansion project of integrated steel plant including re-rolling mill mentioned in the subject with the following specific and sector specific general conditions:

A. Specific Conditions

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.

ii. Air cooled condensers shall be installed in the proposed power plants to reduce water consumption in turn water conservation measure.

iii. Green belt shall be developed in 15.3 ha of land within the plant premises.

iv. Hot charging of billets shall be at least for 90% of quantity in the rolling mill. Reheating furnace shall be for maximum quantity of 10% of billets in rolling mill.

v. Particulate emissions shall be less than 30 mg/Nm^3.

vi. Industrial vacuum cleaners shall be used to clean roads and shop floors regularly to reduce fugitive emissions.

vii. Zero Liquid Discharge (ZLD) shall be maintained. Treated wastewater from STP shall be reused for green belt development.

B. General Conditions:

I. Statutory compliance:

i. The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time

II. Air quality monitoring and preservation

i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 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.

ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986.

iii. The project proponent shall install system to carryout **Continuous Ambient Air Quality** monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM_{10} and $PM_{2.5}$ in reference to PM emission, and SO_2 and

NOx in reference to SO_2 and NOx emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120°each), covering upwind and downwind directions.

iv. Sampling facility at process stacks and at quenching towers shall be provided as per CPCB guidelines for manual monitoring of emissions.

v. The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.

vi. 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.

vii. The project proponent shall provide leakage detection and mechanised bag cleaning facilities for better maintenance of bags.

viii. Secondary emission control system shall be provided at SMS Converters.

ix. Pollution control system in the steel plant shall be provided as per the CREP Guidelines of CPCB.

x. Recycle and reuse iron ore fines, coal fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration.

xi. The project proponent use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.

xii. Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.

xiii. Design the ventilation system for adequate air changes as per ACGIH document for all tunnels, motor houses, Oil Cellars.

III. Water quality monitoring and preservation

i. The project proponent shall install 24x7 **continuous** effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 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.

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.

iii. The project proponent shall submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.

iv. The project proponent shall provide the ETP to meet the standards as amended from time to time.

v. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.

vi. 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.

vii. Tyre washing facilities shall be provided at the entrance of the plant gates

viii. The project proponent shall practice rainwater harvesting to maximum possible extent.

ix. Water meters shall be provided at the inlet to all unit processes in the steel plants.

x. The project proponent shall make efforts to minimise water consumption in the steel plant complex by segregation of used water, practicing cascade use and by recycling treated water.

IV. Noise monitoring and prevention

i. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.

ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time

V. Energy Conservation measures

i. Use torpedo ladle for hot metal transfer as far as possible. If ladles not used, provide covers for open top ladles.

ii. Waste heat recovery systems shall be provided in all units where the flue gas or process gas exceeds 300°C.

iii. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;

iv. Provide LED lights in their offices and residential areas.

v. Ensure installation of regenerative type burners on all reheating furnaces.

VI. Waste management

i. Waste recycling Plant shall be installed to recover scrap, metallic and flux for recycling to sinter plant and SMS.

ii. Used refractories shall be recycled as far as possible.

iii. SMS slag after metal recovery in waste recycling facility shall be conditioned and used for road making, railway track ballast and other applications. The project proponent shall install a waste recycling facility to recover metallic and flux for recycle to sinter plant. The project proponent shall establish linkage for 100% reuse of rejects from Waste Recycling Plant.

iv. 100% utilization of fly ash shall be ensured. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding in this regard shall be submitted to the Ministry's Regional Office.

v. Oil Collection pits shall be provided in oil cellars to collect and reuse/recycle spilled oil. Oil collection trays shall be provided under coils on saddles in cold rolled coil storage area.

vi. The waste oil, grease and other hazardous waste like acidic sludge from pickling, galvanising, chrome plating mills etc. shall be disposed of as per the Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016. Coal tar sludge / decanter shall be recycled to coke ovens

vii. Kitchen waste shall be composted or converted to biogas for further use.

VII. Green Belt

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.

VIII. Public hearing and Human health issues

i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.

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).

iii. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

iv. Occupational health surveillance of the workers shall be done on a regular basis and records maintained.

IX. Corporate Environment Responsibility

i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.

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.

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.

iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six-Monthly Compliance Report.

v. Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

vi. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Iron and Steel plants shall be implemented.

X. Miscellaneous

i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.

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.

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.

iv. The project proponent shall monitor the criteria pollutants level namely; PM_{10}, SO_2, 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.

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.

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.

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.

viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.

ix. 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.

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).

xi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.

xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

xiii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

xiv. 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.

xv. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

This issues with the approval of Competent Authority.

(A.K. Agrawal)
Director

Copy to:-

1) Secretary, Department of Environment, Government of Uttar Pradesh, Secretariat Lucknow – 226001.
2) Deputy Director General of Forests(C), Ministry of Environment, Forest and Climate Change, Regional Office (CZ), Kendriya Bhawan, 5th Floor, Sector "H", Aliganj, Lucknow – 226020,
3) Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office complex, East Arjun Nagar, New Delhi-1100032.
4) Member Secretary, Central Ground Water Authority, 18/11, Jamnagar House, Man Singh Road, New Delhi-110011.
5) Chairman, Uttar Pradesh State Pollution Control Board, PICUP Bhawan, 3rd Floor, B-Block, Vibhuti Khand, Gomti Nagar Lucknow – 226 010.
6) District Collector, Gorakhpur District, State Uttar Pradesh.
7) Guard File/Record File/Monitoring File.
8) MoEF&CC Website.

(A.K. Agrawal)
Director

UTTAR PRADESH POLLUTION CONTROL BOARD
Building. No TC-12V Vibhuti Khand, Gomti Nagar, Lucknow-226010
Phone:0522-2720828,2720831, Fax:0522-2720764, Email: info@uppcb.com, Website: www.uppcb.com

Ref No. - 90/UPHOC6/EIA/GORAKHPUR/2022 **Dated:- 19/01/2022**

To ,

Shri NAVNEET JINDAL
M/s GALLANTT ISPAT LIMITED INTEGRATED STEEL PLANT
AL 5, Sector 23, GIDA Industrial Area, Tehsil - Sahjanwa, District Gorakhpur, Uttar Pradesh,GORAKHPUR,273209
GORAKHPUR

Sub : Certificate of "No Increase in Pollution Load" in compliance of notification issued by Ministry of Environment Forest & Climate Change, Government of India, vide its notification no. S.O. 980(E) 2nd March, 2021

Sir.

Kindly refer to the application dt 12/01/2022 related to sector Metallurgical Industries (Ferrous and Non Ferrous) for obtaining "No Increase in Pollution Load Certificate" in compliance of notification issued by Ministry of Environment Forest & Climate Change, Government of India, vide its notification no. S.O. 980(E) 2nd March, 2021.

That Ministry of Environment Forest & Climate Change, Government of India, vide its notification no. S.O. 980(E) 2nd March, 2021 exempted the requirement for prior Environmental Clearance for cases of change in raw material mix without change in the quantity and pollution load as prescribed in the Environmental clearance of the project. The said provisions made in notification dated 2nd March, 2021 are as below

Existing projects (having Prior Environmental Clearance) with no increase in pollution loads: Any increase in production capacity in respect of processing or production or manufacturing sectors (listed against item numbers 2, 3, 4 and 5 in the Schedule to this notification) with or without any change in (i) raw material-mix or (ii) quantities within products or (iii) number of products including new products falling in the same category or (iv) configuration of the plant or process or operations in existing area or in area contiguous to the existing area (for which prior environmental clearance has been granted) shall be exempt from the requirement of Prior Environmental Clearance provided that there is no increase in pollution load (derived on the basis of such Prior Environmental Clearance)

In compliance of the provisions of the notification no. S.O. 980(E) 2nd March, 2021, the applicant has submitted the the following documents

1. "No Increase In Pollution Load" certificate from the Environmental Auditor or reputed institutions empanelled by the State Pollution Control Board or Pollution Control Committee or Central Pollution Control Board or Ministry of Environment, Forest and Climate Change
2. Last Consent to Operate certificate for the project or activity.
3. 3. Online system generated acknowledgement of uploading of intimation and "No Increase In Pollution Load" certificate on PARIVESH Portal
4. Scan Copy of form only submitted for "No Increase In Pollution Load" certificate on PARIVESH Portal

After the examination of the documents submitted by the applicant "No Increase in Pollution Load Certificate" is hereby issued with the following observation and conditions with the approval of competent authority

Obervation and Conditions

Project proponent has submitted the validation report, prepared by IIT, Roorkee for proposed expansion. This report validates that there is No Increase in Pollution due to proposed expansion. Following are the salient features on the basis of the validation report-

I. The Project under consideration is for expansion of Sponge iron from 594000 TPA to 660000 TPA and Rolling Mill plant from 330000 TPA to 660000 TPA by direct charging of 95 % of raw material by M/s Gallantt Ispat Limited at Plot No– AL 5, Sector – 23, GIDA, Industrial Area, Tehsil – Sahjanwa, District – Gorakhpur (UP).

II. They are also proposing to substitute 04 MW of electricity production through CFBC by WHRB. The following integration strategies are proposed to achieve for proposed expansion without increase in pollution load. :

A. As per the presently approved EC total power plant capacity is 80.5 MW out of which 44.5 MW is proposed to be generated by CFBC / AFBC boilers and balance 36 MW is proposed to be generated by WHRB. Now Industry proposes to generate 40.5 MW from CFBC / AFBC boiler and 40.0 MW from WHRB Boilers, keeping the total power generation capacity the same as per presently approved EC. Reduction in pollution load due to the change in power production mode will compensate the pollution load increased by capacity expansion of Sponge Iron plant.

B. Proposed expansion will be achieved by installing 350 TPD capacity DRI rotary kiln in place of proposed 150 TPD capacity DRI rotary Kiln.

C. Coal quantity will be reduce by 26450 TPA due to less production of electricity thorugh CFBC and use of additional quantity of Dolochar.

D. In order to integrate the plant, 100 % Billets are proposed to be converted to TMT Bars in rolling mills ; as such it is proposed to increase the capacity.

E. Around 95 % of the billets shall be processed through direct charging method instead of 90 % direct charging as per current EC. Only 5 % Billets shall be reheated in reheating furnace.

F. Fugitive emission will be restricted within CPCB norms by installation of Wagon Tripler at railway siding. The same is under installation.

G. Additional Char generated, as Solid Waste will be utilize as fuel in CPP, which reduces the Coal requirement in CPP Plant.

H. MS scrap quantity, as raw material will be reduces from 200779 TPA to 146520 TPA due to utilization of In-house Sponge Iron, which further reduces the road transportation load and Air pollution load on Environment.

I. Ash generation will reduces by 8% due to reduction in Coal Quantity in CPP plant.

III. The raw material consumption will be increased in Sponge iron plant in proportion to expansion proposed. Pollution load increases due to increase in raw material against the expansion shall be compensated by reducing power production by 4 MW in CPP through CFBC boiler and increasing 4 MW Power through WHRB.

IV. In Steel Melting Shop, MS Scrap consumption will be reduced by 54259 TPA, this reduction of scrap will be done by increasing the utilization of In-house Sponge iron in SMS plant. Decreased Scrap quantity reduces the transportation load and air pollution load on Environment.

V. Coal quantity in power plant will reduce by 26450 TPA due to additional quantity of Dolochar being consumed and increase in WHRB power from Sponge Iron Unit.

VI. After expansion, 95 % direct charging of billets will be done;hence, there will be no increase in pollution load due to proposed expansion.

VII. Fresh Water requirement will be reduced by 70 KLD due to the change of route of 4 MW Power Productions from CFBC to WHRB.

VIII. There is no change in wastewater generation and Industry already adopted the Zero Liquid

Discharge scheme and same shall be adopted after expansion also.

IX. There shall not be any incremental rise with respect to air pollution in view of the fact that Air Pollution Control System (ESP& Bag Filter) shall keep particulate matter, SO2, NOx within UPPCB and CPCB norms.

X. Proposed ESP installed with Proposed 350 TPD DRI kiln is proposed to be designed to achieve PM emission < 30 mg/Nm3.

XI. Total PM Load during existing proposal as per EC is 977 kg/day, which will be reduced to 944 Kg/day after expansion.

XII. Total SO2 Load during existing proposal as per EC is 2085kg/day, which will be reduced to 1972 Kg/day after expansion.

XIII. Total NO2 Load during existing proposal as per EC is 2377 kg/day, which will be reduced to 2266 Kg/day after expansion.

XIV. Dolochar generation will be increased after expansion by 8610 TPA but will be utilized completely in captive power plant (CPP) as fuel. Additional Char generated as Solid waste will replace the coal requirement in CPP plant; hence, it will reduce the emission of SO2from CFBC boiler.

XV. There will be no increase in Slag generation.

XVI. Ash generation will reduce by 8 % due to reduction in fuel quantity. 100 % ash from CPP and Pellet plant will be provided to Cement & Brick Manufacturing unit, Hence there will be no additional pollution load due to Solid waste generation.

Project proponent has submitted validation report prepared by IIT Roorki, the validation report validates that there will not be any Increase in Pollution Load due to proposed expansion. Hence, in view of the above facts mentioned in the Validation report for proposed expansion of industry prepared by IIT, Roorkee, UPPCB is of the view that the project of expansion of Sponge iron from 594000 TPA to 660000 TPA and Rolling Mill plant from 330000 TPA to 660000 TPA through direct charging of 95 % of raw material by M/s Gallantt Ispat Limited at Plot No – AL 5, Sector – 23, GIDA Industrial Area,Tehsil – Sahjanwa, District – Gorakhpur (UP), shall result in "No Increase in Pollution Load", hence the project is recommended subject to the condition that the project is implemented strictly in accordance with the Technical details submitted by the proponent before the Board. The Project Proponent shall ensure strict compliance of the following conditions:

1. Due to change in power generation route for 4 MW Power from CFBC to WHRB and decrease in emission rate within 30 mg/Nm3 on proposed DRI Kiln of capacity 350 TPD, Proposed expansion of Integrated Steel Plant shall result in No Increase in Pollution load subject to the condition that the project is implemented strictly in accordance with the technical details submitted by the Project Proponent in the Board.
2. The Project Proponent shall submit the validation report for proposed expansion productions from any reputed Instituted empanelled by UPPCB with 03 months after the proposed expansion.
3. The unit should submit monthly data of following to UPPCB:
a. Fresh water consumption
b. Monthly production details
c. Solid waste generation
d. Power Generation (CFBC & WHRB)
e. Coal Consumption in CPP
f. Third Party Monthly Stack Monitoring Reports
g. Boiler ash generation
h. Online Monitoring Data

4. The unit is not allowed any additional fresh water requirement for proposed expension.

5. The all conditions mentioned in the environmental clearance issued vide letter no- J-11011/229/2008-IA II (I) dated 14.12.2020 by MOEF & CC which was issued for expansion of Integrated Steel Plant, Sponge Iron (2,97,000 to 5,94,000 TPA,) MS Billet (3,30,000 to 6,53,400

TPA), Captive Power (53 to 80.5 MW), Rolling mill (3,30,000 TPA) and Installation of Pellet plant (792000 TPA) by M/s Gallantt Ispat Limited at Plot No – AL 5, Sector – 23, GIDA Industrial Area,Tehsil – Sahjanwa, District – Gorakhpur production.

6. ESP proposed with Proposed 350 TPD DRI Rotary kiln shall be designed and installed in such a way, to achieve PM emission < 30 mg/Nm3. The cleaning and maintenance of ESP shall be done on regular intervals as specify by the manufacturer.

7. Total PM Load shall be reduced to 944 Kg/day after expansion as against 977 kg/day during existing operation as mentioned in the validation report submitted by the project proponent.

8. Total SO2 Load shall be reduced to 1972 Kg/day after expansion as against 2085 kg/day during existing operation as mentioned in the validation report submitted by the project proponent.
9. Total NO2 Load shall be reduced to 2266 Kg/day after expansion as against 2377 kg/day during existing operation as mentioned in the validation report submitted by the project proponent.

10. Dolochar generation shall be increased after expansion by 8610 TPA which shall be utilized completely in captive power plant (CPP) as fuel so that the coal consumption shall be reduced by 26450 TPA as mentioned in the validation report submitted by the project proponent.

11. There shall be no increase in Slag generation.

12. Ash generation shall reduce by 8 % due to reduction in fuel quantity.

13. 100 % ash from CPP and Pellet plant shall be provided to Cement & Brick Manufacturing unit. Suitable Agreement MOU must be made with such Cement & Brick Manufacturing units and copies of the same be submitted to the UPPCB.

14. There shall be no additional pollution load due to Solid waste generation.

15. The unit shall ensure to obtain fresh consent (Water and Air) under the provision of Water (Prevention and control of Pollution) Act, 1974 and Air (Prevention and control of Pollution) Act, 1981 for expansion of Sponge iron from 594000 TPA to 660000 TPA and Rolling Mill plant from 330000 TPA to 660000 TPA before starting production.

16. The project proponent shall implement the project strictly in accordance with the technical details submitted before the Board along with the application.

17. If on verification the State Pollution Control Board holds that the change or expansion or modernisation will result or has resulted in increase in pollution load, the exemption claimed under this clause shall not be valid and it shall be deemed that the project proponent was liable to obtain Prior Environmental Clearance before under taking such changes or increase, as per the clause (a) of sub-paragraph (ii) of paragraph 7 of MOEF notification SO 980(E) dated 02.03.2021 and the provisions of Environment (Protection) Act, 1986 shall apply accordingly.

18. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this No Increase in Pollution Load certificate and attract action under the provisions of Law.

In view of the conclusion and remarks made by the Board, the unit is hereby directed to apply afresh for obtaining amended Consent to Operate under the provisions of Water (Prevention and Control of Pollution) Act, 1974 as amended and Air (Prevention and Control of Pollution) Act, 1981 as amended for the expansion of Sponge iron from 594000 TPA to 660000 TPA and Rolling Mill plant from 330000 TPA to 660000 TPA by direct charging of 95 % of raw material and also to comply with the conditions as above.

RAKESH KUMAR TYAGI

Digitally signed by RAKESH KUMAR TYAGI
DN: c=IN, o=Uttar Pradesh Pollution Control Board, ou=Environment, postalCode=226010, st=Uttar Pradesh, 2.5.4.20=4ed33517cb50b1d55a186a4e980f7be4cb1c2f2729bbee35986f36aab685f410, cn=RAKESH KUMAR TYAGI
Date: 2022.01.25 15:56:36 +05'30'

Chief Environmental Officer

Copy :

Regional Officer, U.P. Pollution Control Board, Gorakhpur for information and necessary action.

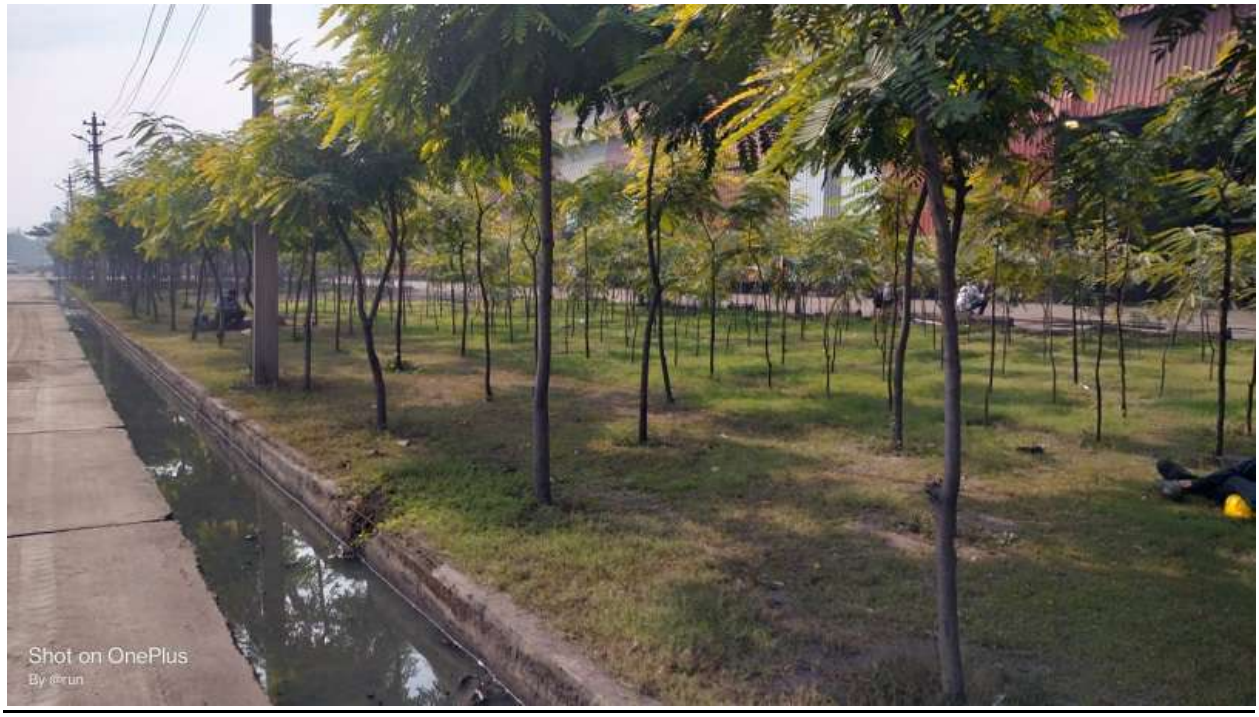
RAKESH KUMAR TYAGI

Digitally signed by RAKESH KUMAR TYAGI
DN: c=IN, o=Uttar Pradesh Pollution Control Board, ou=Environment, postalCode=226010, st=Uttar Pradesh, 2.5.4.20=4ed33517cb50b1d55a186a4e980f7be4cb1c2f2729bbee35986f36aab685f410, cn=RAKESH KUMAR TYAGI
Date: 2022.01.25 15:56:36 +05'30'

Chief Environmental Officer

ANNEXURE - 3

GREEN BELT – TMT WEIGHBRIDGE AREA



GREEN BELT – ROLLING MILL AREA

GREEN *BELT – POWER PLANT*

GREEN BELT – SPONGE IRON

GREEN BELT – RAILWAY SIDING

GREEN BELT – DM PLANT

GREEN BELT – SOUTH OF ROLLING MILL

GREEN BELT – SOUTH WEST BOUNDARY

MECHANISED INDUSTRIAL VACCUM CLEANER – FRONT VIEW

MECHANISED INDUSTRIAL VACCUM CLEANER – SIDE VIEW

ANNEXURE – 5

450 TPD KILN (450 X 2)

750 TPD KILN

AFBC BOILER

CFBC BOILER

FURNACE 3 &4

FURNACE – 1 & 2

FURNACE -5

FURNACE -6

ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory: 2/261, Vishwas Khand, Gomti Nagar, Lucknow- 226 010 (U.P.)
Email : ETRCLTH@YAHOO.IN, Web: www.etrcindia.com

ISO 9001: 2015, ISO 14001: 2015, ISO 45001: 2018 & NABL Accredited Laboratory

ETRC/PM09/TEST-REP/FT/42

TEST REPORT

FUGITIVE AIR QUALITY MONITORING REPORT

Test Report Ref No. ETRC/EPA/9455/2023		**Date of Report:** 28.09.2023
Name /Address/Type of Industry		**M/s Gallant Ispat Limited Sector-23, Plot no.- AL-5, GIDA District: Gorakhpur (U. P.)**
Monitored by		**ETRC, Lucknow (23/09/2023)**
Instrument/ Parameter Description		Fugitive Sampler (Area/ Fugitive Sampling) / PM
Sr. No.	**General Observations**	**Details**
(a)	Weather conditions	Clear
(b)	Wind direction	West to East
(c)	Average humidity (%)	54
(d)	Average ambient temperature (^{o}C)	29.0
(e)	Average sampling rate for SPM (LPM)	2.0

TEST RESULT

Sr. No.	Location	Total Volume of Air Sampled (liter)	Protocol	Unit	Result (Particulate Matter)
1	**Wagon Tippler**	956.0	IS: 5182	$\mu g/m^3$	**1125.5**
2	**Sheet Storage Yard**	948.0	IS: 5182	$\mu g/m^3$	**936.2**

..... END OF REPORT.....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that this data reflects our best attempt to generate accurate results for the sample, mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment constituting to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Environmental And Technical Research Centre
CHECKED

Authorized Signatory
(Ritu Garg)
QM

ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

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ETRC/PM09/TEST-REP/FT/44

TEST REPORT
AMBIENT AIR QUALITY MONITORING REPORT

Test Report Ref No.: ETRC/EPA/9273/2023		**Date of Report:** 06/09/2023	
Name /Address/Type of Industry		**M/s Gallant Ispat Limited Sector-23, Plot no.- AL-5, GIDA District: Gorakhpur (U. P.)**	
Monitored by		**ETRC, Lucknow**	
Location of Sampling points		**At Village: Sahjanwa (Station No. 01)**	
Sr. No.	**GENERAL OBSERVATIONS**	**DETAILS-PM_{10}**	**DETAILS-$PM_{2.5}$**
1(a)	Weather conditions	Clear	Clear
(b)	Wind direction	West to East	West to East
(c)	Average humidity (%)	64	64
(d)	Average ambient temperature (°C)	29	29
(e)	Time of Sampling Started (Hours)	10:42 am (01.09.2023)	10:42 am (01.09.2023)
(f)	Time of Sampling completed (Hours)	10:26 am (02.09.2023)	10:26 am (02.09.2023)
2	Total time of sampling (Minutes)	24 hour (1420 minutes)	24 hour (1420 minutes)
3	Average Air sampling rate (m^3/minute)	1.160	NA
4	**TOTAL VOLUME OF AIR SAMPLED** • PM (m^3) • GAS (liter)	 • 1646.736 • 709.8	 • 23.658

TEST RESULT

Sr. No.	Particulars	Protocol	Unit	Result	Range of testing /limit of detection	Standard as per NAAQS; dated 18/11/ 2009
1	**Particulate matters size less than 10 µm (PM_{10})**	IS: 5182 (Part-23): 2006 Reaffirmed: 2017	µg/m^3	**79.2**	5.0 - 1200	For 24 hour =100
2	**Particulate matters size less than 2.5 µm ($PM_{2.5}$)**	IS: 5182 (Part-24): 2019	µg/m^3	**46.07**	2.0 - 500	For 24 hour =60
3	**Sulphur Dioxide (SO_2)**	IS: 5182 (Part-2): 2001 Reaffirmed: 2017	µg/m^3	**13.12**	5.0 - 1050	For 24 hour =80
4	**Oxides of Nitrogen (NO_X)**	IS: 5182 (Part-6): 2006 Reaffirmed: 2017	µg/m^3	**17.46**	6.0 - 750	For 24 hour =80

..... END OF REPORT.....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that this data reflects our best attempt to generate accurate results for the sample, mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment constituting to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Environmental And Technical Research Centre ★ CHECKED

Authorized Signatory
(Ritu Garg)
QM

ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

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ETRC/PM09/TEST-REP/FT/44

TEST REPORT
AMBIENT AIR QUALITY MONITORING REPORT

Test Report Ref No.: ETRC/EPA/9274/2023		**Date of Report:** 06/09/2023	
Name /Address/Type of Industry		**M/s Gallant Ispat Limited Sector-23, Plot no.- AL-5, GIDA District: Gorakhpur (U. P.)**	
Monitored by		**ETRC, Lucknow**	
Location of Sampling points		**At Village: Johnia (Station No. 02)**	
Sr. No.	**GENERAL OBSERVATIONS**	**DETAILS-PM_{10}**	**DETAILS-$PM_{2.5}$**
1(a)	Weather conditions	Clear	Clear
(b)	Wind direction	West to East	West to East
(c)	Average humidity (%)	64	64
(d)	Average ambient temperature (^{o}C)	29	29
(e)	Time of Sampling Started (Hours)	10:50 am (01.09.2023)	10:50 am (01.09.2023)
(f)	Time of Sampling completed (Hours)	10:41 am (02.09.2023)	10:41 am (02.09.2023)
2	Total time of sampling (Minutes)	24 hour (1424 minutes)	24 hour (1424 minutes)
3	Average Air sampling rate (m^3/minute)	1.165	NA
4	**TOTAL VOLUME OF AIR SAMPLED** • PM (m^3) • GAS (liter)	 • 1659.426 • 712.2	 • 23.734

TEST RESULT

Sr. No.	Particulars	Protocol	Unit	Result	Range of testing /limit of detection	Standard as per NAAQS; dated 18/11/ 2009
1	**Particulate matters size less than 10 µm (PM_{10})**	IS: 5182 (Part-23): 2006 Reaffirmed: 2017	µg/m^3	**78.9**	5.0 - 1200	For 24 hour =100
2	**Particulate matters size less than 2.5 µm ($PM_{2.5}$)**	IS: 5182 (Part-24): 2019	µg/m^3	**48.45**	2.0 - 500	For 24 hour =60
3	**Sulphur Dioxide (SO_2)**	IS: 5182 (Part-2): 2001 Reaffirmed: 2017	µg/m^3	**13.23**	5.0 - 1050	For 24 hour =80
4	**Oxides of Nitrogen (NO_X)**	IS: 5182 (Part-6): 2006 Reaffirmed: 2017	µg/m^3	**18.54**	6.0 - 750	For 24 hour =80

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(Sandeep Kr Verma)
Lab-Incharge

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ETRC/PM09/TEST-REP/FT/44

TEST REPORT
AMBIENT AIR QUALITY MONITORING REPORT

Test Report Ref No.: ETRC/EPA/9275/2023		**Date of Report:** 06/09/2023	
Name /Address/Type of Industry		**M/s Gallant Ispat Limited Sector-23, Plot no.- AL-5, GIDA District: Gorakhpur (U. P.)**	
Monitored by		**ETRC, Lucknow**	
Location of Sampling points		**At Village: Domhar (Station No. 03)**	
Sr. No.	**GENERAL OBSERVATIONS**	**DETAILS-PM_{10}**	**DETAILS-$PM_{2.5}$**
1(a)	Weather conditions	Clear	Clear
(b)	Wind direction	West to East	West to East
(c)	Average humidity (%)	62	62
(d)	Average ambient temperature (^{o}C)	30	30
(e)	Time of Sampling Started (Hours)	10:40 am (02.09.2023)	10:40 am (02.09.2023)
(f)	Time of Sampling completed (Hours)	10:22 am (03.09.2023)	10:22 am (03.09.2023)
2	Total time of sampling (Minutes)	24 hour (1414 minutes)	24 hour (1414 minutes)
3	Average Air sampling rate (m^3/minute)	1.155	NA
4	**TOTAL VOLUME OF AIR SAMPLED** • PM (m^3) • GAS (liter)	 • 1633.401 • 707.1	 • 23.568

TEST RESULT

Sr. No.	Particulars	Protocol	Unit	Result	Range of testing /limit of detection	Standard as per NAAQS; dated 18/11/ 2009
1	**Particulate matters size less than 10 µm (PM_{10})**	IS: 5182 (Part-23): 2006 Reaffirmed: 2017	µg/m^3	**77.8**	5.0 - 1200	For 24 hour =100
2	**Particulate matters size less than 2.5 µm ($PM_{2.5}$)**	IS: 5182 (Part-24): 2019	µg/m^3	**47.52**	2.0 - 500	For 24 hour =60
3	**Sulphur Dioxide (SO_2)**	IS: 5182 (Part-2): 2001 Reaffirmed: 2017	µg/m^3	**13.36**	5.0 - 1050	For 24 hour =80
4	**Oxides of Nitrogen (NO_X)**	IS: 5182 (Part-6): 2006 Reaffirmed: 2017	µg/m^3	**19.14**	6.0 - 750	For 24 hour =80

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Ritu Garg

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ETRC/PM09/TEST-REP/FT/44

TEST REPORT
AMBIENT AIR QUALITY MONITORING REPORT

Test Report Ref No.: ETRC/EPA/9276/2023		**Date of Report:** 06/09/2023	
Name /Address/Type of Industry		**M/s Gallant Ispat Limited Sector-23, Plot no.- AL-5, GIDA District: Gorakhpur (U. P.)**	
Monitored by		**ETRC, Lucknow**	
Location of Sampling points		**Near Main Gate (Station No. 04)**	
Sr. No.	**GENERAL OBSERVATIONS**	**DETAILS-PM_{10}**	**DETAILS-$PM_{2.5}$**
1(a)	Weather conditions	Clear	Clear
(b)	Wind direction	West to East	West to East
(c)	Average humidity (%)	62	62
(d)	Average ambient temperature (^{o}C)	30	30
(e)	Time of Sampling Started (Hours)	10:55 am (02.09.2023)	10:55 am (02.09.2023)
(f)	Time of Sampling completed (Hours)	10:36 am (03.09.2023)	10:36 am (03.09.2023)
2	Total time of sampling (Minutes)	24 hour (1417 minutes)	24 hour (1417 minutes)
3	Average Air sampling rate (m^3/minute)	1.135	NA
4	**TOTAL VOLUME OF AIR SAMPLED** • PM (m^3) • GAS (liter)	 • 1608.522 • 708.6	 • 23.618

TEST RESULT

Sr. No.	Particulars	Protocol	Unit	Result	Range of testing /limit of detection	Standard as per NAAQS; dated 18/11/ 2009
1	**Particulate matters size less than 10 µm (PM_{10})**	IS: 5182 (Part-23): 2006 Reaffirmed: 2017	µg/m^3	**84.6**	5.0 - 1200	For 24 hour =100
2	**Particulate matters size less than 2.5 µm ($PM_{2.5}$)**	IS: 5182 (Part-24): 2019	µg/m^3	**52.08**	2.0 - 500	For 24 hour =60
3	**Sulphur Dioxide (SO_2)**	IS: 5182 (Part-2): 2001 Reaffirmed: 2017	µg/m^3	**14.84**	5.0 - 1050	For 24 hour =80
4	**Oxides of Nitrogen (NO_X)**	IS: 5182 (Part-6): 2006 Reaffirmed: 2017	µg/m^3	**20.45**	6.0 - 750	For 24 hour =80

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(Sandeep Kr Verma)
Lab-Incharge

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(Ritu Garg)
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ETRC/PM09/TEST-REP/FT/45

TEST REPORT
STACK EMISSION MONITORING AND ANALYSIS REPORT
Stack No. 01

Test Report Ref No.: ETRC/EPA/9279/2023		**Date of Report:** 06/09/2023
Name /Address/Type of Industry		**M/s Gallant Ispat Limited Sector-23, Plot no.- AL-5, GIDA District: Gorakhpur (U. P.)**
Monitored by		**ETRC, Lucknow**
Sr. No.	**GENERAL INFORMATION**	**DETAILS**
1.(a)	Date of monitoring	02.09.2023
(b)	Stack material	RCC
(c)	Helght of stack from ground level	80 mts
(d)	Source to which stack attached	Boiler
(e)	No of boiler attached with capacity	01 No., 40 T/hr
(f)	Type and quantity of fuel used	Coal, Dolachar
(g)	Details of APCS installed	ESP
2.	**PARAMETERS**	**VALUES**
(a)	Ambient temperature (^{o}C)	32.0
(b)	Stack gas temperature (^{o}C)	129.0
(c)	Stack gas velocity (m/sec)	12.02
(d)	Flow rate (LPM)	17
(e)	Sampling time (minutes)	62
(f)	Volume of air sampled (liters)	1054

TEST RESULT

Sr. No.	Parameter	Unit	Protocol	Result	Range of Testing/ Limit of Detection	Standard (as per CPCB)
1	Particulate Matter	mg/Nm^3	IS: 11255 (Part-1): 1985 Reaffirmed: 2019	**47.2**	2.0 - 1000	50
2	Sulphur Dioxide (SO_2)	mg/Nm^3	IS:11255 (Part-2): 1985 Reaffirmed: 2019	**28.4**	1.0 - 2000	600
3	Oxide of Nitrogen (NO_X)	mg/Nm^3	IS:11255 (Part-7): 2005 Reaffirmed: 2022	**20.8**	2.0 - 1000	300

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TEST REPORT
STACK EMISSION MONITORING AND ANALYSIS REPORT
Stack No. 02

Test Report Ref No.: ETRC/EPA/9280/2023		**Date of Report:** 06/09/2023
Name /Address/Type of Industry		**M/s Gallant Ispat Limited Sector-23, Plot no.- AL-5, GIDA District: Gorakhpur (U. P.)**
Monitored by		**ETRC, Lucknow**
Sr. No.	**GENERAL INFORMATION**	**DETAILS**
1.(a)	Date of monitoring	02.09.2023
(b)	Stack material	Mild Steel
(c)	Height of stack from ground level	50 mts
(d)	Source to which stack attached	Rotatry Klin
(e)	No of boiler attached with capacity	02 No.
(f)	Type and quantity of fuel used	Coal, 276 T/day
(g)	Details of APCS installed	ESP
2.	**PARAMETERS**	**VALUES**
(a)	Ambient temperature (°C)	32.0
(b)	Stack gas temperature (°C)	135.0
(c)	Stack gas velocity (m/sec)	11.99
(d)	Flow rate (LPM)	17
(e)	Sampling time (minutes)	60
(f)	Volume of air sampled (liters)	1020

TEST RESULT

Sr. No.	Parameter	Unit	Protocol	Result	Range of Testing/ Limit of Detection	Standard (as per CPCB)
1	Particulate Matter	mg/Nm^3	IS: 11255 (Part-1): 1985 Reaffirmed: 2019	43.92	2.0 - 1000	100

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TEST REPORT
STACK EMISSION MONITORING AND ANALYSIS REPORT
Stack No. 03

Test Report Ref No.: ETRC/0609/12182/2023		**Date of Report:** 06/09/2023
Name /Address/Type of Industry		**M/s Gallant Ispat Limited Sector-23, Plot no.- AL-5, GIDA District: Gorakhpur (U. P.)**
Monitored by		**ETRC, Lucknow**
Sr. No.	**GENERAL INFORMATION**	**DETAILS**
1.(a)	Date of monitoring	02.09.2023
(b)	Stack material	RCC
(c)	Height of stack from ground level	75 mts
(d)	Source to which stack attached	DRI Klin (750 TPD)
(e)	No of boiler attached with capacity	01 No.
(f)	Type and quantity of fuel used	Coal, 600 T/day
(g)	Details of APCS installed	ESP
2.	**PARAMETERS**	**VALUES**
(a)	Ambient temperature (^{o}C)	35.0
(b)	Stack gas temperature (^{o}C)	148.0
(c)	Stack gas velocity (m/sec)	12.06
(d)	Flow rate (LPM)	17
(e)	Sampling time (minutes)	62
(f)	Volume of air sampled (liters)	1054

TEST RESULT

Sr. No.	Parameter	Unit	Protocol	Result	Range of Testing/ Limit of Detection	Standard (as per CPCB)
1	Particulate Matter	mg/Nm^3	IS: 11255 (Part-1): 1985 Reaffirmed: 2019	**26.42**	2.0 - 1000	30

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TEST REPORT
STACK EMISSION MONITORING AND ANALYSIS REPORT
Stack No. 04

Test Report Ref No.: ETRC/EPA/9281/2023		**Date of Report:** 06/09/2023
Name /Address/Type of Industry		**M/s Gallant Ispat Limited Sector-23, Plot no.- AL-5, GIDA District: Gorakhpur (U. P.)**
Monitored by		**ETRC, Lucknow**
Sr. No.	**GENERAL INFORMATION**	**DETAILS**
1.(a)	Date of monitoring	03.09.2023
(b)	Stack material	RCC
(c)	Height of stack from ground level	100 mts
(d)	Source to which stack attached	Boiler (CFBC)
(e)	No of boiler attached with capacity	01 No., 110 T/hr
(f)	Type and quantity of fuel used	Rice Husk and Coal
(g)	Details of APCS installed	ESP
2.	**PARAMETERS**	**VALUES**
(a)	Ambient temperature (°C)	33.0
(b)	Stack gas temperature (°C)	134.0
(c)	Stack gas velocity (m/sec)	12.06
(d)	Flow rate (LPM)	17
(e)	Sampling time (minutes)	61
(f)	Volume of air sampled (liters)	1037

TEST RESULT

Sr. No.	Parameter	Unit	Protocol	Result	Range of Testing/ Limit of Detection	Standard (as per CPCB)
1	Particulate Matter	mg/Nm^3	IS: 11255 (Part-1): 1985 Reaffirmed: 2019	**27.20**	2.0 - 1000	30
2	Sulphur Dioxide (SO_2)	mg/Nm^3	IS:11255 (Part-2): 1985 Reaffirmed: 2019	**68.4**	1.0 - 2000	100
3	Oxide of Nitrogen (NO_X)	mg/Nm^3	IS:11255 (Part-7): 2005 Reaffirmed: 2022	**70.6**	2.0 - 1000	100

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TEST REPORT
STACK EMISSION MONITORING AND ANALYSIS REPORT
Stack No. 05

Test Report Ref No.: ETRC/0609/12183/2023		**Date of Report:** 06/09/2023
Name /Address/Type of Industry		**M/s Gallant Ispat Limited Sector-23, Plot no.- AL-5, GIDA District: Gorakhpur (U. P.)**
Monitored by		**ETRC, Lucknow**
Sr. No.	**GENERAL INFORMATION**	**DETAILS**
1.(a)	Date of monitoring	03.09.2023
(b)	Stack material	Mild Steel
(c)	Height of stack from ground level	35 mts
(d)	Source to which stack attached	Cruicible
(e)	No of boiler attached with capacity	02 Nos., (Furnace No. 05 & 06)
(f)	Type and quantity of fuel used	Electricity
(g)	Details of APCS installed	Bagfilters
2.	**PARAMETERS**	**VALUES**
(a)	Ambient temperature (^{o}C)	32.0
(b)	Stack gas temperature (^{o}C)	148.0
(c)	Stack gas velocity (m/sec)	11.96
(d)	Flow rate (LPM)	17
(e)	Sampling time (minutes)	61
(f)	Volume of air sampled (liters)	1037

TEST RESULT

Sr. No.	Parameter	Unit	Protocol	Result	Range of Testing/ Limit of Detection	Standard (as per CPCB)
1	Particulate Matter	mg/Nm^3	IS: 11255 (Part-1): 1985 Reaffirmed: 2019	25.83	2.0 - 1000	30

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TEST REPORT
STACK EMISSION MONITORING AND ANALYSIS REPORT
Stack No. 06

Test Report Ref No.: ETRC/EPA/9278/2023		**Date of Report:** 06/09/2023
Name /Address/Type of Industry		**M/s Gallant Ispat Limited Sector-23, Plot no.- AL-5, GIDA District: Gorakhpur (U. P.)**
Monitored by		**ETRC, Lucknow**
Sr. No.	**GENERAL INFORMATION**	**DETAILS**
1.(a)	Date of monitoring	01.09.2023
(b)	Stack material	Mild Steel
(c)	Height of stack from ground level	30 mts
(d)	Source to which stack attached	Cruicible
(e)	No of boiler attached with capacity	02 Nos., 22 T/Heat
(f)	Type and quantity of fuel used	Electricity
(g)	Details of APCS installed	Bag Filters
2.	**PARAMETERS**	**VALUES**
(a)	Ambient temperature (^{o}C)	33.0
(b)	Stack gas temperature (^{o}C)	130.0
(c)	Stack gas velocity (m/sec)	11.95
(d)	Flow rate (LPM)	17
(e)	Sampling time (minutes)	61
(f)	Volume of air sampled (liters)	1037

TEST RESULT

Sr. No.	Parameter	Unit	Protocol	Result	Range of Testing/ Limit of Detection	Standard (as per CPCB)
1	Particulate Matter	mg/Nm^3	IS: 11255 (Part-1): 1985 Reaffirmed: 2019	46.02	2.0 - 1000	150

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TEST REPORT
STACK EMISSION MONITORING AND ANALYSIS REPORT
Stack No. 07

Test Report Ref No.: ETRC/EPA/9277/2023		**Date of Report:** 06/09/2023
Name /Address/Type of Industry		**M/s Gallant Ispat Limited Sector-23, Plot no.- AL-5, GIDA District: Gorakhpur (U. P.)**
Monitored by		**ETRC, Lucknow**
Sr. No.	**GENERAL INFORMATION**	**DETAILS**
1.(a)	Date of monitoring	01.09.2023
(b)	Stack material	Mild Steel
(c)	Height of stack from ground level	30 mts
(d)	Source to which stack attached	Cruicible
(e)	No of boiler attached with capacity	02 Nos., 30 T/Batch/heat
(f)	Type and quantity of fuel used	Electricity
(g)	Details of APCS installed	Bag Filters
2.	**PARAMETERS**	**VALUES**
(a)	Ambient temperature (°C)	33.0
(b)	Stack gas temperature (°C)	134.0
(c)	Stack gas velocity (m/sec)	11.89
(d)	Flow rate (LPM)	17
(e)	Sampling time (minutes)	62
(f)	Volume of air sampled (liters)	1054

TEST RESULT

Sr. No.	Parameter	Unit	Protocol	Result	Range of Testing/ Limit of Detection	Standard (as per CPCB)
1	Particulate Matter	mg/Nm^3	IS: 11255 (Part-1): 1985 Reaffirmed: 2019	**45.82**	2.0 - 1000	150

..... END OF REPORT.....

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Verma

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Lab-Incharge

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Ritu Garg

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ETRC/PM09/TEST-REP/FT/45

TEST REPORT
STACK EMISSION MONITORING AND ANALYSIS REPORT
Stack No. 08

Test Report Ref No.: ETRC/0609/12184/2023		**Date of Report:** 06/09/2023
Name /Address/Type of Industry		**M/s Gallant Ispat Limited Sector-23, Plot no.- AL-5, GIDA District: Gorakhpur (U. P.)**
Monitored by		**ETRC, Lucknow**
Sr. No.	**GENERAL INFORMATION**	**DETAILS**
1.(a)	Date of monitoring	03.09.2023
(b)	Stack material	RCC
(c)	Height of stack from ground level	50 mts
(d)	Source to which stack attached	Pellet
(e)	No of boiler attached with capacity	01 No.
(f)	Type and quantity of fuel used	Coal
(g)	Details of APCS installed	ESP
2.	**PARAMETERS**	**VALUES**
(a)	Ambient temperature (°C)	34.0
(b)	Stack gas temperature (°C)	139.0
(c)	Stack gas velocity (m/sec)	11.05
(d)	Flow rate (LPM)	17
(e)	Sampling time (minutes)	62
(f)	Volume of air sampled (liters)	1054

TEST RESULT

Sr. No.	Parameter	Unit	Protocol	Result	Range of Testing/ Limit of Detection	Standard (as per CPCB)
1	Particulate Matter	mg/Nm^3	IS: 11255 (Part-1): 1985 Reaffirmed: 2019	**23.25**	2.0 - 1000	30

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ETRC/PM09/TEST-REP/FT/45

TEST REPORT
WATER & WASTE WATER ANALYSIS

Test Report Ref No. ETRC/EPA/9454/2023	**Date of Report:** 28.09.2023
Name /Address/Type of Industry	**M/s Gallant Ispat Limited** **Sector-23, Plot no.- AL-5, GIDA** **District: Gorakhpur (U. P.)**

SAMPLE DETAILS

1	Water/ Waste Water	Waste Water	5	Packing Condition	Sealed
2	Sample Description	**STP Outlet**	6	Sample Collected By	ETRC
3	Sample received date	23.09.2023	7	Analysis Start Date	23.09.2023
4	Sample Quantity	2.0 liters	8	Analysis End Date	27.09.2023

TEST RESULT

Sr. No.	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing /limit of detection
1	**pH**	-	APHA 23rd Ed. 2017 - 4500H+	**7.5**	1 - 14
2	**Total Dissolved Solid (TDS)**	mg/l	IS: 3025 (Part-16): 2023	**628.0**	10 - 40000
3	**Total Suspended Solid (TSS)**	mg/l	APHA 23rd Ed. 2017 - 2540 D	**38.9**	5.0 - 20000
4	**Bio-chemical Oxygen Demand (BOD)**	mg/l	IS: 3025 (Part-44): 1993 Reaffirmed: 2019	**6.2**	1.0 - 150000
5	**Chemical Oxygen Demand (COD)**	mg/l	IS: 3025 (Part-58): 2006 Reaffirmed: 2022	**24.0**	2.0 - 600000
6	**Oil & Grease**	mg/l	APHA 23rd Ed. 2017-5520 A+D	**BDL**	5.0 - 200
7	**Fecal Coliform**	MPN/ 100 ml	IS: 1622 - 1981 Reaffirmed: 2019	**28.0**	≥ 2 MPN Present or Absent per 100 ml

BDL = Below Detection Limit

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ETRCPM14/TES-REP/FT/17

TEST REPORT
WATER ANALYSIS

Test Report Ref No.: ETRC/EPA/8412/2023	**Date of Report:** 25/04/2023
Name /Address/Type of Industry	**M/s Gallant Ispat Limited** **Sector-23, Plot no.- AL-5, GIDA** **District: Gorakhpur (U. P.)**

SAMPLE DETAILS

1	Water/ Waste Water	Ground Water	5	Packing Condition	Sealed
2	Sample Description	**Borewell No.- 02, Near Bank of Pond**	6	Sample Collected By	Industry Self
3	Sample received date	05.04.2023	7	Analysis Start Date	05.04.2023
4	Sample Quantity	5.0 liters	8	Analysis End Date	10.04.2023

TEST RESULT

Sr. No	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing /limit of detection	Indian Standard 10500: 2012	
						Desirable	Permissible
	Physico-chemical Parameters						
1	**Colour**	Hazen	IS: 3025 (Part-4): 1983 Reaffirmed: 2017	**<5.0**	5 - 30	5	15
2	**Odour**	-	IS: 3025 (Part-5): 1983 Reaffirmed: 2017	**Agreeable**	Qualitative	Agreeable	Agreeable
3	**pH**	-	APHA 23rd Ed. 2017-4500 H^+	**7.4**	1 - 14	6.5-8.5	No Relaxation
4	**Turbidity**	NTU	APHA 23rd Ed. 2017-2130 B	**BDL**	2 - 40	1	5
5	**Total Dissolved Solids (TDS)**	mg/l	IS: 3025 (Part-16): 1984 Reaffirmed: 2017	**402.6**	10 - 5000	500	2000
6	**Ammonia (as total ammonia-N)**	mg/l	APHA 23rd Ed. 2017-4500-NH_3 F	**BDL**	0.5 - 2.0	0.5	No Relaxation
7	**Anionic Detergents (as MBAS)**	mg/l	APHA 23rd Ed. 2017-5540 C	**BDL**	0.05 - 0.5	0.2	1.0
8	**Calcium as Ca**	mg/l	IS: 3025 (Part-40): 1991 Reaffirmed: 2019	**54.4**	2.0 - 600	75	200
9	**Magnesium as Mg**	mg/l	APHA 23rd Ed. 2017-3500 Mg, B	**31.10**	0.1 - 200	30	100
10	**Chloride as Cl**	mg/l	APHA 23rd Ed. 2017-4500-Cl^- B	**22.0**	2.0 - 2000	250	1000
11	**Fluoride as F**	mg/l	APHA 23rd Ed. 2017-4500 F^- C	**0.39**	0.02 - 5.0	1.0	1.5
12	**Free Residual Chlorine**	mg/l	IS: 3025 (Part-26): 1986 Reaffirmed: 2019	**BDL**	0.1 - 5.0	0.2	1.0
13	**Nitrate as NO_3**	mg/l	IS: 3025 (Part-34): 1986 Reaffirmed: 2019	**BDL**	1.0 - 70	45	No Relaxation
14	**Phenolic Compound (as C_6H_5OH)**	mg/l	APHA 23rd Ed. 2017-5530 C	**BDL**	0.001 - 0.005	0.001	0.002
15	**Sulphate as SO_4**	mg/l	APHA 23rd Ed. 2017-4500- SO_4^{2-}	**27.0**	1.0 - 500	200	400
16	**Alkalinity as $CaCO_3$**	mg/l	APHA 23rd Ed. 2017-2320 B	**288.0**	2.0 - 1000	200	600
17	**Total Hardness as $CaCO_3$**	mg/l	APHA 23rd Ed. 2017-2340 C	**264.0**	5.0 - 800	200	600
18	**Aluminium as Al**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**BDL**	0.015 - 5.0	0.03	0.2
19	**Boron as B**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**BDL**	0.05 - 2.0	0.5	1.0
20	**Copper as Cu**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**BDL**	0.03 - 10	0.05	1.5
21	**Iron as Fe**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**0.12**	0.05 - 20	0.3	No Relaxation

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22	**Manganese as Mn**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**0.04**	0.02 - 5.0	0.1	0.3
23	**Zinc as Zn**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**0.38**	0.05 - 15	5	15
24	**Cadmium as Cd**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**BDL**	0.05 - 2.0	0.003	No Relaxation
25	**Lead as Pb**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**BDL**	0.01 - 10	0.01	No Relaxation
26	**Mercury as Hg**	µg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**BDL**	0.5 - 1000	1.0	No Relaxation
27	**Nickel as Ni**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**BDL**	0.05 - 5.0	0.02	No Relaxation
28	**Arsenic as As**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**BDL**	0.02 - 2.0	0.01	0.05
29	**Total Chromium**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**BDL**	0.03 - 5.0	0.05	No Relaxation
Microbiological Parameters							
30	**E. coli**	MPN/ 100 ml	IS: 1622 - 1981 Reaffirmed: 2019	**Absent**	≥ 2 MPN Present or Absent per 100 ml	Shall not be detected in any 100 ml sample	
31	**T. coli**	MPN/ 100 ml	IS: 1622 - 1981 Reaffirmed: 2019	**Absent**	≥ 2 MPN Present or Absent per 100 ml	Shall not be detected in any 100 ml sample	

BDL=Below Detection Limit

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ETRCPM14/TES-REP/FT/17

TEST REPORT
WATER ANALYSIS

Test Report Ref No.: ETRC/EPA/8671/2023	**Date of Report:** 15/05/2023
Name /Address/Type of Industry	**M/s Gallant Ispat Limited** **Sector-23, Plot no.- AL-5, GIDA** **District: Gorakhpur (U. P.)**

SAMPLE DETAILS

1	Water/ Waste Water	Ground Water	5	Packing Condition	Sealed
2	Sample Description	**Borewell No.- 02, Near Bank of Pond**	6	Sample Collected By	Industry Self
3	Sample received date	11.05.2023	7	Analysis Start Date	11.05.2023
4	Sample Quantity	5.0 liters	8	Analysis End Date	15.05.2023

TEST RESULT

Sr. No	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing /limit of detection	Indian Standard 10500: 2012	
						Desirable	Permissible
	Physico-chemical Parameters						
1	**Colour**	Hazen	IS: 3025 (Part-4): 1983 Reaffirmed: 2017	**<5.0**	5 - 30	5	15
2	**Odour**	-	IS: 3025 (Part-5): 1983 Reaffirmed: 2017	**Agreeable**	Qualitative	Agreeable	Agreeable
3	**pH**	-	APHA 23rd Ed. 2017-4500 H^+	**7.5**	1 - 14	6.5-8.5	No Relaxation
4	**Turbidity**	NTU	APHA 23rd Ed. 2017-2130 B	**BDL**	2 - 40	1	5
5	**Total Dissolved Solids (TDS)**	mg/l	IS: 3025 (Part-16): 1984 Reaffirmed: 2017	**398.4**	10 - 5000	500	2000
6	**Ammonia (as total ammonia-N)**	mg/l	APHA 23rd Ed. 2017-4500-NH_3 F	**BDL**	0.5 - 2.0	0.5	No Relaxation
7	**Anionic Detergents (as MBAS)**	mg/l	APHA 23rd Ed. 2017-5540 C	**BDL**	0.05 - 0.5	0.2	1.0
8	**Calcium as Ca**	mg/l	IS: 3025 (Part-40): 1991 Reaffirmed: 2019	**52.8**	2.0 - 600	75	200
9	**Magnesium as Mg**	mg/l	APHA 23rd Ed. 2017-3500 Mg, B	**28.18**	0.1 - 200	30	100
10	**Chloride as Cl**	mg/l	APHA 23rd Ed. 2017-4500-Cl^- B	**28.0**	2.0 - 2000	250	1000
11	**Fluoride as F**	mg/l	APHA 23rd Ed. 2017-4500 F^- C	**0.36**	0.02 - 5.0	1.0	1.5
12	**Free Residual Chlorine**	mg/l	IS: 3025 (Part-26): 1986 Reaffirmed: 2019	**BDL**	0.1 - 5.0	0.2	1.0
13	**Nitrate as NO_3**	mg/l	IS: 3025 (Part-34): 1986 Reaffirmed: 2019	**BDL**	1.0 - 70	45	No Relaxation
14	**Phenolic Compound (as C_6H_5OH)**	mg/l	APHA 23rd Ed. 2017-5530 C	**BDL**	0.001 - 0.005	0.001	0.002
15	**Sulphate as SO_4**	mg/l	APHA 23rd Ed. 2017-4500- SO_4^{2-}	**29.0**	1.0 - 500	200	400
16	**Alkalinity as $CaCO_3$**	mg/l	APHA 23rd Ed. 2017-2320 B	**280.0**	2.0 - 1000	200	600
17	**Total Hardness as $CaCO_3$**	mg/l	APHA 23rd Ed. 2017-2340 C	**248.0**	5.0 - 800	200	600
18	**Aluminium as Al**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**BDL**	0.015 - 5.0	0.03	0.2
19	**Boron as B**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**BDL**	0.05 - 2.0	0.5	1.0
20	**Copper as Cu**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**BDL**	0.03 - 10	0.05	1.5
21	**Iron as Fe**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**0.13**	0.05 - 20	0.3	No Relaxation

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22	**Manganese as Mn**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**0.05**	0.02 - 5.0	0.1	0.3
23	**Zinc as Zn**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**0.34**	0.05 - 15	5	15
24	**Cadmium as Cd**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**BDL**	0.05 - 2.0	0.003	No Relaxation
25	**Lead as Pb**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**BDL**	0.01 - 10	0.01	No Relaxation
26	**Mercury as Hg**	µg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**BDL**	0.5 - 1000	1.0	No Relaxation
27	**Nickel as Ni**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**BDL**	0.05 - 5.0	0.02	No Relaxation
28	**Arsenic as As**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**BDL**	0.02 - 2.0	0.01	0.05
29	**Total Chromium**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**BDL**	0.03 - 5.0	0.05	No Relaxation
Microbiological Parameters							
30	**E. coli**	MPN/ 100 ml	IS: 1622 - 1981 Reaffirmed: 2019	**Absent**	≥ 2 MPN Present or Absent per 100 ml	Shall not be detected in any 100 ml sample	
31	**T. coli**	MPN/ 100 ml	IS: 1622 - 1981 Reaffirmed: 2019	**Absent**	≥ 2 MPN Present or Absent per 100 ml	Shall not be detected in any 100 ml sample	

BDL=Below Detection Limit

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ETRCPM14/TES-REP/FT/17

TEST REPORT
WATER ANALYSIS

Test Report Ref No.: ETRC/EPA/8806/2023	**Date of Report:** 10/06/2023
Name /Address/Type of Industry	**M/s Gallant Ispat Limited** **Sector-23, Plot no.- AL-5, GIDA** **District: Gorakhpur (U. P.)**

SAMPLE DETAILS

1	Water/ Waste Water	Ground Water	5	Packing Condition	Sealed
2	Sample Description	**Borewell No.- 02, Near Bank of Pond**	6	Sample Collected By	Industry Self
3	Sample received date	05.06.2023	7	Analysis Start Date	05.06.2023
4	Sample Quantity	5.0 liters	8	Analysis End Date	09.06.2023

TEST RESULT

Sr. No	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing /limit of detection	Indian Standard 10500: 2012	
						Desirable	Permissible
	Physico-chemical Parameters						
1	**Colour**	Hazen	IS: 3025 (Part-4): 1983 Reaffirmed: 2017	**<5.0**	5 - 30	5	15
2	**Odour**	-	IS: 3025 (Part-5): 1983 Reaffirmed: 2017	**Agreeable**	Qualitative	Agreeable	Agreeable
3	**pH**	-	APHA 23rd Ed. 2017-4500 H^+	**7.4**	1 - 14	6.5-8.5	No Relaxation
4	**Turbidity**	NTU	APHA 23rd Ed. 2017-2130 B	**BDL**	2 - 40	1	5
5	**Total Dissolved Solids (TDS)**	mg/l	IS: 3025 (Part-16): 1984 Reaffirmed: 2017	**412.0**	10 - 5000	500	2000
6	**Ammonia (as total ammonia-N)**	mg/l	APHA 23rd Ed. 2017-4500-NH_3 F	**BDL**	0.5 - 2.0	0.5	No Relaxation
7	**Anionic Detergents (as MBAS)**	mg/l	APHA 23rd Ed. 2017-5540 C	**BDL**	0.05 - 0.5	0.2	1.0
8	**Calcium as Ca**	mg/l	IS: 3025 (Part-40): 1991 Reaffirmed: 2019	**51.2**	2.0 - 600	75	200
9	**Magnesium as Mg**	mg/l	APHA 23rd Ed. 2017-3500 Mg, B	**30.13**	0.1 - 200	30	100
10	**Chloride as Cl**	mg/l	APHA 23rd Ed. 2017-4500-Cl^- B	**28.0**	2.0 - 2000	250	1000
11	**Fluoride as F**	mg/l	APHA 23rd Ed. 2017-4500 F^- C	**0.38**	0.02 - 5.0	1.0	1.5
12	**Free Residual Chlorine**	mg/l	IS: 3025 (Part-26): 1986 Reaffirmed: 2019	**BDL**	0.1 - 5.0	0.2	1.0
13	**Nitrate as NO_3**	mg/l	IS: 3025 (Part-34): 1986 Reaffirmed: 2019	**BDL**	1.0 - 70	45	No Relaxation
14	**Phenolic Compound (as C_6H_5OH)**	mg/l	APHA 23rd Ed. 2017-5530 C	**BDL**	0.001 - 0.005	0.001	0.002
15	**Sulphate as SO_4**	mg/l	APHA 23rd Ed. 2017-4500- SO_4^{2-}	**31.0**	1.0 - 500	200	400
16	**Alkalinity as $CaCO_3$**	mg/l	APHA 23rd Ed. 2017-2320 B	**296.0**	2.0 - 1000	200	600
17	**Total Hardness as $CaCO_3$**	mg/l	APHA 23rd Ed. 2017-2340 C	**252.0**	5.0 - 800	200	600
18	**Aluminium as Al**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**BDL**	0.015 - 5.0	0.03	0.2
19	**Boron as B**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**BDL**	0.05 - 2.0	0.5	1.0
20	**Copper as Cu**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**BDL**	0.03 - 10	0.05	1.5
21	**Iron as Fe**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**0.11**	0.05 - 20	0.3	No Relaxation

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ISO 9001:2015, ISO 45001:2018 (OH&S) ISO 14001:2015

Test Report Ref No.: ETRC/EPA/8806/2023

22	**Manganese as Mn**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**0.07**	0.02 - 5.0	0.1	0.3
23	**Zinc as Zn**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**0.49**	0.05 - 15	5	15
24	**Cadmium as Cd**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**BDL**	0.05 - 2.0	0.003	No Relaxation
25	**Lead as Pb**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**BDL**	0.01 - 10	0.01	No Relaxation
26	**Mercury as Hg**	µg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**BDL**	0.5 - 1000	1.0	No Relaxation
27	**Nickel as Ni**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**BDL**	0.05 - 5.0	0.02	No Relaxation
28	**Arsenic as As**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**BDL**	0.02 - 2.0	0.01	0.05
29	**Total Chromium**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**BDL**	0.03 - 5.0	0.05	No Relaxation
Microbiological Parameters							
30	**E. coli**	MPN/ 100 ml	IS: 1622 - 1981 Reaffirmed: 2019	**Absent**	≥ 2 MPN Present or Absent per 100 ml	Shall not be detected in any 100 ml sample	
31	**T. coli**	MPN/ 100 ml	IS: 1622 - 1981 Reaffirmed: 2019	**Absent**	≥ 2 MPN Present or Absent per 100 ml	Shall not be detected in any 100 ml sample	

BDL=Below Detection Limit

..... **END OF REPORT**.....

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Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

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Authorized Signatory
(Ritu Garg)
QM

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ETRCPM14/TES-REP/FT/17

TEST REPORT
WATER ANALYSIS

Test Report Ref No.: ETRC/EPA/8978/2023	**Date of Report:** 15/07/2023
Name /Address/Type of Industry	**M/s Gallant Ispat Limited** **Sector-23, Plot no.- AL-5, GIDA** **District: Gorakhpur (U. P.)**

SAMPLE DETAILS

1	Water/ Waste Water	Ground Water	5	Packing Condition	Sealed
2	Sample Description	**Borewell No.- 02, Near Bank of Pond**	6	Sample Collected By	Industry Self
3	Sample received date	10.07.2023	7	Analysis Start Date	10.07.2023
4	Sample Quantity	5.0 liters	8	Analysis End Date	14.07.2023

TEST RESULT

Sr. No	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing /limit of detection	Indian Standard 10500: 2012	
						Desirable	Permissible
	Physico-chemical Parameters						
1	**Colour**	Hazen	IS: 3025 (Part-4): 1983 Reaffirmed: 2017	**<5.0**	5 - 30	5	15
2	**Odour**	-	IS: 3025 (Part-5): 1983 Reaffirmed: 2017	**Agreeable**	Qualitative	Agreeable	Agreeable
3	**pH**	-	APHA 23rd Ed. 2017-4500 H^+	**7.5**	1 - 14	6.5-8.5	No Relaxation
4	**Turbidity**	NTU	APHA 23rd Ed. 2017-2130 B	**BDL**	2 - 40	1	5
5	**Total Dissolved Solids (TDS)**	mg/l	IS: 3025 (Part-16): 1984 Reaffirmed: 2017	**396.4**	10 - 5000	500	2000
6	**Ammonia (as total ammonia-N)**	mg/l	APHA 23rd Ed. 2017-4500-NH_3 F	**BDL**	0.5 - 2.0	0.5	No Relaxation
7	**Anionic Detergents (as MBAS)**	mg/l	APHA 23rd Ed. 2017-5540 C	**BDL**	0.05 - 0.5	0.2	1.0
8	**Calcium as Ca**	mg/l	IS: 3025 (Part-40): 1991 Reaffirmed: 2019	**56.0**	2.0 - 600	75	200
9	**Magnesium as Mg**	mg/l	APHA 23rd Ed. 2017-3500 Mg, B	**33.0**	0.1 - 200	30	100
10	**Chloride as Cl**	mg/l	APHA 23rd Ed. 2017-4500-Cl^- B	**32.0**	2.0 - 2000	250	1000
11	**Fluoride as F**	mg/l	APHA 23rd Ed. 2017-4500 F^- C	**0.41**	0.02 - 5.0	1.0	1.5
12	**Free Residual Chlorine**	mg/l	IS: 3025 (Part-26): 1986 Reaffirmed: 2019	**BDL**	0.1 - 5.0	0.2	1.0
13	**Nitrate as NO_3**	mg/l	IS: 3025 (Part-34): 1986 Reaffirmed: 2019	**BDL**	1.0 - 70	45	No Relaxation
14	**Phenolic Compound (as C_6H_5OH)**	mg/l	APHA 23rd Ed. 2017-5530 C	**BDL**	0.001 - 0.005	0.001	0.002
15	**Sulphate as SO_4**	mg/l	APHA 23rd Ed. 2017-4500- SO_4^{2-}	**28.0**	1.0 - 500	200	400
16	**Alkalinity as $CaCO_3$**	mg/l	APHA 23rd Ed. 2017-2320 B	**304.0**	2.0 - 1000	200	600
17	**Total Hardness as $CaCO_3$**	mg/l	APHA 23rd Ed. 2017-2340 C	**276.0**	5.0 - 800	200	600
18	**Aluminium as Al**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**BDL**	0.015 - 5.0	0.03	0.2
19	**Boron as B**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**BDL**	0.05 - 2.0	0.5	1.0
20	**Copper as Cu**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**BDL**	0.03 - 10	0.05	1.5
21	**Iron as Fe**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**0.12**	0.05 - 20	0.3	No Relaxation

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22	**Manganese as Mn**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**0.03**	0.02 - 5.0	0.1	0.3
23	**Zinc as Zn**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**0.52**	0.05 - 15	5	15
24	**Cadmium as Cd**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**BDL**	0.05 - 2.0	0.003	No Relaxation
25	**Lead as Pb**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**BDL**	0.01 - 10	0.01	No Relaxation
26	**Mercury as Hg**	µg/l	APHA 23rd Ed. 2017-3112 B	**BDL**	0.5 - 1000	1.0	No Relaxation
27	**Nickel as Ni**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**BDL**	0.05 - 5.0	0.02	No Relaxation
28	**Arsenic as As**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**BDL**	0.02 - 2.0	0.01	0.05
29	**Total Chromium**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**BDL**	0.03 - 5.0	0.05	No Relaxation
Microbiological Parameters							
30	**E. coli**	MPN/ 100 ml	IS: 1622 - 1981 Reaffirmed: 2019	**Absent**	≥ 2 MPN Present or Absent per 100 ml	Shall not be detected in any 100 ml sample	
31	**T. coli**	MPN/ 100 ml	IS: 1622 - 1981 Reaffirmed: 2019	**Absent**	≥ 2 MPN Present or Absent per 100 ml	Shall not be detected in any 100 ml sample	

BDL=Below Detection Limit

..... **END OF REPORT**.....

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Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

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ETRCPM14/TES-REP/FT/17

TEST REPORT
WATER ANALYSIS

Test Report Ref No.: ETRC/EPA/9103/2023	**Date of Report:** 12/08/2023
Name /Address/Type of Industry	**M/s Gallant Ispat Limited** **Sector-23, Plot no.- AL-5, GIDA** **District: Gorakhpur (U. P.)**

SAMPLE DETAILS

1	Water/ Waste Water	Ground Water	5	Packing Condition	Sealed
2	Sample Description	**Borewell No.- 02, Near Bank of Pond**	6	Sample Collected By	Industry Self
3	Sample received date	07.08.2023	7	Analysis Start Date	07.08.2023
4	Sample Quantity	5.0 liters	8	Analysis End Date	11.08.2023

TEST RESULT

Sr. No	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing /limit of detection	Indian Standard 10500: 2012	
						Desirable	Permissible
	Physico-chemical Parameters						
1	**Colour**	Hazen	IS: 3025 (Part-4): 1983 Reaffirmed: 2017	**<5.0**	5 - 30	5	15
2	**Odour**	-	IS: 3025 (Part-5): 1983 Reaffirmed: 2017	**Agreeable**	Qualitative	Agreeable	Agreeable
3	**pH**	-	APHA 23rd Ed. 2017-4500 H^+	**7.5**	1 - 14	6.5-8.5	No Relaxation
4	**Turbidity**	NTU	APHA 23rd Ed. 2017-2130 B	**BDL**	2 - 40	1	5
5	**Total Dissolved Solids (TDS)**	mg/l	IS: 3025 (Part-16): 1984 Reaffirmed: 2017	**404.6**	10 - 5000	500	2000
6	**Ammonia (as total ammonia-N)**	mg/l	APHA 23rd Ed. 2017-4500-NH_3 F	**BDL**	0.5 - 2.0	0.5	No Relaxation
7	**Anionic Detergents (as MBAS)**	mg/l	APHA 23rd Ed. 2017-5540 C	**BDL**	0.05 - 0.5	0.2	1.0
8	**Calcium as Ca**	mg/l	IS: 3025 (Part-40): 1991 Reaffirmed: 2019	**54.4**	2.0 - 600	75	200
9	**Magnesium as Mg**	mg/l	APHA 23rd Ed. 2017-3500 Mg, B	**27.21**	0.1 - 200	30	100
10	**Chloride as Cl**	mg/l	APHA 23rd Ed. 2017-4500-Cl^- B	**28.0**	2.0 - 2000	250	1000
11	**Fluoride as F**	mg/l	APHA 23rd Ed. 2017-4500 F^- C	**0.39**	0.02 - 5.0	1.0	1.5
12	**Free Residual Chlorine**	mg/l	IS: 3025 (Part-26): 1986 Reaffirmed: 2019	**BDL**	0.1 - 5.0	0.2	1.0
13	**Nitrate as NO_3**	mg/l	IS: 3025 (Part-34): 1986 Reaffirmed: 2019	**BDL**	1.0 - 70	45	No Relaxation
14	**Phenolic Compound (as C_6H_5OH)**	mg/l	APHA 23rd Ed. 2017-5530 C	**BDL**	0.001 - 0.005	0.001	0.002
15	**Sulphate as SO_4**	mg/l	APHA 23rd Ed. 2017-4500- SO_4^{2-}	**24.0**	1.0 - 500	200	400
16	**Alkalinity as $CaCO_3$**	mg/l	APHA 23rd Ed. 2017-2320 B	**284.0**	2.0 - 1000	200	600
17	**Total Hardness as $CaCO_3$**	mg/l	APHA 23rd Ed. 2017-2340 C	**248.0**	5.0 - 800	200	600
18	**Aluminium as Al**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**BDL**	0.015 - 5.0	0.03	0.2
19	**Boron as B**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**BDL**	0.05 - 2.0	0.5	1.0
20	**Copper as Cu**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**BDL**	0.03 - 10	0.05	1.5
21	**Iron as Fe**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**0.15**	0.05 - 20	0.3	No Relaxation

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22	**Manganese as Mn**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**0.02**	0.02 - 5.0	0.1	0.3
23	**Zinc as Zn**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**0.56**	0.05 - 15	5	15
24	**Cadmium as Cd**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**BDL**	0.05 - 2.0	0.003	No Relaxation
25	**Lead as Pb**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**BDL**	0.01 - 10	0.01	No Relaxation
26	**Mercury as Hg**	µg/l	APHA 23rd Ed. 2017-3112 B	**BDL**	0.5 - 1000	1.0	No Relaxation
27	**Nickel as Ni**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**BDL**	0.05 - 5.0	0.02	No Relaxation
28	**Arsenic as As**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**BDL**	0.02 - 2.0	0.01	0.05
29	**Total Chromium**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**BDL**	0.03 - 5.0	0.05	No Relaxation
Microbiological Parameters							
30	**E. coli**	MPN/ 100 ml	IS: 1622 - 1981 Reaffirmed: 2019	**Absent**	≥ 2 MPN Present or Absent per 100 ml	Shall not be detected in any 100 ml sample	
31	**T. coli**	MPN/ 100 ml	IS: 1622 - 1981 Reaffirmed: 2019	**Absent**	≥ 2 MPN Present or Absent per 100 ml	Shall not be detected in any 100 ml sample	

BDL=Below Detection Limit

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ETRC/PM09/TEST-REP/FT/46

TEST REPORT
WATER ANALYSIS

Test Report Ref No.: ETRC/EPA/9283/2023	**Date of Report:** 06/09/2023
Name /Address/Type of Industry	**M/s Gallant Ispat Limited** **Sector-23, Plot no.- AL-5, GIDA** **District: Gorakhpur (U. P.)**

SAMPLE DETAILS

1	Water/ Waste Water	Ground Water	5	Packing Condition	Sealed
2	Sample Description	**Borewell No.- 02, Near Bank of Pond**	6	Sample Collected By	ETRC
3	Sample received date	03.09.2023	7	Analysis Start Date	03.09.2023
4	Sample Quantity	5.0 liters	8	Analysis End Date	06.09.2023

TEST RESULT

Sr. No	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing /limit of detection	Indian Standard 10500: 2012	
						Desirable	Permissible
	Physico-chemical Parameters						
1	**Colour**	Hazen	IS: 3025 (Part-4): 1983 Reaffirmed: 2017	**<5.0**	5 - 30	5	15
2	**Odour**	-	IS: 3025 (Part-5): 1983 Reaffirmed: 2017	**Agreeable**	Qualitative	Agreeable	Agreeable
3	**pH**	-	APHA 23rd Ed. 2017-4500 H^+	**7.4**	1 - 14	6.5-8.5	No Relaxation
4	**Turbidity**	NTU	APHA 23rd Ed. 2017-2130 B	**BDL**	2 - 40	1	5
5	**Total Dissolved Solids (TDS)**	mg/l	IS: 3025 (Part-16): 1984 Reaffirmed: 2017	**410.2**	10 - 5000	500	2000
6	**Ammonia (as total ammonia-N)**	mg/l	APHA 23rd Ed. 2017-4500-NH_3 F	**BDL**	0.5 - 2.0	0.5	No Relaxation
7	**Anionic Detergents (as MBAS)**	mg/l	APHA 23rd Ed. 2017-5540 C	**BDL**	0.05 - 0.5	0.2	1.0
8	**Calcium as Ca**	mg/l	IS: 3025 (Part-40): 1991 Reaffirmed: 2019	**57.6**	2.0 - 600	75	200
9	**Magnesium as Mg**	mg/l	APHA 23rd Ed. 2017-3500 Mg, B	**30.13**	0.1 - 200	30	100
10	**Chloride as Cl**	mg/l	APHA 23rd Ed. 2017-4500-Cl^- B	**26.0**	2.0 - 2000	250	1000
11	**Fluoride as F**	mg/l	APHA 23rd Ed. 2017-4500 F^- C	**0.36**	0.02 - 5.0	1.0	1.5
12	**Free Residual Chlorine**	mg/l	IS: 3025 (Part-26): 1986 Reaffirmed: 2019	**BDL**	0.1 - 5.0	0.2	1.0
13	**Nitrate as NO_3**	mg/l	IS: 3025 (Part-34): 1986 Reaffirmed: 2019	**BDL**	1.0 - 70	45	No Relaxation
14	**Phenolic Compound (as C_6H_5OH)**	mg/l	APHA 23rd Ed. 2017-5530 C	**BDL**	0.001 - 0.005	0.001	0.002
15	**Sulphate as SO_4**	mg/l	APHA 23rd Ed. 2017-4500- SO_4^{2-}	**26.0**	1.0 - 500	200	400
16	**Alkalinity as $CaCO_3$**	mg/l	APHA 23rd Ed. 2017-2320 B	**292.0**	2.0 - 1000	200	600
17	**Total Hardness as $CaCO_3$**	mg/l	APHA 23rd Ed. 2017-2340 C	**268.0**	5.0 - 800	200	600
18	**Aluminium as Al**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**BDL**	0.015 - 5.0	0.03	0.2
19	**Boron as B**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**BDL**	0.05 - 2.0	0.5	1.0
20	**Copper as Cu**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**BDL**	0.03 - 10	0.05	1.5
21	**Iron as Fe**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**0.12**	0.05 - 20	0.3	No Relaxation

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Test Report Ref No.: ETRC/EPA/9283/2023

22	**Manganese as Mn**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**0.04**	0.02 - 5.0	0.1	0.3
23	**Zinc as Zn**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**0.63**	0.05 - 15	5	15
24	**Cadmium as Cd**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**BDL**	0.05 - 2.0	0.003	No Relaxation
25	**Lead as Pb**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**BDL**	0.01 - 10	0.01	No Relaxation
26	**Mercury as Hg**	µg/l	APHA 23rd Ed. 2017-3112 B	**BDL**	0.5 - 1000	1.0	No Relaxation
27	**Nickel as Ni**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**BDL**	0.05 - 5.0	0.02	No Relaxation
28	**Arsenic as As**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**BDL**	0.02 - 2.0	0.01	0.05
29	**Total Chromium**	mg/l	APHA 23rd Ed. 2017-3120 B (ICP-OES)	**BDL**	0.03 - 5.0	0.05	No Relaxation
	Microbiological Parameters						
30	**E. coli**	MPN/ 100 ml	IS: 1622 - 1981 Reaffirmed: 2019	**Absent**	≥ 2 MPN Present or Absent per 100 ml	Shall not be detected in any 100 ml sample	
31	**T. coli**	MPN/ 100 ml	IS: 1622 - 1981 Reaffirmed: 2019	**Absent**	≥ 2 MPN Present or Absent per 100 ml	Shall not be detected in any 100 ml sample	

BDL=Below Detection Limit

..... **END OF REPORT**.....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that this data reflects our best attempt to generate accurate results for the sample, mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment constituting to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Environmental And Technical Research Centre ★ CHECKED

Authorized Signatory
(Ritu Garg)
QM

Regd. Address: 4/57, Vipul Khand, Gomti Nagar, Lucknow - 226010 (U.P.) Mob: 09897674227

TYRE WASHING ARRANGEMENT

POND – SURDAHI VILLAGE

POND – BHAISLA VILLAGE

POND – BANGAONA VILLAGE

POND – BHELOUR DADHOULI VILLAGE

POND – BHITNI VILLAGE

POND – AKUAPAR VILLAGE

POND – MADHOPUR VILLAGE

POND – DOHARIAKALA VILLAGE

ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory: 2/261, Vishwas Khand, Gomti Nagar, Lucknow- 226 010 (U.P.)
Email : ETRCLTH@YAHOO.IN, Web: www.etrcindia.com

ISO 9001: 2015, ISO 14001: 2015, ISO 45001: 2018 & NABL Accredited Laboratory

ETRC/PM09/TEST-REP/FT/47

TEST REPORT
AMBIENT NOISE MONITORING AND ANALYSIS REPORT

Test Report Ref No.: ETRC/EPA/9282/2023		**Date of Report:** 06/09/2023
Name /Address/Type of Industry		**M/s Gallant Ispat Limited Sector-23, Plot no.- AL-5, GIDA District: Gorakhpur (U. P.)**
Monitored by		**ETRC, Lucknow**
Sr. No.	**GENERAL INFORMATION**	**DETAILS**
(a)	Date of monitoring	02/09/2023 (6:00 AM) to 03/09/2023 (6:00 AM)
(b)	Sample Description	Ambient Noise
(c)	Sampling Location	Near admin block
(d)	Environmental Condition	Normal

TEST RESULT

Ambient Noise Level				
Sr. No.	**Parameter**	**Unit**	**Results DAY TIME (6.00 AM - 10.00PM)**	**Results NIGHT TIME (10.00 PM - 6.00AM)**
1	**Equivalent sound level**	**dB(A)**	63.18	49.82

Noise Standards as per CPCB Schedule rule 3(1) and 4(1)			
Area Code	Category of Area/Zone	Limits in dB(A) Leq	
		Day Time	Night Time
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40

..... **END OF REPORT**.....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that this data reflects our best attempt to generate accurate results for the sample, mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment constituting to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Environmental And Technical Research Centre ★ CHECKED

Authorized Signatory
(Ritu Garg)
QM

UTTAR PRADESH POLLUTION CONTROL BOARD

TC-12V, Vibhuti Khand,Gomti Nagar, Lucknow-226010

Phone:0522-2720828,2720831 Fax:0522-2720764 Email: info@uppcb.com Website: www.uppcb.com

Ref. No : 13827/UPPCB/Gorakhpur(UPPCBRO)/HWM/GORAKHPUR/2021

Dated :28/02/2021

To,

M/s GALLANTT ISPAT LIMITED INTEGRATED STEEL PLANT
AL - 05, Sector 23, GIDA Industrial Area, Tehsil - Sahjanwa, Distt - Gorakhpur,GORAKHPUR,273216
Tehsil : Shahjanwa
District :GORAKHPUR

Sub :- Authorisation issued under the provisions of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016

1. Number of authorization and date of issue 13827 and 28/02/2021 .
2. Reference of application (No. and date) 11307372 and 05/02/2021 .
3. Mr NAVNEET JINDAL of M/s GALLANTT ISPAT LIMITED INTEGRATED STEEL PLANT is hereby granted an authorization based on the enclosed signed inspection report for generation, collection, utilization, storage and disposal or any other use of hazardous or other wastes or both on the premises situated at .

Details of Authorisation

S No.	Category of Hazardous Waste as per the Schedules I,II and III of these rules	Authorised mode of disposal or recycling or utilization or co-processing, etc.	Quantity(ton/annum)
1	Iron dust from APCS (ESP) cat-13.1 Process dust)	Re-Used in Process	100 Kg/day
2	Empty containers contaminated with hazardous (cat-33.1 Chemical-containing residue from decontamination and disposal)	Trough TSDF	2.0 TPA
3	Contaminated cotton rags (cat.-33.2 Sludge from treatment of waste water arising out of cleaning / disposal of barrels / containers)	Trough TSDF	0.4 MTA
4	used oil (5.1 used oil/ spent oil)	Trough TSDF	0.4 MTA

1. The authorization shall be valid for a period of 24/02/2026 from the date of issue of this letter .
2. The authorization is subject to the following general and specific conditions (please specify any conditions that need to be imposed over and above general conditions, if any) .

A General Conditions of Authorization -

1. The authorised person shall comply with the provisions of the Environment (Protection Act, 1986, and the rules made there under .

2. The authorisation or its renewal shall be produced for inspection at the request of an officer authorised by the State Pollution Board .
3. The person authorized shall not rent, lend, sell, transfer or otherwise transport the hazardous and other wastes except what is permitted through this authorization .
4. Any unauthorized change in personnel, equipment or working conditions as mentioned in the application by the person authorized shall constitute a breach of his authorisation .
5. The person authorised shall implement Emergency Response Procedure (ERP) for which this authorisation is being granted considering all site specific possible scenarios such as spillages, leakages, fire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time .
6. The person authorised shall comply with the provisions outlined in the Central Pollution Control Board guidelines on Implementing Liabilities for Environmental Damages due to Handling and Disposal of Hazardous Waste and penalty .
7. It is the duty of the authorised person to take prior permission ot the State Pollution Control Board to close down the facility .
8. The imported hazardous and other wastes shall be fully insured for transit as well as for any accidental occurrence and its clean-up operation .
9. The record of consumption and fate of the imported hazardous and other wastes shall be maintained .
10. The hazardous and other waste which gets generated during recycling or reuse or recovery or pre-processing or utilisation of imported hazardous or other wastes shall be treated and disposed of as per specific conditions of authorisation .
11. The importer or exporter shall bear the cost of Import or export and mitigation of damages if any
12. An application for the renewal of an authorisation shall be made as laid down under these Rules .
13. Any other conditions for compliance as per the Guidelines issued by the Ministry of Environment, Forest and Climate Changes or Central Pollution Control Board from time to time .
14. Annual return shall be filed by June 30th for the period ensuring 31st March of the year .
15. The Unit will file the renewal application at least 2 months prior to the expiry of this Order.

B Specific Conditions of Authorization

1- The Earlier authorization issued by UPPCB vide office letter dated 07.09.2018 is stand canceled and this authorization will be effective. This Authorization is only valid till the industry is complying and has the valid CTO under Air (Prevention and Control of Pollution) Act 1981 as amended and Water (Prevention and Control of Pollution) Act 1974 as amended otherwise this Authorization will automatically become Null and Void.
2- The unit will submit the proof of depositing the requisite processing fees of application in a month otherwise this authorization will stands automatically cancelled.
3- The wastes must be safely collected in leak proof containers and shall be duly marked in a manner suitable for handling, storage and transport and the packaging shall be easily visible and be able to withstand physical conditions and climatic factors. All hazardous waste containers/bags shall be provided with a general label as given in Form 8. The storage area should be at an isolated spot in the premises and must be fenced, covered and duly marked.
4- The authorised person/agency shall ensure that no adverse impact on the air, soil and water including groundwater takes place due to activities for which authorisation has been requested. Comprehensive safety measures must be followed in handling of wastes and the staff must be

properly trained.
5- It is brought to your notice that as per the order dated 14.11.2003 passed by the Hon'ble Supreme Court in W.P. (c) 657 of 1995, no industry covered under Hazardous Waste (Management and Handling) Rules, 1989 (as amended) shall be allowed to operate without valid authorisation. It is also provided in the same order that industries which are not complying with the conditions shall not be allowed to operate. Hence in case you fail to apply for authorisation before its expiry or fails to comply with conditions of the earlier authorisation issued to you, closure order shall be issued against your industry without any further notice.
6- The applicant must file returns on prescribed Form 4 along with a compliance report of this letter. You should also maintain records on Form-3 and present it to Board's inspecting officials.
7- In case of occurrence of an accident, complete details on Form-11 must be sent to U.P. Pollution Control Board at the earliest along with details of mitigative and remedial measures taken.
8- It is also the mandatory duty of the occupier of industry as well as operator of a facility to develop suitable waste treatment and disposal facility and the design of the facility must be approved by the Board. Details along with the project report must be sent in this regard within fifteen days of receipt of this letter, otherwise the industry shall become member of a common TSDF and the industry shall start sending the Hazardous waste already stored along with the Hazardous waste generated at present at this TSDF. The proof of valid membership of TSDF along with proof of disposal of hazardous waste to TSDF shall be sent to U.P. Pollution Control Board within three months.
9- The authorised person shall not receive, collect, or store any hazardous waste from any unauthorised occupier or generator of hazardous wastes. In case any hazardous wastes is sold to any other reprocessing unit it must be ensured that such unit is fully complying with environmental requirements and has a valid authorisation of the Board.
10- In no case any hazardous wastes shall be disposed off on land, in any drain or stream. All spillages of hazardous chemicals, used containers of hazardous chemicals such as flammable, corrosive, explosive and toxic nature must be safely collected and stored. Non-compatible wastes must be suitably and safely handled.
11- Proposal regarding waste minimization and reuse of wastes must be sent. Details of any recovery/ reuse system must be sent within two months.
12- It is within the powers and functions of the U.P. Pollution Control Board to suspend/ cancel the authorization issued under the Rule- 6(2) of The Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.
13- The stored waste shall not be taken out of the storage area except with the written permission of the State Pollution Control Board in this regard.
14- You are directed to display online data outside the main factory gate with regards to quantity and nature of hazardous chemicals being handled in the plant including waste water and air emissions and solid hazardous waste generated within the factory premises. Necessary compliance should be sent within fifteen days of receipt of this letter.
15- It is the mandatory duty of the authorised person to comply with the guideline for transportation of hazardous waste in accordance with Rule 18 of The Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016. A guideline in this regard has been issued by Central Pollution Control Board from time to time.
16- You are directed to provide the complete details regarding the quantity of hazardous waste stored in the factory premises within a month.
17- You are directed to provide all hazardous waste generated in the factory to any TSDF operating in the state for the treatment and disposal and send the compliance report to the U.P. Pollution Control Board at the earliest.
18- Status report of hazardous waste stored in premises available storage capacity and future action

plan for permanent safe disposal of hazardous waste shall be submitted within one month. .

19- Ground water monitoring report of premises shall be submitted within one month.

20- Industry will follow the various provisions of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.

(Authorized Signatory)

RAKESH KUMAR TYAGI

Digitally signed by RAKESH KUMAR TYAGI
DN: c=IN, o=Uttar Pradesh Pollution Control Board, ou=Environment, postalCode=226010, st=Uttar Pradesh, 2.5.4.20=4ed33517cb50b1d55a186a4e980f7be4cb1c2f2729bbee35986f36aab685f410, cn=RAKESH KUMAR TYAGI
Date: 2021.03.02 15:18:40 +05'30'

UTTAR PRADESH POLLUTION CONTROL BOARD

Copy to: To the Regional Officer, U.P.Pollution Control Board, Gorakhpur for information and necessary action .

RAKESH KUMAR TYAGI

Digitally signed by RAKESH KUMAR TYAGI
DN: c=IN, o=Uttar Pradesh Pollution Control Board, ou=Environment, postalCode=226010, st=Uttar Pradesh, 2.5.4.20=4ed33517cb50b1d55a186a4e980f7be4cb1c2f2729bbee35986f36aab685f410, cn=RAKESH KUMAR TYAGI
Date: 2021.03.02 15:19:03 +05'30'

CEO/EE, I/C Circle_____

FORM No.27

[Prescribed under the Schedule specified under Rule 109]

Serial No.	Department / Work	Name of worker	Nature of job or occupation	Raw material products or by - products likely	Dates of		Signs and symptoms observed during	Nature of tests and results thereof	If declared unfit for work , state period of suspension with	Whether certificate of unfitness issued to the worker	Re-certified fit to resume duty on	Signature of the Certifying Surgeon with date
					Date	Results Fit or Unit						
1	2	3	4	5	6	7	8	9	10	11	12	13
1	OFFICE	AMIT JALAN	CHIEF FINANCE OFFICER	NA	18.10.2023	Fit	NAD	TMT, KFT, LFT, PFT, Chest X - Ray, Audiometry, Vision, CBC, Physical Check up, Spirometry	NA	NA	NA	18.10.2023
2	FURNACE	ANIL KUMAR SINGH	MECHANICAL FOREMAN	Sponge Iron, MS Scrap, SiMn	18.10.2023	Fit	NAD	TMT, KFT, LFT, PFT, Chest X - Ray, Audiometry, Vision, CBC, Physical Check up, Spirometry	NA	NA	NA	18.10.2023
3	OFFICE	ASHOK KUMAR SRIVASTAVA	PURCHASE ASSISTANT	NA	18.10.2023	Fit	NAD	TMT, KFT, LFT, PFT, Chest X - Ray, Audiometry, Vision, CBC, Physical Check up, Spirometry	NA	NA	NA	18.10.2023
4	CCM	BACHHAN YADAV	TEEMER MAN	Liquid Metal, Co2 Gas	18.10.2023	Fit	NAD	TMT, KFT, LFT, PFT, Chest X - Ray, Audiometry, Vision, CBC, Physical Check up, Spirometry	NA	NA	NA	18.10.2023
5	GENERAL PLANT	DHARMENDRA RAI (CPP)	SUPERVISOR	Steem, Coal, Dolochar, Rice	20.10.2023	Fit	NAD	TMT, KFT, LFT, PFT, Chest X - Ray, Audiometry, Vision, CBC, Physical Check up, Spirometry	NA	NA	NA	20.10.2023
6	ROLLING MILL	JAI PRAKASH YADAV	CNC OPERATOR	Mild Steel	20.10.2023	Fit	NAD	TMT, KFT, LFT, PFT, Chest X - Ray, Audiometry, Vision, CBC, Physical Check up, Spirometry	NA	NA	NA	20.10.2023
7	OFFICE	KUSH UPADHYAY	DISPATCH MANAGER	NA	18.10.2023	Fit	NAD	TMT, KFT, LFT, PFT, Chest X - Ray, Audiometry, Vision, CBC, Physical Check up, Spirometry	NA	NA	NA	18.10.2023
8	ROLLING MILL	MAL DHANI	ELECTRICIAN (Sr.)	Electrical Energy, Hot Billet	20.10.2023	Fit	NAD	TMT, KFT, LFT, PFT, Chest X - Ray, Audiometry, Vision, CBC, Physical Check up, Spirometry	NA	NA	NA	20.10.2023
9	ROLLING MILL	MANOJ KUMAR SHUKLA	BILLET YARD SUPERVISOR	Hot Billet	18.10.2023	Fit	NAD	TMT, KFT, LFT, PFT, Chest X - Ray, Audiometry, Vision, CBC, Physical Check up, Spirometry	NA	NA	NA	18.10.2023
10	OFFICE	NAVNEET JINDAL	COMMERCIAL SR. GENER	NA	18.10.2023	Fit	NAD	TMT, KFT, LFT, PFT, Chest X - Ray, Audiometry, Vision, CBC, Physical Check up, Spirometry	NA	NA	NA	18.10.2023
11	OFFICE	RAMESH ACHARAYA	OFFICE/ACCOUNT ASSIST	NA	19.10.2023	Fit	NAD	TMT, KFT, LFT, PFT, Chest X - Ray, Audiometry, Vision, CBC, Physical Check up, Spirometry	NA	NA	NA	19.10.2023
12	OFFICE	RAMESH CHANDRA	OFFICE (RUNNER)	NA	16.10.2023	Fit	NAD	TMT, KFT, LFT, PFT, Chest X - Ray, Audiometry, Vision, CBC, Physical Check up, Spirometry	NA	NA	NA	16.10.2023
13	OFFICE	VISHNU DEO TRIPATHI	ASST. MANAGER ACCOUN	NA	18.10.2023	Fit	NAD	TMT, KFT, LFT, PFT, Chest X - Ray, Audiometry, Vision, CBC, Physical Check up, Spirometry	NA	NA	NA	18.10.2023
14	OLLING MILL	GIRISH CHANDRA YADAV	FITTER MECHANICAL	Hot Billet	18.10.2023	Fit	NAD	TMT, KFT, LFT, PFT, Chest X - Ray, Audiometry, Vision, CBC, Physical Check up, Spirometry	NA	NA	NA	18.10.2023
15	ENERAL PLANT	ANIRUDH YADAV	STORE HELPER	NA	18.10.2023	Fit	NAD	TMT, KFT, LFT, PFT, Chest X - Ray, Audiometry, Vision, CBC, Physical Check up, Spirometry	NA	NA	NA	18.10.2023
16	ONGE IRON	BHOLA SHARAN	Sr.MANAGER (PROCESS)	Iron Ore Pellet, Coal, Dolom	18.10.2023	Fit	NAD	TMT, KFT, LFT, PFT, Chest X - Ray, Audiometry, Vision, CBC, Physical Check up, Spirometry	NA	NA	NA	18.10.2023
17	DMINISTRATION PL	SANJAY SHARMA	SR. G M ELECTRICAL	Electrical Energy	18.10.2023	Fit	NAD	TMT, KFT, LFT, PFT, Chest X - Ray, Audiometry, Vision, CBC, Physical Check up, Spirometry	NA	NA	NA	18.10.2023
18	SPONGE IRON	UMESH CHAUBEY	MANAGER (ELECTRICAL)	Electrical Energy	20.10.2023	Fit	NAD	TMT, KFT, LFT, PFT, Chest X - Ray, Audiometry, Vision, CBC, Physical Check up, Spirometry	NA	NA	NA	20.10.2023
19	OFFICE	KAMLESH KUMAR	SR. SALES ASST.	NA	20.10.2023	Fit	NAD	TMT, KFT, LFT, PFT, Chest X - Ray, Audiometry, Vision, CBC, Physical Check up, Spirometry	NA	NA	NA	20.10.2023
20	SPONGE IRON	DILEEP SINGH	UTILITY COMPRESSOR OP	Iron Ore Pellet, Coal, Dolom	20.10.2023	Fit	NAD	TMT, KFT, LFT, PFT, Chest X - Ray, Audiometry, Vision, CBC, Physical Check up, Spirometry	NA	NA	NA	20.10.2023
21	OFFICE	SAMRENDRA KUMAR SINGH	PURCAHSE MANAGER	NA	18.10.2023	Fit	NAD	TMT, KFT, LFT, PFT, Chest X - Ray, Audiometry, Vision, CBC, Physical Check up, Spirometry	NA	NA	NA	18.10.2023
22	OFFICE	ALOK NARAYAN TRIPATHI	PURCAHSE MANAGER	NA	18.10.2023	Fit	NAD	TMT, KFT, LFT, PFT, Chest X - Ray, Audiometry, Vision, CBC, Physical Check up, Spirometry	NA	NA	NA	18.10.2023
23	SPONGE IRON	ANIL SINGH	MECHANICAL ASST. FITTE	Iron Ore Pellet, Coal, Dolom	17.10.2023	Fit	NAD	TMT, KFT, LFT, PFT, Chest X - Ray, Audiometry, Vision, CBC, Physical Check up, Spirometry	NA	NA	NA	17.10.2023
24	SPONGE IRON	NAGINA PAL	SR.FITTER	Iron Ore Pellet, Coal, Dolom	18.10.2023	Fit	NAD	TMT, KFT, LFT, PFT, Chest X - Ray, Audiometry, Vision, CBC, Physical Check up, Spirometry	NA	NA	NA	18.10.2023
25	SPONGE IRON	AJEET SINGH	MECHANICAL FITTER	Iron Ore Pellet, Coal, Dolom	16.10.2023	Fit	NAD	TMT, KFT, LFT, PFT, Chest X - Ray, Audiometry, Vision, CBC, Physical Check up, Spirometry	NA	NA	NA	16.10.2023
26	SPONGE IRON	NEERAJ KUMAR PANDEY	MECHANICAL SHIFT ENGI	Iron Ore Pellet, Coal, Dolom	18.10.2023	Fit	NAD	TMT, KFT, LFT, PFT, Chest X - Ray, Audiometry, Vision, CBC, Physical Check up, Spirometry	NA	NA	NA	18.10.2023
27	SPONGE IRON	ARUN KUMAR MISHRA	PROCESS SHIFT INCHARG	Iron Ore Pellet, Coal, Dolom	18.10.2023	Fit	NAD	TMT, KFT, LFT, PFT, Chest X - Ray, Audiometry, Vision, CBC, Physical Check up, Spirometry	NA	NA	NA	18.10.2023
28	SPONGE IRON	PREM PRAKASH	MECHANICAL WELDER (D	Iron Ore Pellet, Coal, Dolom	16.10.2023	Fit	NAD	TMT, KFT, LFT, PFT, Chest X - Ray, Audiometry, Vision, CBC, Physical Check up, Spirometry	NA	NA	NA	16.10.2023
29	FURNACE	HEMANT CHAUHAN (FURNA	SLAG CRUSHER MECHANI	Sponge Iron, MS Scrap, SiMn	20.10.2023	Fit	NAD	TMT, KFT, LFT, PFT, Chest X - Ray, Audiometry, Vision, CBC, Physical Check up, Spirometry	NA	NA	NA	20.10.2023
30	SPONGE IRON	GANGA PRASAD SINGH	POLLUTION CONTROL RIC	Iron Ore Pellet, Coal, Dolom	18.10.2023	Fit	NAD	TMT, KFT, LFT, PFT, Chest X - Ray, Audiometry, Vision, CBC, Physical Check up, Spirometry	NA	NA	NA	18.10.2023
31	SPONGE IRON	ARVIND KUMAR SINGH	MECHANICAL RIGGER	Iron Ore Pellet, Coal, Dolom	16.10.2023	Fit	NAD	TMT, KFT, LFT, PFT, Chest X - Ray, Audiometry, Vision, CBC, Physical Check up, Spirometry	NA	NA	NA	16.10.2023
32	FURNACE	AJAY KUMAR SINGH (FURNA	SLAG CRUSHER MECHANI	Slag	17.10.2023	Fit	NAD	TMT, KFT, LFT, PFT, Chest X - Ray, Audiometry, Vision, CBC, Physical Check up, Spirometry	NA	NA	NA	17.10.2023
33	SPONGE IRON	BHAGWAN SINGH YADAV	SR.FITTER	Iron Ore Pellet, Coal, Dolom	18.10.2023	Fit	NAD	TMT, KFT, LFT, PFT, Chest X - Ray, Audiometry, Vision, CBC, Physical Check up, Spirometry	NA	NA	NA	18.10.2023
34	SPONGE IRON	SATISH SINGH	DY. MANAGER POLLUTIO	Iron Ore Pellet, Coal, Dolom	19.10.2023	Fit	NAD	TMT, KFT, LFT, PFT, Chest X - Ray, Audiometry, Vision, CBC, Physical Check up, Spirometry	NA	NA	NA	19.10.2023
35	GENERAL PLANT	SHAILENDRA MISHRA	LAB SHIFT INCHARGE	Chemicals	17.10.2023	Fit	NAD	TMT, KFT, LFT, PFT, Chest X - Ray, Audiometry, Vision, CBC, Physical Check up, Spirometry	NA	NA	NA	17.10.2023
36	GENERAL PLANT	OMVEER SINGH RATHOUR	SECURITY OFFICER	NA	20.10.2023	Fit	NAD	TMT, KFT, LFT, PFT, Chest X - Ray, Audiometry, Vision, CBC, Physical Check up, Spirometry	NA	NA	NA	20.10.2023
37	FURNACE	BASHISHTA PANDEY	ELECTRICAL ENGINEER	Sponge Iron, MS Scrap, SiMn	18.10.2023	Fit	NAD	TMT, KFT, LFT, PFT, Chest X - Ray, Audiometry, Vision, CBC, Physical Check up, Spirometry	NA	NA	NA	18.10.2023
38	ROLLING MILL	RAM PRASAD YADAV	ENGINEER ELECTRICAL	Hot Billet	19.10.2023	Fit	NAD	TMT, KFT, LFT, PFT, Chest X - Ray, Audiometry, Vision, CBC, Physical Check up, Spirometry	NA	NA	NA	19.10.2023
39	CCM	SATYA PAL YADAV	SHIFT INCHARGE	Liquid Metal, Co2 Gas	16.10.2023	Fit	NAD	TMT, KFT, LFT, PFT, Chest X - Ray, Audiometry, Vision, CBC, Physical Check up, Spirometry	NA	NA	NA	16.10.2023
40	POWER PLANT	ARVIND KUMAR RAI	ELECTRICAL ENGINEER	Electrical Energy	20.10.2023	Fit	NAD	TMT, KFT, LFT, PFT, Chest X - Ray, Audiometry, Vision, CBC, Physical Check up, Spirometry	NA	NA	NA	20.10.2023
41	POWER PLANT	YOGENDRA SINGH	FIRST CLASS BOILER ATTE	Electrical Energy, Steam, Do	20.10.2023	Fit	NAD	TMT, KFT, LFT, PFT, Chest X - Ray, Audiometry, Vision, CBC, Physical Check up, Spirometry	NA	NA	NA	20.10.2023
42	POWER PLANT	DIPU KUMAR TIWARI	LAB DY MANAGER	Chemicals	18.10.2023	Fit	NAD	TMT, KFT, LFT, PFT, Chest X - Ray, Audiometry, Vision, CBC, Physical Check up, Spirometry	NA	NA	NA	18.10.2023
43	POWER PLANT	SHYAM NARAYAN MISHRA	ELECTRICIAN	Electrical Energy, Steam, Do	20.10.2023	Fit	NAD	TMT, KFT, LFT, PFT, Chest X - Ray, Audiometry, Vision, CBC, Physical Check up, Spirometry	NA	NA	NA	20.10.2023
44	[illegible]	[illegible]	[illegible]	NA	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
45	FURNACE	DHARMESH PANDEY	ELECTRICIAN (Sr.)	Electrical Energy	18.10.2023	Fit	NAD	TMT, KFT, LFT, PFT, Chest X - Ray, Audiometry, Vision, CBC, Physical Check up, Spirometry	NA	NA	NA	18.10.2023

Medical Officer
Gallantt Ispat Ltd.
GIDA, Sahjanwa, GKP.

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ANNEXURE - 18

GALLANTT

ENVIRONMENT POLICY

We at Gallantt Ispat are committed to conserve preserve and protect the nature. To keep the environment clean and green we shall:-

- Adhere and comply with all environmental legal requirements in force.
- Develop and adopt efficient environmental management system.
- Adopt best practices in conservation of natural resources.
- Work towards continual improvement in environment management.
- Minimize the waste generation, adopt new technologies for recovery of materials.
- Shall work in creating awareness about environment among our employees, workers and stakeholders.

Mr. C.P. Agrawal
Chairman & MD

Mr. P.P. Agrawal
Director

Date- 02.04.2012
Place- Gorakhpur
Version-GIL/ENV/01 Rev.-00

Mr. Nitin Kandoi
Director

GALLANTT ISPAT LIMITED
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ANNEXURE-19

सार्वजनिक सूचना

सर्वसाधारण को सूचित करना है कि मे0 गैलेंट इस्पात लि0, प्लाट न0 AL-5, सेक्टर न0 23, गीडा इण्ड्रस्ट्रीयल स्टेट, तहसील सहजनवां, जिला गोरखपुर ने इन्टीग्रेटेड स्टील प्लांट (स्पंज आयरन, स्टील मेंल्टिगं शाप (इन्डक्सन फर्नेश एवं कानकास्ट) एवं कैप्टिव पावर प्लांट की क्षमता वृद्धि हेतू प्रस्ताव भारत सरकार के वन एंव पर्यावरण मंत्रालय को प्रेषित किया था जिसको भारत सरकार के वन एवं पर्यावरण मंत्रालय ने दिनांक 14.10.2020 को स्वीकृत प्रदान कर दी है। स्वीकृत की प्रति उ0 प्र0 प्रदूषण नियंत्रण बोर्ड, लखनऊ के कार्यालय, वन, पर्यावरण मंत्रालय की वेब साइट http:/envfor.nic.in एवं कम्पनी की वेब साइट www.gallantt.com पर देखी जा सकती है।

महाप्रबन्धक
गैलेंट इस्पात लि0

EMISSION DISPLAY AT MAINGATE