



Ref: NINL/EMC/2024-25/93

Date: 28 Nov 2024

To

**Deputy Director General of Forests (C )  
Ministry of Environment, Forests & Climate Change,  
Integrated Regional Office (EZ)  
A/3 Chandrasekharpur,  
Bhubaneswar 751023**

**Sub: Submission of Six-Monthly Compliance Report (Apr 2024 to Sep 2024), Neelachal Ispat Nigam Limited**

Reference: EC vide letter no. J-11011/23/94-IA.II(I) dated Aug 1, 1996

Dear Sir,

We at Neelachal Ispat Nigam Ltd., while carrying out its operation, reiterate our commitment to preserve the environment. Environmental conditions as stipulated in the legislations / acts related to Air Water and Hazardous Waste are being complied.

We are submitting herewith Six-Monthly Compliance Report for the conditions stipulated in the Environment Clearance for the period from Apr 2024 – Sep 2024 along with monitoring data report for your kind consideration.

The copy of compliance report is also being sent in soft format through email ([roez.bsr-mef@nic.in](mailto:roez.bsr-mef@nic.in)) for your kind perusal. Also, Six Monthly EC compliance is being uploaded on PARIVESH portal.

Hope the above are in line with the statutory requirement.

Thanking you,

Yours sincerely,

**Shikhar Kaushik**  
**Head SHE & Sustainability, NINL**

Enclosure: Annexure

Copy: 1) The Member Secretary, SPCB, Odisha, 2) Regional Officer, SPCB

## **NEELACHAL ISPAT NIGAM LIMITED**

Kalinganagar Industrial Complex, Duburi, Jajpur, Odisha – 755026, India

RegdOffice :Samabaya Bhawan, 4<sup>th</sup> Floor, Unit-9, Janpath, Bhoinagar, Bhubaneswar- 751022, Odisha, India

Phone : 8658028151, Email : [mdoffice@tsn.in](mailto:mdoffice@tsn.in), Website : [www.ninl.in](http://www.ninl.in), Corporate Identification Number : U27109OR1982PLC001050



# HALF YEARLY COMPLIANCE REPORT

for the period from  
**April 2024 to September 2024**

**Environment Clearance of 1 MTPA  
Integrated Iron & Steel Plant**

Env Clearance Letter no.:

J-11011/23/94-IA.II(I) dated Aug 1, 1996



**Neelachal Ispat Nigam Limited**

Kalinga Nagar Industrial Complex, Duburi, Jajpur, Odisha



## YEARLY COMPLIANCE REPORT

**Date: 28 Nov 2024**

Sn	Stipulated Condition	Action Taken
1	The Project authority must strictly adhere to the stipulations made by Orissa Pollution Control Board of the State Government.	Stipulations made by Orissa Pollution Control Board in the form of compliances of Conditions of Consent Order are being adhered. Compliance report is submitted to SPCB, Odisha.
2	No expansion or modification of the plant should be carried out without prior approval of this Ministry.	1 Million Ton Integrated Iron and Steel Plant through Blast Furnace-SMS route have been established. Expansion of the plant has not been carried out yet. The expansion if any shall be carried out only after prior approval of the Ministry of Environment and Forest & CC., Govt. of India
3	Coke Oven Plant should be based on dry quenching process	Coke Oven Plant is based on Dry Quenching technology & is in operation. The heat generated from hot coke is used for generation of high-pressure steam which is utilized in downstream for generation of power.
4	The particulate and gaseous emission (SO <sub>2</sub> , NO <sub>x</sub> , and CO) from various process units should confirm to standard prescribed by the competent authorities from time to time. The state Board may specify more stringent standard.	The particulate & gaseous emission level is being regularly monitored by third party Laboratory, empanelled with State Pollution Control Board, Odisha. Analysis report of stack emission of running process units is attached as <b>Annexure-I</b> . The emission level has been found well within standard set by Pollution Control Board.
5	At least five Ambient Air Quality Monitoring Stations should be provided in Consultation with the State Pollution Control Board for measurement of SPM, SO <sub>2</sub> , NO <sub>x</sub> , and RSPM. Stack emission along with ambient air quality and work environment quality should be submitted along with statistical analysis to the State Pollution Control Board once in three months and to this ministry once in six months.	Air Quality Monitoring at five locations is being conducted. Third party Laboratory, empaneled with State Pollution Control Board, Odisha has been engaged for AAQ monitoring, Stack Emission Monitoring on regular basis. Report of stack emission along with ambient air quality is being submitted to State Pollution Control Board every month. Report of Ambient Air Quality is attached as <b>Annexure-II</b> .
6	In-plant control measures for checking fugitive emission, spillage of chemical / raw material etc. should be provided and properly maintained specially in the critical areas like blast furnace, sintering plant etc.	In-plant Control measures like Gas Cleaning Plant (GCP), Dust Extraction (DE) Systems, Dry Fog Dust Suppression System (DFDS) at wagon tippler are provided for prevention of fugitive emission. Detail is attached as <b>Annexure III</b> . In addition to these control measures are in place to check spillage of chemical/ raw materials. The equipments are well maintained to ensure effectiveness and efficiency. Fugitive emissions are measured periodically and reported. Report of Fugitive Emission in Blast Furnace and Sinter Plant is attached as <b>Annexure-IV</b> .

Sn	Stipulated Condition	Action Taken
7	Adequate effluent treatment facilities should be provided so that the treated effluent conforms to the prescribed standards prescribed under the EPA 1986.	<p>We have 3 nos. of Effluent Treatment Plant to treat Effluent generated from plant processes.</p> <p><b>(i) BF-ETP:</b> Effluent generated in Scrubber based BF-Gas Cleaning Plant is treated in dedicated Effluent Treatment Plant. The treated effluent is recycled back in the Gas Cleaning Plant as scrubbing medium.</p> <p><b>(ii) SMS ETP:</b> Gas cleaning Plant has been installed in Steel Melting Shop to clean the BOF gas. The effluent generated is treated in dedicated Effluent Treatment Plant. The treated effluent is recycled back in the Gas Cleaning Plant as scrubbing medium.</p> <p><b>(iii) CO-ETP:</b> Coke Oven &amp; By-product plant has been provided with Effluent Treatment Plant (BOD unit).</p>
8	Adequate number of influent and effluent quality monitoring station should be set up in consultation with the State Pollution Control Board. Regular monitoring should be carried out for relevant parameters. Monitored data along with statistical analysis and interpretation in the form of report should be submitted to this ministry once in six month and the State Pollution Control Board once in three months.	In order to monitor effluent quality, Online Effluent Quality Monitoring Stations have been installed. Treated effluent quality is being monitored on regular basis. Analysis report is submitted to SPCB, Odisha on monthly basis. Analysis report is attached as <b>Annexure-V, Annexure-VI &amp; Annexure-VII.</b>
9	A guard pond of sufficient holding capacity should be provided with to cope up with the effluent discharge due to process disturbance. The contributing units shall be immediately shutdown and will not be started without bringing the system back to normalcy.	Effluent generated in the process units are treated in respective treatment plant & completely recycled. One Lagoon (Harvesting Pond) of sufficient capacity has been provided to collect rainwater & noncontaminated wastewater. Wastewater Recycle Pump has been provided at the outlet of Harvesting Pond to recycle the water in plant process.
10	Efforts should be made to recycle and reuse the entire treated liquid effluents for green belt development, maintenance and for meeting other requirements.	Treated effluent is cooled in Cooling Tower and then pumped back to scrubber as scrubbing medium in Gas Cleaning Plant. Thus, entire treated effluent is completely recycled.
11	Raw material should be brought to the plant site by sea/ rail to the extent possible. Finished product should also be transported through rail to the extent possible. Transportation through road should be kept to the bare minimum to avoid any traffic congestion in the area and cities.	Transportation of Raw Material & Finished Product through rail is gradually increasing and will be maximized. Transportation of Raw Material through rail in Apr 2024-Sep 2024 period has increased to 63.67% from 54.12% in Oct 2023-Mar 2024. Transportation of Finished Product through rail in Apr 2024-Sep 2024 period is 32.72%.
12	A green belt of adequate width (min 100M width) and density should be provided all around the plant in consultation with the State Forest Department specially selecting the local species, 2000-2500 plants per ha of land should be planted.	Approx. 455 Ha green belt has been developed with local species of Chakundi, Babool, Ber, Neem, Osth, Kadamba, Acacia, Peltophorum, Cassia, S. saman, Teak, Mahaneem, Alstonea, Gambhari, Arjuna, Eucalyptus, Mahua, Karanja, Amla etc.

Sn	Stipulated Condition	Action Taken
13	Noise levels should not exceed 85 dB (A) in the work environment. Workers engaged in the noisy workplaces should be provided with protection devices like ear plugs/ ear muffs etc.	Various measures have been taken to reduce the noise level. Noise generating equipment have been provided with acoustic treatment and silencer. In some areas where is possibility of high noise level, personnel working in these areas have been provided with noise reduction aid such as earmuff, ear plug etc. Also duration of exposure has been limited as per norms. Corrective measures are taken whenever required. Records of noise level taken are attached as <b>Annexure-VIII</b> .
14	An environment management cell should be established with suitably qualified people to carry out various functions under the control of a senior executive who will directly report to the Head of the organization.	At present the Environment Management Deptt. (EMD) is headed by Head (SHE&S), directly reporting to MD&CEO, NINL. Executives in the rank of Asst. General Manager, Area Manager, Sr. Manager have been posted in the department. The EMD has been further reinforced by deploying manpower. In addition, there is dedicated team in each production plant for ensuring smooth running of allpollution control equipment and statutory compliances.
15	Periodical medical checkup of the workers especially with respect to the respiratory disease such as pneumoconiosis etc. should be done and record maintained, and occupational health status intimated to this Ministry once in year.	Medical check-up of employees is conducted periodically by engaging 3 <sup>rd</sup> party agency. Health check-up programme for 23-24 period has been conducted covering total 1115 employees. Height, Weight, Chest Expansion, Vision Test, Blood Tests: CBC, ESR, Blood Group Testing, Serum Sugar and Cholesterol, X-Ray of Chest, ECG, Audiometric Test, Lung Function Test were conducted. In 24-25 period Health check-up of 300 employees has been conducted till date.
16	Project Authority should implement socio-economic measures committed by them vide letter of 1.3.96 in addition to the rehabilitation measures governed under State Policy as implemented by ODD in time bound manner	After takeover of Neelachal Ispat Nigam Limited by Tata Steel Long Products Limited, CSR activities are centrally being coordinated by Tata Steel Foundation. Various socio-economic development programs covering livelihood, education, safe drinking water, sports, health care etc. have been undertaken in surrounding areas of plant. Detail activities is attached as <b>Annexure-IX</b> .
17	The fund earmarked for the environmental protection measures should not be diverted for other purposes, its breakup and year-wise expenditure should be reported to this ministry regularly	Adequate funds are being provided by the management for pollution control and to meet recurring cost. Fund / Budget allocated to Environment protection is utilized only for the purpose. After takeover of Neelachal Ispat Nigam Limited by Tata Steel Long Products Limited 168.64 Cr have been spent towards environmental protection measures.
18	Recommendation made by the consultant in the EMP report should be properly implemented	<p>EMP recommendations compliance:</p> <p>Various clean technologies have been adopted in plant process. As Air Pollution Control measures, Dust extraction system with bag filters have been installed for junction houses and raw material handling systems. Dust extraction systems with electrostatic precipitator have been provided for sinter machine and at sinter cooler discharge end.</p> <p>In order to meet the statutory GLC limits for SO<sub>2</sub> and NO<sub>x</sub>, suitable chimney heights have been provided for proper dispersion. The chimney heights are as per CPCB norms.</p> <p>The measures have been adopted to control water pollution providing adequate treatment units.</p>

## REPORT OF ANALYSIS OF STACK EMISSION

Sr	Sampling Location	Apr'24	May'24	Jun'24	July'24	Aug'24	Sep'24	Standard mg/M <sup>3</sup>
1	Power Plant Boiler-1	29.42	6.58	15.9	11.61	7.32	33.93*	100
2	Power Plant Boiler-2	14.56	12.32	20.0*	8.23	3.96	9.02	100
3	Power Plant Boiler-3	12.97	11.80	9.16	14.01	12.57	7.50	100
4	Sinter Plant ACP	17.28	22.67	23.31	31.89	69.12	50.28	100
5	Sinter Plant GCP	25.53	26.33	52.95	12.61	12.36	29.20	100
6	Coke Oven Battery	33.74	41.15	36.3	18.42	41.51	34.17	50
7	Blast Furnace Stove	11.32*	13.95*	16.18	28.03	13.21	5.39*	100
8	Blast Furnace Stock House DE Stack	9.66	21.46	16.85	7.74	7.35	13.89	100
9	SMS LHF	25.97	31.56	18.16	35.96	35.01	33.07	100

\* Online CEMS monthly avg. value

Sr	Sampling Location	Apr'24		May'24		Jun'24		July'24		Aug'24		Sep'24	
		SO <sub>2</sub>	NO <sub>x</sub>	SO <sub>2</sub>	NO <sub>x</sub>	SO <sub>2</sub>	NO <sub>x</sub>	SO <sub>2</sub>	NO <sub>x</sub>	SO <sub>2</sub>	NO <sub>x</sub>	SO <sub>2</sub>	NO <sub>x</sub>
	Standard mg/NM <sup>3</sup>	600	450	600	450	600	450	600	450	600	450	600	450
1	Power Plant Boiler-1	48.1	36.7	48.1	36.7	100.61*	52.31*	51.2	37.1	45.2	33.6	50.65*	55.3*
2	Power Plant Boiler-2	55.2	44.9	55.2	44.9	258.48*	143.25*	46.6	57.8	50.2	35.1	48.6	34.6
3	Power Plant Boiler-3	21.4	38.4	21.4	38.4	20.5	36.6	21.2	35.1	23.4	39.4	24.2	40.2
5	Sinter Plant GCP	16.2	19.9	16.2	19.9	16.6	19.7	16.1	18.6	16.2	20.9	14.8	20.2
6	Coke Oven Battery	48.6	23.1	48.6	23.1	112.25*	23.8	52.2	25.6	50.2	24.1	48.5	24.2
7	Blast Furnace Stove	80.55*	19.63*	129.83*	27.01*	274.6	67.4	275.6	63.4	282.1	67.7	253.29*	27.97*

\* Online CEMS monthly avg. value

## Annexure-II

# Report of Ambient Air Quality Monitoring

Month	Parameters	Unit	Limits as per CPCB	Exchange Yard	Project Office	Raw Water Treatment Plant	Main Gate
01 April 2024	PM 10	µg/M <sup>3</sup>	100	66.3	65.8	70.2	62.4
	PM 2.5		60	38.4	38.8	44.2	38.1
	SO <sub>2</sub>		80	10.6	7.8	9.5	9.6
	NO <sub>x</sub>		80	16.5	12.1	16.3	14.3
	CO	mg/M <sup>3</sup>	2	1.8	1.6	1.8	2.1
04-05 April 2024	PM 10	µg/M <sup>3</sup>	100	66.9	66.3	69.1	62.8
	PM 2.5		60	38.7	39.1	43.5	38.3
	SO <sub>2</sub>		80	10.5	7.5	9.3	9.8
	NO <sub>x</sub>		80	16.5	12.5	16.5	14.8
	CO	mg/M <sup>3</sup>	2	1.9	1.2	1.7	1.8
09-10 April 2024	PM 10	µg/M <sup>3</sup>	100	67.5	68.7	73.5	63.6
	PM 2.5		60	39.1	40.5	46.3	38.8
	SO <sub>2</sub>		80	10.4	7.8	9.8	9.5
	NO <sub>x</sub>		80	16.3	12.3	16.2	14.5
	CO	mg/M <sup>3</sup>	2	1.5	1.5	1.6	1.9
11-12 April 2024	PM 10	µg/M <sup>3</sup>	100	67.1	65.8	68.4	65.4
	PM 2.5		60	38.9	38.8	43.1	39.9
	SO <sub>2</sub>		80	10.2	7.7	10.2	9.3
	NO <sub>x</sub>		80	16.8	12.2	16.8	15.1
	CO	mg/M <sup>3</sup>	2	1.7	1.4	1.9	2.1
16 April 2024	PM 10	µg/M <sup>3</sup>	100	66.7	67.4	69.7	62.5
	PM 2.5		60	38.6	39.8	43.9	38.1
	SO <sub>2</sub>		80	10.6	7.9	9.4	9.7
	NO <sub>x</sub>		80	16.5	12.1	16.4	14.7
	CO	mg/M <sup>3</sup>	2	1.6	1.3	2.1	1.7
23-24 April 2024	PM 10	µg/M <sup>3</sup>	100	67.5	69.2	72.4	62.9
	PM 2.5		60	39.1	40.8	45.5	38.4
	SO <sub>2</sub>		80	10.7	7.6	11.1	9.2
	NO <sub>x</sub>		80	16.4	12.4	16.9	14.2
	CO	mg/M <sup>3</sup>	2	1.7	1.5	1.8	1.9
25-26 April 2024	PM 10	µg/M <sup>3</sup>	100	67.4	67.4	72.1	66.7
	PM 2.5		60	39	39.8	45.4	40.7
	SO <sub>2</sub>		80	10.3	7.7	9.4	9.4
	NO <sub>x</sub>		80	16.7	12.3	17.1	15.4
	CO	mg/M <sup>3</sup>	2	1.8	1.4	1.7	1.9

Month	Parameters	Unit	Limits as per CPCB	Exchange Yard	Project Office	Raw Water Treatment Plant	Main Gate
01 May 2024	PM 10	$\mu\text{g}/\text{M}^3$	100	64.7	62.8	67.9	61.4
	PM 2.5		60	36.2	34.6	40.5	34.2
	SO2		80	10.4	7.4	9.1	9.5
	NOx		80	16.1	12.3	16.7	14.2
	CO	$\text{mg}/\text{M}^3$	2	1.6	1.4	1.6	1.6
06 May 2024	PM 10	$\mu\text{g}/\text{M}^3$	100	64.2	60.6	62.9	62.6
	PM 2.5		60	36.9	35.7	35.4	34.5
	SO2		80	10.4	7.9	9.5	9.6
	NOx		80	16.3	11.8	17.1	15.1
	CO	$\text{mg}/\text{M}^3$	2	1.5	1.5	1.6	1.7
09 May 2024	PM 10	$\mu\text{g}/\text{M}^3$	100	64.3	62.6	66.8	61.3
	PM 2.5		60	35.9	36.3	40.5	34.5
	SO2		80	10.8	8	9.6	9.7
	NOx		80	16.8	12.4	16.7	14.5
	CO	$\text{mg}/\text{M}^3$	2	1.7	1.5	1.8	1.9
14 May 2024	PM 10	$\mu\text{g}/\text{M}^3$	100	64.1	63.6	67.4	60.8
	PM 2.5		60	36.9	36.4	40.3	35.1
	SO2		80	11.4	8	9.6	10.2
	NOx		80	16.9	12.5	17.1	15.1
	CO	$\text{mg}/\text{M}^3$	2	1.7	1.8	1.8	1.9
17 May 2024	PM 10	$\mu\text{g}/\text{M}^3$	100	64.9	64.7	67.4	63.5
	PM 2.5		60	38.2	36.5	40.2	37.9
	SO2		80	11.3	8	9.5	9.7
	NOx		80	16.8	12.6	16.7	14.6
	CO	$\text{mg}/\text{M}^3$	2	1.6	1.8	1.6	1.7
21 May 2024	PM 10	$\mu\text{g}/\text{M}^3$	100	65.2	64.7	67.4	61.3
	PM 2.5		60	37.1	36.2	40.9	37.4
	SO2		80	10.9	8	9.5	9.9
	NOx		80	16.2	12.3	16.3	15.1
	CO	$\text{mg}/\text{M}^3$	2	1.6	1.7	1.8	1.6
24 May 2024	PM 10	$\mu\text{g}/\text{M}^3$	100	64.6	65.1	66.9	61.8
	PM 2.5		60	36.2	36.9	40.4	36.3
	SO2		80	10.8	8	9.5	10.1
	NOx		80	16.3	12.3	16.7	15.2
	CO	$\text{mg}/\text{M}^3$	2	1.7	1.5	1.6	1.7
29 May 2024	PM 10	$\mu\text{g}/\text{M}^3$	100	65.2	64.3	67.5	62.1
	PM 2.5		60	37.5	37.2	40.3	35.2
	SO2		80	10.5	8	9.6	9.6
	NOx		80	16.9	12.5	16.6	14.5
	CO	$\text{mg}/\text{M}^3$	2	1.7	1.9	1.8	1.7



Month	Parameters	Unit	Limits as per CPCB	Exchange Yard	Project Office	Raw Water Treatment Plant	Main Gate
03 June 2024	PM 10	µg/M <sup>3</sup>	100	65.8	66.3	67.8	62.4
	PM 2.5		60	37.4	39.2	40.5	38.1
	SO <sub>2</sub>		80	10.3	7.9	9.8	9.6
	NO <sub>x</sub>		80	16.7	12.3	16.5	14.7
	CO	mg/M <sup>3</sup>	2	1.5	1.5	1.9	1.7
08 June 2024	PM 10	µg/M <sup>3</sup>	100	58.4	54.3	Conducted another day	55.2
	PM 2.5		60	33.4	31.2		32.4
	SO <sub>2</sub>		80	8.8	6.5		8.7
	NO <sub>x</sub>		80	12.3	10.1		12.6
	CO	mg/M <sup>3</sup>	2	1.4	1.3		1.3
10 June 2024	PM 10	µg/M <sup>3</sup>	100	66.7	66.2	69.4	62.5
	PM 2.5		60	38.4	38.9	43.6	38.4
	SO <sub>2</sub>		80	10.8	7.9	9.4	9.9
	NO <sub>x</sub>		80	16.4	12.2	16.6	14.8
	CO	mg/M <sup>3</sup>	2	1.7	1.7	1.8	1.8
20 June 2024	PM 10	µg/M <sup>3</sup>	100	67.5	66.3	69.2	63.5
	PM 2.5		60	38.8	39.2	43.4	38.6
	SO <sub>2</sub>		80	10.9	7.9	9.2	9.7
	NO <sub>x</sub>		80	16.8	12.4	16.3	14.5
	CO	mg/M <sup>3</sup>	2	1.9	1.8	1.9	1.7
26 June 2024	PM 10	µg/M <sup>3</sup>	100	Conducted another day	66.1	68.8	61.7
	PM 2.5		60		39.1	43.1	37.7
	SO <sub>2</sub>		80		7.6	9.2	9.8
	NO <sub>x</sub>		80		12.1	16.7	14.6
	CO	mg/M <sup>3</sup>	2		1.7	1.8	1.8
04 July 2024	PM 10	µg/M <sup>3</sup>	100	65.2	54.3	56.2	62.5
	PM 2.5		60	37.6	31.2	37.1	38.2
	SO <sub>2</sub>		80	10.2	6.5	8.2	9.9
	NO <sub>x</sub>		80	16.8	10.1	15.1	14.8
	CO	mg/M <sup>3</sup>	2	1.4	1.3	1.2	1.8
11 July 2024	PM 10	µg/M <sup>3</sup>	100	66.3	66.2	64.2	55.4
	PM 2.5		60	38.4	38.9	42.3	32.3
	SO <sub>2</sub>		80	10.5	7.9	9.1	8.8
	NO <sub>x</sub>		80	17.8	12.2	16.2	12.3
	CO	mg/M <sup>3</sup>	2	1.8	1.7	1.9	1.2

Month	Parameters	Unit	Limits as per CPCB	Exchange Yard	Project Office	Raw Water Treatment Plant	Main Gate
18 July 2024	PM 10	µg/M <sup>3</sup>	100	64.9	66.3	62.6	62.6
	PM 2.5		60	37.2	39.2	42.2	38.1
	SO <sub>2</sub>		80	10.7	7.9	9.2	9.8
	NO <sub>x</sub>		80	16.7	12.4	16.0	14.2
	CO	mg/M <sup>3</sup>	2	1.5	1.8	1.8	1.7
25 July 2024	PM 10	µg/M <sup>3</sup>	100	62.6	66.1	62.7	63.2
	PM 2.5		60	37.1	39.1	42.3	38.4
	SO <sub>2</sub>		80	10.5	7.6	9.3	9.8
	NO <sub>x</sub>		80	16.4	12.1	16.4	14.3
	CO	mg/M <sup>3</sup>	2	1.4	1.7	1.9	1.6
05 Aug 2024	PM 10	µg/M <sup>3</sup>	100	64.8	64.2	62.8	60.6
	PM 2.5		60	38.2	37.9	42.3	37.8
	SO <sub>2</sub>		80	11.5	7.6	9.5	9.8
	NO <sub>x</sub>		80	16.2	11.9	16	14.6
	CO	mg/M <sup>3</sup>	2	1.7	1.7	1.9	1.8
14 Aug 2024	PM 10	µg/M <sup>3</sup>	100	66.1	65.8	64.5	54.8
	PM 2.5		60	38.2	38.2	41.8	32.1
	SO <sub>2</sub>		80	10.5	7.8	9.3	8.7
	NO <sub>x</sub>		80	16.2	12.1	16.8	12.2
	CO	mg/M <sup>3</sup>	2	1.7	1.8	1.7	1.21
20 Aug 2024	PM 10	µg/M <sup>3</sup>	100	64.2	64.7	62.2	61.5
	PM 2.5		60	37.4	38.5	41.2	37.7
	SO <sub>2</sub>		80	10.8	7.9	9.1	9.5
	NO <sub>x</sub>		80	16.9	12.3	16.2	14.1
	CO	mg/M <sup>3</sup>	2	1.7	1.8	1.9	1.8
29 Aug 2024	PM 10	µg/M <sup>3</sup>	100	58.3	31.2	57.5	59.4
	PM 2.5		60	33.6	35.4	37.5	36.4
	SO <sub>2</sub>		80	8.7	7.1	8.7	9.4
	NO <sub>x</sub>		80	12.1	10.3	15.1	14.1
	CO	mg/M <sup>3</sup>	2	1.4	1.5	1.4	1.6

Location: Sinter Plant Office						
Sl	Date	PM 10 (µg/M <sub>3</sub> )	PM 2.5 (µg/M <sub>3</sub> )	SO <sub>2</sub> (µg/M <sub>3</sub> )	NO <sub>x</sub> (µg/M <sub>3</sub> )	CO (mg/M <sub>3</sub> )
1	11-04-2024	68.7	39.7	14.7	17.2	1.7
2	16-05-2024	68.2	39.5	14.5	17.1	1.8
3	21-06-2024	67.8	38.7	14.3	16.7	1.6
4	18-07-2024	66.2	38.1	14.4	16.2	1.7
5	22-08-2024	63.5	36.9	13.2	15.8	1.6

Month	Parameters	Unit	Limits as per CPCB	Exchange Yard	Project Office	Raw Water Treatment Plant	Main Gate	Sinter Plant Office
04 Sep 2024	PM 10	µg/M <sup>3</sup>	100	62.1	66.3	60.4	62.6	Conducted another day
	PM 2.5		60	35.2	39.2	38.4	38.1	
	SO <sub>2</sub>		80	8.8	7.9	9.8	9.8	
	NO <sub>x</sub>		80	12.3	12.4	15.4	14.2	
	CO	mg/M <sup>3</sup>	2	1.5	1.8	1.7	1.7	
06 Sep 2024	PM 10	µg/M <sup>3</sup>	100	60.5	66.1	62.5	63.2	60.4
	PM 2.5		60	34.8	39.1	39.1	38.4	35.8
	SO <sub>2</sub>		80	9.2	7.6	9.2	9.8	7.4
	NO <sub>x</sub>		80	13.5	12.1	14.8	14.3	11.9
	CO	mg/M <sup>3</sup>	2	1.5	1.7	1.8	1.6	1.4
10 Sep 2024	PM 10	µg/M <sup>3</sup>	100	59.5	64.2	60.9	60.6	61.2
	PM 2.5		60	33.9	37.9	36.6	37.8	36.1
	SO <sub>2</sub>		80	9.3	7.6	10.1	9.8	7.5
	NO <sub>x</sub>		80	14.2	11.9	16.3	14.6	11.8
	CO	mg/M <sup>3</sup>	2	1.7	1.7	1.9	1.8	1.5
13 Sep 2024	PM 10	µg/M <sup>3</sup>	100	63.6	65.8	59.7	54.8	58.6
	PM 2.5		60	36.5	38.2	38.5	32.1	35.1
	SO <sub>2</sub>		80	9.5	7.8	8.8	8.7	7.2
	NO <sub>x</sub>		80	15.1	12.1	15.8	12.2	11.7
	CO	mg/M <sup>3</sup>	2	1.6	1.8	1.6	1.21	1.4
18 Sep 2024	PM 10	µg/M <sup>3</sup>	100	62.5	64.7	63.1	61.5	60.3
	PM 2.5		60	35.1	38.5	40.2	37.7	36.4
	SO <sub>2</sub>		80	9.1	7.9	9.3	9.5	7.3
	NO <sub>x</sub>		80	14.9	12.3	15.9	14.1	11.9
	CO	mg/M <sup>3</sup>	2	1.8	1.8	1.7	1.8	1.3
20 Sep 2024	PM 10	µg/M <sup>3</sup>	100	65.1	61.2	64.4	59.4	61.1
	PM 2.5		60	35.8	35.4	41.3	36.4	36.7
	SO <sub>2</sub>		80	9.1	7.1	10.5	9.4	67.7
	NO <sub>x</sub>		80	13.5	10.3	17.2	14.1	12.8
	CO	mg/M <sup>3</sup>	2	1.5	1.5	1.8	1.6	1.5
26 Sep 2024	PM 10	µg/M <sup>3</sup>	100	59.5	64.7	63.7	63.2	62.3
	PM 2.5		60	33.1	38.5	41.5	38.4	36.9
	SO <sub>2</sub>		80	8.8	7.9	9.3	9.8	7.4
	NO <sub>x</sub>		80	13.7	12.3	18.4	14.3	12.6
	CO	mg/M <sup>3</sup>	2	1.6	1.8	1.7	1.6	1.5

## Details of Air Pollution Control System

Sn	Junction House	System No.	Control Equipment	Capacity inM <sup>3</sup> /Hr
<b>A Pulse Jet Bag Filter Based De Dusting System-Blast Furnace &amp; RMHS Area</b>				
	Stock House & FJ-1	Dedusting Unit-14	Pulse Jet Bag Filter	4,00,000
	Junction house J8	Dedusting Unit-6	Pulse Jet Bag Filter	62,000
	Junction house J17	Dedusting Unit-10	Pulse Jet Bag Filter	55,000
	Junction house J11	Dedusting Unit-15	Pulse Jet Bag Filter	3,600
	Junction house J11A	Dedusting Unit-16	Pulse Jet Bag Filter	4,200
<b>B Pulse Jet Bag Filter Based De Dusting System-RMHS Area</b>				
	Fuel & Flux Crushing Building		Dry Fog System	
	Junction house J12	Dedusting Unit-3	Pulse Jet Bag Filter	15,000
	Junction house J13	Dedusting Unit-4	Pulse Jet Bag Filter	15,000
<b>C Pulse Jet Bag Filter Based De Dusting System- Coke Oven Area</b>				
	Coke Dry Cooling Plant	Dedusting Unit-1	Pulse Jet Bag Filter	66,000
	Coal discharge point & coal crushing unit	Dedusting Unit-2	Pulse Jet Bag Filter	15,000
	Coke Sorting Plant (Coke discharge point from CDCP)	Dedusting Unit-3	Cyclone separator & Pulse Jet Bag Filter	65,000
	Coke Crushing Section	Dedusting Unit-4	Pulse Jet Bag Filter	60,000
	Coke Sorting Station	Dedusting Unit- 5	Pulse Jet Bag Filter	60,000
	Coke Breeze Bunker	Dedusting Unit- 6	Pulse Jet Bag Filter	40,000
<b>D ESP based De-dusting System of Entire Sinter Plant Complex</b>				
	Plant main building, Raw Feed Proportioning Building, Cold Sinter Screening Building, Transfer Station 1 & 2, Mixing & Nodulizing Building		ESP based De-dusting system	7,30,000
<b>E ESP Based Waste Gas Cleaning System for Sinter Machine</b>				
	Waste Gas Cleaning of Sinter Machine		ESP based De-dusting system	10,26,000
<b>F Dust Suppression System of RMHS Area</b>				
	Water based Dust Suppression System for Stockpile		DS System	70
	Dedusting Suppression System at Ore Wagon Tippler		DS System	10
	Dedusting Suppression System at Coal Wagon Tippler		DS System	10
<b>G Steel Melting Shop</b>				
	Suppressed Combustion System	BOF Converter	Moveable Skirt	64,000
	Ladle Heating Furnace Fume	Dedusting unit	Pulse Jet Bag Filter	1,34,500
<b>H Gas Cleaning Plant (GCP)</b>				
	Blast Furnace	BF GCP	Dust Catcher, Wet Scrubber	1,95,000
	BOF Gas	BOF GCP	Wet Scrubber	64,000

## Fugitive Emission Detail

Month	Work Area			PM 10 Mg/M3	
May 2024	Blast Furnace	BF Stock House	Left Collecting Conveyor (C21) [material Iron Ore Additive]	0.647	
			Right Sinter Screen (Bunker No.-10)	1.201	
			Left Sinter Screen (Bunker No.-6)	3.025	
			Quartz (No.4) & Nut Coke (No. 1) Hopper Discharge	0.804	
			No-5 Iron Ore (I/O) Left Vibro Feeder	1.349	
			Left Coke Screen (Bunker No.-3)	1.583	
		Skip Pit	Skip Top Area	0.603	
		Cast house	Cast house- 1	2.871	
	Cast house- 2		0.139		
	Sinter Plant	ACP	D510 conveyor receiving chute	2.5	
			M017 Chain conveyor Discharge point	2.396	
		GCP	D490 conveyor receiving chute	1.607	
		Sinter Machine	Sinter machine discharge	2.577	
			D490 Discharge chute	2.224	
		Cooler	Cooler Discharge chute	2.993	
			C080 conveyor receiving chute	2.702	
			C070 conveyor discharge chute	2.528	
		Screen	F030 vertical chute receiving chute	2.544	
			F010 conveyor receiving chute	3.098	
			F020 conveyor receiving chute	2.751	
			D495 conveyor discharge chute	1.566	
		RFPB	A010 Conveyor Receiving chute	2.726	
			G010 conveyor receiving chute	2.86	
			SP4 conveyor receiving chute	1.711	
			D520 conveyor discharge chute	2.971	
		Transfer station 2	D510 conveyor receiving chute	1.599	
			D510 conveyor Discharge chute	2.382	
	Junction house 18	F030 conveyor discharge	3.572		
	Jun 2024	Blast Furnace	BF Stock House	Left Collecting Conveyor (C21) [material Iron Ore	0.4
				Right Collecting Conveyor (C11) [material Iron Ore	0.677
No.8 Pellet Vibro Feeder				3.557	
No.11 Iron Ore Right Vibro Feeder				2.471	
Right Sinter Screen (Bunker No.-10)				1.084	
Left Sinter Screen (Bunker No.-6)				1.358	
Quartz (No.4) & Nut Coke (No. 1) Hopper Discharge				0.468	
Pellet (No.2) Vibro Feeder				0.389	
No-5 Iron Ore (I/O) Left Vibro Feeder				2.806	
Left Coke Screen (Bunker No.-3)				1.335	
No-12 (Dolomite) & No.-9 Limestone (L/S)				3.831	
Cast house		Cast house- 1	3.647		
		Cast house- 2	0.858		
Sinter Plant		ACP	D510 conveyor receiving chute	2.582	
			M017 Chain conveyor Discharge point	0.669	
		GCP	D490 conveyor receiving chute	0.248	

		<b>Sinter Machine</b>	Sinter machine discharge	0.37
			Hot sinter breaker	0.116
			D490 Discharge chute	1.548
		<b>Cooler</b>	Cooler Discharge chute	0.434
			Apron feeder Receiving chute	0.602
			C080 conveyor receiving chute	1.482
			C070 conveyor discharge chute	2.498
		<b>Screen</b>	F030 vertical chute receiving chute	0.66
			F010 conveyor receiving chute	0.366
			F020 conveyor receiving chute	0.703
			D495 conveyor discharge chute	0.403
		<b>RFPB</b>	G010 conveyor receiving chute	0.361
			SP4 conveyor receiving chute	0.65
		<b>Transfer station 2</b>	D510 conveyor receiving chute	1.452
D510 conveyor Discharge chute	1.069			
<b>Jul 2024</b>	<b>Blast Furnace</b>	<b>BF Stock House</b>	Left Collecting Conveyor (C21) [material Iron Ore	2.2
			Right Collecting Conveyor (C11) [material Iron Ore	1.588
			No.11 Iron Ore Right Vibro Feeder	2.591
			Left Sinter Screen (Bunker No.-6)	2.978
			Quartz (No.4) & Nut Coke (No. 1) Hopper Discharge	0.877
			Pellet (No.2) Vibro Feeder	2.67
			No-5 Iron Ore (I/O) Left Vibro Feeder	2.492
			Left Coke Screen (Bunker No.-3)	3.471
			Right Coke Screen (Bunker No.-7)	2.008
			No-12 (Dolomite) & No.-9 Limestone (L/S)	1.781
		<b>Cast house</b>	Cast house- 1	0.87
	Cast house- 2		0.772	
	<b>Sinter Plant</b>	<b>ACP</b>	D510 conveyor receiving chute	0.656
			M017 Chain conveyor Discharge point	0.539
		<b>GCP</b>	D490 conveyor receiving chute	0.48
		<b>Sinter Machine</b>	Sinter machine discharge	0.537
			Hot sinter breaker	0.506
			D490 Discharge chute	1.895
		<b>Cooler</b>	Cooler receiving chute	3.47
Cooler Discharge chute			0.349	
Apron feeder Receiving chute			1.102	
C080 conveyor receiving chute			0.378	
<b>Screen</b>		C070 conveyor discharge chute	0.588	
		F030 vertical chute receiving chute	0.533	
		F010 conveyor receiving chute	0.614	
		F020 conveyor receiving chute	0.39	
<b>RFPB</b>		D495 conveyor discharge chute	0.419	
		A010 Conveyor Receiving chute	0.457	
		G010 conveyor receiving chute	0.521	
		SP4 conveyor receiving chute	0.855	
<b>Transfer station 2</b>		D520 conveyor discharge chute	0.412	
		D510 conveyor receiving chute	0.442	
	D510 conveyor Discharge chute	0.299		
<b>Junction house 18</b>	F030 conveyor discharge	1.098		
	F050 Movable chute	0.491		
	F040 conveyor receiving	0.576		

Aug 2024	Blast Furnace	BF Stock House	Left Collecting Conveyor (C21) [material Iron Ore	0.813	
			Right Collecting Conveyor (C11) [material Iron Ore	1.695	
			No.8 Pellet Vibro Feeder	1.526	
			No.11 Iron Ore Right Vibro Feeder	1.425	
			Right Sinter Screen (Bunker No.-10)	1.002	
			Left Sinter Screen (Bunker No.-6)	1.037	
			Quartz (No.4) & Nut Coke (No. 1) Hopper Discharge	0.662	
			Pellet (No.2) Vibro Feeder	0.507	
			No-5 Iron Ore (I/O) Left Vibro Feeder	0.524	
			Left Coke Screen (Bunker No.-3)	0.679	
			No-12 (Dolomite) & No.-9 Limestone (L/S)	1.341	
		Skip Pit	Skip Pit Discharge Area	3.609	
			Skip Top Area	1.126	
	BLT Receiving Hopper Area		0.633		
	Sinter Plant	ACP	D510 conveyor receiving chute	0.744	
			M017 Chain conveyor Discharge point	0.366	
		GCP	D490 conveyor receiving chute	0.242	
			Sinter Machine	Sinter machine discharge	0.308
		Hot sinter breaker		0.187	
		D490 Discharge chute		0.73	
		Cooler	Cooler receiving chute	0.36	
			Cooler Discharge chute	1.187	
			Apron feeder Receiving chute	0.389	
			C080 conveyor receiving chute	0.496	
			C070 conveyor discharge chute	0.463	
		Screen	F030 vertical chute receiving chute	0.385	
			F010 conveyor receiving chute	0.491	
			F020 conveyor receiving chute	0.773	
			D495 conveyor discharge chute	0.392	
		RFPB	A010 Conveyor Receiving chute	0.523	
			G010 conveyor receiving chute	0.394	
			SP4 conveyor receiving chute	0.434	
			D520 conveyor discharge chute	0.63	
Transfer station 2		D510 conveyor receiving chute	0.643		
		D510 conveyor Discharge chute	0.744		
Junction house 18		F030 conveyor discharge	1.842		
		J8C5 conveyor receiving	1.204		
		F040 conveyor receiving	0.435		
Sep 2024		Blast Furnace	BF Stock House	Left Collecting Conveyor (C21) [material Iron Ore	0.696
				Right Collecting Conveyor (C11) [material Iron Ore	2.437
				No.11 Iron Ore Right Vibro Feeder	1.782
	Right Sinter Screen (Bunker No.-10)			2.684	
	Left Sinter Screen (Bunker No.-6)			0.615	
	Quartz (No.4) & Nut Coke (No. 1) Hopper Discharge			0.447	
	No-5 Iron Ore (I/O) Left Vibro Feeder			0.426	
	Left Coke Screen (Bunker No.-3)			0.885	
	No-12 (Dolomite) & No.-9 Limestone (L/S)		1.309		
	Skip Pit		Skip Top Area	0.623	
			BLT Receiving Hopper Area	1.016	
	Cast house		Cast house- 1	3.334	
			Cast house- 2	1.102	

	<b>Sinter Plant</b>	<b>ACP</b>	D510 conveyor receiving chute	0.665
			M017 Chain conveyor Discharge point	0.711
		<b>GCP</b>	D490 conveyor receiving chute	0.423
		<b>Sinter Machine</b>	Sinter machine discharge	0.703
			Hot sinter breaker	0.446
			D490 Discharge chute	1.089
		<b>Cooler</b>	Cooler receiving chute	1.158
			Cooler Discharge chute	1.535
			Apron feeder Receiving chute	0.732
			C080 conveyor receiving chute	0.526
			C070 conveyor discharge chute	0.681
		<b>Screen</b>	F030 vertical chute receiving chute	0.526
			F010 conveyor receiving chute	1.148
			F020 conveyor receiving chute	0.64
		<b>RFPB</b>	A010 Conveyor Receiving chute	0.721
			G010 conveyor receiving chute	0.707
			SP4 conveyor receiving chute	0.425
			D520 conveyor discharge chute	0.456
		<b>Transfer station 2</b>	D510 conveyor receiving chute	1.808
			D510 conveyor Discharge chute	0.59
		<b>Junction house 18</b>	F030 conveyor discharge	2.863
			J8C5 conveyor receiving	1.176
			F040 conveyor receiving	0.856



## Report of Analysis of Plant Outfall

Month	Parameters	Unit	Standard	Plant Outfall
Apr 2024	pH		5.5-9.0	7.5
	Colour			<1.0
	Odour			Agreeable
	Suspended Solid	mg/l	100	1.4
	Oil & Grease	mg/l	10	<1
	Iron as Fe	mg/l	3	0.35
	Phenol	mg/l	1	<0.5
	Cyanide (as CN)	mg/l	0.2	<0.02
	BOD	mg/l	30	6.0
	COD	mg/l	250	30
	Ammoniacal Nitrogen	mg/l	50	2.24
May 2024	pH		5.5 to 9.0	7
	Colour		-	BDL (DL: 1.0)
	Odour		-	Agreeable
	Suspended Solid	mg/l	100	< 2.5
	Oil & Grease	mg/l	10	< 1
	Iron as Fe	mg/l	3	0.2
	Phenol	mg/l	1	< 0.001
	Cyanide (as CN)	mg/l	0.2	< 0.02
	BOD	mg/l	30	7
	COD	mg/l	250	32
	Ammoniacal Nitrogen	mg/l	50	1.96
June 2024	pH		5.5 to 9.0	8
	Colour			BDL (DL: 1.0)
	Odour			Agreeable
	Suspended Solid	mg/l	100	4.8
	Oil & Grease	mg/l	10	< 1
	Iron as Fe	mg/l	3	0.34
	Phenol	mg/l	1	< 0.5
	Cyanide (as CN)	mg/l	0.2	< 0.02
	BOD	mg/l	30	1.5
	COD	mg/l	250	6
	Ammoniacal Nitrogen	mg/l	50	2.24

Month	Parameters	Unit	Standard	Plant Outfall
July 2024	pH		5.5 to 9.0	8
	Colour			<1.0
	Odour			Agreeable
	Suspended Solid	mg/l	100	4.6
	Oil & Grease	mg/l	10	< 1
	Iron as Fe	mg/l	3	0.6
	Phenol	mg/l	1	< 0.5
	Cyanide (as CN)	mg/l	0.2	< 0.02
	BOD	mg/l	30	4
	COD	mg/l	250	14
	Ammoniacal Nitrogen	mg/l	50	2.8
Aug 2024	pH		5.5 to 9.0	8.19
	Colour			BDL (DL: 2.0)
	Odour			Agreeable
	Suspended Solid	mg/l	100	BDL (DL: 2.5)
	Oil & Grease	mg/l	10	BDL (DL: 3.0)
	Iron as Fe	mg/l	3	BDL (DL: 0.05)
	Phenol	mg/l	1	BDL (DL:0.001)
	Cyanide (as CN)	mg/l	0.2	BDL (DL: 0.02)
	BOD	mg/l	30	BDL (DL: 2.0)
	COD	mg/l	250	BDL (DL: 4.0)
	Ammoniacal Nitrogen	mg/l	50	BDL (DL: 0.1)
Sep 2024	pH		5.5 to 9.0	7.69
	Colour			BDL(DL:2.0)
	Odour			Agreeable
	Suspended Solid	mg/l	100	BDL(DL:2.5)
	Oil & Grease	mg/l	10	BDL(DL:3.0)
	Iron as Fe	mg/l	3	0.5
	Phenol	mg/l	1	BDL(DL:0.001)
	Cyanide (as CN)	mg/l	0.2	BDL(DL:0.02)
	BOD	mg/l	30	5.6
	COD	mg/l	250	19.8
	Ammoniacal Nitrogen	mg/l	50	BDL(DL:0.1)

## Report of Analysis of Effluent Treatment Plant

Month	Parameters	Unit	BF ETP (Thickener Outlet)	BOF ETP (Thickener Outlet)
<b>Apr 2024</b>	pH		6.85	12.46
	Suspended Solid	mg/l	23.31	23.04
	TDS	mg/l	908.69	2238.43
	Turbidity (NTU)	mg/l	25.79	24.54
<b>May 2024</b>	pH		6.82	12.17
	Suspended Solid	mg/l	28.28	30.71
	TDS	mg/l	1062.59	3612.36
	Turbidity (NTU)	mg/l	31.03	34.86
<b>Jun 2024</b>	pH		6.64	12.16
	Suspended Solid	mg/l	24.07	37.79
	TDS	mg/l	775.17	2965.82
	Turbidity (NTU)	mg/l	29.62	44.61
<b>July 2024</b>	pH		6.72	12.22
	Suspended Solid	mg/l	19.82	33.15
	TDS	mg/l	662.82	3073.35
	Turbidity (NTU)	mg/l	25.11	36.60
<b>Aug 2024</b>	pH		6.7	12.13
	Suspended Solid	mg/l	23.2	27.96
	TDS	mg/l	752.4	3055.89
	Turbidity (NTU)	mg/l	25.7	32.81
<b>Sep 2024</b>	pH		6.7	12.12
	Suspended Solid	mg/l	25.4	35.63
	TDS	mg/l	671.1	2473.37
	Turbidity (NTU)	mg/l	28.4	39.42

NB: Effluents are not discharged; it is recycled completely in the circuit.

## Report of Analysis of BOD Treated Effluent

Month	Parameters	Unit	Standard	BOD ETP (Treated Effluent)
Apr 2024	pH		5.5 to 9.0	7.81
	Suspended Solid	mg/l	100	37.82
	BOD	mg/l	30	15.50
	COD	mg/l	250	166.67
May 2024	pH		5.5 to 9.0	7.96
	Suspended Solid	mg/l	100	40.38
	BOD	mg/l	30	16.60
	COD	mg/l	250	178.80
Jun 2024	pH		5.5 to 9.0	7.71
	Suspended Solid	mg/l	100	39.38
	BOD	mg/l	30	17.43
	COD	mg/l	250	170
July 2024	pH		5.5 to 9.0	7.52
	Suspended Solid	mg/l	100	45.55
	BOD	mg/l	30	17.38
	COD	mg/l	250	194.19
Aug 2024	pH		5.5 to 9.0	7.63
	Suspended Solid	mg/l	100	48.86
	BOD	mg/l	30	17.21
	COD	mg/l	250	170.65
Sep 2024	pH		5.5 to 9.0	7.67
	Suspended Solid	mg/l	100	44.86
	BOD	mg/l	30	15.16
	COD	mg/l	250	168.67

## Report of Monitoring of Noise

Apr-24						
Sl.	Description	1	2	3	4	Average
1	Compressor House Control Room	69.5	72	70	68.6	70.03
2	Power Plant Control Room	62.3	64.7	61.3	60.7	62.25
3	BF Control Room	65.8	63	69.1	59.9	64.45
4	CWPH Control Room	67.3	70.5	67.6	72	69.35
5	Sinter Plant Control Room	60.9	64.6	64.2	64	63.43
6	SMS Converter Floor 8 mtr	77.3	79.6	78.9	82.3	79.53
7	SMS CCP	71.8	73.3	72.1	78.4	73.90
8	SMS LHF	75.1	75.2	77.2	83.5	77.75
9	Oxygen Plant Control Room	57.9	58.5	58.6	59.3	58.58
10	CDCP Control Room	64.9	73.6	69.2	76.1	70.95
11	Battery Heating Control Room	69	66.8	65.9	65.5	66.80
12	Exhauster House Control Room	71.5	70.1	70.8	59.9	68.08

May-24						
Sl.	Description	1	2	3	4	Average
1	Compressor House Control Room	76.8	70.1	72	70.6	72.38
2	Power Plant Control Room	63.5	62.8	64.6	66.7	64.40
3	BF Control Room	64.3	63	64.9	62.8	63.75
4	CWPH Control Room	67.7	68.9	71.1	73.9	70.40
5	Sinter Plant Control Room	70.2	65.9	71	64	67.78
6	SMS Converter Floor 8 mtr	81.5	78.7	76.4	73.8	77.60
7	SMS CCP	70.5	79.5	68.6	76.1	73.68
8	SMS LHF	65.6	61.6	62.8	68	64.50
9	Oxygen Plant Control Room	60.2	61	63.3	60.7	61.30
10	CDCP Control Room	63.1	80	73.8	70.5	71.85
11	Battery Heating Control Room	66.7	67.6	62.2	65.1	65.40
12	Exhauster House Control Room	70.2	72.3	71.7	73.1	71.83

Jun-24						
Sl.	Description	1	2	3	4	Average
1	Compressor House Control Room	86.2	75.4	72.5	72.8	76.73
2	Power Plant Control Room	68	65.9	65.1	69.8	67.20
3	BF Control Room	72.2	69.9	62.2	67.5	67.95
4	CWPH Control Room	80.3	71.7	70.4	73.6	74.00
5	Sinter Plant Control Room	65.1	65.2	69.7	64.7	66.18
6	SMS Converter Floor 8 mtr	78.5	76.3	75.2	69.8	74.95
7	SMS CCP	69.3	68	72.7	69.2	69.80
8	SMS LHF	67.7	69.6	67.8	68.1	68.30
9	Oxygen Plant Control Room	59.8	61.1	63.4	58.8	60.78
10	CDCP Control Room	60.2	61.1	60.7	61.4	60.85
11	Battery Heating Control Room	66.4	63.2	63.9	65.7	64.80
12	Exhauster House Control Room	69.4	76.2	79.6	77.7	75.73

Jul-24						
Sl.	Description	1	2	3	4	Average
1	Compressor House Control Room	69.4	70.1	69.5	72.5	70.38
2	Power Plant Control Room	64.3	65.7	63.7	62.9	64.15
3	BF Control Room	63.1	59.8	64.7	63.1	62.68
4	CWPH Control Room	62.1	66.8	68.7	64.2	65.45
5	Sinter Plant Control Room	72.1	65.2	88.4	70.8	74.13
6	SMS Converter Floor 8 mtr	76	77.7	68.9	75.4	74.50
7	SMS CCP	70.5	71.1	77.3	72.2	72.78
8	SMS LHF	76.1	80.6	62.5	75.3	54.60
9	Oxygen Plant Control Room	59.1	63.7	105.7	61.8	72.58
10	CDCP Control Room	61.1	66.7	64.5	66.5	64.70
11	Battery Heating Control Room	60.1	61.8	60.9	59.3	60.53
12	Exhauster House Control Room	74.9	76.1	72.6	71.3	73.73

Aug-24						
Sl.	Description	1	2	3	4	Average
1	Compressor House Control Room	69.9	71.4	75.9	70.4	71.90
2	Power Plant Control Room	63.5	65.7	64.7	67.2	65.28
3	BF Control Room	61.4	58.3	60.6	62.8	60.78
4	CWPH Control Room	67.8	71.2	69.5	70.6	69.78
5	Sinter Plant Control Room	64.4	70.2	68.9	63.7	66.80
6	SMS Converter Floor 8 mtr	72.6	77.2	75.4	78	75.80
7	SMS CCP	71	68.9	70.7	68.4	69.75
8	SMS LHF	82.9	72.5	67.3	71.9	73.65
9	Oxygen Plant Control Room	60.4	62	63.5	59.8	61.43
10	CDCP Control Room	62.4	68.7	78	67.7	69.20
11	Battery Heating Control Room	71	66.4	80.8	68.3	71.63
12	Exhauster House Control Room	73.1	75.6	72.4	69.8	72.73

Sep-24						
Sl.	Description	1	2	3	4	Average
1	Compressor House Control Room	73.1	74	75.6	76.1	74.70
2	Power Plant Control Room	75.8	68.6	66.5	70.1	70.25
3	BF Control Room	63.6	57.9	60.2	65.1	61.70
4	CWPH Control Room	70.7	69.3	67.9	66.5	68.60
5	Sinter Plant Control Room	72.5	66.3	66.1	64.9	67.45
6	SMS Converter Floor 8 mtr	75.4	73.8	76.8	78.6	76.15
7	SMS CCP	68.5	70.7	74.7	66.8	70.18
8	SMS LHF	70.7	75.9	77.9	67.5	73.00
9	Oxygen Plant Control Room	59	64.3	62.3	59.5	61.28
10	CDCP Control Room	69.8	66.6	68.6	66	67.75
11	Battery Heating Control Room	65.3	66.2	63.9	73.8	67.30
12	Exhauster House Control Room	77.2	74.1	76.2	72.8	75.08

## CSR Activity highlights

After takeover of Neelachal Ispat Nigam Limited by Tata Steel Long Products Limited, CSR activities are centrally being coordinated by Tata Steel Foundation. Various socio-economic development programs covering livelihood, education, safe drinking water, sports, health care etc. have been undertaken in surrounding areas of plant. Tata Steel Foundation has undertaken the following initiatives in NINL operational area comprising the Gram Panchayats, Salijanga, Duburi, Baragadia, Ollal, Nadiabhanga, Ranagudni, Sarganpur, Gobardhanpur, Dhuligarh and Chitri through different interventions.

Program Head	Major Intervention / Remarks
<b>Agriculture &amp; Livelihood</b>	<p>a) Skill development training like a) Ophthalmic Nurse Assistant training, b) 3 years Diploma Training in Manufacturing technology, c) Master Chef Training, d) Sewing Machine Operator training through 100% placement assurance is being provided to local youth.</p> <p>b) training programs are being arranged to SHG members (Self Help Group) with essential skills in areas like food preparation, agarbati making, and household disinfectants.</p> <p>Agricultural supports through following are being provided to local farmers.</p> <ol style="list-style-type: none"> <li>1. Promotion of Climate-Resilient Agricultural Practices- To cope with the climate related shocks, Crop Diversification, Promotion of new crops etc</li> <li>2. Promotion of Organic Farming- To reduce the input cost &amp; promote sustainability, organic farming had been promoting in the Peripheral Areas</li> <li>3. Promotion of Model Vegetable Farming through Mulching &amp; Trellis: - Promotion of vegetable farming as a 2<sup>nd</sup> Crop and 3<sup>rd</sup> Crop has been introduced Mulching &amp; Trellis technology to the farmers through various village level and farm level training program</li> <li>4. excavation of farm ponds for irrigation support, solar based irrigation scheme</li> <li>5. poultry, duckery, rearing of goats</li> <li>6. Promotion of Inland Fish Farming</li> <li>7. nursery</li> <li>8. Soil testing and issuing certificate</li> <li>9. System of Rice Intensification (SRI) Marker has been distributed to 18 Krushak Sanghas at NINL Cluster.</li> <li>10. Integrated Farming System (IFS) – By promotion of fish farming with vegetable farming, fruit plantation and duckery have been introduced with 15 farmers.</li> </ol>
<b>Water Harvesting Structures</b>	<ol style="list-style-type: none"> <li>1. To stores rainwater for irrigation, ensuring water availability during dry periods several ponds have been constructed and existing ponds were renovated. Total 26 Nos of Ponds constructed, and two number of ponds had been renovated from April 2023 to September 2024</li> <li>2. Earthen Check dam (ECD) has been completed at Fuljhar &amp; it will be helped to irrigation above 80-100 acres of land.</li> </ol>
<b>Gender and Community Enterprise</b>	<ol style="list-style-type: none"> <li>1. 150 Women members were covered under Leadership Development training under Project DISHA.</li> <li>2. Approx 1019 members covered through 84 nos Monthly SHG, CLF &amp; GPLF meeting.</li> <li>3. 743 nos of women members participated in panchayat level women day programme.</li> <li>4. Bag making activity, Ration supply for Nikshyamitra prog &amp; Badi making activity</li> </ol>

<p><b>Education</b></p>	<ol style="list-style-type: none"> <li>1. Pre-matric coaching class is being conducted at four schools (Salijanga High School, Salijanga, Panchayat High School, Ollala, Tapovan Government Girls School, Rampilo &amp; Budhraj High School Danagadi).</li> <li>2. Jyoti Fellowship is being provided to meritorious students from economically backward Scheduled Caste and Scheduled Tribe families to enable them to accomplish educational and career aspirations. 5 schools in Kalinga Nagar area are covered under this program.</li> <li>3. Education Signature Program was initiated in January 2015, aimed at universalizing education in line with the Right to Education Act. In Jajpur, the project operates in Danagadi block</li> <li>4. Youths are receiving training at NIIT center at Duburi in Basic IT and Spoken English Course.</li> <li>5. Running 42 tribal language (Warang Chiti and Ol Chikki) and Literature classes at Salijanga, Sarngapur, Nadiabhanga and Ollal Panchayat.</li> </ol>
<p><b>Infrastructure &amp; misc.</b></p>	<ol style="list-style-type: none"> <li>1. Construction of New Classroom at Nilachal High School, Nadiabhanga, Ollala UP Project School, Khandra UP school &amp; Duburi College have been completed for conducive learning environment.</li> <li>2. Construction of Hospital Building at Primary Health Centre (PHC), Duburi has been completed</li> <li>3. Well-ness park constructed and inaugurated at Duburi.</li> <li>4. Completed construction of Public toilet at Danagadi</li> <li>5. Completed Anganwadi Center at Kulapitha &amp; Construction of Anganwadi center at Ghatisahi, Ranagundi is going on</li> <li>6. Renovation of Community Center at Bajrapalli is undergoing.</li> <li>7. Construction of road at Baragadia is undergoing.</li> <li>8. 4 High Mast Tower at Baragadia and Salijanga and Six Solar Lights at Hadi Sahi, Baragadia have been installed.</li> </ol>
<p><b>Health &amp; Drinking Water</b></p>	<ol style="list-style-type: none"> <li>1. Drinking water facility through installation of New Hand Tube Well at Baragadia, Chitri, Gobardhanpur, Nadiabhanga, Ollala, Salijanga &amp; Sarangpur. Total 19 new hand tube well installed and 30 have repaired. Pipe Water Supply System at UGME, Sarangpur</li> <li>2. Two nos. deep bore based drinking water system have been provided at Sarangpur. It will be impacted around 800 no. of people.</li> <li>3. Screening and awareness of Non -Communicable Disease (Diabetes, Hypertension, Oral cancer, Breast Cancer.) and Vector Borne Disease (VBD) (Screening fever and Raising awareness about VBD) have been conducted with 17,665 people.</li> <li>4. Mobile Public Health Unit is operating in almost all panchayats.</li> <li>5. Nutrition program, basic life support training is provided to local population.</li> <li>6. 252 nos. cataract screening done &amp; 13 cataract surgery was undertaken.</li> <li>7. RISHTA a project for reducing child marriages and promoting adolescent reproductive sexual health has been actively undertaken</li> </ol>
<p><b>Sports</b></p>	<ol style="list-style-type: none"> <li>1. 5 different centers (Athletic Training Center, Youth Development Center &amp; Football Training Center) has been developed which regularly provide training of Football and Athletics</li> <li>2. Organized AFC Grassroot Football Festival at Jamposi on 15<sup>th</sup> May 2024- 170 trainees had been participated in this program.</li> <li>3. Organized Football trial with Sudeva Academy in the month of June 2024 where 8 participants selected in the trial.</li> </ol>