POINT WISE COMPLIANCE STATUS TO THE CONDITIONS STIPULATED IN THE **ENVIRONMENT CLEARANCE** ISSUED FOR EXPANSION OF STEEL PLANT OF **API ISPAT & POWERTECH PRIVATE LIMITED**.

Name of Plant	-	M/s API Ispat & Powertech Private Limited
Location of Plant	-	Siltara Industrial Growth Centre, Phase – II, Siltara Village, Raipur Tehsil & District, Chhattisgarh
Environment Clearance	-	J – 11011/ 377/ 2014 – IA II (I) Dated: 6th March 2019

Sr. No.	EC Conditions	Compliance Status
A.	**Specific Conditions:**	
i.	The Particulate emission from all the units shall be less than 30 mg/ Nm^3.	Presentaly we are maintaining Particulate Matter emission within the prescribed limit.
ii.	Electric Arch furnace should be provided with 4th Hole extraction system with bag filters.	Agreed.
iii.	Tailing shall be dewatered in the filterpress and tailing residue will be stored in storage yard.	Being Complied
iv.	Green belt development in an additional area of 2 acres shall be carried out.	Complied. We are maintaining good greenery in and around premises over an area of 39 acres; which is about 40% of total available land. Developed plantation comprising of 41,342 No. of trees and shrubs. We have also planted 2,260 nos. of saplings as road side avenue plantation from CSIDC water pond to our plant. Certified Plantation Report is enclosedas as **Annexure-I**
B.	**General Conditions:**	
I.	***Statutory Compliance:***	
i.	The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the State Pollution Control Board.	Permission to Establish by Chhattisgarh Environment Conservation Board, Raipur vide its letter no.: 1519/ TS/ CECB/ 2019 Dated: 11th June 2019 and accordingly granted amendment in Consent to Operate from CECB. **Latest Renewed CTO Ref No 10536/TS/CECB/2021 Dt 27.02.2021** with validity for 3 years of operation i.e. up to 28.02.2023.
ii.	The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.	No ground water permission is required as we area not extracting ground water. The required quantity of water is being taken from Chhattisgarh Ispat Bhumi Limited surface water supply network.

Sr. No.	EC Conditions	Compliance Status
iii.	The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.	Hazardous waste authorization under the Hazardous and other Waste Management Rules, 2016 as amended has been obtained & renewed.**HW Autorization No is 487/HO/HSMD/CECB**/Nava Raipur, Atal Nagar ; Validity is for 5 Yrs i.e 04.06.2022 to 03.06.2027. **Ref Letter No 5017/HSMD/HO/CECB/2022 Dt 21.10.2022**
II.		
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 vide G.S.R 277 (E) dated 31st March 2012 (applicable to IF/EAF) as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.	Stacks attached to: a. Operational Sponge Iron Kilns [with WHRB based power plant], b. FBC based Power Plant, c. Induction Furnace and d. Rolling mill has been equipped with Continuous emission Monitoring System [CEMS]. Data collected has been uploaded to CPCB/ CECB sites as per protocol. Installed CEMS is also equipped with Remote calibration facility as per guidelines by CPCB. Six Monthly Data is enclosed as **Annexure-II**
ii.	The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.	Being Complied
iii.	The project proponent shall install system to carryout 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.	Complied. Six Monthly Data is enclosed as **Annexure-II**
iv.	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.	Agreed Six Monthly Data is enclosed as **Annexure-II**

Sr. No.	EC Conditions	Compliance Status
v.	Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources.	Complied Follwing Provisions have been implemented: a. Insataion og Bag filters for all the Transfer Points b. Full Enclosure is provided to material conveying belts. c. Water Sprinklers installation
vi.	The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.	Agreed & being Complied.
vii.	Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.	Good housekeeping practices has been adopted. Internal road has been made pucca and regular water sprinkling is being done within the plant premises. We have also provided vehicle washing system near main gate.-Enclosed as **Annexure-III**
viii.	Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration.	Being complied.
ix.	The project proponent shall use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.	All the raw material, finished goods and solid wastes is being transported thorugh trapaluin covered vehicles.
x.	The project proponent shall provide covered sheds for raw materials like scrap and sponge iron, lump ore, coke, coal, etc.	Raw material stored in pucca floor under covered shed.
xi.	The project proponent shall provide primary and secondary fume extraction system at all melting furnaces.	Fume extraction system to existing operational melting furnace has been provided.
xii.	Design the ventilation system for adequate air changes as per ACGIH document for all tunnels, motor houses, Oil Cellars.	Agreed and complying the same.
III.		
i.	The project proponent shall install effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R 277 (E) dated 31st March 2012 (applicable to IF/EAF) as amended from time to time.	Continunuos Effluent Monitoring System installed in the plant premises.
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	Agreed & Complying.

Sr. No.	EC Conditions	Compliance Status
	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.	Continous Efflunet Monitoring System has been installed and we will submit CEMS result to Board. Six Monthly Data is enclosed as **Annexure-II**
iv.	Adhere to 'Zero Liquid Discharge'.	'Zero Liquid Discharge' condition is strictly maintained.
v.	Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.	STP (Sewage Treatment Plant) of Capacity 12.0 m^3/day has been installed. Photograph encloses as ***Annexure-IV***
vi.	The project proponent shall provide the ETP for effluents of rolling mills to meet the standards prescribed in G.S.R 277 (E) 31st March 2012 (applicable to IF/EAF) as amended from time to time.	ETP (Effluent Treatment Plant) has been constructed within plant premises. Photographs encloses as ***Annexure-IV***
vii.	The project proponent shall provide the slime disposal facility with impervious lining and collection wells for seepage. The water collected from the slime pond shall be treated and recycled.	Agreed.
viii.	Garland drains and collection pits shall be provided for each stock pile to arrest the runoff in the event of heavy rains and to check the water pollution due to surface run off.	Garland drains with settling chambers are constructed within premises.
ix.	The project proponent shall practice rainwater harvesting to maximum possible extent.	Rain water harvesting structures has been constucted within plant premises. Certified Copy of RWH Report along with Photographs enclosed as ***Annexure-V***
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.	Closed cooling circuit has been maitnained in operational Sponge Iron Kilns, Induction Furnaces and Rolling mill. This will be implemented in proposed induction furnaces, rolling mill and arc furnace. Effluent from Power plant is being treated through neutralization cum settling tanks and treated effluent is being reuse for dust suppression, ash conditioning and plantation purpose within premises only. Sewage Treatment Plant has been provided for the treatment of domestic waste water and waste water from rolling mill. Zero discharge strictly maintained by industry.
IV.		

Sr. No.	EC Conditions	Compliance Status
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.	Agreed. Noise Monitoring Report is enclosed as **Annexure-VI**
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.	All the noise generating equipment's are equipped with noise enclosures. Proper lubricating and oiling of moving equipment's is being done on regular basis.
V.		
i.	The project proponent shall provide waste heat recovery system (pre-heating of combustion air) at the flue gases of reheating furnaces.	Noted
ii.	Practice hot charging of slabs and billets/blooms as far as possible.	Agreed & Complying the same
iii.	Ensure installation of regenerative type burners on all reheating furnaces.	Agreed, such type of burners are already installed in operating furnaces.
iv.	Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly.	Solar power generation setup of 1 kw has already been installed.
v.	Provide the project proponent for LED lights in their offices and residential areas.	LED lights has been provided to office and residential areas.
VI.		
i.	Used refractories shall be recycled as far as possible.	Agreed & Complying.
ii.	Oily scum and metallic sludge recovered from rolling mills ETP shall be mixed, dried, and briquetted and reused melting Furnaces.	Agreed.
iii.	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.	Fly ash genrated from the FBC based power plant is being given to nearby cement plants/Brick making units. Latest Fly ash Statementfor FY-2022-23 is enclosed as **Annexure-VII**
iv.	The waste oil, grease and other hazardous waste shall be disposed of as per the Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016.	Agreed and complying the same. Copy Latest Copy of FORM IV submitted to CECB is Enclosed as **Annexure-VIII**
VII.		
i.	Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant	We are maintaining good greenery in and around premises over an area of 39 acres; which is about 40% of total available land. Developed plantation comprising of 41,3,42 No. of trees and shrubs.

Sr. No.	EC Conditions	Compliance Status
		We have also planted 2260 nos. of saplings as road side avenue plantation from CSIDC water pond to our plant. Copy of plantation audit for your reference enclosed as ***Annexure-I***
ii.	The project proponent shall prepare GHG emissions inventory for the plant and shall submit the program for reduction of the same including carbon sequestration including plantation.	GHG Inventory & Programm for Reduction of the same is enclosed as **Annexure-IX**
VIII.		
i.	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.	Complied
ii.	The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act.	Personal Protective Equipments are given in operational units.
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.	Complied. Safe drinking water, medical health care, toilets has been constructed within plant premises.
iv.	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	Occupational Health surveillance of workers are being done on regular basis.
IX.		
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.	Agreed. Progress/Updated status for CER is enclosed as **Annexure-X**
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 pocily has been laid. Copy of the same is enclosed as **Annexure-XI**

Sr. No.	EC Conditions	Compliance Status
	environmental/ forest/ wildlife norms/ conditions and/ or shareholder's/ 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.	Management approved ,Organization structre for Environment Managemnt cell is Enclosed as **Annexure-XII**
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.	Agreed.
v.	Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.	Agreed and Complying.
vi.	All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the plants shall be implemented.	Agreed.
X.		
i.	The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.	Advertisement in this regards has been published in Amrat Sandesh and Central Chronical newspaper n dated 14-03-2019. Copy of advertisement published in two newspaper is enclosed as ***Annexure-XIII***
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	Copy of Environment clearance has been submiited in local administrative bodies.

Sr. No.	EC Conditions	Compliance Status
	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.	Agreed and presntly displayed for operational units.
iv.	The project proponent shall monitor the criteria pollutants level namely; PM_{10}, $S0_2$, 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.	Agreed & Complying.
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.	Six Monthly Environmenal Clearance Compliance report is being submitted online portal of MOEF&CC. Copy of the Latest Submission is enclosed as **Annexure-XVI**
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.	Agreed and Complying. Environment Statement in Form-V is being submitted in regular basis to Board. Copy of the Latest Submission is enclosed as **Annexure-XV**
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.	Agreed.
viii.	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.	Agreed.
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.	Agreed & Noted.
x.	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment,	Agreed & Noted.

Sr. No.	EC Conditions	Compliance Status
	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.	Noted & Agreed.
xii.	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Noted.
xiii.	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.	Agreed & Noted.
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.	Agreed.
xv.	The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.	Noted & Agreed.
xvi.	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.	Agreed & Noted.

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GREEN BELT SPECIES DETAILS

25/12/2020

Details of Tree Plants in factory premises of

API ISPAT & POWERTECH PVT. LTD.
RAIPUR (C.G.)

1. Total Area of premises	:-	97.717Acres
2. Total Area of the Factory to be covered by Plants	:-	39.00 Acres
3. Total area covered by plant (in %)	:-	40%
4. Total No. of Plants Plated so far	:-	48142 No.
5. Total No. of Plants casuality	:-	6800 Nos.
6. Total No. of living plants	:-	41342 Nos.

S.No.	Name of Plant	No. of Plant Old as per 2018	No. of Plant New 2019-20	Total no. of Plant	Average Height
1.	Karanj	6732	825	7557	12-15 feet
2.	Sissoo	5370	840	6210	8-10 feet
3.	Arjun	4410	1875	6285	12-15 feet
4.	Gulmohar	5654	1045	6699	12-15 feet
5.	Teak	1487	75	1562	6-8 feet
6.	Neem	3710	1435	5145	15-18 feet
7.	Amaltas	932	5	937	12-15 feet
8.	Jamun	1878	195	2073	12-15 feet
9.	Kachnar	532	315	847	12-15 feet
10.	Chatim	1547	-	1547	12-15 feet
11.	Parijat	856	5	861	12-15 feet
12.	Mango	-	26	26	8-10 feet
13.	Sagon	-	45	45	8-10 feet
14.	Kaner	-	1282	1282	8-10 feet
15.	Palm	-	18	18	8-10 feet
16.	Kathal	-	248	248	8-10 feet
	Total	**33108**	**8234**	**41342**	

Garden plants have also been planted, Tree plantation is well spread over the premises.

2260 trees have been planted from Gate No. 1 to CSIDC pond in avenue plantation.

25/12/20

C.M. Shakeel
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Consultant
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Mob. 9893025662

C.M. SHAKEEL

Consultant Environment and Forest

C/76, H.I.G. Shailendra Nagar, Raipur – 492001

Ref. No. : 21/RPR/2020 Date : 25/12/2020

CERTIFICATE

This is to certify that API Ispat & Powertech Pvt Ltd, Phase – II, Siltara, Raipur (C.G.) has been inspected. The total area of the plant is 97.717 acres in which 39.08 acres has been planted with tree plants i.e. about 40% of the total area. Total no. of living plant as per verification is around 41342 No. which is sufficient to fulfill the environmental norms.

25/12/2020

C.M. SHAKEEL
Consultant
Forests & Environment
Raipur (C.G.)

(C.M. Shakeel)
Rtd. Dy. C.F. (SFS)
Raipur (C.G.)
Consultant Envn. & Forest

Planation Photographs – API Ispat &Powertech Pt Ltd


TEAMWORK
IS THE KEY TO
SAFETY
आपके कार्यालय को
सुरक्षित रखना आपकी
जिम्मेदारी है।


प्रकृति का ये
करे हरण
आओ बचाए पर्यावरण

Annexure-II

SMS- Stack Emission-CEMS Data:

April-2023	PM (mg/Nm³)	May-2023	PM (mg/Nm³)	June-2023	PM (mg/Nm³)	July - 2023	PM (mg/Nm³)	Aug-2023	PM (mg/Nm³)	Sep-2023	PM (mg/Nm³)
1-4-2023	15.15	1-5-2023	16.28	1-6-2023	18.82	1-7-2023	20.17	1-8-2023	20.94	1-9-2023	22.09
2-4-2023	14.39	2-5-2023	17.70	4-6-2023	22.02	2-7-2023	20.19	2-8-2023	20.27	2-9-2023	20.37
3-4-2023	11.06	3-5-2023	18.07	5-6-2023	21.10	3-7-2023	20.12	3-8-2023	21.14	3-9-2023	19.06
4-4-2023	13.58	4-5-2023	15.16	6-6-2023	21.14	4-7-2023	20.30	4-8-2023	20.20	4-9-2023	18.80
5-4-2023	13.97	5-5-2023	14.74	7-6-2023	21.20	5-7-2023	20.28	5-8-2023	20.91	5-9-2023	20.25
6-4-2023	14.67	6-5-2023	134.92	8-6-2023	21.33	6-7-2023	20.50	6-8-2023	21.80	6-9-2023	19.16
7-4-2023	14.08	7-5-2023	232.20	9-6-2023	21.34	7-7-2023	18.92	7-8-2023	21.89	7-9-2023	19.59
8-4-2023	16.57	8-5-2023	232.20	10-6-2023	21.45	8-7-2023	18.85	8-8-2023	21.85	8-9-2023	19.32
9-4-2023	13.99	9-5-2023	232.20	11-6-2023	21.73	9-7-2023	20.05	9-8-2023	21.86	9-9-2023	19.88
10-4-2023	14.36	10-5-2023	97.52	12-6-2023	21.50	10-7-2023	19.53	10-8-2023	21.92	10-9-2023	20.70
11-4-2023	12.10	11-5-2023	11.70	13-6-2023	20.94	11-7-2023	19.37	11-8-2023	21.17	11-9-2023	20.68
12-4-2023	10.86	12-5-2023	12.15	14-6-2023	20.54	12-7-2023	19.97	12-8-2023	18.86	12-9-2023	19.91
13-4-2023	12.79	13.5.2023	15.62	15-6-2023	21.25	13-7-2023	20.37	13-8-2023	17.95	13-9-2023	18.77
14-4-2023	10.58	14-5-2023	10.47	16-6-2023	21.06	14-7-2023	20.25	14-8-2023	17.65	14-9-2023	17.06
15-4-2023	13.15	15-5-2023	11.70	17-6-2023	21.16	15-7-2023	18.90	15-8-2023	18.20	15-9-2023	12.25
16-4-2023	11.04	16-5-2023	11.29	18-6-2023	20.97	16-7-2023	19.22	16-8-2023	18.27	16-9-2023	10.08
17-4-2023	10.50	17-5-2023	12.48	19-6-2023	19.68	17-7-2023	18.07	17-8-2023	17.97	17-9-2023	16.93
18-4-2023	11.16	18-5-2023	6.95	20-6-2023	20.57	18-7-2023	19.09	18-8-2023	23.45	18-9-2023	14.28
19-4-2023	11.18	19-5-2023	10.79	21-6-2023	20.73	19-7-2023	18.74	19-8-2023	22.92	19-9-2023	17.36
20-4-2023	13.35	20-5-2023	14.26	22-6-2023	20.89	20-7-2023	19.97	20-8-2023	23.10	20-9-2023	17.30
21-4-2023	14.28	21-5-2023	15.62	23-6-2023	21.00	21-7-2023	19.62	21-8-2023	23.00	21-9-2023	13.33
22-4-2023	14.52	22-5-2023	13.74	24-6-2023	21.01	22-7-2023	18.99	22-8-2023	23.09	22-9-2023	7.90
23-4-2023	14.70	23-5-2023	11.74	25-6-2023	20.21	23-7-2023	19.75	23-8-2023	22.90	23-9-2023	6.76
24-4-2023	14.59	24-5-2023	11.39	26-6-2023	19.04	24-7-2023	18.61	24-8-2023	23.02	24-9-2023	7.82
25-4-2023	14.91	25-5-2023	12.10	27-6-2023	18.45	25-7-2023	19.90	25-8-2023	22.61	25-9-2023	8.18
26-4-2023	15.17	26-5-2023	13.16	28-6-2023	20.14	26-7-2023	19.36	26-8-2023	22.86	26-9.2023	NA
27-4-2023	15.53	27-5-2023	12.99	29-6-2023	19.94	27-7-2023	19.53	27-8-2023	19.26	27-9.2023	NA
28-4-2023	14.46	28-5-2023	14.13	30-6-2023	20.32	28-7-2023	19.48	28-8-2023	17.79	28-9.2023	NA
29-4-2023	16.15	29-5-2023	13.56			29-7-2023	17.97	29-8-2023	17.76	29-9.2023	NA
30-4-2023	19.08	30-5-2023	10.66			30-7-2023	18.87	30-8-2023	24.07	30-9.2023	NA
		31-5-2023	10.87					31-8-2023	24.04		

Rolling Mill - Stack Emission-CEMS Data:

April-2023	PM (mg/Nm³)	May-2023	PM (mg/Nm³)	June-2023	PM (mg/Nm³)	July - 2023	PM (mg/Nm³)	Aug-2023	PM (mg/Nm³)	Sep-2023	PM (mg/Nm³)
1-4-2023	16.20	1-5-2023	18.22	1-6-2023	18.82	1-7-2023	20.17	1-8-2023	20.94	1-9-2023	22.09
2-4-2023	14.82	2-5-2023	16.44	4-6-2023	22.02	2-7-2023	20.19	2-8-2023	20.27	2-9-2023	20.37
3-4-2023	14.66	3-5-2023	15.62	5-6-2023	21.10	3-7-2023	20.12	3-8-2023	21.14	3-9-2023	19.06
4-4-2023	20.41	4-5-2023	14.66	6-6-2023	21.14	4-7-2023	20.30	4-8-2023	20.20	4-9-2023	18.80
5-4-2023	16.32	5-5-2023	15.36	7-6-2023	21.20	5-7-2023	20.28	5-8-2023	20.91	5-9-2023	20.25
6-4-2023	15.46	6-5-2023	15.02	8-6-2023	21.33	6-7-2023	20.50	6-8-2023	21.80	6-9-2023	19.16
7-4-2023	15.44	7-5-2023	14.98	9-6-2023	21.34	7-7-2023	18.92	7-8-2023	21.89	7-9-2023	19.59
8-4-2023	17.62	8-5-2023	14.02	10-6-2023	21.45	8-7-2023	18.85	8-8-2023	21.85	8-9-2023	19.32
9-4-2023	18.22	9-5-2023	16.08	11-6-2023	21.73	9-7-2023	20.05	9-8-2023	21.86	9-9-2023	19.88
10-4-2023	12.16	10-5-2023	14.98	12-6-2023	21.50	10-7-2023	19.53	10-8-2023	21.92	10-9-2023	20.70
11-4-2023	18.25	11-5-2023	16.82	13-6-2023	20.94	11-7-2023	19.37	11-8-2023	21.17	11-9-2023	20.68
12-4-2023	20.52	12-5-2023	15.80	14-6-2023	20.54	12-7-2023	19.97	12-8-2023	18.86	12-9-2023	19.91
13-4-2023	16.64	13.5.2023	17.96	15-6-2023	21.25	13-7-2023	20.37	13-8-2023	17.95	13-9-2023	18.77
14-4-2023	17.26	14-5-2023	18.64	16-6-2023	21.06	14-7-2023	20.25	14-8-2023	17.65	14-9-2023	17.06
15-4-2023	14.32	15-5-2023	19.44	17-6-2023	21.16	1-7-2023	20.17	15-8-2023	18.20	15-9-2023	12.25
16-4-2023	18.47	16-5-2023	16.55	18-6-2023	20.97	16-7-2023	19.22	16-8-2023	18.27	16-9-2023	10.08
17-4-2023	16.48	17-5-2023	18.52	19-6-2023	19.68	17-7-2023	18.07	17-8-2023	17.97	17-9-2023	16.93
18-4-2023	15.62	18-5-2023	18.89	20-6-2023	20.57	18-7-2023	19.09	18-8-2023	23.45	18-9-2023	14.28
19-4-2023	14.72	19-5-2023	20.45	21-6-2023	20.73	19-7-2023	18.74	19-8-2023	22.92	19-9-2023	17.36
20-4-2023	16.85	20-5-2023	19.62	22-6-2023	20.89	20-7-2023	19.97	20-8-2023	23.10	20-9-2023	17.30
21-4-2023	20.88	21-5-2023	16.99	23-6-2023	21.00	21-7-2023	19.62	21-8-2023	23.00	21-9-2023	13.33
22-4-2023	16.43	22-5-2023	17.82	24-6-2023	21.01	22-7-2023	18.99	22-8-2023	23.09	22-9-2023	7.90
23-4-2023	18.66	23-5-2023	16.44	25-6-2023	20.21	23-7-2023	19.75	23-8-2023	22.90	23-9-2023	6.76
24-4-2023	15.33	24-5-2023	15.04	26-6-2023	19.04	24-7-2023	18.61	24-8-2023	23.02	24-9-2023	7.82
25-4-2023	12.38	25-5-2023	17.06	27-6-2023	18.45	25-7-2023	19.90	25-8-2023	22.61	25-9-2023	8.18
26-4-2023	14.65	26-5-2023	15.74	28-6-2023	20.14	26-7-2023	19.36	26-8-2023	22.86	26-9.2023	NA
27-4-2023	18.62	27-5-2023	14.68	29-6-2023	19.94	27-7-2023	19.53	27-8-2023	19.26	27-9.2023	NA
28-4-2023	19.54	28-5-2023	16.42	30-6-2023	20.32	28-7-2023	19.48	28-8-2023	17.79	28-9.2023	NA
29-4-2023	**17.64**	29-5-2023	**17.56**			29-7-2023	17.97	29-8-2023	17.76	29-9.2023	NA
30-4-2023	16.38	30-5-2023	16.89			30-7-2023	18.87	30-8-2023	24.07	30-9.2023	NA
		31-5-2023	19.64			31-7-2023	21.04	31-8-2023	24.04		

WHRB + Kiln : Stack Emission-CEMS Data:

Apr-2023	PM (mg/Nm^3)	SO2 (mg/Nm^3)	May-2023	PM (mg/Nm^3)	SO2 (mg/Nm^3)	June-2023	PM (mg/Nm^3)	SO2 (mg/Nm^3)
1-4-2023	19.16	73.35	1-5-2023	19.09	52.54	1-6-2023	27.81	106.61
2-4-2023	19.3	72.18	2-5-2023	19.08	47.23	2 -6-2023	27.53	101.84
3-4-2023	19.2	69.82	3-5-2023	19.17	36.95	3-6-2023	27.76	96.03
4-4-2023	19.22	68.48	4-5-2023	19.04	30.53	4-6-2023	27.78	91.57
5-4-2023	19.16	67.17	5-5-2023	19.07	22.03	5-6-2023	27.57	92.92
6-4-2023	19.15	61.36	6-5-2023	19.2	19.27	6-6-2023	27.78	97.27
7-4-2023	19.32	62.2	7-5-2023	19.24	46.02	7-6-2023	25.1	106.01
8-4-2023	18.95	67.2	8-5-2023	20.58	43.22	8-6-2023	23	110.08
9-4-2023	19.07	64.07	9-5-2023	24.2	35.17	9-6-2023	23.13	104.89
10-4-2023	19.22	63.66	10-5-2023	25.77	31	10-6-2023	23.38	98.89
11-4-2023	19.18	64.03	11-5-2023	25.45	79.64	11-6-2023	23.19	93.3
12-4-2023	19.14	70.93	12-5-2023	25.9	32.77	12-6-2023	23.23	92.86
13-4-2023	19.31	114.44	13.5.2023	24.74	21.81	13-6-2023	23.19	93.62
14-4-2023	19.3	52.01	14-5-2023	25.63	20.62	14-6-2023	23.08	92.36
15-4-2023	19.04	31.81	15-5-2023	25.52	43.01	15-6-2023	23.13	90.02
16-4-2023	19.13	98.31	16-5-2023	25.59	40.58	16-6-2023	23.18	89.26
17-4-2023	19.32	35.63	17-5.2023	25.24	82.98	17-6-2023	23.14	91.95
18-4-2023	19.17	31.99	18-5-2023	25.78	49.75	18-6-2023	23.21	90.54
19-4-2023	19.03	71.74	19-5-2023	25.63	23.24	19-6-2023	23.17	90.13
20-4-2023	19.17	48.08	20-5-2023	27.63	29.44	20-6-2023	23.35	90.09
21-4-2023	19.36	23.16	21-5-2023	30.41	61.14	21-6-2023	23.33	86.82
22-4-2023	19.41	41.57	22-5-2023	30.38	94.35	22-6-2023	23.23	69.62
23-4-2023	19.06	65.52	23-5-2023	30.15	80.7	23-6-2023	23.1	49.97
24-4-2023	19.25	46.53	24-5-2023	28.79	136.27	24-6-2023	23.12	46.13
25-4-2023	19.16	53.9	25-5-2023	27.86	126.49	25-6-2023	23.16	54.61
26-4-2023	19.09	62.06	26-5-2023	27.62	119.07	26-6-2023	23.23	59.01
27-4-2023	19.13	33.26	27-5-2023	27.66	117.03	27-6-2023	22.97	59.3
28-4-2023	19.3	40.76	28-5-2023	27.72	105.88	28-6-2023	23.04	56.75
29-4-2023	19.3	42.7	29-5-2023	27.71	107.91	29-6-2023	23.07	54.75
30-4-2023	19.14	44.28	30-5-2023	27.6	102.35	30-6-2023	23.32	58.52
			31-5-2023	27.75	99.85			

Contd.

July-2023	PM (mg/Nm³)	SO2 (mg/Nm³)	Aug-2023	PM (mg/Nm³)	SO2 (mg/Nm³)	Sep-2023	PM (mg/Nm³)	SO2 (mg/Nm³)
1-7-2023	23.01	69.03	1-8-2023	18.33	54.67	1-9-2023	22.56	22.04
2-7-2023	23.04	56.51	2-8-2023	18.36	72.08	2-9-2023	22.64	21.9
3-7-2023	23	46.52	3-8-2023	17.14	76.22	3-9-2023	21.03	22.68
4-7-2023	23.11	43.97	4-8-2023	22.35	0	4-9-2023	21.09	22.27
5-7-2023	23.17	42.18	5-8-2023	20.8	0	5-9-2023	17.82	20.94
6-7-2023	23.08	40.99	6-8-2023	22.9	0	6-9-2023	18.66	68.79
7-7-2023	23.21	41.75	7-8-2023	22.72	0	7-9-2023	18.59	22.49
8-7-2023	23	43.27	8-8-2023	22.81	0	8-9-2023	18.54	22.56
9-7-2023	23	42.2	9-8-2023	22.4	0	9-9-2023	18.35	24.02
10-7-2023	22.92	42.24	10-8-2023	15.36	0.23	10-9-2023	18.4	24.39
11-7-2023	22.98	43.73	11-8-2023	22.96	8.88	11-9-2023	18.44	22.4
12-7-2023	22.95	40.1	12-8-2023	22.68	14.51	12-9-2023	17.45	19.87
13-7-2023	22.9	39.46	13-8-2023	22.98	13.35	13-9-2023	19.61	18.82
14-7-2023	23.09	37.04	14-8-2023	22.67	17.42	14-9-2023	19.8	18.88
15-7-2023	22.92	39.3	15-8-2023	22.65	1.84	15-9-2023	19.65	21.44
16-7-2023	23.12	46.43	16-8-2023	22.95	0	16-9-2023	19.79	18.95
17-7-2023	23.39	47.87	17-8-2023	22.98	0	17-9-2023	21.27	19.08
18-7-2023	22.85	66.42	18-8-2023	22.66	14.71	18-9-2023	19.41	19.02
19-7-2023	23.02	71.91	19-8-2023	22.95	25.29	19-9-2023	19.69	18.67
20-7-2023	22.96	75.5	20-8-2023	22.64	24.52	20-9-2023	20	18.53
21-7-2023	22.9	54.89	21-8-2023	22.78	22.73	21-9-2023	19.55	18.56
22-7-2023	22.99	38.46	22-8-2023	22.9	25.08	22-9-2023	19.96	19.29
23-7-2023	23.08	106.45	23-8-2023	22.5	26.02	23-9-2023	13.91	18.32
24-7-2023	23.28	97.73	24-8-2023	22.88	26.11	24-9-2023	15.79	65.81
25-7-2023	23.11	45.54	25-8-2023	22.92	25.6	25-9-2023	13.95	63.11
26-7-2023	22.98	34.27	26-8-2023	22.44	25.1	26-9.2023	18.06	67.11
27-7-2023	23.1	27.07	27-8-2023	22.71	24.5	27-9.2023	17.94	68.47
28-7-2023	23.4	29.98	28-8-2023	22.71	23.94	28-9.2023	9.65	54.78
29-7-2023	22.21	37.21	29-8-2023	22.67	22.89	29-9.2023	6.24	48.51
30-7-2023	21.44	31.33	30-8-2023	22.64	21.87	30-9.2023	20.3	38.93
31-7-2023	13.41	75.58	31-8-2023	23.02	22.41			

FBC Stack Emission-CEMS Data:

Apr-2023	PM (mg/Nm³)	SO2 (mg/Nm³)	NOx (mg/Nm³)	May-2023	PM (mg/Nm³)	SO2 (mg/Nm³)	NOX (mg/Nm³)	June-2023	PM (mg/Nm³)	SO2 (mg/Nm³)	NOX (mg/Nm³)
1-4-2023	25.7	131.5	15.8	1-5-2023	25.9	190.6	15.2	1-6-2023	29.3	106.99	6.88
2-4-2023	25.6	135.2	16.1	2-5-2023	26.2	193.3	15.3	2 -6-2023	29.56	108.99	6.89
3-4-2023	25.8	136.0	16.2	3-5-2023	26.5	192.0	15.0	3-6-2023	29.79	106.84	6.63
4-4-2023	13.2	134.6	16.1	4-5-2023	26.4	207.9	16.3	4-6-2023	29.6	110.78	6.75
5-4-2023	7.0	136.0	16.1	5-5-2023	26.6	217.3	16.8	5-6-2023	29.68	106.44	6.41
6-4-2023	7.0	137.2	15.8	6-5-2023	26.4	200.1	17.0	6-6-2023	29.51	110.37	6.97
7-4-2023	17.2	137.9	15.9	7-5-2023	26.9	162.2	17.1	7-6-2023	29.5	109.16	6.63
8-4-2023	25.7	129.5	15.0	8-5-2023	28.9	268.7	24.9	8-6-2023	27.77	109.26	6.68
9-4-2023	25.9	142.4	16.3	9-5-2023	24.5	117.5	7.6	9-6-2023	27.86	109.65	6.67
10-4-2023	25.8	147.1	16.7	10-5-2023	24.6	116.5	7.8	10-6-2023	28.36	107.99	6.55
11-4-2023	25.5	154.9	17.7	11-5-2023	24.6	121.8	8.0	11-6-2023	28.38	106.52	6.47
12-4-2023	26.0	160.3	18.2	12-5-2023	24.7	122.4	8.1	12-6-2023	28.25	109.91	6.65
13-4-2023	26.1	157.9	17.9	13.5.2023	24.7	120.5	7.9	13-6-2023	28.41	107.63	6.54
14-4-2023	26.1	158.6	18.1	14-5-2023	24.7	123.2	8.1	14-6-2023	28.48	107.95	7.85
15-4-2023	26.1	155.8	17.6	15-5-2023	24.8	123.7	8.1	15-6-2023	28.09	105.13	6.66
16-4-2023	26.1	158.0	17.9	16-5-2023	24.8	122.7	8.1	16-6-2023	28.52	107.59	6.6
17-4-2023	25.8	161.4	18.2	17-5.2023	25.0	121.1	8.0	17-6-2023	28.34	108.57	6.63
18-4-2023	26.0	165.3	18.6	18-5-2023	24.9	121.0	7.9	18-6-2023	28.94	114	7
19-4-2023	26.1	164.1	18.4	19-5-2023	25.0	121.8	10.1	19-6-2023	29.06	111.74	6.85
20-4-2023	26.2	154.5	17.4	20-5-2023	-	-	-	20-6-2023	27.87	106.87	12.72
21-4-2023	26.1	145.5	16.5	21-5-2023	31.2	124.4	8.6	21-6-2023	33.78	109.55	17.05
22-4-2023	26.0	138.7	15.6	22-5-2023	31.3	122.2	7.9	22-6-2023	35.13	104.29	17.96
23-4-2023	25.9	140.3	15.7	23-5-2023	31.2	121.2	8.6	23-6-2023	34.53	100.75	16.34
24-4-2023	26.0	138.8	15.5	24-5-2023	30.6	116.8	7.7	24-6-2023	34.92	1044.2	41.37
25-4-2023	25.9	140.4	15.7	25-5-2023	29.2	105.4	6.6	25-6-2023	29.4	808.49	29.81
26-4-2023	25.8	141.9	15.9	26-5-2023	29.2	102.7	9.2	26-6-2023	21.08	90.58	5.32
27-4-2023	26.0	142.6	15.9	27-5-2023	28.8	101.2	6.9	27-6-2023	20.61	90.27	5.25
28-4-2023	25.5	137.4	15.5	28-5-2023	28.5	102.0	6.5	28-6-2023	21.39	93.84	6.01
29-4-2023	26.8	180.3	19.2	29-5-2023	29.1	106.1	6.6	29-6-2023	22.62	100.45	6.44
30-4-2023	29.4	230.7	22.7	30-5-2023	29.2	108.5	6.8	30-6-2023	22.85	101.72	7.26
				31-5-2023	29.2	105.3	6.7				

Contd.

July-2023	PM (mg/Nm³)	SO2 (mg/Nm³)	NOx (mg/Nm³)	Aug-2023	PM (mg/Nm³)	SO2 (mg/Nm³)	NOX (mg/Nm³)	Sep-2023	PM (mg/Nm³)	SO2 (mg/Nm³)	NOX (mg/Nm³)
1-7-2023	22.8	102.4	6.7	1-8-2023	21.7	151.8	13.2	1-9-2023	23.74	261.36	40.78
2-7-2023	22.9	100.6	6.5	2-8-2023	20.1	174.7	14.8	2-9-2023	24.22	275.94	44.82
3-7-2023	23.3	104.9	7.7	3-8-2023	20.1	185.7	16.1	3-9-2023	-	-	-
4-7-2023	23.8	107.9	8.3	4-8-2023	20.4	212.4	17.4	4-9-2023	-	-	-
5-7-2023	23.1	98.5	7.0	5-8-2023	21.5	254.2	19.5	5-9-2023	-	-	-
6-7-2023	22.9	88.4	31.6	6-8-2023	21.6	154.2	11.5	6-9-2023	-	-	-
7-7-2023	21.6	83.8	21.7	7-8-2023	21.3	100.3	9.2	7-9-2023	-	-	-
8-7-2023	21.6	84.4	5.5	8-8-2023	21.7	77.8	5.3	8-9-2023	-	-	-
9-7-2023	21.7	85.5	5.7	9-8-2023	21.4	69.5	5.2	9-9-2023	-	-	-
10-7-2023	22.6	86.7	45.3	10-8-2023	22.4	63.8	5.5	10-9-2023	-	-	-
11-7-2023	22.2	85.6	51.9	11-8-2023	22.4	62.1	5.5	11-9-2023	-	-	-
12-7-2023	22.1	86.9	30.7	12-8-2023	22.3	37.8	5.5	12-9-2023	-	-	-
13-7-2023	22.6	89.2	23.5	13-8-2023	22.0	48.2	5.4	13-9-2023	-	91.8	72.1
14-7-2023	22.9	89.2	10.3	14-8-2023	22.3	52.7	5.4	14-9-2023	23.74	261.36	40.78
15-7-2023	21.7	85.8	25.0	15-8-2023	22.3	50.2	5.4	15-9-2023	24.22	275.94	44.82
16-7-2023	22.0	87.4	47.8	16-8-2023	6.4	13.9	1.5	16-9-2023	-	-	-
17-7-2023	21.0	83.2	20.4	17-8-2023	0.9	2.2	0.2	17-9-2023	-	-	-
18-7-2023	22.2	114.1	9.3	18-8-2023	22.1	51.7	5.4	18-9-2023	-	-	-
19-7-2023	11.2	64.7	6.1	19-8-2023	21.9	48.7	5.3	19-9-2023	-	-	-
20-7-2023	0.0	0.0	0.0	20-8-2023	21.5	41.0	5.2	20-9-2023	-	-	-
21-7-2023	3.6	18.5	7.0	21-8-2023	21.6	39.2	5.0	21-9-2023	-	-	-
22-7-2023	23.5	124.1	31.7	22-8-2023	21.8	37.7	5.3	22-9-2023	-	-	-
23-7-2023	21.8	92.7	5.7	23-8-2023	21.9	36.3	5.3	23-9-2023	-	-	-
24-7-2023	21.9	94.1	5.6	24-8-2023	13.1	113.8	19.4	24-9-2023	-	-	-
25-7-2023	22.6	98.2	5.8	25-8-2023	21.8	192.2	33.0	25-9-2023	-	-	-
26-7-2023	22.7	99.1	6.3	26-8-2023	6.6	59.8	10.3	26-9.2023	-	91.8	72.1
27-7-2023	22.5	99.5	7.2	27-8-2023	7.9	65.7	11.5	27-9.2023	23.74	261.36	40.78
28-7-2023	22.8	153.5	12.6	28-8-2023	22.7	187.1	33.0	28-9.2023	24.22	275.94	44.82
29-7-2023	21.6	170.3	13.4	29-8-2023	22.3	184.9	33.0	29-9.2023	-	-	-
30-7-2023	22.0	182.7	14.2	30-8-2023	22.8	184.5	33.0	30-9.2023	-	-	-
31-7-2023	18.6	158.3	14.4	31-8-2023	23.5	185.3	33.0				

CAAQMS Data

Continuous Ambient Air Quality Data for the Month April - 2023					Continuous Ambient Air Quality Data for the Month May- 2023				
Date	**PM 2.5 (ug/m^3)**	**PM 10 (ug/m^3)**	**SO_2 (ug/m^3)**	**NOx (ug/m^3)**	**Date**	**PM 2.5 (ug/m^3)**	**PM 10 (ug/m^3)**	**SO_2 (ug/m^3)**	**NOx (ug/m^3)**
01-04-2023	38.42	60.54	41.7	37.05	**01-05-2023**	38.2	60.71	42.42	38.13
02-04-2023	39.1	58.43	41.38	36.97	**02-05-2023**	39.42	61.85	42.17	36.22
03-04-2023	38.87	61.14	40.86	37.6	**03-05-2023**	39.08	60.92	43.15	38.06
04-04-2023	39.39	61.78	40.75	37.51	**04-05-2023**	38.64	58.83	40.09	37.89
05-04-2023	39.61	62.52	42.66	36.53	**05-05-2023**	38.55	61.38	42.24	37.8
06-04-2023	39.17	63.78	41.82	37.38	**06-05-2023**	38.5	61.64	41.8	37.56
07-04-2023	38.76	60.19	42.58	37.97	**07-05-2023**	38.87	61.36	40.57	37.3
08-04-2023	38.72	60.69	40.25	37.32	**08-05-2023**	39.36	60.82	43.68	36.18
09-04-2023	38.68	60.42	42.75	36.15	**09-05-2023**	38.78	61.9	40.69	38.05
10-04-2023	39.1	61.45	40.64	35.87	**10-05-2023**	39.16	60.42	42.81	38.82
11-04-2023	39.13	62.76	42.7	36.63	**11-05-2023**	38.9	61.99	41.45	37.66
12-04-2023	39.28	61.55	41.79	36.59	**12-05-2023**	38.66	60.58	42.48	36.67
13-04-2023	39.02	59.79	40.71	36.64	**13-05-2023**	38.44	60.89	41.99	38.8
14-04-2023	39.13	61.69	41.42	37.57	**14-05-2023**	39.58	61.96	41.19	38.22
15-04-2023	38.79	60.4	44.2	37.55	**15-05-2023**	38.93	59.7	40.7	37.43
16-04-2023	39.06	60.99	40.59	37.8	**16-05-2023**	38.93	59.73	40.43	37.15
17-04-2023	39.04	60.93	41.76	37.54	**17-05-2023**	39.04	61.6	41.23	37.29
18-04-2023	39.55	61.47	42.12	36.41	**18-05-2023**	39.41	62.17	41.17	36.86
19-04-2023	38.8	61.71	41.51	37.47	**19-05-2023**	38.65	60.19	43.16	36.97
20-04-2023	38.7	62.2	42.69	37.02	**20-05-2023**	39.01	60.24	41.64	37.05
21-04-2023	38.76	59.33	42.22	37.83	**21-05-2023**	39.25	59.73	42.87	37.32
22-04-2023	38.76	60.79	42.66	36.46	**22-05-2023**	39.15	61.92	41.31	37.35
23-04-2023	39.54	62.25	41.47	38.4	**23-05-2023**	38.69	61.06	43.46	37.58
24-04-2023	38.83	60.22	40.5	37.1	**24-05-2023**	39.08	59.6	41.83	37.73
25-04-2023	39.3	62.06	43.04	35.93	**25-05-2023**	38.9	63.05	41.94	37.74
26-04-2023	39.7	62.3	41.8	37.38	**26-05-2023**	38.63	60.13	42.14	36.09
27-04-2023	38.78	62.65	41.86	35.69	**27-05-2023**	39.08	56.71	44.04	37.39
28-04-2023	38.58	61.79	43.23	38.29	**28-05-2023**	39.21	61.35	41.63	37.05
29-04-2023	38.74	62.25	42.25	37.7	**29-05-2023**	38.31	62.08	41.38	38.9
30-04-2023	39.11	60.64	39.78	37.13	**30-05-2023**	38.98	58.36	42.61	38.23
					31-05.2023	38.97	61.25	42.5	37.77

Continuous Ambient Air Quality Data for the Month June- 2023					Continuous Ambient Air Quality Data for the Month July- 2023				
Date	**PM 2.5 (ug/m^3)**	**PM 10 (ug/m^3)**	**SO_2 (ug/m^3)**	**NOx (ug/ m^3)**	**Date**	**PM 2.5 (ug/m^3)**	**PM 10 (ug/m^3)**	**SO_2 (ug/m^3)**	**NOx (ug/m^3)**
01-06-2023	38.82	60.39	42.34	37.24	**01-07-2023**	38.56	60.61	41.13	37.17
02-06-2023	38.6	63.29	41.07	37.24	**02-07-2023**	38.81	61.72	42.26	37.17
03-06-2023	39.03	61.39	40.82	37.93	**03-07-2023**	39.38	61.57	43.48	36.15
04-06-2023	39.05	60.52	43.29	38.01	**04-07-2023**	39.31	60.62	41.22	36.64
05-06-2023	39.26	60.87	42.58	37.65	**05-07-2023**	39.39	61.47	43.56	37.73
06-06-2023	39.13	61.63	41.86	37.11	**06-07-2023**	38.74	60.03	42.75	37.92
07-06-2023	38.15	62.11	41.08	37.21	**07-07-2023**	38.87	62.12	39.62	37.4
08-06-2023	39.22	59.72	42.19	37.97	**08-07-2023**	38.97	59.57	41.77	37.76
09-06-2023	38.74	60.14	43.06	37.26	**09-07-2023**	38.9	59.69	42.6	37.37
10-06-2023	38.95	60.49	44.43	37.11	**10-07-2023**	39	61.36	41.73	38.31
11-06-2023	38.93	60.69	42.56	37.68	**11-07-2023**	39.08	62.54	42.69	38.03
12-06-2023	38.67	59.59	41	38.84	**12-07-2023**	39.03	61.27	42.19	37.65
13-06-2023	38.64	62.66	41.29	36.65	**13-07-2023**	38.75	61.51	42.53	36.34
14-06-2023	38.94	61.53	40.81	37.36	**14-07-2023**	38.34	59.31	42.08	38.14
15-06-2023	38.87	61.03	41.34	37.96	**15-07-2023**	39.53	62.67	41.23	37.5
16-06-2023	39.06	61.57	43.43	36.41	**16-07-2023**	38.67	59.33	41.2	38.51
17-06-2023	38.85	60.31	41.66	36.55	**17-07-2023**	38.77	61.38	41.83	36.77
18-06-2023	39	62.49	41.69	38.11	**18-07-2023**	38.61	61.33	41.95	36.06
19-06-2023	39.29	60.98	42.37	37.03	**19-07-2023**	39.21	61.85	41.75	37.38
20-06-2023	38.91	60.49	41.34	38.39	**20-07-2023**	39.1	60.52	41.52	37.78
21-06-2023	38.97	59.46	40.52	37.56	**21-07-2023**	38.18	60.33	41.19	36.71
22-06-2023	38.9	60.85	41.35	37.99	**22-07-2023**	39.12	59.55	41.3	38.33
23-06-2023	39	62.51	40.99	36.74	**23-07-2023**	38.45	62.34	40.63	36.88
24-06-2023	39.12	59.45	41.76	37.24	**24-07-2023**	38.92	59.29	40.78	38.44
25-06-2023	38.89	61.19	40.11	37.38	**25-07-2023**	39.17	62.21	41.8	36.77
26-06-2023	38.7	61.92	42.27	36.96	**26-07-2023**	38.95	60.16	43.06	37.58
27-06-2023	39.08	61.29	42.8	36.93	**27-07-2023**	39.14	59.94	41.56	36.99
28-06-2023	39.65	60.46	41.64	37.54	**28-07-2023**	39.1	60.74	43.3	38.61
29-06-2023	39.06	60.94	40.56	36.44	**29-07-2023**	39.22	58.88	41.14	37.87
30-06-2023	38.53	61.08	41.18	37.16	**30-07-2023**	38.77	59.98	41.56	38.46
					31-07-2023	39.04	61.88	42.04	36.71

Continuous Ambient Air Quality Data for the Month August 2023					Continuous Ambient Air Quality Data for the Month September 2023				
Date	**PM 2.5 (ug/m^3)**	**PM 10 (ug/m^3)**	**SO_2 (ug/m^3)**	**NOx (ug/m^3)**	**Date**	**PM 2.5 (ug/m^3)**	**PM 10 (ug/m^3)**	**SO_2 (ug/m^3)**	**NOx (ug/m^3)**
01-08-2023	39.31	61.05	41.29	36.41	**01-09-2023**	39.3	61.32	42.72	36.98
02-08-2023	39.08	60.54	42.5	38.34	**02-09-2023**	39.27	60.4	41.46	37.48
03-08-2023	39.03	58.26	41.33	38.4	**03-09-2023**	39.09	61.07	41.57	38.59
04-08-2023	38.6	60.22	41.94	37.31	**04-09-2023**	38.51	61.73	43.19	36.46
05-08-2023	38.95	60.38	41.1	36.76	**05-09-2023**	39.09	62.44	42.42	38.33
06-08-2023	38.44	60.16	43.12	37.87	**06-09-2023**	38.7	60.42	42.71	37.15
07-08-2023	38.83	60.97	41.4	38.29	**07-09-2023**	38.66	58.72	42.63	37.78
08-08-2023	39.31	59.48	40.77	38.12	**08-09-2023**	38.75	62.65	42.89	38.2
09-08-2023	39.12	61.26	42.4	36.79	**09-09-2023**	39.15	61.38	41.48	36.42
10-08-2023	39.33	61.67	41.87	38.54	**10-09-2023**	39	60.45	42.44	36.9
11-08-2023	39.26	62.11	41.6	36.83	**11-09-2023**	39.27	60.8	41.47	38.05
12-08-2023	39.43	62.13	41.5	37.71	**12-09-2023**	39.2	61.22	42.5	35.35
13-08-2023	38.1	59.71	43.2	37.72	**13-09-2023**	39.31	61.28	41.36	36.62
14-08-2023	38.79	60.4	42.09	37.94	**14-09-2023**	39.02	62.54	42.7	37.34
15-08-2023	38.93	61.81	40.45	37.13	**15-09-2023**	38.38	60.55	40.24	38.12
16-08-2023	38.74	62.74	40.65	39.92	**16-09-2023**	38.74	61.87	39.3	36.81
17-08-2023	39.71	62.38	41.64	38.1	**17-09-2023**	38.8	62.32	40.25	38.39
18-08-2023	39.09	62.93	43.03	36.82	**18-09-2023**	39.23	61.72	42.2	37.2
19-08-2023	38.69	61.24	42.59	36.62	**19-09-2023**	38.74	60.84	41.78	38.3
20-08-2023	38.96	61.08	44.01	39.03	**20-09-2023**	38.99	63.6	41.67	38.84
21-08-2023	39.06	59.24	42.65	38.16	**21-09-2023**	38.68	61.53	41.98	37.03
22-08-2023	39.27	59.53	42.93	37.68	**22-09-2023**	38.64	60.28	41.89	37.79
23-08-2023	38.82	61.23	39.54	36.25	**23-09-2023**	38.89	60.03	41.4	37.78
24-08-2023	39.01	59.5	42.05	37.14	**24-09-2023**	38.94	60.8	43.21	37.85
25-08-2023	39	59.44	42.51	37.08	**25-09-2023**	38.77	60.8	42.21	37.41
26-08-2023	39.02	61.96	41.92	36.06	**26-09-2023**	39.14	61.29	41.18	36.98
27-08-2023	39.02	60.48	41.68	37.45	**27-09-2023**	39.05	60.84	41.47	38
28-08-2023	39.33	60.97	41.28	38.82	**28-09-2023**	39.48	61.2	41.19	37.06
29-08-2023	38.37	61.1	41.61	38.75	**29-09-2023**	38.61	60.54	42.74	36.98
30-08-2023	38.97	60.65	41.62	37.05	**30-09-2023**	39.66	60.86	42.92	37.59
31-08-2023	39.07	61.8	43.34	38.77	**01-09-2023**	39.3	61.32	42.72	36.98

Annexure-III

ANNEXURE-IV

EFFLUENT TREATMENT SYSTEM- ETP

SEWAGE TREATMENT SYSTEM_ STP

API ISPAT & POWERTECH PRIVATE LIMITED

Village Siltara, Near Industrial Growth Center Siltara Phase - II, Raipur (C.G.)

STUDY REPORT
GREEN HOUSE GASES (GHG) EMISSIONS INVENTORY FOR THE PLANT AND CARBON SEQUESTRATION

Environment Clearance letter no. J – 11011/ 377/ 2014 – IA II (I) dated: 6th March 2019 Steel Plant Submitted

Report Prepared By **Sanjay Yadav**
Chartered Eng. (I) Environment
M.Tech-IIT-ISM Dhanbad

2021

AT VILLAGE — SILTARA, NEAR PHASE — II, SILTARA INDUSTRIAL GROWTH CENTRE, TEHSIL AND DISTRICT: RAIPUR (C.G.)

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3	Control options and GHG Mitigation Strategies	3	16
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CHAPTER-1

1.0 INTRODUCTION

1.1 About Project

API Ispat & Powertech Pvt. Ltd. integrated steel plant situated in Village: Siltara, near Siltara Industrial Growth Centre, Phase – II, Tehsil and District: Raipur Chhattisgarh. Following is Plant Configuration & Production Capacity for which EC was obtained from MOEFCC dt. 6th March 2019.

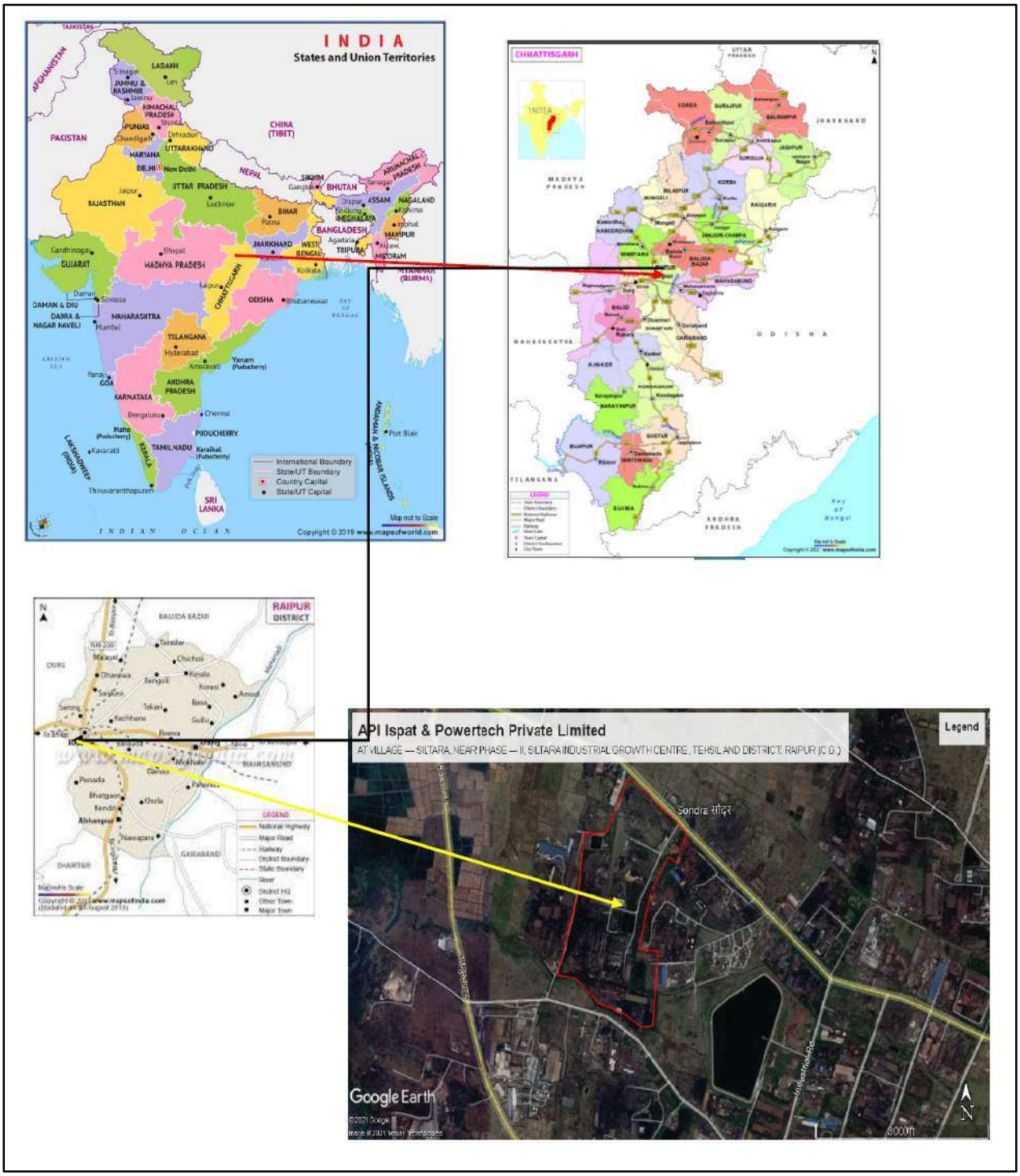
S. No.	Unit (Product)	Existing Plant (In Operation)	Configuration of expansion for which EC obtained dt. 6th March 2019	Total capacity including EC obtained dt. 6th March 2019
1.	Iron Ore Beneficiation and Pelletization Plant (Pellet)	---	2 x 1000 TPD (6,00,000 TPA)	2 x 1000 TPD (6,00,000 TPA)
2.	DRI Kilns (Sponge Iron)	2 x 350 TPD (2,10,000 TPA)	---	2 x 350 TPD (2,10,000 TPA)
3.	Steel Melting Shop			
	a) Induction Furnace with CCM (MS Ingots/ billets/ blooms)	2 x 12 T (86,400 TPA)	3 x 15 T (1,62,000 TPA)	2 x 12 T & 3 x 15 T (2,48,400 TPA)
	b) Electric Arc Furnace with AOD/ VOD & Caster (MS and SS Ingots/ billets/ blooms)	---	1 x 40 T (1,20,000 TPA)	1 x 40 T (1,20,000 TPA)
4.	Rolling Mill (Rolled Products / Structural Steels / TMT bars / Wire Drawing mill)	1,45,250 TPA	2,00,000 TPA	3,45,250 TPA
5.	Producer Gas Plant (Gasifer)	---	30,000 Nm^3/Hr	30,000 Nm^3/Hr
6.	Ferro alloys (FeSi / SiMn / FeMn)	---	2 x 9 MVA (FeSi - 12,600 TPA / SiMn - 28,400 TPA / FeMn -37,000 TPA)	2 x 9 MVA (FeSi - 12,600 TPA / SiMn - 28,400 TPA / FeMn -37,000 TPA)
7.	Power Plant (WHRB based)	18 MW	---	18 MW
8.	Power Plant (FBC based)	7 MW	---	7 MW

At Preset implemented status

S. No.	Unit (Products)	Existing Capacity (as per EC)	Present Status
1.	Iron Ore Beneficiation and Pelletization Plant (Pellet)	2x1000TPD (**6,00,000 TPA**)	2x1000TPD (6,00,000 TPA)**CTE granted**
2.	DRI Kilns (Sponge Iron)	2 x 350 TPD (**2,10,000 TPA**)	2 x 350 TPD (2,10,000 TPA) **Operational**
3.	Steel Melting Shop		
	a) Induction Furnace with CCM (MS Ingots/ Billets/ Blooms)	2 x 12 T& 3 x 15 T (**2,48,000 TPA**)	2 x 12 T, 3 x 15 T **Operational** 2X15 T (CTE under NIIPL) (2,48,000 TPA)
	b) Electric Arc Furnace with AOD/VOD & Caster (MS & Ingots/Billets/Blooms)	1 x 40 T (**1,20,000 TPA**)	1,20,000 TPA **CTE granted**
4.	Rolling Mill (Rolled Products/Structural Steels/ TMT Bars/ Wire Drawing Mill)	**3,45,250 TPA** (1,45,250 TPA+ 2,00,000 TPA)	3,45,250 TPA **Operational**
5.	Producer Gas Plant (Gasifier)	30,000 Nm3/Hr.	14,250 PP +15,500 RM Nm3/Hr.**CTE granted** 8,500 Nm3/Hr.**Operational**
6.	Ferro Alloys Plant	2 x 9 MVA	CTE to be obtained
	• Ferro - Silicon or	12,600 TPA	
	• Silico - Manganese or	28,400 TPA	
	• Ferro - Manganese	37,000 TPA	
7.	Power Plant (WHRB Based)	18 MW	20 MW**Operational**
8.	Power Plant (FBC Based)	7 MW	7 MW**Operational**

1.2 Location of the Project

Proposed Project is located at Siltara village, near Phase – II, Siltara Industrial Growth Centre, Tehsil and District: Raipur, Chhattisgarh. 96.57 acres of diverted land is in possession of management project site are shown below:



1.3 Steel manufacturing & GHG scenario

Worldwide, about one billion tonnes of iron was produced in 2011 and the concomitant generation of carbon dioxide (CO2) contributed to 5 % of that year's global increase in atmospheric CO2 (Fray 2013). The issue that is of major concern for global GHG emissions from this industry is that more than half of the world steel production takes place in countries that have no obligations to curb their emissions under the FCCC KyotoProtocol (Mathiesen and Maestad2004).

Steel continues to dominate global metal production. In 2011, China produced46 % of the world's steel, European Union (EU) 12 %, the United States 8 %,Japan 7 %, India 5 % and Russia 5 % (IPCC 2014a). Emissions are projected toincrease 50–150 % by 2050 unless energy efficiency improvements are acceleratedsignificantly (IPCC 2014b). Reduction of CO2 emissions is an integrated task for theiron and steel industry, and includes management measures, product structure adjustment,scaling-up of equipment and application of new technologies (Zeng et al. 2009).

A report by International Energy Agency (IEA) and United Nations IndustrialDevelopment Organization (UNIDO) says that India accounted for only 5 % of theglobal industrial sector CO2 emissions, compared to China's 34 % in 2006. Within theindustry and fuel transformation sectors, 31 % of emissions are attributed to theproduction of iron and steel (IEA and UNIDO2011). India is the 4thlargest producer of crude steel in the world (WSA2013). It ranked 8th in 2003 andis expected to become the 2nd largest by 2015. It is the world's largest producer ofdirect reduced iron (DRI) or sponge iron. Crude steel production grew at over 8 %annually from 46.46 million tonnes in 2005–06 to 73.79 million tonnes in 2011–12(Ministry of Steel 2013).

1.4 Waste Heat Recovery Bioler (WHRB) technologies

Reduction of CO2 emissions by WHRB where waste heat from waste gas are recovered and utilized to generate power, there is no technology available which can assure equivalent 95 to 100% power generation. Indeed waste heat (from the waste gas) generation which is responsible for steam generation through WHRB and ultimately power generation is directly related to Sponge Iron plant operation and Production, Sponge Iron plant operation and production varies frequently due to frequent change in raw material quality, atmospheric temperature, weather conditions and various other things, these prevailing conditions are beyond the control of PP. The project activity displaces CO2 emissions from the fossil fuel based captive power plant and hence achieves reduction of CO2 emissions.

In the present scenario of global climate change, the biggest benefit of the waste heat recovery is that it is a green-house gas free source of energy. The indirect benefits are reduction in environmental pollution, reduction in the consumption of energy for auxiliary uses and reduction in the equipment sizes.

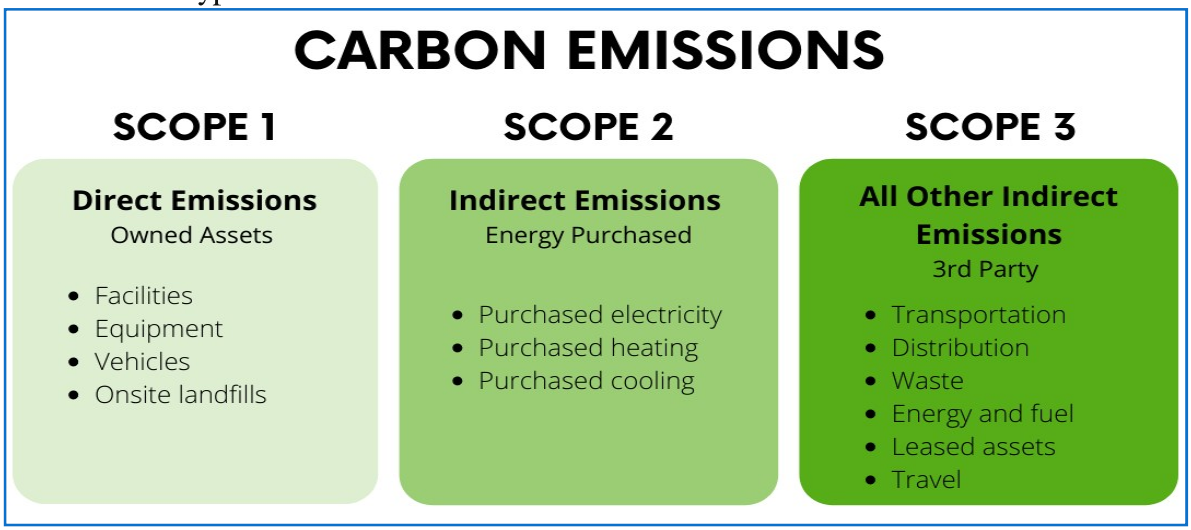
1.5 Objectives

1. **GHG emissions inventory from the plant.**

2. **Submit the program for reduction of the same including carbon sequestration including plantation.**

1.6 GHG emissions inventory form the plant

There are three types of GHG emissions:



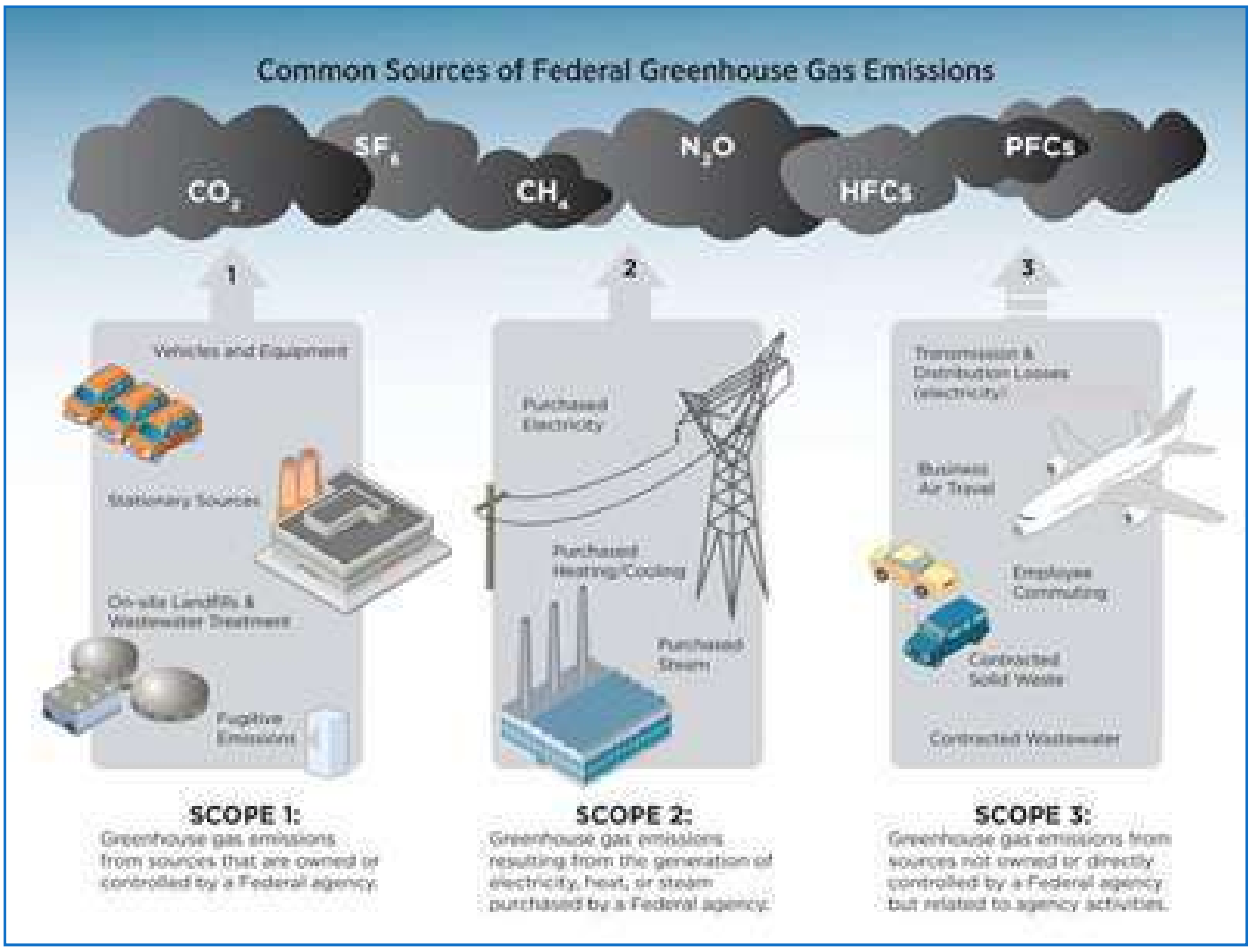
Scopes 1: Emission isdirect emissions from sources that are owned or controlled by the Agency**.**Scope 1 includes on-site fossil fuel combustion and fleet fuel consumption. Electricity production generates the second largest share of greenhouse gas emissions. Greenhouse gas emissions from industry primarily come from burning fossil fuels for energy.

Scopes 2: Emission is indirect emissions from sources that are owned or controlled by the Agency.Scope 2 includes emissions that result from the generation of electricity, heat or steam purchased by the agency from a utility provider.
Greenhouse gas emissionsIndirect Emissions from Purchased Electricity, Carbon dioxide (CO2), methane (CH4), and nitrous oxide (N2O) are emitted to the atmosphere as fuels are burned to produce heat and power. Therefore, activities that use purchased electricity indirectly cause emissions of greenhouse gases (GHG). The resulting emissions depend on the amount of energy used and the mix of fuel that goes into producing this electricity.

Scopes 3: Emission is from sources not owned or directly controlled by EPA but related to agency activities.Itincludes employee travel, commuting and emissions associated

with contracted solid waste disposal and wastewater treatment.It can also result from transportation and distribution losses associated with purchased electricity

.



Scope-1 coal-fired power plants were the single largest contributor to the growth in emissions observed in 2018, with an increase of 2.9%, or 280 Mt, compared with 2017 levels, exceeding 10 Gt for the first time.

As a result, coal-fired electricity generation accounted for 30% of global CO_2 emissions. The majority of that generation is found today in Asia, where average plants are only 12 years old, decades younger than their average economic lifetime of around 40 years.

scope 2 emissions, the activity data needed are the amount of electricity that is purchased. Utility bills or other purchase records can be used to determine the amount of electricity purchased. This information on the electricity entering the organizations

Scope 3 emissions are a consequence of the activities of the company, but occur from sources not owned or controlled by the company. Some examples of scope 3 activities are extraction and production of purchased materials; transportation of purchased fuels; and use of products and services.

CHAPTER-3

2.0 METHOD, DATA COLLECTION AND QUANTIFICATION

2.1 General

Emission inventory (EI) is a basic necessity for planning GHG control activities. EI provides a reliable estimate of total emissions of different GHGs, their spatial and temporal distribution, and identification and characterization of main sources. This information on EI is an essential input to climate models and for developing strategies and policies.

Table-1

Overview on emission sources included in or excluded from the project boundary

	Source	Gas		Justification / Explanation
Baseline	Coal Based Captive Electricity generation	CO_2	Included	Main emission source
		CH_4	Excluded	Excluded for simplification. This is conservative.
		N_2O	Excluded	Excluded for simplification. This is conservative.
Project Activity	Heat of waste gas for electricity generation	CO_2	Excluded	In absence of the Project Activity the hot gases would have been let to the atmosphere. As well as no extra fuel or support fossil fuel is fired.
		CH_4	Excluded	Excluded for simplification
		N_2O	Excluded	Excluded for simplification

2.2 Methodology of GHG emissions inventory from the plant

There are two main methods for estimating GHG emissions from stationary combustion sources

a. **Analysis of fuel input:** The fuel analysis method to calculate CO2 emissions involves determining a carbon content of fuel combusted using either fuel-specific information or default emission factors, and applying that carbon content to the amount of fuel burned to quantify CO2 emissions.The information on stacks, fuel and its consumption was obtained from Plant.

b. **Direct measurement**

Fuel analysis is essentially a mass balance approach in which carbon content factors are applied to fuel input to determine emissions. These method increases the accuracy and credibility of the inventory.

Power plants: Our power currently generating power 27 MW (20 MW by WHRB +7 MW by CFBC) and balance withdrawing from state grid.

Table-2 Production and Power generation details as per EC granted

S. No.	Unit (Products)	Existing Capacity (as per EC)	Present Status
1.	Iron Ore Beneficiation and Pelletization Plant (Pellet)	2x1000TPD (**6,00,000 TPA**)	2x1000TPD (6,00,000 TPA)**CTE granted**
2.	DRI Kilns (Sponge Iron)	2 x 350 TPD (**2,10,000 TPA**)	2 x 350 TPD (2,10,000 TPA) **Operational**
3.	Steel Melting Shop		
	c) Induction Furnace with CCM (MS Ingots/ Billets/ Blooms)	2 x 12 T& 3 x 15 T (**2,48,000 TPA**)	2 x 12 T, 3 x 15 T **Operational** 2X15 T (CTE under NIIPL) (2,48,000 TPA)
	d) Electric Arc Furnace with AOD/VOD & Caster (MS Ingots/Billets/Blooms)	1 x 40 T (**1,20,000 TPA**)	CET To be operated
4.	Rolling Mill (Rolled Products/Structural Steels/ TMT Bars/ Wire Drawing Mill)	**3,45,250 TPA** (1,45,250 TPA+ 2,00,000 TPA)	3,45,250 TPA **Operational**
5.	Producer Gas Plant (Gasifier)	30,000 Nm3/Hr.	14,250 PP +15,500 RM Nm3/Hr. **CTE granted** 8,500 Nm3/Hr.**Operational**
6.	Ferro Alloys Plant	2 x 9 MVA	CET To be operated
	• Ferro - Silicon or	12,600 TPA	
	• Silico - Manganese or	28,400 TPA	
	• Ferro - Manganese	37,000 TPA	
7.	Power Plant (WHRB Based)	18+2 MW	20 MW **Operational**
8.	Power Plant (CFBC Based)	7 MW	7 MW **Operational**

Presently we are operating DRI, Induction Furnace, rolling mill, Gasifier, Power Plant (WHRB Based) and Power Plant (CFBC Based).

2.3 Data Collection

The primary data were collected by our Environment Management team from power plant division. 7.0 MW Coal based captive captive power plant is main source of CO2 emission and secondary data collected through Internet by visiting various websites. DRI kiln Waste heat recover to generate up-to 20 MW electricity by Waste heat recovery boiler without emitting any additional GHG.

2.4 Procedure for quantification of GHG emission

Emissions = Fuel x CC x 44/12

Where: Emissions = Mass of CO2 emitted
Fuel = Mass or volume of fuel combusted
CC = Fuel carbon content, in units of mass of carbon per mass or volume of fuel 44/12 = ratio of molecular weights of CO2 and carbon.

This Equation used to calculate CO2 emissions when the actual carbon content of the fuel is known. Carbon content is typically expressed as a percentage by mass, which requires fuel

use data in mass units. This equation is most preferred for CO2 calculations because CO2 emissions are directly related to the fuel's carbon content.

An emissions factor is a representative value that attempts to relate the quantity of GHG released to the atmosphere from an activity that releases GHG. These factors are usually expressed as the mass of GHG per unit mass of raw material, volume, distance travelled, or duration of the activity (e.g., grams of CO2 emitted per kilogram of coal burnt). Such factors facilitate estimation of emissions from various sources. In most cases, these factors are simply averages of all available factors of acceptable quality, and are generally assumed to be representative of long-term averages for most source categories. The GHG emission is finally converted to total carbon dioxide equivalent (tCO2e).

2.4.1 Quantification of GHG emission Scope-1

Calculating Emissions:-

Step 1: The amount of fuel combusted has been determined based on purchase data on utility bills from the supplier.

Step 2: Carbon content is known,

Step 3: Fuel heat content has been provided by the supplier.

Step 4: The emissions are calculated as follows:

Emissions = Fuel x CC x 44/12

Where: Emissions = Mass of CO2 emitted
Fuel = Mass or volume of fuel combusted
CC = Fuel carbon content, in units of mass of carbon per mass or volume of fuel
44/12 = ratio of molecular weights of CO2 and carbon

Table-3 Baseline Carbon Emission Reduction Calculation

API AFBC= 7 MW (CO2 Emission)			
S. No.	**Particular**	**Calculation/Factor**	**Unit**
1	No. of days operation per year	342	days
2	Plant load factor	0.81	percentage
3	Total Power Generation Capacity	7	MW
4	Total Working Hour for Power Plant	24	hrs
5	Total Power Generation (A)	58800	MW/Year
6	Gross Power Generation (B)	46539.36	MW/Year
7	Auxiliary Power Consumption Formula	B*10%	
8	Auxiliary Power Consumption Calculation (C)	4653.936	
9	Net Power Generation Formula	B-C	
10	Net Power Generation Calculation (D)	41885.424	MW/Year
11	Emission factor of Captive Power Generation (As Per National CO2 Factor)	0.96	Ton CO2/MWh
	Total CO2 Emission by AFBC	**40210.00704**	**Ton CO2/Year**

2.4.2 Quantification of GHG emission Scope-2

Greenhouse gas emissionsIndirect Emissions from Purchased Electricity: This section presents guidance to calculate GHG emissions from purchased electricity, steam, heat, and cooling. This guidance is applicable to calculation of emissions in both the location-based and market-based methods. For both the location-based and market-based methods, emissions are calculated by multiplying the purchased electricity by appropriate emission factors. The steps involved with calculating emissions from consumption of purchased electricity are shown below. The same approach is applicable to steam, heat, and cooling

Step 1: Determine the amount of electricity purchased.

Step 2: Determine emission factors

Step 3: Calculate emissions of CO2.

Emissions = Electricity x EF

Where: Emissions = Mass of CO2
Electricity = Quantity of electricity purchased
EF = CO2 emission factor

Emissions = 16658.4*0.83
=13659.88 MY/Year

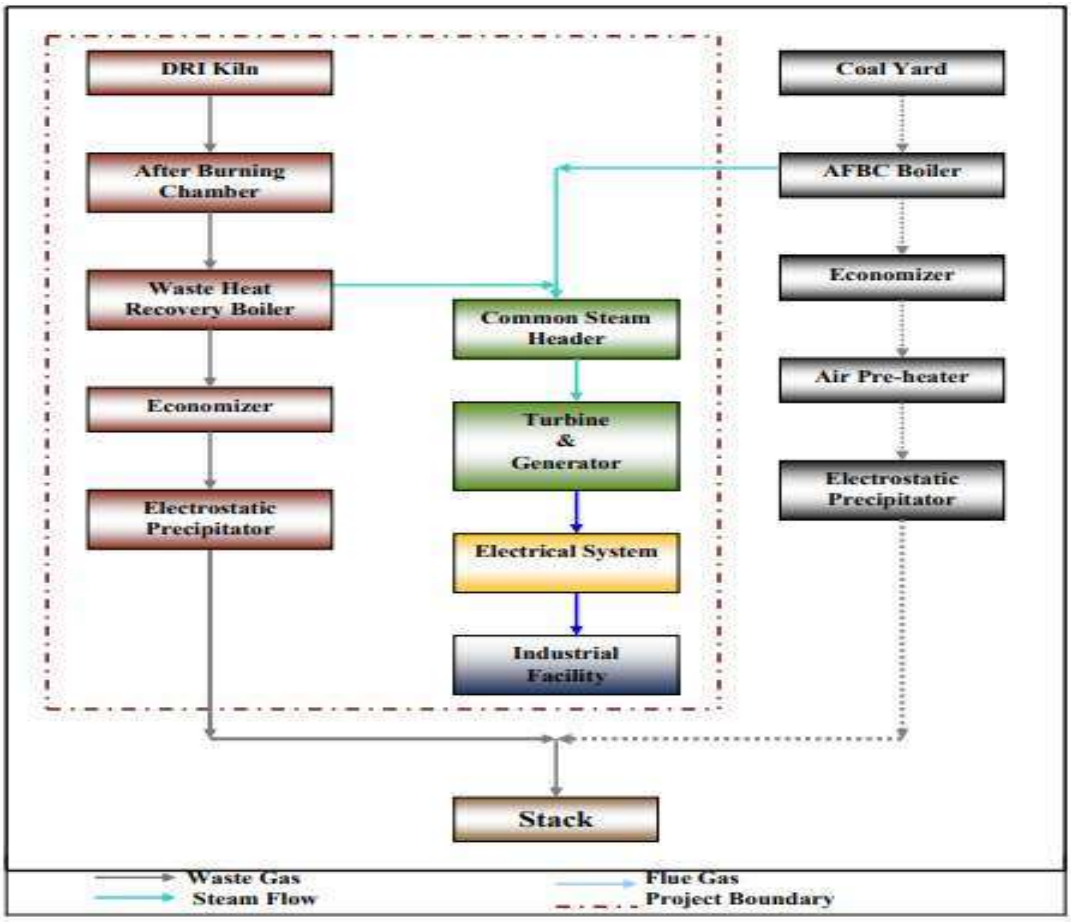
2.5 Quantification of GHG Reduction

We have adapted two methodologies for the reduction of CO2 emission.

2.5.1 Reduction of CO2 emission by WHRB

The primary purpose of the project is to recover the sensible heat content of the waste gases generated from DRI Kilns using Waste Heat Recovery Boiler (WHRB) to generate cleaner power and thus contribute to the energy security of the nation by conserving natural resources.The project activity displaces power from fossil fuel based captive power of the company and hence reduces CO2 emission. The WHRB power saves coal combustion thus to this extent the fly ash generated pollution is saved in addition the pollution caused in the coal mining and transportation also is saved to this extent. APIIPL will follow monitoring plan to achieve complete transparency in monitoring, recording and calculating reduction in CO2 emissions. The project activity will lead to sustainable development and promote sustainable Industrial growth by conserving natural resources and preventing the thermal pollution even though no such statutory requirement exists.

Table-4WHRB Process flow chart



2.5.2 Calculation of Emissions Reduction by WHRB

Table-5 Baseline Carbon Emission Reduction Calculation

WHRB 20 MW (CO2 Emission Reduction)			
S. No.	**Particular**	**Calculation/Factor**	**Unit**
1	No. of days operation per year	345	days
2	Plant load factor (%)	0.85	percentage
3	Total Power Generation Capacity	20	MW
4	Total Working Hour for Power Plant	24	hrs
5	Total Power Generation (A)	165600	MW/Year
6	Gross Power Generation (B)	140760	MW/Year
7	Auxilary Power Consumption Formula	B*10%	
8	Auxilary Power Consumption Calculation (C)	14076	
9	Net Power Generation Formula	B-C	
10	Net Power Generation Calculation (D)	126684	MW/Year
11	Emission factor of Captive Power Generation (As Per National Co2 Factor)	0.96	Ton CO2/MWh
	Total CO2 Emission reduction by WHRB	**121616.64**	Ton CO2/Year

2.6 Carbon sequestration by Green Belt

We have developed green belt 40% of total plant is that is 39.0 Acer within the plant premises of different plant species. Carbon Sequestration is basically withholding carbon in some safe form (biomass) other than the gaseous form as long as possible. The carbon absorbing potential is high in the initial stages of plant growth, when growth rate is high and it declines towards the plants maturity. Carbon sequestration potential of the green belt was estimated using methods prescribed by Ravindranath and Ostwald (2008) in Carbon Inventory Methods.

2.6.1 Calculation of Carbon sequestration by Green Belt

We have developed the green belt 40% of total area i.e 39.0 Acer within the plant premises. On average, one acre of new forest can sequester about 2.5 tons of carbon annually. Young trees absorb CO2 at a rate of 5.98 kg per tree each year. Depending on, amongst others, age, climate zone, type of forest and soil, a hectare of trees captures of CO2

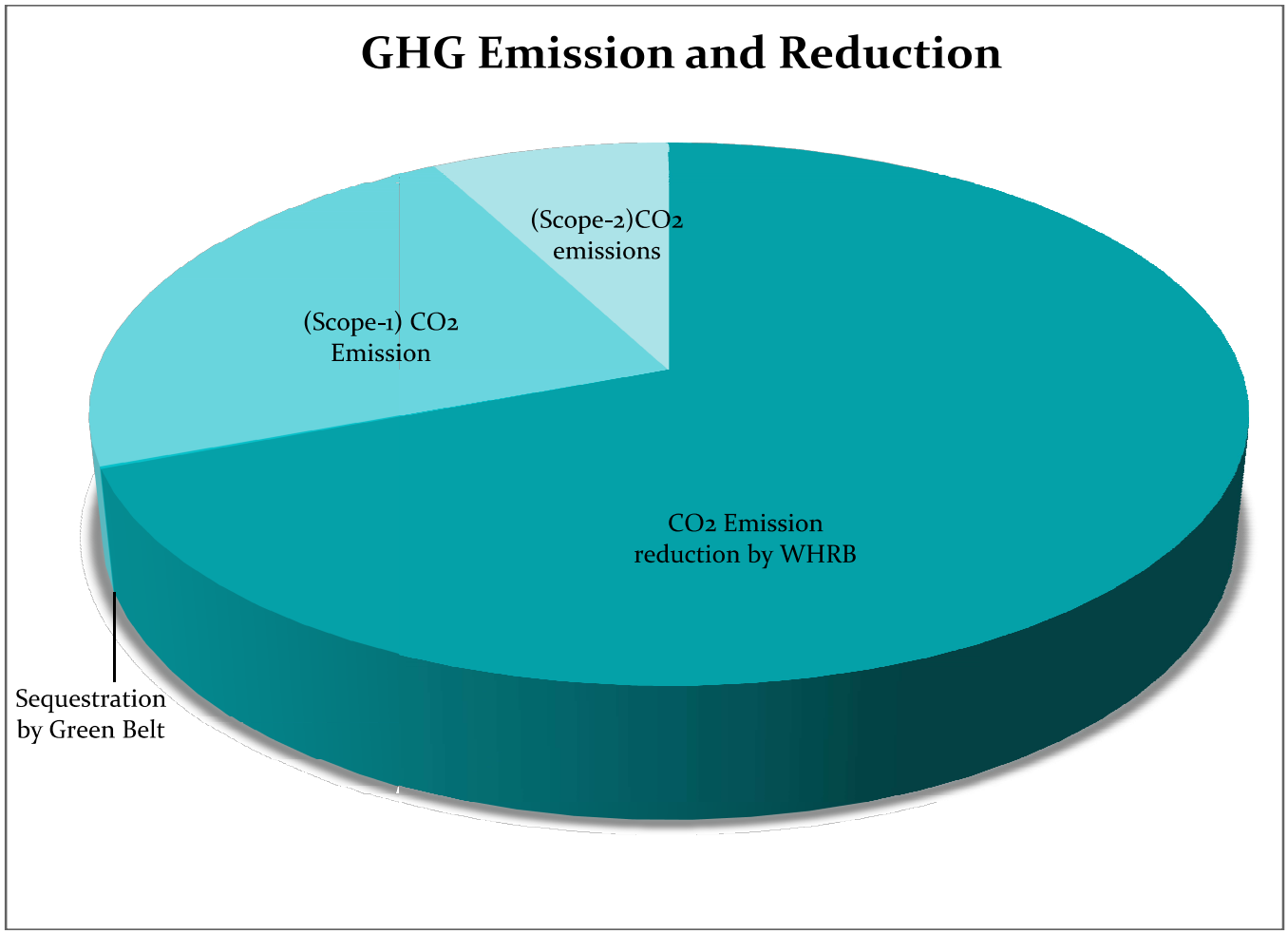
Table-6 Calculation of Carbon sequestration by Green Belt

S. No.	Particular	Calculation/ Factor/Formula	Unit
1	Total Plantation Area	39	Acre
2	Plantation Per Acre	1000	Per Acre
3	Total Plants inside	39000	Trees
4	One Young Plant can absorb CO2	5.98	Kg/Year
5	Total Green Belt absorb CO2	233220	KG/Year
	Carbon sequestration by Green Belt	**233.22**	**T/Year**

2.6.2 Net Grass CO2 reduction analysis

Table-7 Net Grass CO2 reduction

S.No.	Source of Emission and Reduction	MT/ Year
1	CO2 Emission reduction by WHRB	121616.64
2	Carbon sequestration by Green Belt	233.22
3	CO2 Emission by AFBC (Scope-1)	40210.00
4	CO2 emissions by Purchased Electricity(Scope-2)	13659.88
	Net CO2 Emission reduction	**67979.965**



CHAPTER-3

3.0 GHG MITIGATION STRATEGIES

3.1 General

We understand the impact of the stainless steel industry on climate change. We endeavor to reduce and manage our GHG emissions (Scope 1 and 2) through process improvements that are less energy intensive. Our GHG emission management strategy includes monitoring, evaluating and understanding GHG performance. We evaluate performance through sustainability reviews and energy audits. We work relentlessly to manage carbon impact from our operations as well as our supply chain.

3.2 LED lights and Solar panel

We have installed the LED light inside the plant premises and 2 kw solar panel in our sister plant Real Ispat & Power Private Limited and M/s Shivalay Ispat and Power Pvt. Ltd.

3.3 Energy efficient Vehicles

We need to introduce efficient fuels or vehicles to reduce the emissions by transport sector. Introduction of Electric/Hybrid Vehicles: if electrical and hybrid vehicles are introduced. The additional electricity needed by the vehicles is not accounted for in the GHG emissions due to unavailability of data.

3.4 Reduction of Fuel

There are a variety of opportunities to reduce greenhouse gas emissions associated with electricity generation, transmission, and distribution.Reductions in fuel consumption result in reductions of direct emissions of GHGs at the steel plant, and reductions in electricity usage result in reductions of indirect GHG emissions (i.e., GHG emissions from the power plant supplying the electricity).

3.6 Energy efficient Machineries & process

The Iron and Steel industry is an energy intensive industry. However, industrywide technology advances, such as new process adoption and widespread adoption of advanced process controls, have reduced energy intensity. Hot charging rolling mills reduce the consume electricity; they consequently contribute to reduction emissions of GHGs.

CHAPTER-4

4.0 CONCLUSIONS AND RECOMMENDATION

4.1 Conclusions

Net CO2 emission from our plant is less in compare to CO2 generation by Scope-1 and Scope-2. Project activity is environment friendly and is generating employment and other benefits. The project will attain sustainable development of the region.

4.2 Recommendation

1. Cut Consumption & Get More Energy-Efficient Making capital investments in newer, more energy-efficient equipment can lower your operating costs and reduce emissions at the same time.
2. When replacing old equipment, select an energy-efficient model.
3. Only power on equipment and electronics when needed.
4. Optimize lighting as well as heating and cooling use to run less when no one is in the building.
5. Use the renewable source of energy.(Examples include rooftop solar panels, solar water heating, small-scale wind generation, fuel cells powered by natural gas or renewable hydrogen, and geothermal energy.)
6. Develop the think green belt.
7. Reduction of fuel consumption
8. Organizations can reduce their market-based scope 2 emissions by purchasing renewable energy, or “green power.”

*****

RADHA RAMAN NAYAK

M.Tech.(Applied Geology)
Regd. Hydrogeologist From Raipur Municipal Corporation
Regd No. 992/2017-18

Address : Gole Chowk, Sector-2
DDU Nagar, Raipur (C.G.)
Mobile : 8962258928
Email : radhageo8@gmail.com

Ref NO- RWH /05/ Raipur/2021-22

Dated- 19/07/2021

RAIN WATER HARVESTING CERTIFICATE

This is Certify that **M/s API Ispat & Powertech Private Limited** located at village- Siltara, Near Phase-II, Siltara Industrial Area, District- Raipur (C.G.) Pin: 493111 has successfully constructed 10 no's of Recharge pit System in their plant premises & 01 No. of deepening work in pond is located at murethi village.

(i) Size of the all recharge structure is

1. W (2.5M) x L (2.5M) * Depth (6.0M).
2. W (2.5M) x L (2.5M) * Depth (6.0M).
3. W (2.5M) x L (2.5M) * Depth (6.0M).
4. W (2.5M) x L (2.5M) * Depth (6.0M).
5. W (2.5M) x L (2.5M) * Depth (6.0M).
6. W (2.5M) x L (2.5M) * Depth (6.0M).
7. W (2.5M) x L (2.5M) * Depth (6.0M).
8. W (2.5M) x L (2.5M) * Depth (6.0M).
9. W (2.5M) x L (2.5M) * Depth (6.0M).
10. W (2.5M) x L (2.5M) * Depth (6.0M).

(ii) Area of the recharge pond is **5200** Square Meter.

All The Recharge structure is working properly during the site visit of the plant.

Radha Raman Nayak
Regd. Hydrogeologist

RADHA RAMAN NAYAK
Regd. Hydro-Geologist
Nagar Nigam Raipur 992/2017-18

RADHA RAMAN NAYAK

M.Tech.(Applied Geology)
Regd. Hydrogeologist From Raipur Municipal Corporation
Regd No. 992/2017-18

Address : Gole Chowk, Sector-2
DDU Nagar, Raipur (C.G.)
Mobile : 8962258928
Email : radhageo8@gmail.com

Necessary Precaution

1. Every year changed the Filter Media from RWH Structure.
2. Weekly clean the Roof Top and Open Area.
3. This system working in Rainy Season (July-Nov) Every Year.
4. The system designed for Purely Rain Water Harvesting, Ensure that Recharge Water is purely Rain water/fresh water only & Contaminated free.
5. Water is precious please Save Water.

Enclosure: Site Working Photograph

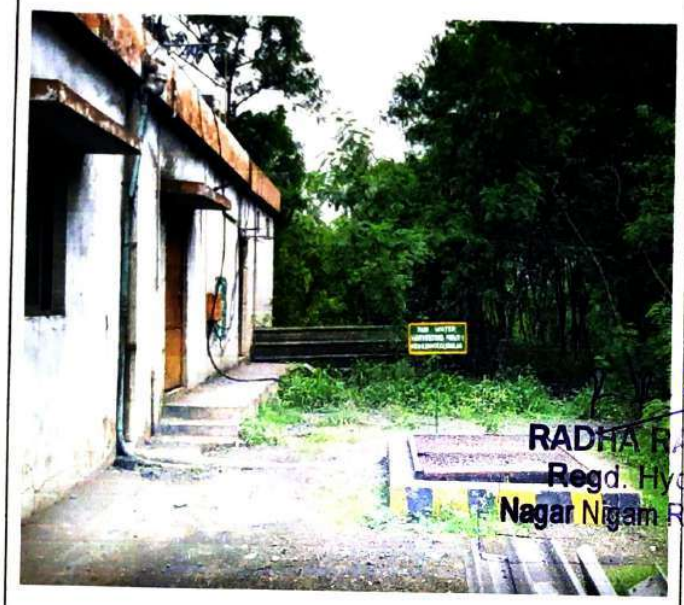
R. R. Nayak

Radha Raman Nayak

Regd. Hydrogeologist

RADHA RAMAN NAYAK
Regd. Hydro-Geologist
Nagar Nigam Raipur 992/2017-18

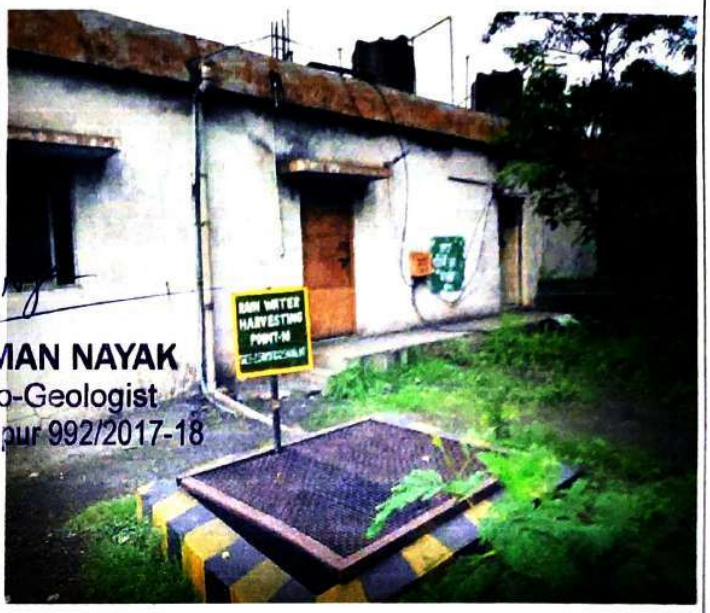
PHOTOGRAPH OF RAIN WATER HARVESTING STRUCTURE

RWH PIT-1	RWH PIT-2
	
RWH PIT-3	**RWH PIT-4**
	

RADHA RAMAN NAYAK
Regd. Hydro-Geologist
Nagar Nigam Raipur 992/2017-18

RWH PIT-5	RWHPIT6
	
RWH PIT-7	**RWH PIT-8**
	

RADHA RAMAN NAYAK
Regd. Hydro-Geologist
Nagar Nigam Raipur 9921/2017-18

RWH PIT-9	RWH PIT-10
	

R.R.N

RADHA RAMAN NAYAK
Regd. Hydro-Geologist
Nagar Nigam Raipur 992/2017-18

API ISPAT & POWERTECH (P) LTD.

City Office : "Vrindavan", Near IDBI Bank, Civil Lines, Raipur (C.G.) 492001
Tel : +91 771 4224000, Fax : 4224010, Email : apiispat@gmail.com

API/CECB/FLY ASH/22-23/107

Date: 12/04/2023

To,

The Regional Officer,
Chhattisgarh Environment Conservation Board,
Commercial Complex, Kabir Nagar,
Dist- Raipur Chhattisgarh

Sub: Submission of annual return fly ash generation and utilization for the period of 1st April 2022 to 31stMarch 2023-: Reg.

Ref: **CECB Letter no 34 / RO/CECB/2023 ON 05.04.2023**

Respected Sir,

With reference to above subject matter, we are submitting annual (1st April 2022 to 31st March 2023) fly ash generation and utilization details from coal-based power plant (WHRB 20 MW + FBC 07 MW) at Near Industrial Grouth Centre, Phase-2 Siltara, District - Raipur, Chhattisgarh, detail is enclosed as ***Annexure-I.***

This is for your kind information and record please.

Thanking You

For, **M/s API Ispat and Powertech Private Limited**

R.O.C.E.C.B. L.R.No. 1101 DATE 18/4/2023 RAIPU

Authorized Signatory

Copy To:

1. The Member Secretary Chhattisgarh Environment Conservation Board Paryavas Bhavan, North Block Sector-19, Atal Nagar Dist.- Raipur (C.G.).
2. The Scientist "C", Integrated Regional Office, MOEF&CC, Aranya Bhawan, North Block, Sector-19, Atal Nagar, Raipur Chhattisgarh.
3. The Regional Director, CPCB, Regional Office, 3rd Floor, Sahkar Bhawan, North D.D. Nagar, Bhopal (M.P.)

ANNEXURE I

FLY ASH UTILIZATION REPORT FBC POWER PLANT FOR THE YEAR 2022-2023 (1st APRIL'2022 TO 31st MARCH' 2023)

S.N.	Name of the Thermal Power Plant	Capacity in MW	Qty of generated fly ash (01.04.2022 to 31.03.2023)	Fly ash Generation and utilization FY 2022-23								
				Supply to Cement Plant (MT)	Brick Manufacturing (MT)	Inside Land Filling (MT)	Ash Dyke Raising/ Construction (MT)	Agriculture (MT)	Mining Filling (MT)	Any other use (MT) in others brick plants	Total (MT)	Percentage utilization
1	API Ispat & Powertech Private Limited Located Near Industrial Growth Centre, Phase-II, Siltara, Tehsil & District- Raipur	Captive power plant (20 MW WHRB + 07 MW FBC) 27 MW	75400	43261.435	1303.5	-	-	-	-	30835.01	75400	100

API ISPAT & POWERTECH (P) LTD. RAIPUR (C.G.)

API ISPAT & POWERTECH (P) LTD.

City Office : "Vrindavan", Near IDBI Bank, Civil Lines, Raipur (C.G.) 492001
Tel : +91 771 4224000, Fax : 4224010, Email : apiispat@gmail.com

API/ENV/CECB/HW/2023-24/109 **Date: 17/04/2023**

To,
The Regional Officer
Chhattisgarh Environment Conservation Board
Commercial Complex, Chhattisgarh Housing Board Colony,
Kabir Nagar, Raipur, Chhattisgarh.

Sub: Submission of Hazardous Waste annual return (Form-IV) for FY 2022-23 reg.

Respected Sir,

With reference to above subject, we are submitting herewith Hazardous Waste annual return (Form-IV) for FY 2022-23 under Hazardous & Other Wastes (Management and Trans boundary Movement) Rules, 2016.

This is for your kind information and record.

Yours Faithfully,
For, **API Ispat & Powertech Private Limited**

Authorized Signatory

R.O.C.B.C.B. E.R.No. 1061 DATE 12/4/23 IPU

Encl: Form-IV.

C.C.: The Member Secretary, Chhattisgarh Environment Conservation Board, Payavash Bhawan, Sector-19, Nava Raipur, Atal Nagar,

FORM 4

FORM FOR FILING ANNUAL RETURNS

[To be submitted to State Pollution Control Board by 30thday of June of every year for the preceding period April to March]

PERIOD : FROM 01.04.2022 TO 31.03.2023

1. Name and address of facility: API ISPAT & POWERTECH PRIVATE LIMITED
   Near Industrial Growth Centre, Phase – II, Siltara,
   Tehsil and District – Raipur (C.G.)

2. Authorization No. and Date of issue: **487/HO/HSMD/CECB/ NAVA RAIPUR ATAL NAGAR, RAIPUR Dtd. 04/06/2022**

3. Name of the authorized person and full address with telephone, fax number and e-mail
   : Mr. Krishna Kumar Chaturvedi,
   Near Industrial Growth Centre,
   Tehsil and District – Raipur (C.G.)
   E-mail : apipowertech@gmail.com

4. Production during the year (product wise), wherever applicable

Part A. To be filled by hazardous waste generators

1. Total quantity of waste generated category wise
   1. Category: 5.1 (Used/ Spent Oil) : 2690 Ltrs.
   2. Category: 35.1 (Tarry residue) : Nil
   3. Category: 35.2 (Spent ion exchange resin containing toxic metals) : Nil
   4. Category: 35.3 (Chemical Sludge from waste water treatment) : Nil
   5. Category: 33.1(Empty barrels/containers/liners contaminated with Hazardous chemicals /wastes). : Nil
   6. Category: 33.2 (Contaminated cotton rags or other cleaning materials) : Nil
   7. Category: 1.4 Phenolic Waste Water : Nil

2. Quantity dispatched
   1. Category: 5.1 (Used/ Spent Oil) : Nil
   2. Category: 35.1 (Tarry residue) : Nil
   3. Category: 35.2 (Spent ion exchange resin containing toxic metals) : Nil
   4. Category: 35.3 (Chemical Sludge from waste water treatment) : Nil
   5. Category: 33.1(Empty barrels/containers/liners contaminated with Hazardous chemicals /wastes). : Nil
   6. Category: 33.2 (Contaminated cotton rags or other cleaning materials) : Nil
   Category: 1.4 Phenolic Waste Water : Nil

3. Quantity utilized in-house, if any – : 2610 Ltrs. (Used in lubrication)
4. Quantity in storage at the end of the year – : **80 Ltrs.**

Part B. To be filled by Treatment, storage and disposal facility operators

1. Total quantity received	-	N.A.
2. Quantity in stock at the beginning of the year	-	N.A.
3. Quantity treated	-	N.A.
4. Quantity disposed in landfills as such and after treatment	-	N.A.
5. Quantity incinerated (if applicable)	-	N.A.
6. Quantity processed other than specified above	-	N.A.
7. Quantity in storage at the end of the year	-	N.A.

Part C. To be filled by recycler or co-processors or other users

1. Quantity of waste received during the year	- N.A.
(i) Domestic sources	
(ii) imported (if applicable)	
2. Quantity in stock at the beginning of the year	- N.A.
3. Quantity recycled or co processed or used	- N.A.
4. Quantity of products dispatched (wherever applicable)	- N.A.
5. Quantity of waste generated	- N.A.
6. Quantity of waste disposed	- N.A.
7. Quantity re-exported (wherever applicable)	- N.A.
8. Quantity in storage at the end of the year	- N.A.

Date :17.04.2023

Signature of the Occupier
or
Operator of the disposal facility

Place:Raipur (C.G.)

Annexure-13

Environment Management Cost

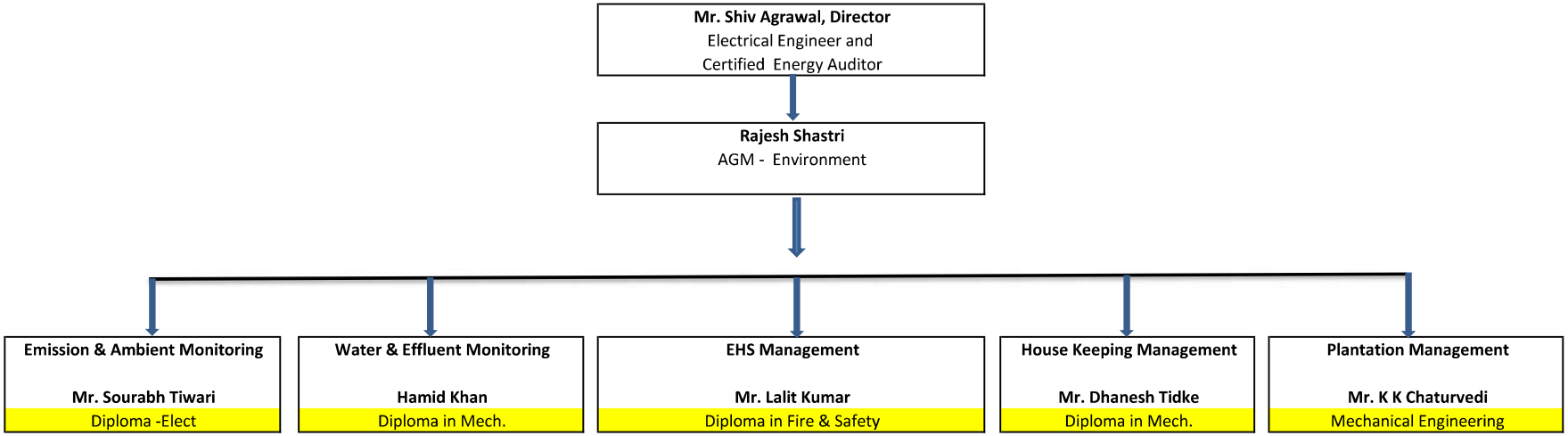
API ISPAT & POWERTECH PRIVATE LIMITED

S. No.	Description	Approx amount in Rs (in Lac)
1	Environment Management Cell	805000
2	Maintenance of Pollution Control Equipment	31563
3	Procurement & Installation and maintenance of water sprinkling system for dust supression	1391524
4	ESP/BF Air Pollution Control Equipments Maintenance	78639
5	ETP & STP maintenance & operation cost	282838
6	Wheel Washing System Operation Cost	30304
7	AMC for drinking water (Water Purifier & Water Cooler) for workers	8378
8	Operation and Maintenance of Road Sweeping Machine	830738
9	Environment Monitoring, procurement of Instrument & its Spare parts, Calibration of instrument and CMC for Continuous Emission Monitoring System	3860449
10	Saplings Procurement & Plantation activities and spare part	144995
11	Manpower for Green Belt Development & Maintenance	829242
12	Manpower for Garland Drain Cleaning	570000
13	Manpower for Road Sweeping	
14	Manpower for Occupational Health Centre	467784
15	Occupational Health (Plant)- Periodical Health Checkup, Medicines procurement and Insurance policy for workers	975221
16	Fire Safety System	377998
GRAND TOTAL >>>		10684673

API ISPAT & POWERTECH PVT. LTD.

Annexure-XII

ENVIRONMENT CELL ORGANIZATIONAL CHART



Annexure- 25

NEWS PAPER ADVERTISEMENT

अमृत संदेश रायपुर ■ गुरुवार 14 मार्च 2019 11

सूचना

सर्वसाधारण को सूचित किया जाता है कि मेसर्स एपीआई इस्पात एण्ड पावरटेक प्राइवेट लिमिटेड को ग्राम- सिलतरा, फेज-2 के समीप, सिलतरा औद्योगिक विकास केन्द्र, तहसील व जिला: रायपुर (छग) में नवीन आवरन ओर बेनिफिकेशन एवं पैलेट प्लांट (पैलेट- 6,00,000 टन/वर्ष), प्रोड्यूसड गैस प्लांट- 30,000 सामान्य घन मीटर/ घण्टा इण्डक्शन फर्नेस (एमएस इंगॉट्स/बिलेट्स/ब्लूम्स 86,400 टन/वर्ष से 2,48,400 टन/वर्ष), नवीन इलेक्ट्रिक आर्क फर्नेस विथ एओडी/वीओडी कास्टर (एमएस एवं एमएस इंगॉट्स/ बिलेट्स/ ब्लूम्स 1,20,000 टन/वर्ष), रोलिंग मिल (रोल्ड प्रोडक्ट/स्ट्रक्चुरल स्टील्स/ टीएमटी बार 1,45,250 टन/वर्ष से 3,45,250 टन/वर्ष), नवीन फैरो एलॉयज ईकाई (FeSi 12,600 टन/वर्ष/SiMn - 28,400 टन/वर्ष/ FeMn - 37,000 टन/वर्ष में क्षमता विस्तार हेतु पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, (MoEF&CC) भारत शासन के पत्र क्रमांक J-11011/ 377/2014-IA-II(I), नई दिल्ली, दिनाँक: 06.03.2019 द्वारा पर्यावरणीय स्वीकृति प्रदान की गई है, जिसका अवलोकन मुख्य कार्यालय इन्दिरा पर्यावरण भवन, जोरबाग रोड, नई दिल्ली -3 तथा पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, भारत शासन के वेबसाइट environment clearance. nic.in पर किया जा सकता है एवं इसकी प्रतिलिपी छत्तीसगढ़ पर्यावरण संरक्षण मण्डल के मुख्य कार्यालय नॉर्थ ब्लॉक, पर्यावास भवन, सेक्टर - 19, अटल नगर, रायपुर तथा छत्तीसगढ़ पर्यावरण संरक्षण मण्डल के क्षेत्रीय कार्यालय, कमर्शियल कॉम्प्लेक्स, छत्तीसगढ़ हाऊसिंग बोर्ड कालोनी, कबीर नगर, रायपुर (छ.ग.) में भी उपलब्ध है।

हेतु,
एपीआई इस्पात एण्ड पावरटेक प्राइवेट
(डायरेक्टर)

WORLD 05
CENTRAL CHRONICLE, RAIPUR, THURSDAY, MARCH 14, 2019

NOTICE

This is to inform all the concerned peoples that M/s API Ispat & Powertech Private Limited has accorded Environmental Clearance by Ministry of Environment, Forest & Climate Change, Government of India vide its letter No.: J-11011/377/2014-IA-II(I), New Delhi, Dated: 06.03.2019 for capacity expansion in their New Iron Ore Benefication & Pellet Plant (Pellets-6,00,000 TPA) Produced Gas Plant- 30,000 Nm3/Hr., Induction Furnace (MS Ingots/ Billets/ Blooms from 86,400 TPA to 2,48,400 TPA), New Electric Arc Furnace with AOD/VOD Caster (MS & SS Ingots/ Billets/ Blooms – 1,20,000 TPA), Rolling Mill (Rolled Products/ Structural Steels/ TMT Bars from 1,45,250 TPA to 3,45,250 TPA), New Ferro Alloys Unit (FeSi – 12,600 TPA/ SiMn – 28,400 TPA/ FeMn – 37,000 TPA at Village: Siltara, Near Phase-2, Siltara Industrial Growth Centre, Tehsil & District: Raipur (C.G). The aforesaid Environment Clearance letter is available on website of Ministry of Environment, Forest & Climate Change, Government of India (MoEF&CC) [environmentclearance.nic.in] and copies are also available at Head Office of Chhattisgarh Environment Conservation Board, North Block, Paryavaas Bhawan, Sector – 19, Atal Nagar, Raipur and Regional Office, Chhattisgarh Environment Conservation Board, Commercial Complex, Chhattisgarh Housing Board Colony, Kabir Nagar, Raipur (C.G.).

For,
API Ispat & Powertech
Private Limited
(Director)

API ISPAT & POWERTECH (P) LTD.

City Office : "Vrindavan", Near IDBI Bank, Civil Lines, Raipur (C.G.) 492001
Tel : +91 771 4224000, Fax : 4224010, Email : apiispat@gmail.com

Date: 10.05.2023

API/ENV/EC/22-23 / 113

To,

The Scientist "C",

Integrated Regional Office,

MOEF&CC, Aranya Bhawan, North

Block, Sector-19, Atal Nagar, Raipur Chhattisgarh

Sub: Submission of Six-Monthly Environmental Compliance report for the period **October, 2022 to March, 2023** with respect to M/s **API Ispat & Powertech Private Limited, at** near Industrial Growth Centre, Phase – II, Siltara Tehsil & District, Raipur Chhattisgarh – Reg.

Ref: Environmental Clearance issued by MoEF&CC vide File no. J-11011/377/2014-IA-II (I) dated 6th March, 2019.

Respected Sir,

With reference in the subject, please find the attached **Six-Monthly Environment Clearance Compliance report** for the period of **October, 2022 to March, 2023** along with monitoring report Part-1 Datasheet as **Annexure–1** and Environmental Clearance compliance status report as on date is enclosed as **Annexure–2** with respect to **API Ispat & Powertech Pvt. Ltd.** at near Industrial Growth Centre, Phase – II, Siltara Tehsil & District, Raipur Chhattisgarh

Honorable MoEF&CC, has granted the EC for Expansion of Steel Plant – New Iron Ore Benefication & Pellet Plant (Pellet – 6,00,000 TPA), Producer Gas Plant 30,000 Nm3/Hr, Induction Furnace (MS Ingots/ Billets/ Blooms from 86,000 TPA to 2,48,400 TPA), New Electric Arc Furnace with AOD/ VOD Caster (MS & SS Ingots/ Billets/ Blooms – 1,20,000 TPA), Rolling Mill (Rolled Products/ Structural Steels/ TMT Bars – from 1,45,250 TPA to 3,45,250 TPA), New Ferro Alloys Unit (FeSi – 12,600 TPA/ SiMn – 28,400 TPA/ FeMn – 37,000 TPA, Power Plant -25 MW (WHRB based 18 MW and FBC based -7 MW).

But at present the following units has been commissioned and under the operation: -

S. No.	Units (Products)	Present Operational Status
1.	DRI Kilns (Sponge Iron)	2 x 350 TPD (2,10,000 TPA)
2.	Waste Heat Recovery Based Captive Power Plant (10 MW + 10 MW)	20 MW
3	Fluidized Bed Boiler Based Captive Power Plant	07 MW
4	Induction Furnace (2 X 12 T, + 5 X 15 T) with CCM (MS Ingots/ Billets/ Blooms)	2,37,600 MTPA)
5	MS Ingots/ Billets/ Blooms (New Induction Furnaces 2 x20 T)	1,20,000 MTPA
6	Rolling Mill / Wire Drawing Mill	1,45,250 MTPA
7	Hot Charged Rolling Mill	2,00,000 MTPA
8	Coal Gasifier Plant	8,500 Nm3/Hr.

This is for your kind information and record please.

Thanking you,

Yours faithfully,
For, **API Ispat & Powertech Pvt. Ltd.**

Authorized Signatory
(Dr. Sunil Kushwaha)

Encl:

- Annexure – 1: Monitoring data sheet.
- Annexure – 2: Compliance status of the Environment Clearance conditions with annexure.

Copy To:

1. The Member Secretary, CECB Paryavas Bhavan, North Block Sector-19, Atal Nagar Dist.- Raipur (C.G.).
2. The Regional Officer, CECB, Commercial Complex, Kabir Nagar, Dist- Raipur Chhattisgarh.
3. Uploaded on Parivesh Portal.

API ISPAT & POWERTECH (P) LTD.

City Office : "Vrindavan", Near IDBI Bank, Civil Lines, Raipur (C.G.) 492001
Tel : +91 771 4224000, Fax : 4224010, Email : apiispat@gmail.com

API/ENV/23-24/ .128 Date: **30/09/2023**

To,

The Member Secretory
Chhattisgarh Environment Conservation Board,
Sector-19, Paryavas bhavan,
Atal Nagar ,New Raipur,
Chhattisgarh-492101

Sub: Submission of Environment Statement for FY- 2022-23_Reg.

Respected Sir,

We reference to the subject matter please find enclosed herewith Environment Statement (F-V) for the financial Year 2022-2023 with respect to the plant operation.

Thanking You,

Yours Faithfully

For, **API Ispat & Powertech Pvt. Ltd.**

RK Chaturvedi 30/9/2023

Authorized Signatory

Encl: Environment Statement (FORM-V)- for FY 2022-23

CC To : The Regional Officer, RO- CECB,Commercial Complex, Housing Board Colony, Kabir Nagar, Raipur (C.G.)

R. O. C. B. C. B. L.R.No DATE 3/10/23 RAIPUR.

R.O. C.G. Environment Conservation Board Atal Nagar Dist.-Raipur (C.G.) 3/10/23

Please do not enter any special chara

Form for Uploading Compliance Report

Proposal No :	IA/CG/IND/79244/2014	**Proposal Name :**	API Ispat and Powertech Private Limited
Category :	Industrial Projects - 1	**MoEF File No. :**	J-11011/374/2014-IA.II(I)

Compliance Letter/Report

Year of Compliance: -All Years-

Date of Compliance * : Select

Remarks :

Upload Compliance Letter/Report * : Choose File No file chosen **(.pdf only)**

SUBMIT

Sno.	Proposal No.	Uploaded copy of Compliance report	Remarks	Uploaded Date	Delete
1	IA/CG/IND/79244/2014	08092019X7VIAN9CAPIECCOMPLIANCE.pdf		09/08/2019	
2	IA/CG/IND/79244/2014	091620208NKPCPO9APIECOMPLIANCE10520.pdf		16/09/2020	
3	IA/CG/IND/79244/2014	02162021DHCMPRSFECComplianceReportSeptoDec_API.pdf	Six monthly EC compliance from April to Sept.'2020	16/02/2021	
4	IA/CG/IND/79244/2014	0531202147211338ECComplianceReportSeptoDec_APIOct20toMarch21.pdf	Six Monthly EC Compliance Report for the Period of October 20 to March 21	31/05/2021	
5	IA/CG/IND/79244/2014	1123202136041608API_HECC_April21toSep21withallannexure-compressed.pdf	API Six Monthly EC Compliance Report for the Period of April to September 21	23/11/2021	