स्टील अथॉरिटी ऑफ इण्डिया लिमिटेड
(भारत सरकार का उपक्रम)
इस्को स्टील प्लांट
बर्नपुर - 713 325 पश्चिम बंगाल
टेलिफोन नं० : 0341-2240441
फैक्स नं० : 0341-2240018, 2240032
: 0341-2240704 (Works)

SAIL-ISP

ओ एवं एम/सा०/O & M /Genl/33
STEEL AUTHORITY OF INDIA LIMITED
(A Govt. of India Enterprise)
IISCO STEEL PLANT
BURNPUR - 713 325, WEST BENGAL
Phone No. : 0341-2240441
FAX No. : 0341-2240018, 2240032
: 0341-2240704 (Works)

संदर्भ सं०/Ref. No. : GMD/MOEF&cc/2025/17

दिनांक / Date 29/05/25

The IGF & Incharge,
GOI, MOEF&CC
Integrated Regional Office, Kolkata
1B-198, Salt Lake City, Sector III
Kolkata- 700106

Sub: Expansion of IISCO Steel Plant (ISP) (0.55 MTPA to 2.50 MTPA, Rebuilding Battery No. 10 of Coke Oven and setting up of captive Power Plant (87.5 MW) and other Facilities at Burnpur, Asansol, Burdwan, West Bengal by M/s Steel Authority of India Limited (SAIL) – Environment Clearance

Ref.: F. No. J-11011/348/2005-IAII (I), dated 7th August, 2007 & F. No. J-11011/348/2006-IAII (I) dated 22nd November , 2007 Ministry of Environment & Forests, Govt. of India, Paryavaran Bhawan, CGO Complex, Lodi Road, New Delhi-110003 & F. No. J-11011/348/2005-IAII (I) dated 14th November, 2013

Sir,

We are enclosing herewith a status report of Compliance to the conditions stipulated in the above mentioned environmental clearance for the period October 2024 to March 2025.

Thanking you,

Yours faithfully,

P. K. Paul
29-5-2025

(P. K. Paul)
GM I/c (Safety, FS & Env.) exe. pwr of CGM (Safety, FS & Env)

Encl : as stated

Steel Authority of India Limited
IISCO Steel Plant

Sub: Expansion of IISCO Steel Plant (ISP) (0.55 MTPA to 2.50 MTPA), Rebuilding of Coke Oven Battery No. 10 and setting up of a Captive Power Plant (87.5 MW) and other facilities at Burnpur, Asansol, Burdwan, West Bengal by M/s Steel Authority of India Limited (SAIL) – Environmental Clearance

Ref: F. No. J-11011/348/2005 – IA II (I), dated 7th August, 2007 & F. No. J-11011/348/2006 – IA II (I) dated 22nd November, 2007 & F. No. J-11011/348/2005-IA II (I) dated 14th November, 2013 of Ministry of Environment & Forests, Government of India, Paryavaran Bhawan, C.G.O. Complex, Lodi Road, New Delhi – 110003

Status report of the compliance to the conditions: October 2024 to March 2025

Condition of MoEFCC	Status / Compliance
A. Specific Conditions :	
i) The gaseous emissions from various process units shall conform to the load/mass based standards notified by this Ministry on 19th May, 1993 and standards prescribed from time to time. The West Bengal Pollution Control Board (WBPCB) may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location. At no time, the emission level shall go beyond the prescribed standards. Interlocking facilities shall be provided so that process can be automatically stopped in case emission level exceeds the limit.	These features are taken care of in Design & Engineering. Efforts are made considering necessary factor of safety that at no time, the emission level shall go beyond the prescribed standards. However, due to technological limitation and safety & hazards requirements of different units of the plant interlock facilities cannot be provided for automatically stopping. Test Reports of monitoring and analysis carried out by WBPCB and other recognized laboratories during October 2024 to March 2025 are placed at Annexure 1.
ii) Low NO_X burners shall be provided in re-heating furnace and boilers to control NO_X emissions. Continuous stack monitoring facilities for all the major stacks and adequate air pollution control systems shall be provided to control air emissions within 50 mg/Nm^3 and reports submitted to the WBPCB & CPCB.	These features are taken care of in Design & Engineering. Emission is maintained within norm. Stack, Ambient Air, Work Environment, Ambient Noise and Coke oven Fugitive Emissions monitoring report from October 2024 to March 2025 is placed at Annexure 2.
iii) Ambient air quality monitoring stations shall be set up per statutory requirement in consultation with the WBPCB. Ambient air quality including ambient noise levels shall not exceed the standards stipulated under EPA or by the State authorities. Monitoring of ambient air quality and shall be carried out regularly in consultation with WBPCB and data submitted to the CPCB and WBPCB regularly. The instruments used for ambient air quality monitoring shall be calibrated time to time.	Monitoring stations already exist. Calibration being done regularly. Five (5) Nos. of Continuous Ambient Air Quality Stations (CAAQMS) are set up at Township (1 No.) & Plant (4 Nos.).
iv) In-plant control measures for checking fugitive emissions from all the vulnerable sources shall be provided. ESP to the new sinter plant, ventury scrubber to BOF shop, pulse jet type bag filter to lime and dolomite plant and bag filters in material handling areas and material transfer points shall be provided. A fume extraction system comprising suction hood, associated duct, cyclone/scrubber shall be provided to control dust generated during secondary refining. De-dusting system shall be provided at different material transfer points. Tar, NH_3 shall be cleaned in the process and H_2S recovery from the coke oven shall be ensured. By-product fuel gases shall be used for steam and power generation.	The stipulated control measures have been considered in Design & Engineering and installed. ESP has been provided in the sinter plant. Scrubber has been provided to clean BOF gas. Bag filters have been provided at Lime & Dolomite Calcination Plant, as well as in material handling & transfer points. ESP is provided to control dust generated from secondary refining. List of Pollution Control equipment installed in various units are provided in Annexure 3. Tar, NH_3 is being cleaned and H_2S recovery plant is in operation. By-product fuel gases like Coke Oven, Blast Furnace & BOF Gas is used for generation of power & steam generation as well as for heating purpose.

सहायक महाप्रबंधक (पर्यावरण प्रबंधन)
AGM (Environ. Mgmt.)
सेल-आई. एस. पी., बर्नपुर
SAIL-ISP, BURNPUR

	Condition of MoEFCC	Status / Compliance
v)	Dry fog dust suppression system shall be provided to control fugitive emissions. Further, specific measures like water sprinkling around the coal stockpiles and asphalting or concreting of the roads shall be done to control fugitive emissions. Secondary fugitive emissions shall be controlled within the prescribed limits, regularly monitored and records maintained. Guidelines/Code of Practice issued by the CPCB in this regard shall be followed.	Dry fog dust suppression system and water sprinkling systems are provided to control fugitive emissions from coal stockpiles. Also, the roads have been concretised. Secondary fugitive emissions are being controlled by deploying sprinklers and mist canons.
vi)	Total requirement of the water from River Damodar shall not exceed 23 MGD and prior `permission' – for the total water requirement shall be obtained from the concerned Department before commissioning the project. Effluent Treatment Plant (ETP) shall be installed for the treatment of process water. During the rebuilding of coke oven battery, BOD plant shall be provided for the disposal of liquid effluent. The wastewater generated from blast furnace (BF) shall be treated in clarifier and reused in the system. Blow down from BF re-circulation system shall be reused in SGP as make up water. Blow down from BOF re-circulation system shall be reused in new SMS slag yard. Reverse Osmosis plant shall be installed. All the wastewater generated shall be treated, recycled and reused either in the process or for dust suppression or green belt development. No wastewater shall be discharged outside the factory premises and `Zero' discharge shall be adopted. Domestic effluent shall be treated in sewage treatment plant (STP).	Total water requirement from the River Damodar is well within the permitted value of 23 MGD. Permission from DVC is also obtained before commissioning of the project. ETP is installed at Sinter Plant, Blast Furnace, SMS, Bar Mill and at USM. Separate BODs are installed for both COB 10 & 11. Clarifier is provided at BF and water is being reused. Clarifier is also provided in BOF for re-circulation of water. Reverse Osmosis systems are also installed with ZLD units. Domestic effluents are being treated in STP.
vii)	All the BF slag shall be either sold or used for road construction. BF sludge and BOF sludge shall be partly used in sinter plant and partly dumped. BOF slag shall be reused in BF, sinter plant as well as ballast. All the BF fume dust, BOF scale, Mill scales, Lime dust, Dolo dust, Burnt lime, Pig casting machine sludge etc. shall be reused in sinter plant. All the mill scrap and skull/scrap shall be reused in BOF plant. Blast furnace gas, Coke oven gas, BOF gas, Liquid Oxygen, LPG, shall be used in the power plant, Tar sludge, BOD plant sludge and waste oil shall be generated during the rebuilding of coke oven battery shall be properly disposed of as per the Hazardous Waste (Management & Handling) Rules, 1989 and subsequent amendments.	BF & BOF slags are either sold or being used in the plant. BF & BOF sludge is either being sold or used. BF Fume Dust, CCP/Mill scales, Lime & Dolo Dust and burnt Lime are being used in the plant. Skull & Scrap are being used in the plant. Tar Sludge is being utilized in the plant and waste oils are being disposed as per Hazardous & Other Wastes (Management And Trans-boundary Movement) Rules, 2016.
viii)	The prescribed emission standards for coke oven plants as notified vide notification no. GSR 46 (E) dated 3rd February, 2006 shall be complied with.	Complied
ix)	All the environment management measures given in the EIA/EMP shall be implemented and complied with.	Complied
x)	Out of total 1,165.58 ha.green belt shall be developed in 260 ha. area in addition to existing 43 ha within and around the plant premises as per the CPCB guidelines in consultation with DFO.	Development of green belt is done in and around the plant premises as per the CPCB guidelines and total planted area is around 305 Ha.
A.	**General Conditions :**	
i)	The project authority shall adhere to the stipulation made by West Bengal Pollution Control Board (WBPCB) and State Government.	Complied
ii)	No further expansion of modification of the plant shall be carried out without prior approval of this Ministry.	Agreed
iii)	The overall noise levels in and around the plant area shall be kept well within the standards (85 dB (A)) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under Environmental (Protection) Act, 1986 Rules, 1989 viz.	All the noise control measures have been installed and noise levels in and around the plant is well within the prescribed limits.

सहायक महाप्रबंधक (पर्यावरण प्रबंधन)
AGM (Environ. Mgmt.)
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SAIL-ISP, BURNPUR

Condition of MoEFCC	Status / Compliance
75 dB(A) (day time) and 70 dB(A) (night time).	
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 is being carried for all the employees including workers and records are being maintained.
v) All the recommendations mentioned in the Corporate Responsibility for Environmental Protection (CREP) of CPCB issued for the steel plants shall be implemented.	Recommendations mentioned in the CREP of CPCB issued for the steel plants are implemented.
vi) The company shall undertake eco-development measures including community welfare measures in the project area.	Being done on regular basis under Corporate Social Responsibility (CSR). List of CSR activities carried out during Financial Year 2024-25 is placed at Annexure 4.
vii) The company shall develop rain water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table.	Rainwater harvesting system is installed at Refractory storage shed area.
viii) Proper housekeeping and adequate occupational health programmes shall be taken up.	Being done on regular basis
ix) A separate environmental management cell to carry out various management and monitoring functions shall be set up under the control of Senior Executive.	Already exists with GM I/c (Safety, Fire Services & Environment), 3 officers, 4 associates and 15 contractual workers.
x) As mentioned in the EIA/EMP, Rs. 480.00 Crores and Rs. 36.60 Crores allocated towards the capital cost and recurring cost/annum environmental pollution control measures shall be judiciously used to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government. The funds so provided shall not be diverted for any other purpose.	Adequate amount being utilized for environmental measures.
xi) The Regional Office of this Ministry at Bhubaneswar/CPCB/WBPCB shall monitor the stipulated conditions. A six monthly compliance report and the monitored data along with statistical interpretation shall be submitted to them regularly.	Monitoring Reports along with statistical interpretation are being submitted regularly to MoEFCC/CPCB/WBPCB and are also being placed at sail.co.in.
xii) The Project Authorities shall inform the Regional Office as well as Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.	Financial closure of the only left out LDCP package is expected to be completed by June 2025. .
xiii) The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the W.B. Pollution Control Board/Committee and may also be seen at Website of the Ministry of Environment and Forests at http:/envfor.nic.in. This should be advertised within seven days from the date of issue of the clearance letter at least in two local newspaper that are widely circulated in the region of which one shall be in the vernacular language of the locally concerned and a copy of the same shall be forwarded to the Regional Office at Bhubaneswar.	Advertised through local newspaper and is also being displayed at sail.co.in.
B. Additional Conditions Dated 1st June 2011	
i) There shall be no increase in the total coke production and coal throughput due to increase in the number of ovens from 67 to 74 in the coke oven battery.	Agreed.
ii) Data on ambient air, stack and fugitive emissions shall be regularly submitted online to Ministry's Regional office at Bhubaneswar, SPCB and Central Pollution Control Board as well as hard copy once in six months and display data on RSPM, SO_2 and NOx outside the premises at the appropriate place for the general public.	Being done regularly.
iii) The National Ambient Air Quality Standard issued by the Ministry Vide G.S.R No 826 (E) dated 18th November 2009 shall be followed	Agreed.

सहायक महाप्रबंधक (पर्यावरण प्रबंधन)
AGM (Environ. Mgmt.)
सेल-आई. एस. पी., बर्नपुर
SAIL-ISP, BURNPUR

Condition of MoEFCC	Status / Compliance
iv) The project proponent shall also submit monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective regional office of MOEF, the respective Zonal Office of CPCB and the SPCB .The Regional Office of the Ministry at Bhubaneswar/CPCB/SPCB shall monitor the stipulated condition.	Monthly data is being submitted in this report.
v) The environmental statement for each financial year ending 31st March in Form-V as is mandated to submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental conditions and shall also be sent to the respective Regional Offices of the MOEF by e-mail.	Followed.
vi) The company shall adopt well laid down corporate environment policy and identify and designate responsible officers at all levels of its hierarchy for ensuring adherence to the policy and compliance with environmental clearance, environmental laws and regulations.	Corporate Environment Policy exists and also for its implementation, separate Environmental Management Department is provided in each of the unit, with corporate Environment set up as well.

27/5/25

सहायक महाप्रबंधक (पर्यावरण प्रबंधन)
AGM (Environ. Mgmt.)
सेल-आई. एस. पी., बर्नपुर
SAIL-ISP. BURNPUR

Annexure 1

Test Reports

Analysis Reports of Gaseous Emission

Identification Code: 1 3 1 1 2 0 2 4 1 0 1 4 2

WEST BENGAL POLLUTION CONTROL BOARD

Durgapur Regional Laboratory, Paribesh Bhawan, City Centre, Durgapur- 713 216

Analysis done at:

1.Name of Industry	M/s. SAIL-IISCO Steel Plant.		
2.Address	P.O: Burnpur, Paschim Bardhaman,W.B.		
3.Category & Type	Red & Integrated Steel Plant.		
4.Sampling Date	13.11.2024		
5.Duration of Sampling	33 min		
6.Name of Laboratory	M/s. Eco Care.		
7.Height of Stack from ground (m)	120.0		
8.Cross section of Stack at sampling point (m^2)	26.4314		
9.Stack connected to	Coke Oven Battery No.#11		
10.Emission due to (Furnace / Boiler)	Process Activity.		
Average operational hours of boiler/furnace (per month)	720 hrs/month.		
12.APC System (if any)	NIL		
13.Working load of source (MT/hr)	2050 MT/hr.		
14. Fuel used	Coke Oven Gas		
15.Rated Fuel consumption (Kg or l /hr)	-		
16.Working Fuel consumption (Kg or l /hr)	20,66600 m^3/day.		
17.Nature of furnace/boiler	Coke Oven Battery		
18.Flue Gas Temp (^0C)	157.0		
19.Flue gas velocity (m/s)	8.50	20.Volume of Flue gas drawn in lit (m^3)	1.023
21.Corrected flue gas volume (Nm^3)	0.8153	22.Percentage of CO_2 & O_2	CO_2=6.2% O_2=14.2%
23. To be compensated at (% if required)		12% CO_2	
24.Initial wt of thimble (gm)	1.7037	25.Final wt of thimble (gm)	1.7090
26.Wt. of PM (mg)	5.30	27.Particulate matter (mg/Nm^3)	12.58 at 12% CO_2
28.Barometric Pressure Head (mm of Hg)	754	29.Diameter of the nozzle	3/8"
30. Others SO_2 & NO_x		31. Thimble Number	5619
Sampled by		Mr. R. Chakraborty, AEE	

26/11/24	26/11/24	Subhajit Das 26/11/2024	26/11/2024
Date of Reporting	Prepared by	Checked by	Signature of In-Charge, DRL

Copy to:
1. OSD - Operation & Execution, WBPCB
2. Chief Scientist, WBPCB
3. Env. Engineer (DRO) / Env. Engineer (ARO), WBPCB
4. Industry

24/5/25

सहायक महाप्रबंधक (पर्यावरण प्रबंधन)
AGM (Environ. Mgmt.)
सेल-आई. एस. पी., बर्नपुर
SAIL-ISP, BURNPUR

Analysis Reports of Gaseous Emission

Identification Code: 1 3 1 1 2 0 2 4 1 0 1 4 1

WEST BENGAL POLLUTION CONTROL BOARD

Durgapur Regional Laboratory, Paribesh Bhawan, City Centre, Durgapur- 713 216

Analysis done at:

1.Name of Industry		M/s. SAIL-IISCO Steel Plant.	
2.Address		P.O: Burnpur, Paschim Bardhaman,W.B.	
3.Category & Type		Red & Integrated Steel Plant.	
4.Sampling Date		13.11.2024	
5.Duration of Sampling		33 min	
6.Name of Laboratory		M/s. Eco Care.	
7.Height of Stack from ground (m)		110.0	
8.Cross section of Stack at sampling point (m^2)		9.625	
9.Stack connected to		Coke Oven Battery No.#10	
10.Emission due to (Furnace / Boiler)		Process Activity.	
Average operational hours of boiler/furnace (per month)		720 hrs/month.	
12.APC System (if any)		NIL	
13.Working load of source (MT/hr)		35 MT/hr.	
14. Fuel used		Coke Oven Gas	
15.Rated Fuel consumption (Kg or l /hr)		-	
16.Working Fuel consumption (Kg or l /hr)		9500 m^3/hr.	
17.Nature of furnace/boiler		COB#10	
18.Flue Gas Temp (^0C)		.142.0	
19.Flue gas velocity (m/s)	8.01	20.Volume of Flue gas drawn in lit (m^3)	1.023
21.Corrected flue gas volume (Nm^3)	0.7892	22.Percentage of CO_2 & O_2	CO_2=5.6% O_2=14.8%
23.To be compensated at (% if required)		12% CO_2	
24.Initial wt of thimble (gm)	1.7945	25.Final wt of thimble (gm)	1.8110
26.Wt. of PM (mg)	16.50	27.Particulate matter (mg/Nm^3)	44.80 at 12% CO_2
28.Barometric Pressure Head (mm of Hg)	754	29.Diameter of the nozzle	3/8"
30. Others SO_2 & NO_x		31. Thimble Number	5618
Sampled by		Mr. R. Chakraborty, AEE	

26/11/24	26/11/24	Subhajit Das 26/11/2024	26/11/2024
Date of Reporting	Prepared by	Checked by	Signature of In-Charge, DRL

Copy to:
1. OSD - Operation & Execution, WBPCB
2. Chief Scientist, WBPCB
3. Env. Engineer (DRO) / Env. Engineer (ARO), WBPCB
4. Industry

29/5/25
सहायक महाप्रबंधक (पर्यावरण प्रबंधन)
AGM (Envirco. Mgmt.)
सेल-आई. एस. पी., बर्नपुर
SAIL-ISP, BURNPUR

Analysis Reports of Gaseous Emission

Identification Code: 1 4 1 1 2 0 2 4 1 0 1 4 4

WEST BENGAL POLLUTION CONTROL BOARD

Durgapur Regional Laboratory, Paribesh Bhawan, City Centre, Durgapur- 713 216

Analysis done at:

1.Name of Industry		M/s. SAIL-IISCO Steel Plant.	
2.Address		P.O.: Burnpur, Paschim Bardhaman, W.B.	
3.Category & Type		Red & Integrated Steel Plant.	
4.Sampling Date		14.11.2024	
5.Duration of Sampling		42 min	
6.Name of Laboratory		M/s. Eco Care.	
7.Height of Stack from ground (m)		30.46	
8.Cross section of Stack at sampling point (m^2)		5.3114	
9.Stack connected to		Power Plant Unit-A (Boiler-B)	
10.Emission due to (Furnace / Boiler)		Combustion of Coal, Coke Oven Gas.	
Average operational hours of boiler/furnace (per month)		720 hrs/month.	
12.APC System (if any)		Multi Cyclone	
13.Working load of source (MT/hr)		75 TPH	
14. Fuel used		Coal, Coke Oven Gas	
15.Rated Fuel consumption (Kg or l /hr)		-	
16.Working Fuel consumption (Kg or l /hr)		Coal-5.6 MT/hr. & CO Gas-2.5 Nm^3/hr.	
17.Nature of furnace/boiler		Boiler	
18.Flue Gas Temp (^0C)		158.0	
19.Flue gas velocity (m/s)	13.42	20.Volume of Flue gas drawn in lit (m^3)	1.008
21.Corrected flue gas volume (Nm^3)	0.7096	22.Percentage of CO_2 & O_2	CO_2=10.8% O_2=6.8%
23.To be compensated at (% if required)		6% O_2	
24.Initial wt of thimble (gm)	1.7476	25.Final wt of thimble (gm)	1.7553
26.Wt. of PM (mg)	7.70	27.Particulate matter (mg/Nm^3)	11.46 at 6% O_2
28.Barometric Pressure Head (mm of Hg)	753	29.Diameter of the nozzle	1/4"
30. Others SO_2 & NO_x		31. Thimble Number	5621
Sampled by		Mr. A. Barman, AEE	

26/11/24	26/11/24	Subhajit Das 26/11/2024	26/11/2024
Date of Reporting	Prepared by	Checked by	Signature of In-Charge, DRL

Copy to:
1. OSD - Operation & Execution, WBPCB
2. Chief Scientist, WBPCB
3. Env. Engineer (DRO) / Env. Engineer (ARO), WBPCB
4. Industry

महाप्रबंधक (पर्यावरण प्रबंधन)
(AGM (Env. Mgmt.)
सेल-आई. एस. पी., बर्नपुर
SAIL-ISP, BURNPUR

Analysis Reports of Gaseous Emission

Identification Code: 1 4 1 1 2 0 2 4 1 0 1 4 3

WEST BENGAL POLLUTION CONTROL BOARD

Durgapur Regional Laboratory, Paribesh Bhawan, City Centre, Durgapur- 713 216

Analysis done at:

1.Name of Industry		M/s. SAIL-IISCO Steel Plant.	
2.Address		P.O.: Burnpur, Paschim Bardhaman, W.B.	
3.Category & Type		Red & Integrated Steel Plant.	
4.Sampling Date		14.11.2024	
5.Duration of Sampling		42 min	
6.Name of Laboratory		M/s. Eco Care.	
7.Height of Stack from ground (m)		0.9144	
8.Cross section of Stack at sampling point (m^2)		5.0	
9.Stack connected to		Boiler No.#02	
10.Emission due to (Furnace / Boiler)		Combustion of Mixed Gas & CO-Gas.	
11.Average operational hours of boiler/furnace (per month)		720 hrs/month.	
12.APC System (if any)		NIL	
13.Working load of source (MT/hr)		160 TPH	
14. Fuel used		Mixed Gas & CO-Gas	
15.Rated Fuel consumption (Kg or l /hr)		-	
16.Working Fuel consumption (Kg or l /hr)		11,70,000 M^3/day.	
17.Nature of furnace/boiler		Boiler	
18.Flue Gas Temp (^0C)		136.0	
19.Flue gas velocity (m/s)	12.60	20.Volume of Flue gas drawn in lit (m^3)	1.008
21.Corrected flue gas volume (Nm^3)	0.6968	22.Percentage of CO_2 & O_2	CO_2=11.4% O_2=6.6%
23.To be compensated at (% if required)		6% O_2	
24.Initial wt of thimble (gm)	1.7989	25.Final wt of thimble (gm)	1.8044
26.Wt. of PM (mg)	5.50	27.Particulate matter (mg/Nm^3)	8.22 at 6% O_2
28.Barometric Pressure Head (mm of Hg)	753	29.Diameter of the nozzle	1/4"
30. Others SO_2 & NO_x		31. Thimble Number	5620
Sampled by		Mr. A. Barman, AEE	

26/11/24	26/11/24	Subhajit Das 26/11/2024	26/11/2024
Date of Reporting	Prepared by	Checked by	Signature of In-Charge, DRL

Copy to:
1. OSD - Operation & Execution, WBPCB
2. Chief Scientist, WBPCB
3. Env. Engineer (DRO) / Env. Engineer (ARO), WBPCB
4. Industry

29/8/25
(A. K. Rai)
सहायक महाप्रबंधक (पर्यावरण प्रबंधन)
AGM (Environ. Mgmt.)
सेल-आई. एस. पी., बर्नपुर
SAIL-ISP, BURNPUR

Analysis Reports of Gaseous Emission

Identification Code: 2 0 0 2 2 0 2 5 1 0 3 4 2

WEST BENGAL POLLUTION CONTROL BOARD

Durgapur Regional Laboratory, Paribesh Bhawan, City Centre, Durgapur- 713 216

Analysis done at:

1.Name of Industry		M/s. SAIL-ISP (Burnpur)	
2.Address		Burnpur, Paschim Bardhaman, 713325	
3.Category & Type		Red. Steel Plant	
4.Sampling Date		20.02.2025	
5.Duration of Sampling		32 min.	
6.Name of Laboratory		M/s. Envirocheck	
7.Height of Stack from ground (m)		70.0 m	
8.Cross section of Stack at sampling point (m^2)		12.5714 m^2	
9.Stack connected to		Blast Furnace-5 (Stove)	
10.Emission due to (Furnace / Boiler)		Burning of Mixed Gas	
11.Average operational hours of boiler/furnace (per month)		720 hrs/month	
12.APC System (if any)		Dust Catcher & Venturi Scrubber	
13.Working load of source (MT/hr)		7700 MT/Day	
14. Fuel used		Mixed Gas	
15.Rated Fuel consumption (Kg or l /hr)		535 Kg/thm	
16.Working Fuel consumption (Kg or l /hr)		530 Kg/thm	
17.Nature of furnace/boiler		Blast Furnace-5 (Stove)	
18.Flue Gas Temp (^0C)		81.85	
19.Flue gas velocity (m/s)	18.99	20.Volume of Flue gas drawn in lit (m^3)	1.024
21.Corrected flue gas volume (Nm^3)	0.9591	22.Percentage of CO_2 & O_2	CO_2=13.2% O_2=4.6%
23.To be compensated at (% if required)		-	
24.Initial wt of thimble (gm)	1.5730	25.Final wt of thimble (gm)	1.5799
26.Wt. of PM (mg)	6.90	27.Particulate matter (mg/Nm^3)	7.19
28.Barometric Pressure Head (mm of Hg)	759	29.Diameter of the nozzle	6.35 mm
30. Others SO_2 & NO_x		31. Thimble Number	5825
32. Sampled by		Mr. R. Chakraborty, AEE	

04/03/25	04/03/25	04/03/25	04/03/2025
Date of Reporting	Prepared by	Checked by	Signature of In-Charge, DRL

Copy to:
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2. Chief Scientist, WBPCB
3. Env. Engineer (DRO) / Env. Engineer (ARO), WBPCB
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29/5/25
(A. K. Rai)
सहायक महाप्रबंधक (पर्यावरण प्रबंधन)
AGM (Environ. Mgmt.)
सेल-आई. एस. पी., बर्नपुर
SAIL-ISP, BURNPUR

Analysis Reports of Gaseous Emission

Identification Code: 2 1 0 2 2 0 2 5 1 0 3 4 4

WEST BENGAL POLLUTION CONTROL BOARD

Durgapur Regional Laboratory, Paribesh Bhawan, City Centre, Durgapur- 713 216

Analysis done at:

1.Name of Industry		M/s. SAIL-ISP (Burnpur)	
2.Address		Burnpur, Paschim Bardhaman	
3.Category & Type		Red, Steel Plant	
4.Sampling Date		21.02.2025	
5.Duration of Sampling		24 min	
6.Name of Laboratory		M/s. Envirocheck	
7.Height of Stack from ground (m)		70.0 m	
8.Cross section of Stack at sampling point (m^2)		7.065 m^2	
9.Stack connected to		Boiler No-01	
10.Emission due to (Furnace / Boiler)		Mixed Gas & CO Gas	
11.Average operational hours of boiler/furnace (per month)		720 hrs/month	
12.APC System (if any)		-	
13.Working load of source (MT/hr)		130 TPH	
14. Fuel used		Mixed Gas & CO Gas	
15.Rated Fuel consumption (Kg or l /hr)		-	
16.Working Fuel consumption (Kg or l /hr)		100000 Nm^3/hr.	
17.Nature of furnace/boiler		Boiler No.-01	
18.Flue Gas Temp (^0C)		144.42	
19.Flue gas velocity (m/s)	12.70	20.Volume of Flue gas drawn in lit (m^3)	1.008
21.Corrected flue gas volume (Nm^3)	0.9671	22.Percentage of CO_2 & O_2	CO_2=12.4% O_2=7.2%
23.To be compensated at (% if required)		6% O_2	
24.Initial wt of thimble (gm)	1.5972	25.Final wt of thimble (gm)	1.6035
26.Wt. of PM (mg)	6.30	27.Particulate matter (mg/Nm^3)	7.08 at 6% O_2
28.Barometric Pressure Head (mm of Hg)	759	29.Diameter of the nozzle	9.55 mm
Others SO_2 & NO_x		31. Thimble Number	5827
32. Sampled by		Mr. A. Barman, AEE	

04/03/25	04/03/25	04/03/25	04/03/2025
Date of Reporting	Prepared by	Checked by	Signature of In-Charge, DRL

Copy to:
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(A. K. Roy)

सहायक महाप्रबंधक (पर्यावरण प्रबंधन)
AGM (Environ. Mgmt.)
सेल-आई. एस. पी., बर्नपुर
SAIL-ISP, BURNPUR

Analysis Reports of Gaseous Emission

Identification Code: 2 1 0 2 2 0 2 5 1 0 3 4 5

WEST BENGAL POLLUTION CONTROL BOARD

Durgapur Regional Laboratory, Paribesh Bhawan, City Centre, Durgapur- 713 216

Analysis done at:

1.Name of Industry		M/s. SAIL-ISP (Burnpur)	
2.Address		Burnpur, Paschim Bardhaman	
3.Category & Type		Red, Steel Plant	
4.Sampling Date		21.02.2025	
5.Duration of Sampling		36 min	
6.Name of Laboratory		M/s. Envirocheck	
7.Height of Stack from ground (m)		85.0 m	
8.Cross section of Stack at sampling point (m^2)		25.50 m^2	
9.Stack connected to		Sinter Plant-01	
10.Emission due to (Furnace / Boiler)		Combustion of Coke Oven Gas	
11.Average operational hours of boiler/furnace (per month)		720 hrs/month	
12.APC System (if any)		ESP	
13.Working load of source (MT/hr)		5886 MT/hr.	
14. Fuel used		Coke Oven Gas	
15.Rated Fuel consumption (Kg or l /hr)		-	
16.Working Fuel consumption (Kg or l /hr)		6000 m^3/hr.	
17.Nature of furnace/boiler		Sinter Plant.-01	
18.Flue Gas Temp (^{0}C)		106.60	
19.Flue gas velocity (m/s)	17.84	20.Volume of Flue gas drawn in lit (m^3)	1.008
21.Corrected flue gas volume (Nm^3)	0.9409	22.Percentage of CO_2 & O_2	CO_2=7.2% O_2=12.6%
23.To be compensated at (% if required)		-	
24.Initial wt of thimble (gm)	1.6507	25.Final wt of thimble (gm)	1.6807
26.Wt. of PM (mg)	30.0	27.Particulate matter (mg/Nm^3)	31.88
28.Barometric Pressure Head (mm of Hg)	759	29.Diameter of the nozzle	6.35 mm
30. Others -		31. Thimble Number	5828
32. Sampled by		Mr. A. Barman, AEE	

04/03/25	04/03/25	04/03/25	04/03/25
Date of Reporting	Prepared by	Checked by	Signature of In-Charge, DRL

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Eco Care

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Asansol - 713304
Dist. Paschim Bardhaman (W.B.)

TEST REPORT

Report Release Date	: 28.10.2024	Sample Ref. No.(ARF)	: EC/ARF/29/241009
Test Report No	: EC/TR/42/10009	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 25.10.2024
Sample Collected by	: Mr. Sisir Kr. Roy & Team	Sample Registration Date	: 26.10.2024
Sample Details	: Stack Emission	Period of Analysis	: 26.10.2024
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: Bag Filter Stack
		Sample Condition	: Sealed
		Sample Stamped as	: TH – 80
		Sample Drawn By	: ECO CARE
		Sampling Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Process Activity
3	Stack Connected to	: Lime Dolomite Calcinations Unit No. 1 (LDCP – 1)
4	Material of Construction	: M.S
5	Stack Height from G.L.	: 31.00 m
6	Height of Sampling Port from G.L.	: 20.00 m
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 1.0 m
9	Shape of the Stack	: Circular Ø
10	Working Load	: ----

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: ----
2	Energy Consumption	: ----
3	Calorific Value (K-Cal/Kg)	: ----

	RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS		UNIT	METHOD
1	Flue Gas Temperature	67	^{0}C	IS 11255 : Part 3
2	Barometric Pressure	753	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	7.60	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	18674	NM^3/ hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	38.55	mg/NM^3	IS 11255 : Part 1

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Authorised Signatory

End of Test Report

Dr. Mousumi Pal
Ph.D.(Env.), Scientist
Authorised Signatory

29/5/24
(A.K. Rai)
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AGM (Environ. Mgmt.)
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Dist. Paschim Bardhaman (W.B.)

TEST REPORT

Report Release Date	: 28.10.2024	Sample Ref. No.(ARF)	: EC/ARF/29/241009
Test Report No	: EC/TR/42/10011	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 25.10.2024
Sample Collected by	: Mr. Sisir Kr. Roy & Team	Sample Registration Date	: 26.10.2024
Sample Details	: Stack Emission	Period of Analysis	: 26.10.2024
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: Bag Filter Stack
		Sample Condition	: Sealed
		Sample Stamped as	: TH – 82
		Sample Drawn By	: ECO CARE
		Sampling Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Process Activity
3	Stack Connected to	: Lime Dolomite Calcinations Unit No. 3 (LDCP – 3)
4	Material of Construction	: M.S
5	Stack Height from G.L.	: 31.00 m
6	Height of Sampling Port from G.L.	: 20.00 m
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 1.0 m
9	Shape of the Stack	: Circular Ø
10	Working Load	: ----

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: ----
2	Energy Consumption	: ----
3	Calorific Value (K-Cal/Kg)	: ----

	RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS		UNIT	METHOD
1	Flue Gas Temperature	72	^{0}C	IS 11255 : Part 3
2	Barometric Pressure	753	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	7.98	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	19327	NM^3/ hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	45.72	mg/NM^3	IS 11255 : Part 1

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Authorised Signatory

End of Test Report

Dr. Mousumi Pal
Ph.D.(Env.), Scientist
Authorised Signatory

29/10/24
(A.K. Rai)
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TEST REPORT

Report Release Date	: 28.10.2024	Sample Ref. No.(ARF)	: EC/ARF/29/241009
Test Report No	: EC/TR/42/10012	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 25.10.2024
Sample Collected by	: Mr. Sisir Kr. Roy & Team	Sample Registration Date	: 26.10.2024
Sample Details	: Stack Emission	Period of Analysis	: 26.10.2024
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: Bag Filter Stack
		Sample Condition	: Sealed
		Sample Stamped as	: TH – 83
		Sample Drawn By	: ECO CARE
		Sampling Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Process Activity
3	Stack Connected to	: Lime Dolomite Calcinations Unit No. 4 (LDCP – 4)
4	Material of Construction	: M.S
5	Stack Height from G.L.	: 31.00 m
6	Height of Sampling Port from G.L.	: 20.00 m
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 1.0 m
9	Shape of the Stack	: Circular Ó
10	Working Load	: ----

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: ----
2	Energy Consumption	: ----
3	Calorific Value (K-Cal/Kg)	: ----

	RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS		UNIT	METHOD
1	Flue Gas Temperature	70	^0C	IS 11255 : Part 3
2	Barometric Pressure	753	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	7.78	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	18966	NM^3/ hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	47.08	mg/NM^3	IS 11255 : Part 1

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Authorised Signatory

End of Test Report

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TEST REPORT

Report Release Date	: 29.10.2024	Sample Ref. No.(ARF)	: EC/ARF/29/241010
Test Report No	: EC/TR/42/10013	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 26.10.2024
Sample Collected by	: Mr. Sisir Kr. Roy & Team	Sample Registration Date	: 28.10.2024
Sample Details	: Stack Emission	Period of Analysis	: 28.10.2024
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: Furnace Stack
		Sample Condition	: Sealed & Preserved
		Sample Stamped as	: TH – 84
		Sample Drawn By	: ECO CARE
		Sampling Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Burning of Mixed Gas
3	Stack Connected to	: Reheating Furnace (Bar Mill)
4	Material of Construction	: M.S
5	Stack Height from G.L.	: 65.00 m
6	Height of Sampling Port from G.L.	: ----
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 3.02 m
9	Shape of the Stack	: Circular Ó
10	Working Load	: 88.84 MT/hr

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: CBM & BF Gas
2	Energy Consumption	: 10.754 M^3/hr
3	Calorific Value (K-Cal/Kg)	: ----

	RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS		UNIT	METHOD
1	Flue Gas Temperature	392	^{0}C	IS 11255 : Part 3
2	Barometric Pressure	755	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	10.56	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	120855	NM^3/ hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	12.27	mg/NM^3	IS 11255 : Part 1
6	Concentration of SO_2	64.38	mg/NM^3	IS 11255 : Part 2

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29/10/24
(A.K. Rai)

End of Test Report

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TEST REPORT

Report Release Date	: 29.10.2024	Sample Ref. No (ARF)	: EC/ARF/29/241010
Test Report No	: EC/TR/42/10014	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 26.10.2024
Sample Collected by	: Mr. Sisir Kr. Roy & Team	Sample Registration Date	: 28.10.2024
Sample Details	: Stack Emission	Period of Analysis	: 28.10.2024
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: Furnace Stack
		Sample Condition	: Sealed & Preserved
		Sample Stamped as	: TH – 85-
		Sample Drawn By	: ECO CARE
		Sampling Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Burning of Mixed Gas
3	Stack Connected to	: Reheating Furnace (W.R.M)
4	Material of Construction	: M.S
5	Stack Height from G.L.	: 65.00 m
6	Height of Sampling Port from G.L.	: ----
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 3.02 m
9	Shape of the Stack	: Circular Ø
10	Working Load	: 49.53 MT/hr

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: CBM & BF Gas
2	Energy Consumption	: 10.754 M^3/hr
3	Calorific Value (K-Cal/Kg)	: ----

	RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS		UNIT	METHOD
1	Flue Gas Temperature	296	^{0}C	IS 11255 : Part 3
2	Barometric Pressure	755	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	7.22	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	92672	NM^3/ hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	9.58	mg/NM^3	IS 11255 : Part 1
6	Concentration of SO_2	78.54	mg/NM^3	IS 11255 : Part 2

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TEST REPORT

Report Release Date	: 29.10.2024	Sample Ref. No.(ARF)	: EC/ARF/29/241010
Test Report No	: EC/TR/42/10015	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 26.10.2024
Sample Collected by	: Mr. Sisir Kr. Roy & Team	Sample Registration Date	: 28.10.2024
Sample Details	: Stack Emission	Period of Analysis	: 28.10.2024
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: Furnace Stack
		Sample Condition	: Sealed & Preserved
		Sample Stamped as	: TH – 86
		Sample Drawn By	: ECO CARE
		Sampling Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Burning of Mixed Gas
3	Stack Connected to	: Reheating Furnace (USM)
4	Material of Construction	: M.S
5	Stack Height from G.L.	: 65.00 m
6	Height of Sampling Port from G.L.	: ----
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 3.02 m
9	Shape of the Stack	: Circular Ø
10	Working Load	: 23.79 MT/hr

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: CBM & BF Gas
2	Energy Consumption	: 10.754 M^3/hr
3	Calorific Value (K-Cal/Kg)	: ----

	RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS		UNIT	METHOD
1	Flue Gas Temperature	176	^{0}C	IS 11255 : Part 3
2	Barometric Pressure	755	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	10.46	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	177356	NM^3/ hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	11.25	mg/NM^3	IS 11255 : Part 1
6	Concentration of SO_2	45.50	mg/NM^3	IS 11255 : Part 2

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Asansol - 713304
Dist. Paschim Bardhaman (W.B.)

TEST REPORT

Report Release Date	: 29.10.2024	Sample Ref. No.(ARF)	: EC/ARF/29/241010
Test Report No	: EC/TR/42/10016	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 26.10.2024
Sample Collected by	: Mr. Sisir Kr. Roy & Team	Sample Registration Date	: 28.10.2024
Sample Details	: Stack Emission	Period of Analysis	: 28.10.2024
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: Coke Oven Stack
		Sample Condition	: Sealed & Preserved
		Sample Stamped as	: TH – 87
		Sample Drawn By	: ECO CARE
		Sampling Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Process Activity
3	Stack Connected to	: Coke Oven Battery No. # 10
4	Material of Construction	: R.C.C
5	Stack Height from G.L.	: 110.0 m
6	Height of Sampling Port from G.L.	: 28.0 m
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 3.5 m
9	Shape of the Stack	: Circular Ø
10	Working Load	: 35 MT/hr

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: Coke Oven Gas
2	Energy Consumption	: 9500 M^3/hr
3	Calorific Value (K-Cal/Kg)	: ----

	RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS		UNIT	METHOD
1	Flue Gas Temperature	156	^0C	IS 11255 : Part 3
2	Barometric Pressure	755	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	8.99	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	215272	NM^3/ hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	37.18	mg/NM^3	IS 11255 : Part 1
6	Concentration of SO_2	126.31	mg/NM^3	IS 11255 : Part 2
7	Concentration of NO_x	87.63	mg/NM^3	IS 11255 : Part 7

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Authorised Signatory

End of Test Report

Dr. Mousumi Pal
Ph.D.(Env.), Scientist
Authorised Signatory

29/5/25

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TEST REPORT

Report Release Date	: 04.11.2024	Sample Ref. No.(ARF)	: EC/ARF/29/241101
Test Report No	: EC/TR/42/11001	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 30.10.2024
Sample Collected by	: Mr. Sisir Kr. Roy & Team	Sample Registration Date	: 02.11.2024
Sample Details	: Stack Emission	Period of Analysis	: 02.11.2024
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: ESP Stack
		Sample Condition	: Sealed
		Sample Stamped as	: TH – 88
		Sample Drawn By	: ECO CARE
		Sampling Procedure	
		Remarks	: EC/SOP/03/01
		Deviation if any	: ----
			: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Process Activity
3	Stack Connected to	: BF # 05 (Cast House No. 01)
4	Material of Construction	: M.S
5	Stack Height from G.L.	: 31.00 m
6	Height of Sampling Port from G.L.	: 20.00 m
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 3.85 m
9	Shape of the Stack	: Circular Ó
10	Working Load	: 720 MT/hr

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: ----
2	Energy Consumption	: ----
3	Calorific Value (K-Cal/Kg)	: ----

	RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS		UNIT	METHOD
1	Flue Gas Temperature	77	^{0}C	IS 11255 : Part 3
2	Barometric Pressure	755	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	12.66	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	449348	NM^3/ hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	43.17	mg/NM^3	IS 11255 : Part 1

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Authorised Signatory

End of Test Report

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TEST REPORT

Report Release Date	: 04.11.2024	Sample Ref. No.(ARF)	: EC/ARF/29/241101
Test Report No	: EC/TR/42/11002	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 30.10.2024
Sample Collected by	: Mr. Sisir Kr. Roy & Team	Sample Registration Date	: 02.11.2024
Sample Details	: Stack Emission	Period of Analysis	: 02.11.2024
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: ESP Stack
		Sample Condition	: Sealed
		Sample Stamped as	: TH – 89
		Sample Drawn By	: ECO CARE
		Sampling Procedure	
		Remarks	: EC/SOP/03/01
		Deviation if any	: ----
			: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Process Activity
3	Stack Connected to	: BF # 05 (Cast House No. 02)
4	Material of Construction	: M.S
5	Stack Height from G.L.	: 31.00 m
6	Height of Sampling Port from G.L.	: 20.00 m
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 3.85 m
9	Shape of the Stack	: Circular Ó
10	Working Load	: 720 MT/hr

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: ----
2	Energy Consumption	: ----
3	Calorific Value (K-Cal/Kg)	: ----

	RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS		UNIT	METHOD
1	Flue Gas Temperature	82	^{0}C	IS 11255 : Part 3
2	Barometric Pressure	755	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	13.47	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	471175	NM^3/ hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	36.62	mg/NM^3	IS 11255 : Part 1

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TEST REPORT

Report Release Date	: 04.11.2024	Sample Ref. No.(ARF)	: EC/ARF/29/241101
Test Report No	: EC/TR/42/11003	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 30.10.2024
Sample Collected by	: Mr. Sisir Kr. Roy & Team	Sample Registration Date	: 02.11.2024
Sample Details	: Stack Emission	Period of Analysis	: 02.11.2024
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: ESP Stack
		Sample Condition	: Sealed
		Sample Stamped as	: TH – 90
		Sample Drawn By	: ECO CARE
		Sampling Procedure	
		Remarks	: EC/SOP/03/01
		Deviation if any	: ----
			: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Process Activity
3	Stack Connected to	: BF # 05 (Stove)
4	Material of Construction	: M.S
5	Stack Height from G.L.	: 70.00 m
6	Height of Sampling Port from G.L.	: ----
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 5.7 m
9	Shape of the Stack	: Circular Ø
10	Working Load	: 720 hrs/month

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: BF Gas
2	Energy Consumption	: 200000 M^3/hr
3	Calorific Value (K-Cal/Kg)	: ----

	RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS		UNIT	METHOD
1	Flue Gas Temperature	165	^{0}C	IS 11255 : Part 3
2	Barometric Pressure	755	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	12.82	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	797026	NM^3/ hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	25.34	mg/NM^3	IS 11255 : Part 1

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End of Test Report

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TEST REPORT

Report Release Date	: 04.11.2024	Sample Ref. No.(ARF)	: EC/ARF/29/241101
Test Report No	: EC/TR/42/11004	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 30.10.2024
Sample Collected by	: Mr. Sisir Kr. Roy & Team	Sample Registration Date	: 02.11.2024
Sample Details	: Stack Emission	Period of Analysis	: 02.11.2024
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: ESP Stack
		Sample Condition	: Sealed
		Sample Stamped as	: TH – 91
		Sample Drawn By	: ECO CARE
		Sampling Procedure	
		Remarks	: EC/SOP/03/01
		Deviation if any	: ----
			: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Process Activity
3	Stack Connected to	: BF # 05 (Stock House)
4	Material of Construction	: M.S
5	Stack Height from G.L.	: 31.0 m
6	Height of Sampling Port from G.L.	: 20.0 m
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 3.85 m
9	Shape of the Stack	: Circular Ø
10	Working Load	: 720 hrs/month

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: ----
2	Energy Consumption	: ----
3	Calorific Value (K-Cal/Kg)	: ----

	RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS		UNIT	METHOD
1	Flue Gas Temperature	66	^{0}C	IS 11255 : Part 3
2	Barometric Pressure	755	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	11.22	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	411165	NM^3/ hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	34.48	mg/NM^3	IS 11255 : Part 1

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TEST REPORT

Report Release Date	: 13.11.2024	Sample Ref. No.(ARF)	: EC/ARF/29/241105
Test Report No	: EC/TR/42/11015	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 11.11.2024
Sample Collected by	: Mr. Sisir Kr. Roy & Team	Sample Registration Date	: 12.11.2024
Sample Details	: Stack Emission	Period of Analysis	: 12.11.2024
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: Oven Stack
		Sample Condition	: Sealed
		Sample Stamped as	: TH – 94
		Sample Drawn By	: ECO CARE
		Sampling Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Process Activity
3	Stack Connected to	: Coke Oven Battery No. #11(PEC)
4	Material of Construction	: M.S
5	Stack Height from G.L.	: 30.00 m
6	Height of Sampling Port from G.L.	: ----
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 2.1 m
9	Shape of the Stack	: Circular Ø
10	Working Load	: 720 MT/hr

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: ----
2	Energy Consumption	: ----
3	Calorific Value (K-Cal/Kg)	: ----

	RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS		UNIT	METHOD
1	Flue Gas Temperature	62	^{0}C	IS 11255 : Part 3
2	Barometric Pressure	755	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	5.77	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	63656	NM^3/ hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	13.43	mg/NM^3	IS 11255 : Part 1

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TEST REPORT

Report Release Date	: 13.11.2024	Sample Ref. No.(ARF)	: EC/ARF/29/241105
Test Report No	: EC/TR/42/11016	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 11.11.2024
Sample Collected by	: Mr. Sisir Kr. Roy & Team	Sample Registration Date	: 12.11.2024
Sample Details	: Stack Emission	Period of Analysis	: 12.11.2024
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: Oven Stack
		Sample Condition	: Sealed & Preserved
		Sample Stamped as	: TH – 95
		Sample Drawn By	: ECO CARE
		Sampling Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Process Activity
3	Stack Connected to	: Coke Oven Battery No. #11
4	Material of Construction	: M.S
5	Stack Height from G.L.	: 120.00 m
6	Height of Sampling Port from G.L.	: 36.00 m
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 5.80 m
9	Shape of the Stack	: Circular Ø
10	Working Load	: 2150 MT/hr

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: Coke Oven Gas
2	Energy Consumption	: 2005000 M^3/hr
3	Calorific Value (K-Cal/Kg)	: ----

	RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS		UNIT	METHOD
1	Flue Gas Temperature	152	^{0}C	IS 11255 : Part 3
2	Barometric Pressure	755	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	8.62	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	571804	NM^3/ hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	39.74	mg/NM^3	IS 11255 : Part 1
6	Concentration of Carbon Dioxide	----	%	IS 13270
7	Concentration of SO_2	137.43	mg/NM^3	IS 11255 : Part 2
8	Concentration of NO_x	92.90	mg/NM^3	IS 11255 : Part 7

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Authorised Signatory

End of Test Report

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TEST REPORT

Report Release Date	: 13.11.2024	Sample Ref. No.(ARF)	: EC/ARF/29/241105
Test Report No	: EC/TR/42/11017	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 11.11.2024
Sample Collected by	: Mr. Sisir Kr. Roy & Team	Sample Registration Date	: 12.11.2024
Sample Details	: Stack Emission	Period of Analysis	: 12.11.2024
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: Bag Filter Stack
		Sample Condition	: Sealed
		Sample Stamped as	: TH – 96
		Sample Drawn By	: ECO CARE
		Sampling Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Process Activity
3	Stack Connected to	: CDCP Outlet
4	Material of Construction	: M.S
5	Stack Height from G.L.	: 50.00 m
6	Height of Sampling Port from G.L.	: 20.00 m
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 1.60 m
9	Shape of the Stack	: Circular Ó
10	Working Load	: 720 MT/hr

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: ----
2	Energy Consumption	: ----
3	Calorific Value (K-Cal/Kg)	: ----

	RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS		UNIT	METHOD
1	Flue Gas Temperature	81	^0C	IS 11255 : Part 3
2	Barometric Pressure	755	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	12.79	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	77474	NM^3/ hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	34.47	mg/NM^3	IS 11255 : Part 1

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Authorised Signatory

29/11/24 (A.K. Rai)

End of Test Report

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TEST REPORT

Report Release Date	: 13.11.2024	Sample Ref. No.(ARF)	: EC/ARF/29/241105
Test Report No	: EC/TR/42/11018	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 11.11.2024
Sample Collected by	: Mr. Sisir Kr. Roy & Team	Sample Registration Date	: 12.11.2024
Sample Details	: Stack Emission	Period of Analysis	: 12.11.2024
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: Bag Filter Stack
		Sample Condition	: Sealed
		Sample Stamped as	: TH – 97
		Sample Drawn By	: ECO CARE
		Sampling Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Process Activity
3	Stack Connected to	: CDU
4	Material of Construction	: M.S
5	Stack Height from G.L.	: 40.00 m
6	Height of Sampling Port from G.L.	: 27.00 m
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 1.60 m
9	Shape of the Stack	: Circular Ø
10	Working Load	: 720 MT/hr

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: ----
2	Energy Consumption	: ----
3	Calorific Value (K-Cal/Kg)	: ----

	RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS		UNIT	METHOD
1	Flue Gas Temperature	57	^{0}C	IS 11255 : Part 3
2	Barometric Pressure	755	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	8.97	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	58281	NM^3/ hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	30.22	mg/NM^3	IS 11255 : Part 1

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Authorised Signatory

End of Test Report

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TEST REPORT

Report Release Date	: 14.11.2024	Sample Ref. No.(ARF)	: EC/ARF/29/241106
Test Report No	: EC/TR/42/11019	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 12.11.2024
Sample Collected by	: Mr. Sisir Kr. Roy & Team	Sample Registration Date	: 13.11.2024
Sample Details	: Stack Emission	Period of Analysis	: 13.11.2024
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: Boiler Stack
		Sample Condition	: Sealed & Preserved
		Sample Stamped as	: TH – 98
		Sample Drawn By	: ECO CARE
		Sampling Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Burning of Coal
3	Stack Connected to	: Boiler – A
4	Material of Construction	: M.S
5	Stack Height from G.L.	: 31.00 m
6	Height of Sampling Port from G.L.	: 24.0 m
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 2.6 m
9	Shape of the Stack	: Circular Ø
10	Working Load	: 18 TPH

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: Coal, Co. Gas
2	Energy Consumption	: Coal – 50 MT/hr, Co. Gas – 2250 MT/hr
3	Calorific Value (K-Cal/Kg)	: ----

	RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS		UNIT	METHOD
1	Flue Gas Temperature	182	^{0}C	IS 11255 : Part 3
2	Barometric Pressure	755	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	7.57	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	94249	NM^3/ hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	73.59	mg/NM^3	IS 11255 : Part 1
6	Concentration of SO_2	152.92	mg/NM^3	IS 11255 : Part 2
7	Concentration of NO_x	108.96	mg/NM^3	IS 11255 : Part 7

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End of Test Report

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TEST REPORT

Report Release Date	: 14.11.2024	Sample Ref. No.(ARF)	: EC/ARF/29/241106
Test Report No	: EC/TR/42/11020	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 12.11.2024
Sample Collected by	: Mr. Sisir Kr. Roy & Team	Sample Registration Date	: 13.11.2024
Sample Details	: Stack Emission	Period of Analysis	: 13.11.2024
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: Boiler Stack
		Sample Condition	: Sealed
		Sample Stamped as	: TH – 99
		Sample Drawn By	: ECO CARE
		Sampling Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Combustion of BF Gas
3	Stack Connected to	: Boiler # 2
4	Material of Construction	: M.S
5	Stack Height from G.L.	: 0.9144 m
6	Height of Sampling Port from G.L.	: 2.4384 m
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 2.5m x 2.0m
9	Shape of the Stack	: Rectangle
10	Working Load	: 170 MT/hr

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: Mixed Gas, Co Gas
2	Energy Consumption	: 11,72,000 M^3/hr
3	Calorific Value (K-Cal/Kg)	: ----

	RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS		UNIT	METHOD
1	Flue Gas Temperature	145	^{0}C	IS 11255 : Part 3
2	Barometric Pressure	755	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	12.41	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	159233	NM^3/ hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	16.28	mg/NM^3	IS 11255 : Part 1

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TEST REPORT

Report Release Date	: 14.11.2024	Sample Ref. No.(ARF)	: EC/ARF/29/241106
Test Report No	: EC/TR/42/11021	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 12.11.2024
Sample Collected by	: Mr. Sisir Kr. Roy & Team	Sample Registration Date	: 13.11.2024
Sample Details	: Stack Emission	Period of Analysis	: 13.11.2024
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: Boiler Stack
		Sample Condition	: Sealed
		Sample Stamped as	: TH – 100
		Sample Drawn By	: ECO CARE
		Sampling Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Combustion of BF Gas
3	Stack Connected to	: Boiler # 3
4	Material of Construction	: M.S
5	Stack Height from G.L.	: 0.9144 m
6	Height of Sampling Port from G.L.	: 2.4384 m
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 2.5m x 2.0m
9	Shape of the Stack	: Rectangle
10	Working Load	: 150 MT/hr

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: Mixed Gas, Co Gas
2	Energy Consumption	: 11,72,000 M^3/hr
3	Calorific Value (K-Cal/Kg)	: ----

	RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS		UNIT	METHOD
1	Flue Gas Temperature	152	^{0}C	IS 11255 : Part 3
2	Barometric Pressure	755	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	13.59	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	171527	NM^3/ hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	12.37	mg/NM^3	IS 11255 : Part 1

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End of Test Report

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TEST REPORT

Report Release Date	: 14.11.2024	Sample Ref. No.(ARF)	: EC/ARF/29/241106
Test Report No	: EC/TR/42/11022	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 12.11.2024
Sample Collected by	: Mr. Sisir Kr. Roy & Team	Sample Registration Date	: 13.11.2024
Sample Details	: Stack Emission	Period of Analysis	: 13.11.2024
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: Coke Oven Stack
		Sample Condition	: Sealed & Preserved
		Sample Stamped as	: TH – 101
		Sample Drawn By	: ECO CARE
		Sampling Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Process Activity
3	Stack Connected to	: Coke Oven Battery No. # 10
4	Material of Construction	: R.C.C
5	Stack Height from G.L.	: 110.0 m
6	Height of Sampling Port from G.L.	: 28.0 m
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 3.5 m
9	Shape of the Stack	: Circular Ø
10	Working Load	: 35 MT/hr

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: Coke Oven Gas
2	Energy Consumption	: 9500 M^3/hr
3	Calorific Value (K-Cal/Kg)	: ----

	RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS		UNIT	METHOD
1	Flue Gas Temperature	156	^{0}C	IS 11255 : Part 3
2	Barometric Pressure	755	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	8.54	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	204736	NM^3/ hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	33.16	mg/NM^3	IS 11255 : Part 1
6	Concentration of SO_2	133.07	mg/NM^3	IS 11255 : Part 2
7	Concentration of NO_x	99.12	mg/NM^3	IS 11255 : Part 7

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Authorised Signatory

End of Test Report

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29/5/25

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TEST REPORT

Report Release Date	: 04.12.2024	Sample Ref. No.(ARF)	: EC/ARF/29/241202
Test Report No	: EC/TR/42/12004	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 02.12.2024
Sample Collected by	: Mr. Sumit Sarkar & Team	Sample Registration Date	: 03.12.2024
Sample Details	: Stack Emission	Period of Analysis	: 03.12.2024
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: Bag Filter Stack
		Sample Condition	: Sealed
		Sample Stamped as	: TH – 103
		Sample Drawn By	: ECO CARE
		Sampling Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Process Activity
3	Stack Connected to	: Coke Oven Battery No. #11(PEC)
4	Material of Construction	: M.S
5	Stack Height from G.L.	: 30.00 m
6	Height of Sampling Port from G.L.	: ----
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 2.10 m
9	Shape of the Stack	: Circular Ø
10	Working Load	: 720 hrs/month

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: ----
2	Energy Consumption	: ----
3	Calorific Value (K-Cal/Kg)	: ----

	RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS		UNIT	METHOD
1	Flue Gas Temperature	59	^0C	IS 11255 : Part 3
2	Barometric Pressure	755	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	5.07	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	56401	NM^3/ hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	12.43	mg/NM^3	IS 11255 : Part 1

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TEST REPORT

Report Release Date	: 04.12.2024	Sample Ref. No.(ARF)	: EC/ARF/29/241202
Test Report No	: EC/TR/42/12005	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 02.12.2024
Sample Collected by	: Mr. Sumit Sarkar & Team	Sample Registration Date	: 03.12.2024
Sample Details	: Stack Emission	Period of Analysis	: 03.12.2024
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: Bag Filter Stack
		Sample Condition	: Sealed
		Sample Stamped as	: TH – 104
		Sample Drawn By	: ECO CARE
		Sampling Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Process Activity
3	Stack Connected to	: CDCP Outlet
4	Material of Construction	: M.S
5	Stack Height from G.L.	: 50.00 m
6	Height of Sampling Port from G.L.	: 20.00 m
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 1.60 m
9	Shape of the Stack	: Circular Ø
10	Working Load	: ----

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: ----
2	Energy Consumption	: ----
3	Calorific Value (K-Cal/Kg)	: ----

	RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS		UNIT	METHOD
1	Flue Gas Temperature	69	^0C	IS 11255 : Part 3
2	Barometric Pressure	755	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	12.76	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	78905	NM^3/hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	31.71	mg/NM^3	IS 11255 : Part 1

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Authorised Signatory

21/3/25
(A.K. Pal)

End of Test Report

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TEST REPORT

Report Release Date	: 04.12.2024	Sample Ref. No.(ARF)	: EC/ARF/29/241202
Test Report No	: EC/TR/42/12006	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 02.12.2024
Sample Collected by	: Mr. Sumit Sarkar & Team	Sample Registration Date	: 03.12.2024
Sample Details	: Stack Emission	Period of Analysis	: 03.12.2024
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: Bag Filter Stack
		Sample Condition	: Sealed
		Sample Stamped as	: TH – 105
		Sample Drawn By	: ECO CARE
		Sampling Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Process Activity
3	Stack Connected to	: CDU
4	Material of Construction	: M.S
5	Stack Height from G.L.	: 40.00 m
6	Height of Sampling Port from G.L.	: 27.00 m
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 1.60 m
9	Shape of the Stack	: Circular Ø
10	Working Load	: ----

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: ----
2	Energy Consumption	: ----
3	Calorific Value (K-Cal/Kg)	: ----

	RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS		UNIT	METHOD
1	Flue Gas Temperature	56	^0C	IS 11255 : Part 3
2	Barometric Pressure	755	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	6.50	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	42338	NM^3/hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	26.57	mg/NM^3	IS 11255 : Part 1

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29/8/25
(A.K. Ri)

End of Test Report

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TEST REPORT

Report Release Date	: 06.12.2024	Sample Ref. No.(ARF)	: EC/ARF/29/241203
Test Report No	: EC/TR/42/12007	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 04.12.2024
Sample Collected by	: Mr. Sumit Sarkar & Team	Sample Registration Date	: 05.12.2024
Sample Details	: Stack Emission	Period of Analysis	: 05.12.2024
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: ESP Stack
		Sample Condition	: Sealed
		Sample Stamped as	: TH – 106
		Sample Drawn By	: ECO CARE
		Sampling Procedure	
		Remarks	: EC/SOP/03/01
		Deviation if any	: ----
			: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Process Activity
3	Stack Connected to	: BF # 05 (Stock House)
4	Material of Construction	: M.S
5	Stack Height from G.L.	: 31.0 m
6	Height of Sampling Port from G.L.	: 20.0 m
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 3.85 m
9	Shape of the Stack	: Circular Ø
10	Working Load	: ----

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: ----
2	Energy Consumption	: ----
3	Calorific Value (K-Cal/Kg)	: ----

	RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS		UNIT	METHOD
1	Flue Gas Temperature	65	^0C	IS 11255 : Part 3
2	Barometric Pressure	755	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	11.23	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	412548	NM^3/ hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	37.13	mg/NM^3	IS 11255 : Part 1

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Authorised Signatory

29/12/24

End of Test Report

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TEST REPORT

Report Release Date	: 06.12.2024	Sample Ref. No.(ARF)	: EC/ARF/29/241203
Test Report No	: EC/TR/42/12008	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 04.12.2024
Sample Collected by	: Mr. Sumit Sarkar & Team	Sample Registration Date	: 05.12.2024
Sample Details	: Stack Emission	Period of Analysis	: 05.12.2024
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: ESP Stack
		Sample Condition	: Sealed
		Sample Stamped as	: TH – 107
		Sample Drawn By	: ECO CARE
		Sampling Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Process Activity
3	Stack Connected to	: BF # 05 (Cast House No. 02)
4	Material of Construction	: M.S
5	Stack Height from G.L.	: 31.00 m
6	Height of Sampling Port from G.L.	: 20.00 m
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 3.85 m
9	Shape of the Stack	: Circular Ø
10	Working Load	: 720 MT/hr

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: ----
2	Energy Consumption	: ----
3	Calorific Value (K-Cal/Kg)	: ----

	RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS		UNIT	METHOD
1	Flue Gas Temperature	76	^0C	IS 11255 : Part 3
2	Barometric Pressure	755	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	13.10	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	466138	NM^3/hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	39.70	mg/NM^3	IS 11255 : Part 1

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Authorised Signatory

29/5/25

End of Test Report

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TEST REPORT

Report Release Date	: 06.12.2024	Sample Ref. No.(ARF)	: EC/ARF/29/241203
Test Report No	: EC/TR/42/12010	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 04.12.2024
Sample Collected by	: Mr. Sumit Sarkar & Team	Sample Registration Date	: 05.12.2024
Sample Details	: Stack Emission	Period of Analysis	: 05.12.2024
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: ESP Stack
		Sample Condition	: Sealed
		Sample Stamped as	: TH – 109
		Sample Drawn By	: ECO CARE
		Sampling Procedure	
		Remarks	: EC/SOP/03/01
		Deviation if any	: ----
			: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Process Activity
3	Stack Connected to	: BF # 05 (Stove)
4	Material of Construction	: M.S
5	Stack Height from G.L.	: 70.00 m
6	Height of Sampling Port from G.L.	: ----
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 5.7 m
9	Shape of the Stack	: Circular Ó
10	Working Load	: 200000 M^3/hr

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: BF Gas
2	Energy Consumption	: 200000 M^3/hr
3	Calorific Value (K-Cal/Kg)	: ----

	RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS		UNIT	METHOD
1	Flue Gas Temperature	162	^{0}C	IS 11255 : Part 3
2	Barometric Pressure	755	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	12.79	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	800159	NM^3/ hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	25.36	mg/NM^3	IS 11255 : Part 1

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Authorised Signatory

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End of Test Report

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ULR NO – TC1513625000000033F

TEST REPORT

Report Release Date	: 06.01.2025	Sample Ref. No.(ARF)	: EC/ARF/29/250103
Test Report No	: EC/TR/42/01008	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 02.01.2025
Sample Collected by	: Mr. Sumit Sarkar & Team	Sample Registration Date	: 04.01.2025
Sample Details	: Stack Emission	Period of Analysis	: 04.01.2025
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: ESP Stack
		Sample Condition	: Sealed
		Sample Stamped as	: TH – 115
		Sample Drawn By	: ECO CARE
		Sampling Procedure	
		Remarks	: EC/SOP/03/01
		Deviation if any	: ----
			: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Process Activity
3	Stack Connected to	: Cast House No. 01
4	Material of Construction	: M.S
5	Stack Height from G.L.	: 31.00 m
6	Height of Sampling Port from G.L.	: 20.00 m
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 3.85 m
9	Shape of the Stack	: Circular Ø
10	Working Load	: 720 MT/hr

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: ----
2	Energy Consumption	: ----
3	Calorific Value (K-Cal/Kg)	: ----

	RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS		UNIT	METHOD
1	Flue Gas Temperature	79	^{0}C	IS 11255 : Part 3
2	Barometric Pressure	750	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	13.55	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	475157	NM^3/ hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	47.53	mg/NM^3	IS 11255 : Part 1

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Authorised Signatory

End of Test Report

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ULR NO – TC1513625000000034F

TEST REPORT

Report Release Date	: 06.01.2025	Sample Ref. No.(ARF)	: EC/ARF/29/250103
Test Report No	: EC/TR/42/01009	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 02.01.2025
Sample Collected by	: Mr. Sumit Sarkar & Team	Sample Registration Date	: 04.01.2025
Sample Details	: Stack Emission	Period of Analysis	: 04.01.2025
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: ESP Stack
		Sample Condition	: Sealed
		Sample Stamped as	: TH – 116
		Sample Drawn By	: ECO CARE
		Sampling Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Process Activity
3	Stack Connected to	: Stock House
4	Material of Construction	: M.S
5	Stack Height from G.L.	: 31.0 m
6	Height of Sampling Port from G.L.	: 20.0 m
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 3.85 m
9	Shape of the Stack	: Circular Ø
10	Working Load	: ----

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: ----
2	Energy Consumption	: ----
3	Calorific Value (K-Cal/Kg)	: ----

RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS

			UNIT	METHOD
1	Flue Gas Temperature	68	^0C	IS 11255 : Part 3
2	Barometric Pressure	750	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	11.89	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	430277	NM^3/ hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	48.05	mg/NM^3	IS 11255 : Part 1

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ULR NO – TC1513625000000035F

TEST REPORT

Report Release Date	: 06.01.2025	Sample Ref. No.(ARF)	: EC/ARF/29/250103
Test Report No	: EC/TR/42/01010	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 02.01.2025
Sample Collected by	: Mr. Sumit Sarkar & Team	Sample Registration Date	: 04.01.2025
Sample Details	: Stack Emission	Period of Analysis	: 04.01.2025
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: ESP Stack
		Sample Condition	: Sealed
		Sample Stamped as	: TH – 117
		Sample Drawn By	: ECO CARE
		Sampling Procedure	
		Remarks	: EC/SOP/03/01
		Deviation if any	: ----
			: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Process Activity
3	Stack Connected to	: BF # 05 (Stove)
4	Material of Construction	: M.S
5	Stack Height from G.L.	: 70.00 m
6	Height of Sampling Port from G.L.	: ----
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 5.7 m
9	Shape of the Stack	: Circular Ø
10	Working Load	: ----

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: BF Gas
2	Energy Consumption	: 200000 M^3/hr
3	Calorific Value (K-Cal/Kg)	: ----

	RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS		UNIT	METHOD
1	Flue Gas Temperature	173	^{0}C	IS 11255 : Part 3
2	Barometric Pressure	750	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	12.96	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	786209	NM^3/ hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	17.94	mg/NM^3	IS 11255 : Part 1

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Authorised Signatory

29/1/25
(A. K. Roy)

End of Test Report

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ULR NO – TC1513625000000036F

TEST REPORT

Report Release Date	: 07.01.2025	Sample Ref. No.(ARF)	: EC/ARF/29/250104
Test Report No	: EC/TR/42/01011	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 04.01.2025
Sample Collected by	: Mr. Sumit Sarkar & Team	Sample Registration Date	: 06.01.2025
Sample Details	: Stack Emission	Period of Analysis	: 06.01.2025
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: Oven Stack
		Sample Condition	: Sealed & Preserved
		Sample Stamped as	: TH – 118
		Sample Drawn By	: ECO CARE
		Sampling Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Process Activity
3	Stack Connected to	: Coke Oven Battery No. #10
4	Material of Construction	: R.C.C
5	Stack Height from G.L.	: 110.00 m
6	Height of Sampling Port from G.L.	: 28.00 m
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 3.50 m
9	Shape of the Stack	: Circular Ø
10	Working Load	: 35 MT/hr

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: Coke Oven Gas
2	Energy Consumption	: 9500 M^3/hr
3	Calorific Value (K-Cal/Kg)	: ----

RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS

			UNIT	METHOD
1	Flue Gas Temperature	156	^0C	IS 11255 : Part 3
2	Barometric Pressure	750	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	8.65	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	205659	NM^3/ hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	32.65	mg/NM^3	IS 11255 : Part 1
6	Concentration of Carbon Dioxide	----	%	IS 13270
7	Concentration of SO_2	124.06	mg/NM^3	IS 11255 : Part 2
8	Concentration of NO_x	88.93	mg/NM^3	IS 11255 : Part 7

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Authorised Signatory

29/5/25

(A.K. Roy)

End of Test Report

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ULR NO – TC1513625000000037F

TEST REPORT

Report Release Date	: 07.01.2025	Sample Ref. No.(ARF)	: EC/ARF/29/250104
Test Report No	: EC/TR/42/01012	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 04.01.2025
Sample Collected by	: Mr. Sumit Sarkar & Team	Sample Registration Date	: 06.01.2025
Sample Details	: Stack Emission	Period of Analysis	: 06.01.2025
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: Bag Filter Stack
		Sample Condition	: Sealed
		Sample Stamped as	: TH – 119
		Sample Drawn By	: ECO CARE
		Sampling Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Process Activity
3	Stack Connected to	: Lime Dolomite Calcinations Unit No. 4 (LDCP – 4)
4	Material of Construction	: M.S
5	Stack Height from G.L.	: 31.00 m
6	Height of Sampling Port from G.L.	: 20.00 m
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 1.0 m
9	Shape of the Stack	: Circular Ó
10	Working Load	: ----

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: ----
2	Energy Consumption	: ----
3	Calorific Value (K-Cal/Kg)	: ----

	RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS		UNIT	METHOD
1	Flue Gas Temperature	76	^{0}C	IS 11255 : Part 3
2	Barometric Pressure	750	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	7.95	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	18963	NM^3/ hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	43.59	mg/NM^3	IS 11255 : Part 1

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Authorised Signatory

End of Test Report

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ULR NO – TC1513625000000038F

TEST REPORT

Report Release Date	: 07.01.2025	Sample Ref. No.(ARF)	: EC/ARF/29/250104
Test Report No	: EC/TR/42/01013	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 04.01.2025
Sample Collected by	: Mr. Sumit Sarkar & Team	Sample Registration Date	: 06.01.2025
Sample Details	: Stack Emission	Period of Analysis	: 06.01.2025
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: Bag Filter Stack
		Sample Condition	: Sealed
		Sample Stamped as	: TH – 120
		Sample Drawn By	: ECO CARE
		Sampling Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Process Activity
3	Stack Connected to	: CDCP Outlet
4	Material of Construction	: M.S
5	Stack Height from G.L.	: 50.00 m
6	Height of Sampling Port from G.L.	: 20.00 m
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 1.60 m
9	Shape of the Stack	: Circular Ø
10	Working Load	: ----

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: ----
2	Energy Consumption	: ----
3	Calorific Value (K-Cal/Kg)	: ----

	RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS		UNIT	METHOD
1	Flue Gas Temperature	69	^0C	IS 11255 : Part 3
2	Barometric Pressure	750	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	13.08	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	81455	NM^3/ hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	43.29	mg/NM^3	IS 11255 : Part 1

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ULR NO – TC1513625000000039F

TEST REPORT

Report Release Date	: 07.01.2025	Sample Ref. No.(ARF)	: EC/ARF/29/250104
Test Report No	: EC/TR/42/01014	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 04.01.2025
Sample Collected by	: Mr. Sumit Sarkar & Team	Sample Registration Date	: 06.01.2025
Sample Details	: Stack Emission	Period of Analysis	: 06.01.2025
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: ESP Stack
		Sample Condition	: Sealed
		Sample Stamped as	: TH – 121
		Sample Drawn By	: ECO CARE
		Sampling Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Process Activity
3	Stack Connected to	: Basic Oxygen Furnace (BOF)
4	Material of Construction	: M.S
5	Stack Height from G.L.	: 79.10 m
6	Height of Sampling Port from G.L.	: 35.0 m
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 4.52 m
9	Shape of the Stack	: Circular Ó
10	Working Load	: 150 MT/hr

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: ----
2	Energy Consumption	: ----
3	Calorific Value (K-Cal/Kg)	: ----

	RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS		UNIT	METHOD
1	Flue Gas Temperature	62	^0C	IS 11255 : Part 3
2	Barometric Pressure	750	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	11.36	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	576813	NM^3/ hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	47.18	mg/NM^3	IS 11255 : Part 1
6	Concentration of SO_2	114.18	mg/NM^3	IS 11255 : Part 2

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ULR NO – TC1513625000000040F

TEST REPORT

Report Release Date	: 08.01.2025	Sample Ref. No.(ARF)	: EC/ARF/29/250105
Test Report No	: EC/TR/42/01015	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 06.01.2025
Sample Collected by	: Mr. Sumit Sarkar & Team	Sample Registration Date	: 07.01.2025
Sample Details	: Stack Emission	Period of Analysis	: 07.01.2025
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: Boiler Stack
		Sample Condition	: Sealed & Preserved
		Sample Stamped as	: TH – 122
		Sample Drawn By	: ECO CARE
		Sampling Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Burning of Coal
3	Stack Connected to	: Boiler – B
4	Material of Construction	: M.S
5	Stack Height from G.L.	: 31.00 m
6	Height of Sampling Port from G.L.	: 24.0 m
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 2.6 m
9	Shape of the Stack	: Circular Ø
10	Working Load	: 18 TPH

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: Coal, Co. Gas
2	Energy Consumption	: Coal – 50 MT/hr, Co. Gas – 2250 MT/hr
3	Calorific Value (K-Cal/Kg)	: ----

	RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS		UNIT	METHOD
1	Flue Gas Temperature	189	^0C	IS 11255 : Part 3
2	Barometric Pressure	752	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	7.70	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	93750	NM^3/hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	57.91	mg/NM^3	IS 11255 : Part 1

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3. The Test report shall not be reproduced, without the written approval of laboratory

Pal

Authorised Signatory

29/01/25
(A.K. Rai)

End of Test Report

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ULR NO – TC1513625000000041F

TEST REPORT

Report Release Date	: 08.01.2025	Sample Ref. No.(ARF)	: EC/ARF/29/250105
Test Report No	: EC/TR/42/01016	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 06.01.2025
Sample Collected by	: Mr. Sumit Sarkar & Team	Sample Registration Date	: 07.01.2025
Sample Details	: Stack Emission .	Period of Analysis	: 07.01.2025
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: Furnace Stack
		Sample Condition	: Sealed & Preserved
		Sample Stamped as	: TH – 123
		Sample Drawn By	: ECO CARE
		Sampling Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Burning of Mixed Gas
3	Stack Connected to	: Reheating Furnace (Bar Mill)
4	Material of Construction	: M.S
5	Stack Height from G.L.	: 65.00 m
6	Height of Sampling Port from G.L.	: ----
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 3.02 m
9	Shape of the Stack	: Circular Ó
10	Working Load	: 88.84 MT/hr

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: CBM & BF Gas
2	Energy Consumption	: 10.754 M^3/hr
3	Calorific Value (K-Cal/Kg)	: ----

	RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS		UNIT	METHOD
1	Flue Gas Temperature	386	^{0}C	IS 11255 : Part 3
2	Barometric Pressure	752	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	10.71	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	123719	NM^3/ hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	14.39	mg/NM^3	IS 11255 : Part 1
6	Concentration of SO_2	70.23	mg/NM^3	IS 11255 : Part 2

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Authorised Signatory

29/1/25
(A.K. Yadav)

End of Test Report

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ULR NO – TC1513625000000042F

TEST REPORT

Report Release Date	: 08.01.2025	Sample Ref. No.(ARF)	: EC/ARF/29/250105
Test Report No	: EC/TR/42/01017	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 06.01.2025
Sample Collected by	: Mr. Sumit Sarkar & Team	Sample Registration Date	: 07.01.2025
Sample Details	: Stack Emission	Period of Analysis	: 07.01.2025
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: Furnace Stack
		Sample Condition	: Sealed & Preserved
		Sample Stamped as	: TH – 124
		Sample Drawn By	: ECO CARE
		Sampling Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Burning of Mixed Gas
3	Stack Connected to	: Reheating Furnace (WRM)
4	Material of Construction	: M.S
5	Stack Height from G.L.	: 65.00 m
6	Height of Sampling Port from G.L.	: ----
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 3.02 m
9	Shape of the Stack	: Circular Ø
10	Working Load	: 49.53 MT/hr

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: CBM & BF Gas
2	Energy Consumption	: 10.754 M^3/hr
3	Calorific Value (K-Cal/Kg)	: ----

	RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS		UNIT	METHOD
1	Flue Gas Temperature	311	^{0}C	IS 11255 : Part 3
2	Barometric Pressure	752	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	7.64	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	99526	NM^3/ hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	11.72	mg/NM^3	IS 11255 : Part 1
6	Concentration of SO_2	76.59	mg/NM^3	IS 11255 : Part 2

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29/1/25
(A.K. Roy)

Authorised Signatory

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ULR NO – TC1513625000000043F

TEST REPORT

Report Release Date	: 08.01.2025	Sample Ref. No.(ARF)	: EC/ARF/29/250105
Test Report No	: EC/TR/42/01018	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 06.01.2025
Sample Collected by	: Mr. Sumit Sarkar & Team	Sample Registration Date	: 07.01.2025
Sample Details	: Stack Emission	Period of Analysis	: 07.01.2025
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: Furnace Stack
		Sample Condition	: Sealed & Preserved
		Sample Stamped as	: TH – 125
		Sample Drawn By	: ECO CARE
		Sampling Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Burning of Mixed Gas
3	Stack Connected to	: Reheating Furnace (USM)
4	Material of Construction	: M.S
5	Stack Height from G.L.	: 65.00 m
6	Height of Sampling Port from G.L.	: ----
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 3.02 m
9	Shape of the Stack	: Circular Ø
10	Working Load	: 23.79 MT/hr

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: CBM & BF Gas
2	Energy Consumption	: 10.754 M^3/hr
3	Calorific Value (K-Cal/Kg)	: ----

	RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS		UNIT	METHOD
1	Flue Gas Temperature	185	^{0}C	IS 11255 : Part 3
2	Barometric Pressure	752	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	10.60	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	176176	NM^3/ hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	13.19	mg/NM^3	IS 11255 : Part 1
6	Concentration of SO_2	51.81	mg/NM^3	IS 11255 : Part 2

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Authorised Signatory

End of Test Report

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ULR NO – TC1513625000000418F

TEST REPORT

Report Release Date	: 27.02.2025	Sample Ref. No.(ARF)	: EC/ARF/29/250207
Test Report No	: EC/TR/42/02020	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 25.02.2025
Sample Collected by	: Mr. Sumit Sarkar & Team	Sample Registration Date	: 26.02.2025
Sample Details	: Stack Emission	Period of Analysis	: 26.02.2025
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: Bag Filter Stack
		Sample Condition	: Sealed
		Sample Stamped as	: TH – 127
		Sample Drawn By	: ECO CARE
		Sampling Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Process Activity
3	Stack Connected to	: Lime Dolomite Calcinations Unit No# 4 (LDCP # 4)
4	Material of Construction	: M.S
5	Stack Height from G.L.	: 31.00 m
6	Height of Sampling Port from G.L.	: 20.00 m
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 1.0 m
9	Shape of the Stack	: Circular Ø
10	Working Load	: ----

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: ----
2	Energy Consumption	: ----
3	Calorific Value (K-Cal/Kg)	: ----

	RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS		UNIT	METHOD
1	Flue Gas Temperature	71	^{0}C	IS 11255 : Part 3
2	Barometric Pressure	752	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	8.05	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	19530	NM^3/ hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	44.14	mg/NM^3	IS 11255 : Part 1

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End of Test Report

Authorised Signatory

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ULR NO – TC1513625000000419F

TEST REPORT

Report Release Date	: 27.02.2025	Sample Ref. No.(ARF)	: EC/ARF/29/250207
Test Report No	: EC/TR/42/02021	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 25.02.2025
Sample Collected by	: Mr. Sumit Sarkar & Team	Sample Registration Date	: 26.02.2025
Sample Details	: Stack Emission	Period of Analysis	: 26.02.2025
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: Bag Filter Stack
		Sample Condition	: Sealed
		Sample Stamped as	: TH – 128
		Sample Drawn By	: ECO CARE
		Sampling Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Process Activity
3	Stack Connected to	: Lime Dolomite Calcinations Unit No#1 (LDCP # 1)
4	Material of Construction	: M.S
5	Stack Height from G.L.	: 31.00 m
6	Height of Sampling Port from G.L.	: 20.00 m
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 1.0 m
9	Shape of the Stack	: Circular Ø
10	Working Load	: ----

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: ----
2	Energy Consumption	: ----
3	Calorific Value (K-Cal/Kg)	: ----

	RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS		UNIT	METHOD
1	Flue Gas Temperature	74	^0C	IS 11255 : Part 3
2	Barometric Pressure	752	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	7.65	m/sec	IS 11255 : Part 3
4.	Flue Gas Quantity	18397	NM^3/ hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	46.23	mg/NM^3	IS 11255 : Part 1

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End of Test Report

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ULR NO – TC1513625000000420F

TEST REPORT

Report Release Date	: 27.02.2025	Sample Ref. No.(ARF)	: EC/ARF/29/250207
Test Report No	: EC/TR/42/02022	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 25.02.2025
Sample Collected by	: Mr. Sumit Sarkar & Team	Sample Registration Date	: 26.02.2025
Sample Details	: Stack Emission	Period of Analysis	: 26.02.2025
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: ESP Stack
		Sample Condition	: Sealed
		Sample Stamped as	: TH – 129
		Sample Drawn By	: ECO CARE
		Sampling Procedure	
		Remarks	: EC/SOP/03/01
		Deviation if any	: ----
			: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Process Activity
3	Stack Connected to	: BF # 05 (Stove)
4	Material of Construction	: M.S
5	Stack Height from G.L.	: 70.00 m
6	Height of Sampling Port from G.L.	: ----
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 5.7 m
9	Shape of the Stack	: Circular Ø
10	Working Load	: 200000 M^3/hr

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: BF Gas
2	Energy Consumption	: 200000 M^3/hr
3	Calorific Value (K-Cal/Kg)	: ----

	RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS		UNIT	METHOD
1	Flue Gas Temperature	169	^{0}C	IS 11255 : Part 3
2	Barometric Pressure	752	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	13.18	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	808378	NM^3/ hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	12.11	mg/NM^3	IS 11255 : Part 1

1. Test values are reported based on the samples received.
2. Sample(s) will be destroyed after 7 days from date of issues of the Test Report subject to nature of Preservation. Sample will be preserved as per the standard method.
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Authorised Signatory

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ULR NO – TC1513625000000421F

TEST REPORT

Report Release Date	: 28.02.2025	Sample Ref. No.(ARF)	: EC/ARF/29/250208
Test Report No	: EC/TR/42/02023	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 26.02.2025
Sample Collected by	: Mr. Sumit Sarkar & Team	Sample Registration Date	: 27.02.2025
Sample Details	: Stack Emission	Period of Analysis	: 27.02.2025
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: Oven Stack
		Sample Condition	: Sealed & Preserved
		Sample Stamped as	: TH – 130
		Sample Drawn By	: ECO CARE
		Sampling Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Process Activity
3	Stack Connected to	: Coke Oven Battery No. #10
4	Material of Construction	: R.C.C
5	Stack Height from G.L.	: 110.00 m
6	Height of Sampling Port from G.L.	: 28.00 m
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 3.5 m
9	Shape of the Stack	: Circular Ø
10	Working Load	: 35 MT/hr

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: Coke Oven Gas
2	Energy Consumption	: 9500 M^3/hr
3	Calorific Value (K-Cal/Kg)	: ----

	RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS		UNIT	METHOD
1	Flue Gas Temperature	146	^{0}C	IS 11255 : Part 3
2	Barometric Pressure	752	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	8.22	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	200580	NM^3/ hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	29.12	mg/NM^3	IS 11255 : Part 1
6	Concentration of Carbon Dioxide	8.8	%	IS 13270
7	Concentration of SO_2	126.26	mg/NM^3	IS 11255 : Part 2
8	Concentration of NO_x	85.98	mg/NM^3	IS 11255 : Part 7

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27/5/25 (P.K. Rai)

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End of Test Report

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ULR NO – TC1513625000000422F

TEST REPORT

Report Release Date	: 28.02.2025	Sample Ref. No.(ARF)	: EC/ARF/29/250208
Test Report No	: EC/TR/42/02024	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 26.02.2025
Sample Collected by	: Mr. Sumit Sarkar & Team	Sample Registration Date	: 27.02.2025
Sample Details	: Stack Emission	Period of Analysis	: 27.02.2025
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: Oven Stack
		Sample Condition	: Sealed & Preserved
		Sample Stamped as	: TH – 131
		Sample Drawn By	: ECO CARE
		Sampling Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Process Activity
3	Stack Connected to	: Coke Oven Battery No. #11
4	Material of Construction	: R.C.C
5	Stack Height from G.L.	: 120.00 m
6	Height of Sampling Port from G.L.	: 36.00 m
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 5.80 m
9	Shape of the Stack	: Circular Ø
10	Working Load	: 2150 MT/hr

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: Coke Oven Gas
2	Energy Consumption	: 2005000 M^3/hr
3	Calorific Value (K-Cal/Kg)	: ----

	RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS		UNIT	METHOD
1	Flue Gas Temperature	192	^{0}C	IS 11255 : Part 3
2	Barometric Pressure	752	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	9.53	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	575395	NM^3/ hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	43.62	mg/NM^3	IS 11255 : Part 1
6	Concentration of Carbon Dioxide	8.8	%	IS 13270
7	Concentration of SO_2	147.88	mg/NM^3	IS 11255 : Part 2
8	Concentration of NO_x	92.48	mg/NM^3	IS 11255 : Part 7

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ULR NO – TC1513625000000424F

TEST REPORT

Report Release Date	: 28.02.2025	Sample Ref. No.(ARF)	: EC/ARF/29/250208
Test Report No	: EC/TR/42/02026	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 26.02.2025
Sample Collected by	: Mr. Sumit Sarkar & Team	Sample Registration Date	: 27.02.2025.
Sample Details	: Stack Emission	Period of Analysis	: 27.02.2025
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: Boiler Stack
		Sample Condition	: Sealed & Preserved
		Sample Stamped as	: TH – 133
		Sample Drawn By	: ECO CARE
		Sampling Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Burning of Coal
3	Stack Connected to	: Boiler – B
4	Material of Construction	: M.S
5	Stack Height from G.L.	: 31.00 m
6	Height of Sampling Port from G.L.	: 24.0 m
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 2.6 m
9	Shape of the Stack	: Circular Ø
10.	Working Load	: 18 TPH

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: Coal, Co. Gas
2	Energy Consumption	: Coal – 50 MT/hr, Co. Gas – 2250 MT/hr
3	Calorific Value (K-Cal/Kg)	: ----

	RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS		UNIT	METHOD
1	Flue Gas Temperature	168	^{0}C	IS 11255 : Part 3
2	Barometric Pressure	752	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	8.12	m/sec	IS 11255 : Part 3
4.	Flue Gas Quantity	103879	NM^3/ hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	48.15	mg/NM^3	IS 11255 : Part 1

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ULR NO – TC1513625000000425F

TEST REPORT

Report Release Date	: 03.03.2025	Sample Ref. No.(ARF)	: EC/ARF/29/250209
Test Report No	: EC/TR/42/02027	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 28.02.2025
Sample Collected by	: Mr. Sumit Sarkar & Team	Sample Registration Date	: 01.03.2025
Sample Details	: Stack Emission	Period of Analysis	: 01.03.2025
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: Furnace Stack
		Sample Condition	: Sealed & Preserved
		Sample Stamped as	: TH – 134
		Sample Drawn By	: ECO CARE
		Sampling Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Burning of Mixed Gas
3	Stack Connected to	: Reheating Furnace (WRM)
4	Material of Construction	: M.S
5	Stack Height from G.L.	: 65.00 m
6	Height of Sampling Port from G.L.	: ----
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 3.02 m
9	Shape of the Stack	: Circular Ø
10	Working Load	: 49.53 MT/hr

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: CBM & BF Gas
2	Energy Consumption	: 10.754 M^3/hr
3	Calorific Value (K-Cal/Kg)	: ----

	RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS		UNIT	METHOD
1	Flue Gas Temperature	298	^{0}C	IS 11255 : Part 3
2	Barometric Pressure	750	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	7.76	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	103152	NM^3/ hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	15.62	mg/NM^3	IS 11255 : Part 1
6	Concentration of SO_2	80.27	mg/NM^3	IS 11255 : Part 2

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ULR NO – TC15136250000000426F

TEST REPORT

Report Release Date	: 03.03.2025	Sample Ref. No.(ARF)	: EC/ARF/29/250209
Test Report No	: EC/TR/42/02028	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 28.02.2025
Sample Collected by	: Mr. Sumit Sarkar & Team	Sample Registration Date	: 01.03.2025
Sample Details	: Stack Emission	Period of Analysis	: 01.03.2025
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: Furnace Stack
		Sample Condition	: Sealed & Preserved
		Sample Stamped as	: TH – 135
		Sample Drawn By	: ECO CARE
		Sampling Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Burning of Mixed Gas
3	Stack Connected to	: Reheating Furnace (USM)
4	Material of Construction	: M.S
5	Stack Height from G.L.	: 65.00 m
6	Height of Sampling Port from G.L.	: ----
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 3.02 m
9	Shape of the Stack	: Circular Ø
10	Working Load	: 23.79 MT/hr

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: CBM & BF Gas
2	Energy Consumption	: 10.754 M^3/hr
3	Calorific Value (K-Cal/Kg)	: ----

	RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS		UNIT	METHOD
1	Flue Gas Temperature	179	^{0}C	IS 11255 : Part 3
2	Barometric Pressure	752	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	10.35	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	173857	NM^3/ hr	IS 11255 : Part 3
5.	Concentration of Particulate Matter	14.29	mg/NM^3	IS 11255 : Part 1
6	Concentration of SO_2	49.62	mg/NM^3	IS 11255 : Part 2

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ULR NO – TC1513625000000427F

TEST REPORT

Report Release Date	: 03.03.2025	Sample Ref. No.(ARF)	: EC/ARF/29/250209
Test Report No	: EC/TR/42/02029	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 28.02.2025
Sample Collected by	: Mr. Sumit Sarkar & Team	Sample Registration Date	: 01.03.2025
Sample Details	: Stack Emission	Period of Analysis	: 01.03.2025
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: ESP Stack
		Sample Condition	: Sealed & Preserved
		Sample Stamped as	: TH – 136
		Sample Drawn By	: ECO CARE
		Sampling Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Combustion of CO gas
3	Stack Connected to	: Sinter Plant # 01
4	Material of Construction	: R.C.C
5	Stack Height from G.L.	: 85.00 m
6	Height of Sampling Port from G.L.	: 50.00 m
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 5.7 m
9	Shape of the Stack	: Circular Ø
10	Working Load	: 5880MT /hr

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: CO Gas
2	Energy Consumption	: CO Gas 2250 M^3/ hr
3	Calorific Value (K-Cal/Kg)	: ----

	RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS		UNIT	METHOD
1	Flue Gas Temperature	139	^{0}C	IS 11255 : Part 3
2	Barometric Pressure	750	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	13.02	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	854446	NM^3/ hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	45.65	mg/NM^3	IS 11255 : Part 1
6	Concentration of Carbon Dioxide	8.4	%	IS 13270
7	Concentration of SO_2	134.14	mg/NM^3	IS 11255 : Part 2
8	Concentration of NO_x	95.27	mg/NM^3	IS 11255 : Part 7

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ULR NO – TC1513625000000428F

TEST REPORT

Report Release Date	: 03.03.2025	Sample Ref. No.(ARF)	: EC/ARF/29/250209
Test Report No	: EC/TR/42/02030	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 28.02.2025
Sample Collected by	: Mr. Sumit Sarkar & Team	Sample Registration Date	: 01.03.2025
Sample Details	: Stack Emission	Period of Analysis	: 01.03.2025
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: ESP Stack
		Sample Condition	: Sealed & Preserved
		Sample Stamped as	: TH – 137
		Sample Drawn By	: ECO CARE
		Sampling Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Combustion of CO gas
3	Stack Connected to	: Sinter Plant # 02
4	Material of Construction	: R.C.C
5	Stack Height from G.L.	: 85.00 m
6	Height of Sampling Port from G.L.	: 50.00 m
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 5.7 m
9	Shape of the Stack	: Circular Ø
10	Working Load	: 10422 MT /hr

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: CO Gas
2	Energy Consumption	: CO Gas 7000 M^3/ hr
3	Calorific Value (K-Cal/Kg)	: ----

	RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS		UNIT	METHOD
1	Flue Gas Temperature	132	^{0}C	IS 11255 : Part 3
2	Barometric Pressure	750	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	13.12	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	877411	NM^3/ hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	41.99	mg/NM^3	IS 11255 : Part 1
6	Concentration of Carbon Dioxide	8.6	%	IS 13270
7	Concentration of SO_2	149.13	mg/NM^3	IS 11255 : Part 2
8	Concentration of NO_x	95.71	mg/NM^3	IS 11255 : Part 7

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ULR NO – TC1513625000000566F

TEST REPORT

Report Release Date	: 21.03.2025	Sample Ref. No (ARF)	: EC/ARF/29/250313
Test Report No	: EC/TR/42/03018	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 19.03.2025
Sample Collected by	: Mr. Sumit Sarkar & Team	Sample Registration Date	: 20.03.2025
Sample Details	: Stack Emission	Period of Analysis	: 20.03.2025
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: ESP Stack
		Sample Condition	: Sealed
		Sample Stamped as	: TH – 138
		Sample Drawn By	: ECO CARE
		Sampling Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Process Activity
3	Stack Connected to	: BF # 5 (Cast House No. 01)
4	Material of Construction	: M.S
5	Stack Height from G.L.	: 31.00 m
6	Height of Sampling Port from G.L.	: 20.00 m
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 3.85 m
9	Shape of the Stack	: Circular Ø
10	Working Load	: ----

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: ----
2	Energy Consumption	: ----
3	Calorific Value (K-Cal/Kg)	: ----

	RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS		UNIT	METHOD
1	Flue Gas Temperature	76	^{0}C	IS 11255 : Part 3
2	Barometric Pressure	752	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	13.26	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	469966	NM^3/ hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	45.94	mg/NM^3	IS 11255 : Part 1

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ULR NO – TC1513625000000567F

TEST REPORT

Report Release Date	: 21.03.2025	Sample Ref. No.(ARF)	: EC/ARF/29/250313
Test Report No	: EC/TR/42/03019	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 19.03.2025
Sample Collected by	: Mr. Sumit Sarkar & Team	Sample Registration Date	: 20.03.2025
Sample Details	: Stack Emission	Period of Analysis	: 20.03.2025
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: ESP Stack
		Sample Condition	: Sealed
		Sample Stamped as	: TH – 139
		Sample Drawn By	: ECO CARE
		Sampling Procedure	
		Remarks	: EC/SOP/03/01
		Deviation if any	: ----
			: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Process Activity
3	Stack Connected to	: BF # 5 (Cast House No. 02)
4	Material of Construction	: M.S
5	Stack Height from G.L.	: 31.00 m
6	Height of Sampling Port from G.L.	: 20.00 m
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 3.85 m
9	Shape of the Stack	: Circular Ø
10	Working Load	: ----

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: ----
2	Energy Consumption	: ----
3	Calorific Value (K-Cal/Kg)	: ----

	RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS		UNIT	METHOD
1	Flue Gas Temperature	72	^{0}C	IS 11255 : Part 3
2	Barometric Pressure	752	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	13.43	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	481610	NM^3/ hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	43.57	mg/NM^3	IS 11255 : Part 1

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29/5/25

End of Test Report

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ULR NO – TC1513625000000568F

TEST REPORT

Report Release Date	: 21.03.2025	Sample Ref. No.(ARF)	: EC/ARF/29/250313
Test Report No	: EC/TR/42/03020	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 19.03.2025
Sample Collected by	: Mr. Sumit Sarkar & Team	Sample Registration Date	: 20.03.2025
Sample Details	: Stack Emission	Period of Analysis	: 20.03.2025
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: ESP Stack
		Sample Condition	: Sealed
		Sample Stamped as	: TH – 140
		Sample Drawn By	: ECO CARE
		Sampling Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Process Activity
3	Stack Connected to	: BF # 5 (Stock House)
4	Material of Construction	: M.S
5	Stack Height from G.L.	: 31.00 m
6	Height of Sampling Port from G.L.	: 20.00 m
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 3.85 m
9	Shape of the Stack	: Circular Ø
10	Working Load	: ----

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: ----
2	Energy Consumption	: ----
3	Calorific Value (K-Cal/Kg)	: ----

	RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS		UNIT	METHOD
1	Flue Gas Temperature	67	^{0}C	IS 11255 : Part 3
2	Barometric Pressure	752	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	13.00	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	473256	NM^3/ hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	41.38	mg/NM^3	IS 11255 : Part 1

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ISO 9001:2015 Certified, OHSAS 45001:2018 Certified

ULR NO – TC1513625000000569F

TEST REPORT

Report Release Date	: 22.03.2025	Sample Ref. No.(ARF)	: EC/ARF/29/250314
Test Report No	: EC/TR/42/03021	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 20.03.2025
Sample Collected by	: Mr. Sumit Sarkar & Team	Sample Registration Date	: 21.03.2025
Sample Details	: Stack Emission	Period of Analysis	: 21.03.2025
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: E.S.P Stack
		Sample Condition	: Sealed & Preserved
		Sample Stamped as	: TH – 141
		Sample Drawn By	: ECO CARE
		Sampling Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Combustion of Coke Oven Gas
3	Stack Connected to	: Sinter Plant No. # 01
4	Material of Construction	: R.C.C
5	Stack Height from G.L.	: 85.0 m
6	Height of Sampling Port from G.L.	: 50.0 m
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 5.7 m
9	Shape of the Stack	: Circular Ø
10	Working Load	: 5880 MT/day

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: Coke Oven Gas
2	Energy Consumption	: 6002 M^3/hr
3	Calorific Value (K-Cal/Kg)	: ----

	RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS		UNIT	METHOD
1	Flue Gas Temperature	149	^{0}C	IS 11255 : Part 3
2	Barometric Pressure	754	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	13.41	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	864090	NM^3/ hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	45.82	mg/NM^3	IS 11255 : Part 1
6	Concentration of SO_2	129.29	mg/NM^3	IS 11255 : Part 2
7	Concentration of NO_x	84.60	mg/NM^3	IS 11255 : Part 7

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3. The Test report shall not be reproduced, without the written approval of laboratory

Authorised Signatory

Dr. Mousumi Pal
Ph.D.(Env.), Scientist
Authorised Signatory

29/5/25
(A.K. Pal)

सहायक महाप्रबंधक (पर्यावरण प्रबंधन)
AGM (Environ. Mgmt.)
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End of Test Report

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ULR NO – TC1513625000000570F

TEST REPORT

Report Release Date	: 22.03.2025	Sample Ref. No.(ARF)	: EC/ARF/29/250314
Test Report No	: EC/TR/42/03022	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 20.03.2025
Sample Collected by	: Mr. Sumit Sarkar & Team	Sample Registration Date	: 21.03.2025
Sample Details	: Stack Emission	Period of Analysis	: 21.03.2025
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: E.S.P Stack
		Sample Condition	: Sealed & Preserved
		Sample Stamped as	: TH – 142
		Sample Drawn By	: ECO CARE
		Sampling Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Combustion of Coke Oven Gas
3	Stack Connected to	: Sinter Plant No. # 02
4	Material of Construction	: R.C.C
5	Stack Height from G.L.	: 85.0 m
6	Height of Sampling Port from G.L.	: 50.0 m
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 5.7 m
9	Shape of the Stack	: Circular Ø
10	Working Load	: 10422 MT/day

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: Coke Oven Gas
2	Energy Consumption	: 7000 M^3/hr
3	Calorific Value (K-Cal/Kg)	: ----

	RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS		UNIT	METHOD
1	Flue Gas Temperature	156	^{0}C	IS 11255 : Part 3
2	Barometric Pressure	754	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	13.62	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	862902	NM^3/ hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	48.16	mg/NM^3	IS 11255 : Part 1
6	Concentration of SO_2	140.93	mg/NM^3	IS 11255 : Part 2
7	Concentration of NO_x	91.09	mg/NM^3	IS 11255 : Part 7

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Authorised Signatory

End of Test Report

Dr. Mousumi Pal
Ph.D.(Env.), Scientist
Authorised Signatory

29/5/25
(A.K. Roy)
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ULR NO – TC1513625000000571F

TEST REPORT

Report Release Date	: 22.03.2025	Sample Ref. No.(ARF)	: EC/ARF/29/250314
Test Report No	: EC/TR/42/03023	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 20.03.2025
Sample Collected by	: Mr. Sumit Sarkar & Team	Sample Registration Date	: 21.03.2025
Sample Details	: Stack Emission	Period of Analysis	: 21.03.2025
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: Bag Filter Stack
		Sample Condition	: Sealed
		Sample Stamped as	: TH – 143
		Sample Drawn By	: ECO CARE
		Sampling Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Process Activity
3	Stack Connected to	: Lime Dolomite Calcinations Unit No. 4 (LDCP – 4)
4	Material of Construction	: M.S
5	Stack Height from G.L.	: 31.00 m
6	Height of Sampling Port from G.L.	: 20.00 m
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 1.0 m
9	Shape of the Stack	: Circular Ø
10	Working Load	: ----

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: ----
2	Energy Consumption	: ----
3	Calorific Value (K-Cal/Kg)	: ----

	RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS		UNIT	METHOD
1	Flue Gas Temperature	75	^0C	IS 11255 : Part 3
2	Barometric Pressure	754	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	7.71	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	18552	NM^3/hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	47.42	mg/NM^3	IS 11255 : Part 1

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Authorised Signatory

24/3/25

End of Test Report

Dr. Mousumi Pal
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ULR NO – TC1513625000000572F

TEST REPORT

Report Release Date	: 22.03.2025	Sample Ref. No (ARF)	: EC/ARF/29/250314
Test Report No	: EC/TR/42/03024	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 20.03.2025
Sample Collected by	: Mr. Sumit Sarkar & Team	Sample Registration Date	: 21.03.2025
Sample Details	: Stack Emission	Period of Analysis	: 21.03.2025
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: Bag Filter Stack
		Sample Condition	: Sealed
		Sample Stamped as	: TH – 144
		Sample Drawn By	: ECO CARE
		Sampling Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Process Activity
3	Stack Connected to	: Lime Dolomite Calcinations Unit No. 1 (LDCP – 1)
4	Material of Construction	: M.S
5	Stack Height from G.L.	: 31.00 m
6	Height of Sampling Port from G.L.	: 20.00 m
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 1.0 m
9	Shape of the Stack	: Circular Ø
10	Working Load	: ----

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: ----
2	Energy Consumption	: ----
3	Calorific Value (K-Cal/Kg)	: ----

	RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS		UNIT	METHOD
1	Flue Gas Temperature	71	^{0}C	IS 11255 : Part 3
2	Barometric Pressure	754	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	7.50	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	18257	NM^3/ hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	40.78	mg/NM^3	IS 11255 : Part 1

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Authorised Signatory

End of Test Report

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ULR NO – TC1513625000000574F

TEST REPORT

Report Release Date	: 23.03.2025	Sample Ref. No.(ARF)	: EC/ARF/29/250315
Test Report No	: EC/TR/42/03026	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 21.03.2025
Sample Collected by	: Mr. Sumit Sarkar & Team	Sample Registration Date	: 22.03.2025
Sample Details	: Stack Emission	Period of Analysis	: 22.03.2025
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: Boiler Stack
		Sample Condition	: Sealed & Preserved
		Sample Stamped as	: TH – 146
		Sample Drawn By	: ECO CARE
		Sampling Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION PROVIDED BY CUSTOMER		
1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Combustion of BF Gas
3	Stack Connected to	: Boiler No. # 03
4	Material of Construction	: M.S
5	Duct Height from G.L.	: 0.9144 m
6	Height of Sampling Port from G.L.	: 2.4384 m
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Duct at Sampling Port	: 2.5m x 2.0m
9	Shape of the Duct	: Rectangular
10	Working Load	: 150 TPH
FUEL CHARACTERISTIC REPORT		
1	Source of Energy	: Mixed Gas & Co. Gas
2	Energy Consumption	: 11,7,2000 M^3/day
3	Calorific Value (K-Cal/Kg)	: ----

RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS		UNIT	METHOD
Flue Gas Temperature	138	^{0}C	IS 11255 : Part 3
Barometric Pressure	755	mm Hg	IS 11255 : Part 3
Velocity of Flue Gas	12.67	m/sec	IS 11255 : Part 3
Flue Gas Quantity	165258	NM^3/ hr	IS 11255 : Part 3
Concentration of Particulate Matter	19.08	mg/NM^3	IS 11255 : Part 1
Concentration of Carbon Dioxide	7.4	%	IS 13270

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End of Test Report

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ULR NO – TC1513625000000575F

TEST REPORT

Report Release Date	: 23.03.2025	Sample Ref. No.(ARF)	: EC/ARF/29/250315
Test Report No	: EC/TR/42/03027	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 21.03.2025
Sample Collected by	: Mr. Sumit Sarkar & Team	Sample Registration Date	: 22.03.2025
Sample Details	: Stack Emission	Period of Analysis	: 22.03.2025
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: Bag Filter Stack
		Sample Condition	: Sealed
		Sample Stamped as	: TH – 147
		Sample Drawn By	: ECO CARE
		Sampling Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Process Activity
3	Stack Connected to	: CDCP Outlet
4	Material of Construction	: M.S
5	Stack Height from G.L.	: 50.00 m
6	Height of Sampling Port from G.L.	: 20.00 m
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 1.60 m
9	Shape of the Stack	: Circular Ø
10	Working Load	: ----

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: ----
2	Energy Consumption	: ----
3	Calorific Value (K-Cal/Kg)	: ----

	RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS		UNIT	METHOD
1	Flue Gas Temperature	74	^{0}C	IS 11255 : Part 3
2	Barometric Pressure	755	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	12.90	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	79776	NM^3/ hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	48.76	mg/NM^3	IS 11255 : Part 1

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Authorised Signatory

End of Test Report

29.5.25

सहायक महाप्रबंधक (पर्यावरण प्रबंधन)
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ULR NO – TC1513625000000576F

TEST REPORT

Report Release Date	: 23.03.2025	Sample Ref. No.(ARF)	: EC/ARF/29/250315
Test Report No	: EC/TR/42/03028	Source of Sample	: Integrated Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 21.03.2025
Sample Collected by	: Mr. Sumit Sarkar & Team	Sample Registration Date	: 22.03.2025
Sample Details	: Stack Emission	Period of Analysis	: 22.03.2025
Customer Name & Address	: **SAIL - IISCO Steel Plant** P.O. – Burnpur Dist – Paschim Barddhaman West Bengal	Sampling Location	: Furnace Stack
		Sample Condition	: Sealed & Preserved
		Sample Stamped as	: TH – 148
		Sample Drawn By	: ECO CARE
		Sampling Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Integrated Steel Plant
2	Emission Due to	: Combustion of Mixed Gas
3	Stack Connected to	: Reheating Furnace (Bar Mill)
4	Material of Construction	: M.S
5	Stack Height from G.L.	: 65.00 m
6	Height of Sampling Port from G.L.	: ----
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 3.02 m
9	Shape of the Stack	: Circular Ø
10	Working Load	: 88.84 MT/hr

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: CBM & BF Gas
2	Energy Consumption	: 10.754 M^3/hr
3	Calorific Value (K-Cal/Kg)	: ----

	RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS		UNIT	METHOD
1	Flue Gas Temperature	396	^{0}C	IS 11255 : Part 3
2	Barometric Pressure	755	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	10.28	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	117393	NM^3/ hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	16.24	mg/NM^3	IS 11255 : Part 1
6	Concentration of SO_2	85.70	mg/NM^3	IS 11255 : Part 2

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Authorised Signatory

End of Test Report

Dr. Mousumi Pal
Ph.D.(Env.), Scientist
Authorised Signatory

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Test Report

Test Report No.: ALPL/19112024/13-1 dated 19.11.2024

Issued To : **M/s IISCO Steel Plant -SAIL** Environment Management Division, Burnpur-713325 (West Bengal).	**Sample Inward No.**	ALPL/15112024/EW-3/5-1	**Analysis Start**	15.11.2024
	Inward Date	15.11.2024	**Analysis End**	18.11.2024
	Reference	W.O.1400003051		
	Reference Date	09.10.2024		

Sample Particulars Waste Water	**Sample Details As Provided By Client** Not Mentioned	**Sample Location 1** Damra Outlet	**Quantity Received** 1L
Sampling By Joint Sampling Of PCB And Environment Department		**Sampling Date:** 14.11.2024	
Tests Required : pH, Cyanide, Ammonical Nitrogen, Phenolic compounds, Chemical oxygen demand, Biochemical oxygen demand, Total Suspended solids, Oil & grease			

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Test Result
1	pH	-	APHA Method 23rd Edition	7.89 at 30°C
2	Cyanide (as CN^-)	mg/l	APHA Method 23rd Edition	0.019
3	Ammonical Nitrogen (as N)	mg/l	APHA Method 23rd Edition	5.90
4	Phenolic compounds (as C_6H_5OH)	g/l	APHA Method 23rd Edition	<0.1
5	Chemical oxygen demand	mg/l	APHA Method 23rd Edition	36
6	Biochemical oxygen demand (at 27°C for 3 days)	mg/l	APHA Method 23rd Edition	5.0
7	Total Suspended solids (TSS)	mg/l	APHA Method 23rd Edition	9.0
8	Oil & grease	mg/l	APHA Method 23rd Edition	<1.0

NOTES: ● Please see watermark "Original Test Report" to confirm the authenticity of this report. ● Results shall be referred to tested sample(s) and applicable to tested parameters only. ● Test report shall not be reproduced except in full without prior written approval of Anacon Labs. ● Liability of Anacon Labs is limited to invoiced amount only. ● Non-perishable and perishable sample(s) shall be disposed off after 30 days and 15 days respectively from the date of issue of Test Report, unless specified otherwise. ● 'mg/l' is equivalent to 'ppm'.
REMARKS: As requested by the client, samples were tested for above parameters only.

Verified By
Snehal Raut
Technical Manager

Authorized Signatory
Dr. (Mrs.) S.D. Garway
Quality Manager

----------END OF REPORT----------

सहायक महाप्रबंधक (पर्यावरण प्रबंधन)
AGM (Environ. Mgmt.)
सेल-भारत इस्पात प्राधिकरण लि., बर्नपुर
SAIL-IISCO STEEL PLANT, BURNPUR

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Test Report

Test Report No.: ALPL/19112024/13-2 dated 19.11.2024

Issued To : **M/s HSCO Steel Plant -SAIL** Environment Management Division, Burnpur-713325 (West Bengal).	**Sample Inward No.**	ALPL/15112024/EW-3/5-2	**Analysis Start**	15.11.2024
	Inward Date	15.11.2024	**Analysis End**	18.11.2024
	Reference	W.O.1400003051		
	Reference Date	09.10.2024		

Sample Particulars	**Sample Details As Provided By Client**	**Sample Location 2**	**Quantity Received**
Waste Water	Not Mentioned	Dihika Outlet	1L

Sampling By	**Sampling Date:** 14.11.2024
Joint Sampling Of PCB And Environment Department	

Tests Required : pH, Cyanide, Ammonical Nitrogen, Phenolic compounds, Chemical oxygen demand, Biochemical oxygen demand, Total Suspended solids, Oil & grease

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Test Result
1	pH	-	APHA Method 23rd Edition	7.94 at 30 °C
2	Cyanide (as CN^-)	mg/l	APHA Method 23rd Edition	0.024
3	Ammonical Nitrogen (as N)	mg/l	APHA Method 23rd Edition	6.10
4	Phenolic compounds (as C_6H_5OH)	g/l	APHA Method 23rd Edition	<0.1
5	Chemical oxygen demand	mg/l	APHA Method 23rd Edition	40
6	Biochemical oxygen demand (at 27°C for 3 days)	mg/l	APHA Method 23rd Edition	6.0
7	Total Suspended solids (TSS)	mg/l	APHA Method 23rd Edition	11.0
8	Oil & grease	mg/l	APHA Method 23rd Edition	<1.0

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REMARKS: As requested by the client, samples were tested for above parameters only.

Verified By

Snehal Raut
Technical Manager

Authorized Signatory

Dr. (Mrs.) S.D. Garway
Quality Manager

----------**END OF REPORT**----------

29/11/24
(A.K. Rai)
सहायक महाप्रबंधक (पर्यावरण प्रबंधन)
AGM (Environ. Mgmt.)
सेल-आई. एस. पी., हिरमंडल
SAIL-ISP, BURNPUR

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Test Report

Test Report No.: ALPL/19112024/13-3 dated 19.11.2024

Issued To : **M/s IISCO Steel Plant -SAIL** Environment Management Division, Burnpur-713325 (West Bengal).	**Sample Inward No.**	ALPL/15112024/EW-3/5-3	**Analysis Start**	15.11.2024
	Inward Date	15.11.2024	**Analysis End**	18.11.2024
	Reference	W.O.1400003051		
	Reference Date	09.10.2024		

Sample Particulars	**Sample Details As Provided By Client**	**Sample Location 3**	**Quantity Received**
Waste Water	Not Mentioned	Reservoir	1L

Sampling By	**Sampling Date:** 14.11.2024
Joint Sampling Of PCB And Environment Department	

Tests Required : pH, Cyanide, Ammonical Nitrogen, Phenolic compounds, Chemical oxygen demand, Biochemical oxygen demand, Total Suspended solids, Oil & grease

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Test Result
1	pH	-	APHA Method 23rd Edition	7.96 at 30°C
2	Cyanide (as CN^-)	mg/l	APHA Method 23rd Edition	0.027
3	Ammonical Nitrogen (as N)	mg/l	APHA Method 23rd Edition	5.40
4	Phenolic compounds (as C_6H_5OH)	g/l	APHA Method 23rd Edition	<0.1
5	Chemical oxygen demand	mg/l	APHA Method 23rd Edition	32
6	Biochemical oxygen demand (at 27°C for 3 days)	mg/l	APHA Method 23rd Edition	4.0
7	Total Suspended solids (TSS)	mg/l	APHA Method 23rd Edition	14.0
8	Oil & grease	mg/l	APHA Method 23rd Edition	<1.0

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REMARKS: As requested by the client, samples were tested for above parameters only.

Verified By
Snehal Raut
Technical Manager

Authorized Signatory
Dr. (Mrs.) S.D. Garway
Quality Manager

----------END OF REPORT----------

28/5/25
सहायक महाप्रबंधक (पर्यावरण प्रबंधन)
AGM (Environ. Mgmt.)
सैल-आई एस पी., बर्नपुर
SAIL-ISP, Burnpur

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Test Report

Test Report No.: ALPL/19112024/13-4 dated 19.11.2024

Issued To : **M/s IISCO Steel Plant -SAIL** Environment Management Division, Burnpur-713325 (West Bengal).	**Sample Inward No.**	ALPL/15112024/EW-3/5-4	**Analysis Start**	15.11.2024
	Inward Date	15.11.2024	**Analysis End**	18.11.2024
	Reference	W.O.1400003051		
	Reference Date	09.10.2024		

Sample Particulars	**Sample Details As Provided By Client**	**Sample Location 4**	**Quantity Received**
Waste Water	Not Mentioned	BOD Plant 10 Outlet	1L

Sampling By	**Sampling Date:** 14.11.2024
Joint Sampling Of PCB And Environment Department	

Tests Required : pH, Cyanide, Ammonical Nitrogen, Phenolic compounds, Chemical oxygen demand, Biochemical oxygen demand, Total Suspended solids, Oil & grease

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Test Result
1	pH	-	APHA Method 23rd Edition	8.22 at 30 °C
2	Cyanide (as CN^-)	mg/l	APHA Method 23rd Edition	0.031
3	Ammonical Nitrogen (as N)	mg/l	APHA Method 23rd Edition	6.60
4	Phenolic compounds (as C_6H_5OH)	g/l	APHA Method 23rd Edition	<0.1
5	Chemical oxygen demand	mg/l	APHA Method 23rd Edition	72
6	Biochemical oxygen demand (at 27°C for 3 days)	mg/l	APHA Method 23rd Edition	11.0
7	Total Suspended solids (TSS)	mg/l	APHA Method 23rd Edition	24.0
8	Oil & grease	mg/l	APHA Method 23rd Edition	<1.0

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REMARKS: As requested by the client, samples were tested for above parameters only.

Verified By

Snehal Raut
Technical Manager

Authorized Signatory

Dr. (Mrs.) S.D. Garway
Quality Manager

----------END OF REPORT----------

29/5/25
(A.K. Roy)
सहायक महाप्रबंधक (पर्यावरण प्रबंधन)
AGM (Environ. Mgmt.)
सेल-आई. एस. पी., बर्नपुर

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Test Report

Test Report No.: ALPL/19112024/13-5 dated 19.11.2024

Issued To : **M/s IISCO Steel Plant -SAIL** Environment Management Division, Burnpur-713325 (West Bengal).	**Sample Inward No.**	ALPL/15112024/EW-3/5-5	**Analysis Start**	15.11.2024
	Inward Date	15.11.2024	**Analysis End**	18.11.2024
	Reference	W.O.1400003051		
	Reference Date	09.10.2024		

Sample Particulars	**Sample Details As Provided By Client**	**Sample Location 5**	**Quantity Received**
Waste Water	Not Mentioned	BOD Plant 11 Outlet	1L

Sampling By	**Sampling Date:** 14.11.2024
Joint Sampling Of PCB And Environment Department	

Tests Required : pH, Cyanide, Ammonical Nitrogen, Phenolic compounds, Chemical oxygen demand, Biochemical oxygen demand, Total Suspended solids, Oil & grease

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Test Result
1	pH	-	APHA Method 23rd Edition	8.07 at 30 °C
2	Cyanide (as CN^-)	mg/l	APHA Method 23rd Edition	0.036
3	Ammonical Nitrogen (as N)	mg/l	APHA Method 23rd Edition	8.30
4	Phenolic compounds (as C_6H_5OH)	g/l	APHA Method 23rd Edition	<0.1
5	Chemical oxygen demand	mg/l	APHA Method 23rd Edition	68
6	Biochemical oxygen demand (at 27°C for 3 days)	mg/l	APHA Method 23rd Edition	10.0
7	Total Suspended solids (TSS)	mg/l	APHA Method 23rd Edition	27.0
8	Oil & grease	mg/l	APHA Method 23rd Edition	<1.0

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REMARKS: As requested by the client, samples were tested for above parameters only.

Verified By
Snehal Raut
Technical Manager

Authorized Signatory
Dr. (Mrs.) S.D. Garway
Quality Manager

----------END OF REPORT----------

(A. K. Rai)
सहायक महाप्रबंधक (पर्यावरण प्रबंधन)
AGM (Environ. Mgmt.)
सेल-आई. एस. पी., बर्नपुर
SAIL-ISP, BURNPUR

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Test Report

Test Report No.: ALPL/25122024/08-1 dated 25.12.2024

Issued To : **M/s IISCO Steel Plant -SAIL** Environment Management Division, Burnpur-713325 (West Bengal).	**Sample Inward No.**	ALPL/20122024/EW-8/6-1	**Analysis Start**	20.12.2024
	Inward Date	20.12.2024	**Analysis End**	24.12.2024
	Reference	W.O.1400003051		
	Reference Date	09.10.2024		

Sample Description	**Sample Details As Provided By Client**	**Sample Location 1**	**Quantity Received**
Waste Water	Not Mentioned	Damra Outlet	1L

Sampling By- Anacon Representative
Mr. Sanjib Roy and Mr. Mohit Mondal (Anacon Representative).

Sampling Date: 20.12.2024

Tests Required : pH, Cyanide, Ammonical Nitrogen, Phenolic compounds, Chemical oxygen demand, Biochemical oxygen demand, Total Suspended solids, Oil & grease

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Test Result
1	pH	-	APHA Method 23rd Edition	7.62 at 26°C
2	Cyanide (as CN^-)	mg/l	APHA Method 23rd Edition	0.021
3	Ammonical Nitrogen (as N)	mg/l	APHA Method 23rd Edition	17
4	Phenolic compounds (as C_6H_5OH)	g/l	APHA Method 23rd Edition	0.16
5	Chemical oxygen demand	mg/l	APHA Method 23rd Edition	64
6	Biochemical oxygen demand (at 27°C for 3 days)	mg/l	APHA Method 23rd Edition	14
7	Oil & grease	mg/l	APHA Method 23rd Edition	<1.0
8	Total Suspended solids (TSS)	mg/l	APHA Method 23rd Edition	12

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REMARKS: As requested by the client, samples were tested for above parameters only.

Verified By

Snehal Raut
Technical Manager

Authorized Signatory

Chinmay Gadway
Deputy Quality Manager

----------END OF REPORT----------

29/12/24

सहायक महाप्रबंधक (पर्यावरण प्रबंधन)
AGM (Environ. Mgmt.)
सेल-आई. एस. पी., बर्नपुर
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Test Report

Test Report No.: ALPL/25122024/08-2 dated 25.12.2024

Issued To : **M/s IISCO Steel Plant -SAIL** Environment Management Division, Burnpur-713325 (West Bengal).	**Sample Inward No.**	ALPL/20122024/EW-8/6-2	**Analysis Start**	20.12.2024
	Inward Date	20.12.2024	**Analysis End**	24.12.2024
	Reference	W.O.1400003051		
	Reference Date	09.10.2024		

Sample Description	**Sample Details As Provided By Client**	**Sample Location 2**	**Quantity Received**
Waste Water	Not Mentioned	Dihika Outlet	1L

Sampling By- Anacon Representative
Mr. Sanjib Roy and Mr. Mohit Mondal (Anacon Representative).

Sampling Date: 20.12.2024

Tests Required : pH, Cyanide, Ammonical Nitrogen, Phenolic compounds, Chemical oxygen demand, Biochemical oxygen demand, Total Suspended solids, Oil & grease

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Test Result
1	pH	-	APHA Method 23rd Edition	7.81 at 26°C
2	Cyanide (as CN^-)	mg/l	APHA Method 23rd Edition	0.033
3	Ammonical Nitrogen (as N)	mg/l	APHA Method 23rd Edition	19
4	Phenolic compounds (as C_6H_5OH)	g/l	APHA Method 23rd Edition	0.18
5	Chemical oxygen demand	mg/l	APHA Method 23rd Edition	68
6	Biochemical oxygen demand (at 27°C for 3 days)	mg/l	APHA Method 23rd Edition	15
7	Oil & grease	mg/l	APHA Method 23rd Edition	<1.0
8	Total Suspended solids (TSS)	mg/l	APHA Method 23rd Edition	15

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REMARKS: As requested by the client, samples were tested for above parameters only.

Verified By

Snehal Raut
Technical Manager

Authorized Signatory

Chinmay Garway
Deputy Quality Manager

----------END OF REPORT----------

29/5/25
सहायक महाप्रबंधक (पर्यावरण प्रबंधन)
AGM (Environ. Mgmt.)
सैल-आई. एस. पी., बर्नपुर
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Test Report

Test Report No.: ALPL/25122024/08-3 dated 25.12.2024

Issued To : **M/s IISCO Steel Plant -SAIL** Environment Management Division, Burnpur-713325 (West Bengal).	**Sample Inward No.**	ALPL/20122024/EW-8/6-3	**Analysis Start**	20.12.2024
	Inward Date	20.12.2024	**Analysis End**	24.12.2024
	Reference	W.O.1400003051		
	Reference Date	09.10.2024		

Sample Description	**Sample Details As Provided By Client**	**Sample Location 3**	**Quantity Received**
Waste Water	Not Mentioned	Reservoir	1L

Sampling By- Anacon Representative
Mr. Sanjib Roy and Mr. Mohit Mondal (Anacon Representative).

Sampling Date: 20.12.2024

Tests Required : pH, Cyanide, Ammonical Nitrogen, Phenolic compounds, Chemical oxygen demand, Biochemical oxygen demand, Total Suspended solids, Oil & grease

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Test Result
1	pH	-	APHA Method 23rd Edition	8.04 at 26°C
2	Cyanide (as CN^-)	mg/l	APHA Method 23rd Edition	0.109
3	Ammonical Nitrogen (as N)	mg/l	APHA Method 23rd Edition	36
4	Phenolic compounds (as C_6H_5OH)	g/l	APHA Method 23rd Edition	0.38
5	Chemical oxygen demand	mg/l	APHA Method 23rd Edition	72
6	Biochemical oxygen demand (at 27°C for 3 days)	mg/l	APHA Method 23rd Edition	16
7	Oil & grease	mg/l	APHA Method 23rd Edition	1.4
8	Total Suspended solids (TSS)	mg/l	APHA Method 23rd Edition	29

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REMARKS: As requested by the client, samples were tested for above parameters only.

Verified By
Snehal Raut
Technical Manager

Authorized Signatory
Chinmay Garway
Deputy Quality Manager

----------END OF REPORT----------

सहायक महाप्रबंधक (पर्यावरण प्रबंधन)
AGM (Environ. Mgmt.)
सेल-आई. एस. पी., बर्नपुर
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Test Report

Test Report No.: ALPL/25122024/08-4 dated 25.12.2024

Issued To : **M/s IISCO Steel Plant -SAIL** Environment Management Division, Burnpur-713325 (West Bengal).	**Sample Inward No.**	ALPL/20122024/EW-8/6-4	**Analysis Start**	20.12.2024
	Inward Date	20.12.2024	**Analysis End**	24.12.2024
	Reference	W.O.1400003051		
	Reference Date	09.10.2024		

Sample Description	**Sample Details As Provided By Client**	**Sample Location 4**	**Quantity Received**
Waste Water	Not Mentioned	BOD Plant 10 Outlet	1L

Sampling By- Anacon Representative
Mr. Sanjib Roy and Mr. Mohit Mondal (Anacon Representative).

Sampling Date: 20.12.2024

Tests Required : pH, Cyanide, Ammonical Nitrogen, Phenolic compounds, Chemical oxygen demand, Biochemical oxygen demand, Total Suspended solids, Oil & grease

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Test Result
1	pH	-	APHA Method 23rd Edition	8.40 at 26°C
2	Cyanide (as CN^-)	mg/l	APHA Method 23rd Edition	0.084
3	Ammonical Nitrogen (as N)	mg/l	APHA Method 23rd Edition	24.6
4	Phenolic compounds (as C_6H_5OH)	g/l	APHA Method 23rd Edition	0.22
5	Chemical oxygen demand	mg/l	APHA Method 23rd Edition	104
6	Biochemical oxygen demand (at 27°C for 3 days)	mg/l	APHA Method 23rd Edition	18
7	Oil & grease	mg/l	APHA Method 23rd Edition	1
8	Total Suspended solids (TSS)	mg/l	APHA Method 23rd Edition	19

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REMARKS: As requested by the client, samples were tested for above parameters only.

Verified By
Snehal Raut
Technical Manager

Authorized Signatory
Chinmay Gadway
Deputy Quality Manager

----------END OF REPORT----------

सहायक महाप्रबंधक (पर्यावरण प्रबंधन)
AGM (Environ. Mgmt.)
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Test Report

Test Report No.: ALPL/25122024/08-5 dated 25.12.2024

Issued To : **M/s IISCO Steel Plant -SAIL** Environment Management Division, Burnpur-713325 (West Bengal).	**Sample Inward No.**	ALPL/20122024/EW-8/6-5	**Analysis Start** 20.12.2024
	Inward Date	20.12.2024	**Analysis End** 24.12.2024
	Reference	W.O.1400003051	
	Reference Date	09.10.2024	

Sample Description	**Sample Details As Provided By Client**	**Sample Location 5**	**Quantity Received**
Waste Water	Not Mentioned	BOD Plant 11 Outlet	1L

Sampling By- Anacon Representative
Mr. Sanjib Roy and Mr. Mohit Mondal (Anacon Representative).

Sampling Date: 20.12.2024

Tests Required : pH, Cyanide, Ammonical Nitrogen, Phenolic compounds, Chemical oxygen demand, Biochemical oxygen demand, Total Suspended solids, Oil & grease

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Test Result
1	pH	-	APHA Method 23rd Edition	8.27 at 26°C
2	Cyanide (as CN^-)	mg/l	APHA Method 23rd Edition	0.104
3	Ammonical Nitrogen (as N)	mg/l	APHA Method 23rd Edition	32.4
4	Phenolic compounds (as C_6H_5OH)	g/l	APHA Method 23rd Edition	0.34
5	Chemical oxygen demand	mg/l	APHA Method 23rd Edition	112
6	Biochemical oxygen demand (at 27°C for 3 days)	mg/l	APHA Method 23rd Edition	20
7	Oil & grease	mg/l	APHA Method 23rd Edition	1.2
8	Total Suspended solids (TSS)	mg/l	APHA Method 23rd Edition	24

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REMARKS: As requested by the client, samples were tested for above parameters only.

Verified By

Snehal Raut
Technical Manager

Authorized Signatory

Chinmay Garwy
Deputy Quality Manager

---------**END OF REPORT**---------

सहायक महाप्रबंधक (पर्यावरण प्रबंधन)
AGM (Environ. Mgmt.)
सेल-आई. एस. पी., बर्नपुर
SAIL-ISP, BURNPUR

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Test Report

Test Report No.: ALPL/25012025/14-1 dated 25.01.2025

Issued To : **M/s IISCO Steel Plant -SAIL** Burnpur- (West Bengal). Pincode:713325	**Sample Inward No.**	ALPL/21012025/EW-10/5-1	**Analysis Start** 21.01.2025
	Inward Date	21.01.2025	**Analysis End** 25.01.2025
	Reference	Work Order Number 1400003051 Date: 09.10.2024	

Sample Description	**Sample Details as Provided By Client**	**Purpose of Analysis**	**Quantity Received**
Waste Water	Damra Outlet	Quality Check	1Ltr

Sampling By	**Physical Condition/Packaging**
Anacon representative- Sanjib Roy & Mohit Mandal	Sample in Bottle / Satisfactory

Tests Required : pH, Cyanide (as CN^-), Ammonical Nitrogen (as N), Phenolic compounds, Chemical oxygen demand, Biochemical oxygen demand, Total Suspended solids, Oil & grease

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Test Result
I	**Chemical Testing**			
1	pH value at 26°C	-	APHA Method 23rd Edition	7.70
2	Cyanide (as CN^-)	mg/l	APHA Method 23rd Edition	0.034
3	Ammonical Nitrogen (as N)	mg/l	APHA Method 23rd Edition	21.00
4	Phenolic compounds	mg/l	APHA Method 23rd Edition	0.18
5	Chemical oxygen demand (COD)	mg/l	APHA Method 23rd Edition	72
6	Biochemical oxygen demand (3 days at 27°C)	mg/l	APHA Method 23rd Edition	16
7	Total Suspended Solids	mg/l	APHA Method 23rd Edition	17.0
8	Oil & Grease	mg/l	APHA Method 23rd Edition	<1.0

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● **BLQ- Below Limit of Quantification** ● **LOQ- Limit Of Quantification.**
REMARKS: As requested by the client, sample was tested for above parameters only

Verified By

Snehal Raut
Technical Manager

Authorized Signatory

Chinmay Garwar
Deputy Quality Manager

----------**END OF REPORT**----------

28/5/25
(A. K. Roy)
सहायक महाप्रबंधक (पर्यावरण प्रबंधन)
AGM (Environ. Mgmt.)
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Test Report

Test Report No.: ALPL/25012025/14-2 dated 25.01.2025

Issued To : M/s IISCO Steel Plant -SAIL Burnpur- (West Bengal). Pincode:713325	Sample Inward No.	ALPL/21012025/EW-10/5-2	Analysis Start	21.01.2025
	Inward Date	21.01.2025	Analysis End	25.01.2025
	Reference	Work Order Number 1400003051 Date: 09.10.2024		

Sample Description	Sample Details as Provided By Client	Quantity Received
Waste Water	Dihika Outlet	1Ltr

Sampling By	Physical Condition/Packaging
Anacon representative- Sanjib Roy & Mohit Mandal	Sample in Bottle / Satisfactory

Tests Required : pH, Cyanide (as CN^-), Ammonical Nitrogen, Phenolic compounds, Chemical oxygen demand, Biochemical oxygen demand, Total Suspended solids, Oil & grease

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Test Result
I	Chemical Testing			
1	pH value at 26^0C	-	APHA Method 23rd Edition	7.92
2	Cyanide (as CN^-)	mg/l	APHA Method 23rd Edition	0.047
3	Ammonical Nitrogen (as N)	mg/l	APHA Method 23rd Edition	25.00
4	Phenolic compounds	mg/l	APHA Method 23rd Edition	0.21
5	Chemical oxygen demand (COD)	mg/l	APHA Method 23rd Edition	80
6	Biochemical oxygen demand (3 days at 27^0C)	mg/l	APHA Method 23rd Edition	17
7	Total Suspended Solids	mg/l	APHA Method 23rd Edition	18.0
8	Oil & Grease	mg/l	APHA Method 23rd Edition	<1.0

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• **BLQ- Below Limit of Quantification** • **LOQ- Limit Of Quantification.**

REMARKS: As requested by the client, sample was tested for above parameters only

Verified By

Snehal Raut
Technical Manager

Authorized Signatory

Chinmay Garway
Deputy Quality Manager

----------END OF REPORT----------

29/1/25

सहायक महाप्रबंधक (पर्यावरण प्रबंधन)
AGM (Environ. Mgmt.)
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Test Report

Test Report No.: ALPL/25012025/14-3 dated 25.01.2025

Issued To : **M/s IISCO Steel Plant -SAIL** Burnpur- (West Bengal). Pincode:713325	**Sample Inward No.**	ALPL/21012025/EW-10/5-3	**Analysis Start**	21.01.2025
	Inward Date	21.01.2025	**Analysis End**	25.01.2025
	Reference	Work Order Number 1400003051 Date: 09.10.2024		

Sample Description	**Sample Details as Provided By Client**	**Quantity Received**
Waste Water	Reservior	1Ltr

Sampling By	**Physical Condition/Packaging**
Anacon representative- Sanjib Roy & Mohit Mandal	Sample in Bottle / Satisfactory

Tests Required : pH, Cyanide (as CN^-), Ammonical Nitrogen, Phenolic compounds, Chemical oxygen demand, Biochemical oxygen demand, Total Suspended solids, Oil & grease

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Test Result
I	**Chemical Testing**			
1	pH value at 26°C	-	APHA Method 23rd Edition	8.18
2	Cyanide (as CN^-)	mg/l	APHA Method 23rd Edition	0.122
3	Ammonical Nitrogen (as N)	mg/l	APHA Method 23rd Edition	41.00
4	Phenolic compounds	mg/l	APHA Method 23rd Edition	0.40
5	Chemical oxygen demand (COD)	mg/l	APHA Method 23rd Edition	184
6	Biochemical oxygen demand (3 days at 27°C)	mg/l	APHA Method 23rd Edition	26
7	Total Suspended Solids	mg/l	APHA Method 23rd Edition	35.0
8	Oil & Grease	mg/l	APHA Method 23rd Edition	1.60

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• **BLQ- Below Limit of Quantification** • **LOQ- Limit Of Quantification..**

REMARKS: As requested by the client, sample was tested for above parameters only

Verified By

Snehal Raut
Technical Manager

Authorized Signatory

Chinmay Garwey
Deputy Quality Manager

----------END OF REPORT----------

(A.K.Roy)
सहायक महाप्रबंधक (पर्यावरण प्रबंधन)
AGM (Environ. Management)
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Test Report

Test Report No.: ALPL/25012025/14-4 dated 25.01.2025

Issued To : **M/s IISCO Steel Plant -SAIL** Burnpur- (West Bengal). Pincode:713325	**Sample Inward No.**	ALPL/21012025/EW-10/5-4	**Analysis Start**	21.01.2025
	Inward Date	21.01.2025	**Analysis End**	25.01.2025
	Reference	Work Order Number 1400003051 Date: 09.10.2024		

Sample Description	**Sample Details as Provided By Client**	**Quantity Received**
Waste Water	BOD 10 Outlet	1Ltr

Sampling By	**Physical Condition/Packaging**
Anacon representative- Sanjib Roy & Mohit Mandal	Sample in Bottle / Satisfactory

Tests Required : pH, Cyanide (as CN^-), Ammonical Nitrogen, Phenolic compounds, Chemical oxygen demand, Biochemical oxygen demand, Total Suspended solids, Oil & grease

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Test Result
I	Chemical Testing			
1	pH value at 26°C	-	APHA Method 23rd Edition	8.12
2	Cyanide (as CN^-)	mg/l	APHA Method 23rd Edition	0.091
3	Ammonical Nitrogen (as N)	mg/l	APHA Method 23rd Edition	30.80
4	Phenolic compounds	mg/l	APHA Method 23rd Edition	0.25
5	Chemical oxygen demand (COD)	mg/l	APHA Method 23rd Edition	168
6	Biochemical oxygen demand (3 days at 27°C)	mg/l	APHA Method 23rd Edition	24
7	Total Suspended Solids	mg/l	APHA Method 23rd Edition	15.0
8	Oil & Grease	mg/l	APHA Method 23rd Edition	1.40

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● **BLQ- Below Limit of Quantification** ● **LOQ- Limit Of Quantification.**
REMARKS: As requested by the client, sample was tested for above parameters only

Verified By
Snehal Raut
Technical Manager

Authorized Signatory
Chinmay Garwar
Deputy Quality Manager

----------END OF REPORT----------

सहायक महाप्रबंधक (पर्यावरण प्रबंधन)
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Test Report

Test Report No.: ALPL/25012025/14-5 dated 25.01.2025

Issued To : **M/s IISCO Steel Plant -SAIL** Burnpur- (West Bengal). Pincode:713325	**Sample Inward No.**	ALPL/21012025/EW-10/5-5	**Analysis Start**	21.01.2025
	Inward Date	21.01.2025	**Analysis End**	25.01.2025
	Reference	Work Order Number 1400003051 Date: 09.10.2024		

Sample Description Waste Water	**Sample Details as Provided By Client** BOD 11 Outlet	**Quantity Received** 1Ltr
Sampling By Anacon representative- Sanjib Roy & Mohit Mandal		**Physical Condition/Packaging** Sample in Bottle / Satisfactory

Tests Required : pH, Cyanide (as CN^-), Ammonical Nitrogen, Phenolic compounds, Chemical oxygen demand, Biochemical oxygen demand, Total Suspended solids, Oil & grease

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Test Result
I	Chemical Testing			
1	pH value at 26°C	-	APHA Method 23rd Edition	8.32
2	Cyanide (as CN^-)	mg/l	APHA Method 23rd Edition	0.128
3	Ammonical Nitrogen (as N)	mg/l	APHA Method 23rd Edition	38.60
4	Phenolic compounds	mg/l	APHA Method 23rd Edition	0.34
5	Chemical oxygen demand (COD)	mg/l	APHA Method 23rd Edition	176
6	Biochemical oxygen demand (3 days at 27°C)	mg/l	APHA Method 23rd Edition	25
7	Total Suspended Solids	mg/l	APHA Method 23rd Edition	10.0
8	Oil & Grease	mg/l	APHA Method 23rd Edition	1.0

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● **BLQ- Below Limit of Quantification** ● **LOQ- Limit Of Quantification.**
REMARKS: As requested by the client, sample was tested for above parameters only

Verified By

Snehal Raut
Technical Manager

Authorized Signatory

Chinmay Garway
Deputy Quality Manager

----------END OF REPORT----------

29/5/25
(A.K. Roy)
सहायक महाप्रबंधक (पर्यावरण प्रबंधन)
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Test Report

Test Report No.: ALPL/ 26022025/06-2 dated 26.02.2025

Issued To : **M/s IISCO Steel Plant -SAIL** Burnpur- (West Bengal). Pincode:713325	**Sample Inward No.**	ALPL/21022025/EW-8/5-2	**Analysis Start**	21.02.2025
	Inward Date	21.02.2025	**Analysis End**	25.02.2025
	Reference	Work Order Number 1400003051 Date: 09.10.2024		

Sample Description Waste Water	**Sample Details as Provided By Client** Dihika Outlet	**Quantity Received** 1Ltr
Sampling By Joint Sampling of PCB and Environment Department IISCO		**Physical Condition/Packaging** Sample in Bottle / Satisfactory

Tests Required : pH, Cyanide (as CN^-), Ammonical Nitrogen, Phenolic compounds, Chemical oxygen demand, Biochemical oxygen demand, Total Suspended solids, Oil & grease

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Test Result
I	**Chemical Testing**			
1	pH value at 27°C	-	APHA Method 23rd Edition	7.74
2	Cyanide (as CN^-)	mg/l	APHA Method 23rd Edition	0.060
3	Ammonical Nitrogen (as N)	mg/l	APHA Method 23rd Edition	19.0
4	Phenolic compounds	mg/l	APHA Method 23rd Edition	<0.1
5	Chemical oxygen demand (COD)	mg/l	APHA Method 23rd Edition	52
6	Biochemical oxygen demand (3 days at 27°C)	mg/l	APHA Method 23rd Edition	7.0
7	Total Suspended Solids	mg/l	APHA Method 23rd Edition	6.0
8	Oil & Grease	mg/l	APHA Method 23rd Edition	<1.0

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• **BLQ- Below Limit of Quantification** • **LOQ- Limit Of Quantification.**
REMARKS: As requested by the client, sample was tested for above parameters only

Verified By

Snehal Raut
Technical Manager

Authorized Signatory

Chinmay Gaway
Deputy Quality Manager

----------END OF REPORT----------

महायक महाप्रबंधक (पर्यावरण प्रबंधन)
AGM (Environ. Mgmt.)
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Test Report

Test Report No.: ALPL/ 26022025/06-3 dated 26.02.2025

Issued To : **M/s IISCO Steel Plant -SAIL** Burnpur- (West Bengal). Pincode:713325	**Sample Inward No.**	ALPL/21022025/EW-8/5-3	**Analysis Start**	21.02.2025
	Inward Date	21.02.2025	**Analysis End**	25.02.2025
	Reference	Work Order Number 1400003051 Date: 09.10.2024		

Sample Description	**Sample Details as Provided By Client**	**Quantity Received**
Waste Water	Reservior	1Ltr

Sampling By	**Physical Condition/Packaging**
Joint Sampling of PCB and Environment Department IISCO	Sample in Bottle / Satisfactory

Tests Required : pH, Cyanide (as CN^-), Ammonical Nitrogen, Phenolic compounds, Chemical oxygen demand, Biochemical oxygen demand, Total Suspended solids, Oil & grease

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Test Result
I	Chemical Testing			
1	pH value at 27°C	-	APHA Method 23rd Edition	7.60
2	Cyanide (as CN^-)	mg/l	APHA Method 23rd Edition	0.040
3	Ammonical Nitrogen (as N)	mg/l	APHA Method 23rd Edition	17.0
4	Phenolic compounds	mg/l	APHA Method 23rd Edition	<0.1
5	Chemical oxygen demand (COD)	mg/l	APHA Method 23rd Edition	48
6	Biochemical oxygen demand (3 days at 27°C)	mg/l	APHA Method 23rd Edition	6.0
7	Total Suspended Solids	mg/l	APHA Method 23rd Edition	9.0
8	Oil & Grease	mg/l	APHA Method 23rd Edition	<1.0

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• **BLQ- Below Limit of Quantification** • **LOQ- Limit Of Quantification..**

REMARKS: As requested by the client, sample was tested for above parameters only

Verified By

Snehal Raut
Technical Manager

Authorized Signatory

Chinmay Garway
Deputy Quality Manager

----------**END OF REPORT**----------

29/5/25
(A.K. Roy)
सहायक महाप्रबंधक (पर्यावरण प्रबंधन)
AGM (Environ. Mgmt.)
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Test Report

Test Report No.: ALPL/ 26022025/06-4 dated 26.02.2025

Issued To : **M/s IISCO Steel Plant -SAIL** Burnpur- (West Bengal). Pincode:713325	**Sample Inward No.**	ALPL/21022025/EW-8/5-4	**Analysis Start**	21.02.2025
	Inward Date	21.02.2025	**Analysis End**	25.02.2025
	Reference	Work Order Number 1400003051 Date: 09.10.2024		

Sample Description Waste Water	**Sample Details as Provided By Client** BOD 10 Outlet	**Quantity Received** 1Ltr
Sampling By Joint Sampling of PCB and Environment Department IISCO	**Physical Condition/Packaging** Sample in Bottle / Satisfactory	

Tests Required : pH, Cyanide (as CN^-), Ammonical Nitrogen, Phenolic compounds, Chemical oxygen demand, Biochemical oxygen demand, Total Suspended solids, Oil & grease

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Test Result
I	**Chemical Testing**			
1	pH value at 27°C	-	APHA Method 23rd Edition	8.39
2	Cyanide (as CN^-)	mg/l	APHA Method 23rd Edition	0.010
3	Ammonical Nitrogen (as N)	mg/l	APHA Method 23rd Edition	5.70
4	Phenolic compounds	mg/l	APHA Method 23rd Edition	<0.1
5	Chemical oxygen demand (COD)	mg/l	APHA Method 23rd Edition	100
6	Biochemical oxygen demand (3 days at 27°C)	mg/l	APHA Method 23rd Edition	14.0
7	Total Suspended Solids	mg/l	APHA Method 23rd Edition	20.0
8	Oil & Grease	mg/l	APHA Method 23rd Edition	<1.0

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● **BLQ- Below Limit of Quantification** ● **LOQ- Limit Of Quantification.**
REMARKS: As requested by the client, sample was tested for above parameters only

Verified By

Snehal Raut
Technical Manager

Authorized Signatory

Chinmay Garwar
Deputy Quality Manager

----------**END OF REPORT**----------

सहायक महाप्रबंधक (पर्यावरण प्रबंधन)
AGM (Environ. Mgmt.)
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Test Report

Test Report No.: ALPL/ 26022025/06-5 dated 26.02.2025

Issued To : **M/s IISCO Steel Plant -SAIL** Burnpur- (West Bengal) Pincode:713325	**Sample Inward No.**	ALPL/21022025/EW-8/5-5	**Analysis Start**	21.02.2025
	Inward Date	21.02.2025	**Analysis End**	25.02.2025
	Reference	Work Order Number 1400003051 Date: 09.10.2024		

Sample Description	**Sample Details as Provided By Client**	**Quantity Received**
Waste Water	BOD 11 Outlet	1Ltr

Sampling By	**Physical Condition/Packaging**
Joint Sampling of PCB and Environment Department IISCO	Sample in Bottle / Satisfactory

Tests Required : pH, Cyanide (as CN^-), Ammonical Nitrogen, Phenolic compounds, Chemical oxygen demand, Biochemical oxygen demand, Total Suspended solids, Oil & grease

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Test Result
I	Chemical Testing			
1	pH value at 27°C	-	APHA Method 23rd Edition	7.90
2	Cyanide (as CN^-)	mg/l	APHA Method 23rd Edition	0.090
3	Ammonical Nitrogen (as N)	mg/l	APHA Method 23rd Edition	7.70
4	Phenolic compounds	mg/l	APHA Method 23rd Edition	<0.1
5	Chemical oxygen demand (COD)	mg/l	APHA Method 23rd Edition	64
6	Biochemical oxygen demand (3 days at 27°C)	mg/l	APHA Method 23rd Edition	9.0
7	Total Suspended Solids	mg/l	APHA Method 23rd Edition	12.0
8	Oil & Grease	mg/l	APHA Method 23rd Edition	<1.0

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● **BLQ- Below Limit of Quantification** ● **LOQ- Limit Of Quantification.**
REMARKS: As requested by the client, sample was tested for above parameters only

Verified By

Snehal Raut
Technical Manager

Authorized Signatory

Chinmay Garway
Deputy Quality Manager

----------END OF REPORT----------

28/6/25
(A. K. Roy)

सहायक महाप्रबंधक (पर्यावरण प्रबंधन)
AGM (Environ. Mgmt.)
सेल-आई. एस. पी., बर्नपुर
SAIL-ISP, BURNPUR

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Test Report

Test Report No.: ALPL/15032025/05-1 dated 15.03.2025

Issued To : **M/s IISCO Steel Plant -SAIL** Burnpur- (West Bengal). Pincode:713325	**Sample Inward No.**	ALPL/12032025/EW-4/4-1	**Analysis Start** 12.03.2025
	Inward Date	12.03.2025	**Analysis End** 15.03.2025
	Reference	Work Order Number 1400003051 Date: 09.10.2024	

Sample Description	Sample Details as Provided By Client	Purpose of Analysis	Quantity Received
Waste Water	Damra Outlet	Quality Check	1Ltr

Sampling By & Date	Physical Condition/Packaging
Sampling by Anacon Representative Sanjib Roy and Mohit Mondal. & 12.03.25	Sample in Bottle / Satisfactory

Tests Required : pH, Cyanide (as CN'), Ammonical Nitrogen (as N), Phenolic compounds, Chemical oxygen demand, Biochemical oxygen demand, Total Suspended solids, Oil & grease

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Test Result
I	Chemical Testing			
1	pH value	-	APHA Method 23rd Edition	6.90 at 30ºC
2	Cyanide (as CN')	mg/l	APHA Method 23rd Edition	0.163
3	Ammonical Nitrogen (as N)	mg/l	APHA Method 23rd Edition	24.7
4	Phenolic compounds	mg/l	APHA Method 23rd Edition	0.19
5	Chemical oxygen demand (COD)	mg/l	APHA Method 23rd Edition	56
6	Biochemical oxygen demand (3 days at 27°C)	mg/l	APHA Method 23rd Edition	7
7	Oil & Grease	mg/l	APHA Method 23rd Edition	<1.0
8	Total Suspended Solids	mg/l	APHA Method 23rd Edition	15

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REMARKS: As requested by the client, sample was tested for above parameters only

Verified By

Snehal Raut
Technical Manager

Authorized Signatory

Chinmay Ganvay
Deputy Quality Manager

----------END OF REPORT----------

महायक महाप्रबंधक (पर्यावरण प्रबंधन)
AGM (Environ. Mgmt.)
सेल-आई. एस. पी., बर्नपुर
SAIL-ISP, BURNPUR

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Test Report

Test Report No.: ALPL/15032025/05-2 dated 15.03.2025

Issued To : **M/s IISCO Steel Plant -SAIL** Burnpur- (West Bengal). Pincode:713325	**Sample Inward No.**	ALPL/12032025/EW-4/4-2	**Analysis Start** 12.03.2025
	Inward Date	12.03.2025	**Analysis End** 15.03.2025
	Reference	Work Order Number 1400003051 Date: 09.10.2024	

Sample Description	Sample Details as Provided By Client	Purpose of Analysis	Quantity Received
Waste Water	Dihika Outlet	Quality Check	1Ltr

Sampling By & Date	Physical Condition/Packaging
Sampling by Anacon Representative Sanjib Roy and Mohit Mondal. & 12.03.25	Sample in Bottle / Satisfactory

Tests Required : pH, Cyanide (as CN^-), Ammonical Nitrogen, Phenolic compounds, Chemical oxygen demand, Biochemical oxygen demand, Total Suspended solids, Oil & grease

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Test Result
I	**Chemical Testing**			
1	pH value	-	APHA Method 23rd Edition	7.88 at 30°C
2	Cyanide (as CN^-)	mg/l	APHA Method 23rd Edition	0.156
3	Ammonical Nitrogen (as N)	mg/l	APHA Method 23rd Edition	13.2
4	Phenolic compounds	mg/l	APHA Method 23rd Edition	0.16
5	Chemical oxygen demand (COD)	mg/l	APHA Method 23rd Edition	48
6	Biochemical oxygen demand (3 days at 27°C)	mg/l	APHA Method 23rd Edition	6
7	Oil & Grease	mg/l	APHA Method 23rd Edition	<1.0
8	Total Suspended Solids	mg/l	APHA Method 23rd Edition	11

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• **BLQ- Below Limit of Quantification** • **LOQ- Limit Of Quantification.**

REMARKS: As requested by the client, sample was tested for above parameters only

Verified By

Snehal Raut
Technical Manager

Authorized Signatory

Chinmay Garway
Deputy Quality Manager

----------END OF REPORT----------

29/1/25
(A. K. Rai)
सहायक महाप्रबंधक (पर्यावरण प्रबंधन)
AGM (Environ. Mgmt.)
सेल-आई. एस. पी., बर्नपुर
SAIL-ISP, BURNPUR

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Test Report

Test Report No.: ALPL/15032025/05-3 dated 15.03.2025

Issued To : **M/s IISCO Steel Plant -SAIL** Burnpur- (West Bengal). Pincode:713325	**Sample Inward No.**	ALPL/12032025/EW-4/4-3	**Analysis Start** 12.03.2025
	Inward Date	12.03.2025	**Analysis End** 15.03.2025
	Reference	Work Order Number 1400003051 Date: 09.10.2024	

Sample Description	**Sample Details as Provided By Client**	**Purpose of Analysis**	**Quantity Received**
Waste Water	Reservior	Quality Check	1Ltr

Sampling By & Date	**Physical Condition/Packaging**
Sampling by Anacon Representative Sanjib Roy and Mohit Mondal. & 12.03.25	Sample in Bottle / Satisfactory

Tests Required : pH, Cyanide (as CN^-), Ammonical Nitrogen, Phenolic compounds, Chemical oxygen demand, Biochemical oxygen demand, Total Suspended solids, Oil & grease

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Test Result
I	**Chemical Testing**			
1	pH value	-	APHA Method 23rd Edition	8.17 at 30°C
2	Cyanide (as CN^-)	mg/l	APHA Method 23rd Edition	0.189
3	Ammonical Nitrogen (as N)	mg/l	APHA Method 23rd Edition	37.4
4	Phenolic compounds	mg/l	APHA Method 23rd Edition	0.4
5	Chemical oxygen demand (COD)	mg/l	APHA Method 23rd Edition	88
6	Biochemical oxygen demand (3 days at 27°C)	mg/l	APHA Method 23rd Edition	12
7	Oil & Grease	mg/l	APHA Method 23rd Edition	1.4
8	Total Suspended Solids	mg/l	APHA Method 23rd Edition	19

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● BLQ- Below Limit of Quantification ● LOQ- Limit Of Quantification..
REMARKS: As requested by the client, sample was tested for above parameters only

Verified By

Snehal Raut
Technical Manager

Authorized Signatory

Chinmay Garway
Deputy Quality Manager

----------END OF REPORT----------

सहायक महाप्रबंधक (पर्यावरण प्रबंधन)
AGM (Environ. Mgmt.)
सेल-आई. एस. पी., बर्नपुर
SAIL-ISP, BURNPUR

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Test Report

Test Report No.: ALPL/18032025/05-1 dated 18.03.2025

Issued To : **M/s IISCO Steel Plant -SAIL** Burnpur- (West Bengal). Pincode:713325	**Sample Inward No.**	ALPL/15032025/EW-3/2-1	**Analysis Start** 15.03.2025
	Inward Date	15.03.2025	**Analysis End** 18.03.2025
	Reference	Work Order Number 1400003051 Date: 09.10.2024	

Sample Description	**Sample Details as Provided By Client**	**Purpose of Analysis**	**Quantity Received**
Waste Water	BOD 10 Outlet	Quality Check	1Ltr

Sampling By & Date	**Physical Condition/Packaging**
Sampling by Anacon Representative Sanjib Roy and Mohit Mondal. & 15.03.25	Sample in Bottle / Satisfactory

Tests Required : pH, Cyanide (as CN^-), Ammonical Nitrogen, Phenolic compounds, Chemical oxygen demand, Biochemical oxygen demand, Total Suspended solids, Oil & grease

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Test Result
I	**Chemical Testing**			
1	pH value	-	APHA Method 23rd Edition	8.07 at 30ºC
2	Cyanide (as CN^-)	mg/l	APHA Method 23rd Edition	0.042
3	Ammonical Nitrogen (as N)	mg/l	APHA Method 23rd Edition	37.9
4	Phenolic compounds	mg/l	APHA Method 23rd Edition	0.36
5	Chemical oxygen demand (COD)	mg/l	APHA Method 23rd Edition	184
6	Biochemical oxygen demand (3 days at 27°C)	mg/l	APHA Method 23rd Edition	26
7	Oil & Grease	mg/l	APHA Method 23rd Edition	1.4
8	Total Suspended Solids	mg/l	APHA Method 23rd Edition	37

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REMARKS: As requested by the client, sample was tested for above parameters only

Verified By

Snehal Raut
Technical Manager

Authorized Signatory

Chinmay Garway
Deputy Quality Manager

----------END OF REPORT----------

महायक महाप्रबंधक (पर्यावरण प्रबंधन)
AGM (Environ. Mgmt.)
सेल-आई. एस. पी.
SAIL-ISP BURNPUR

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Test Report

Test Report No.: ALPL/18032025/05-2 dated 18.03.2025

Issued To : **M/s IISCO Steel Plant -SAIL** Burnpur- (West Bengal). Pincode:713325	**Sample Inward No.**	ALPL/15032025/EW-3/2-2	**Analysis Start** 15.03.2025
	Inward Date	15.03.2025	**Analysis End** 18.03.2025
	Reference	Work Order Number 1400003051 Date: 09.10.2024	

Sample Description	**Sample Details as Provided By Client**	**Purpose of Analysis**	**Quantity Received**
Waste Water	BOD 11 Outlet	Quality Check	1Ltr

Sampling By & Date	**Physical Condition/Packaging**
Sampling by Anacon Representative Sanjib Roy and Mohit Mondal. & 15.03.25	Sample in Bottle / Satisfactory

Tests Required : pH, Cyanide (as CN^-), Ammonical Nitrogen, Phenolic compounds, Chemical oxygen demand, Biochemical oxygen demand, Total Suspended solids, Oil & grease

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Test Result
I	**Chemical Testing**			
1	pH value	-	APHA Method 23rd Edition	8.37 at 30°C
2	Cyanide (as CN^-)	mg/l	APHA Method 23rd Edition	0.028
3	Ammonical Nitrogen (as N)	mg/l	APHA Method 23rd Edition	15
4	Phenolic compounds	mg/l	APHA Method 23rd Edition	0.18
5	Chemical oxygen demand (COD)	mg/l	APHA Method 23rd Edition	168
6	Biochemical oxygen demand (3 days at 27°C)	mg/l	APHA Method 23rd Edition	24
7	Oil & Grease	mg/l	APHA Method 23rd Edition	1
8	Total Suspended Solids	mg/l	APHA Method 23rd Edition	24

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REMARKS: As requested by the client, sample was tested for above parameters only

Verified By

Snehal Raut
Technical Manager

Authorized Signatory

Chinmay Garway
Deputy Quality Manager

----------END OF REPORT----------

28/3/25
(A.K. Pal)

सहायक महाप्रबंधक (पर्यावरण प्रबंधन)
AGM (Environ. Mgmt.)
सेल-आई. एस. पी., बर्नपुर
SAIL-ISP, BURNPUR

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Annexure 2

Monitoring Results

Stack Monitoring Data

Month	Unit	Stack	PM (mg/Nm^3)	SO_2 (mg/Nm^3)	NOx (mg/Nm^3)
October 2024	Blast Furnace	Bf-5 Cast house-1	43	---	---
		Bf-5 Cast house-2	37	---	---
		Bf-5 Stock house	34	---	---
		Bf-5 (Stove)	25	17	46
	Coke Oven	COB #10	37	126	88
		COB #11	40	104	131
		PEC	15	---	---
		CDU	40	---	---
		CDCP	40	---	---
	LDCP	Dolomite Plant	38	---	---
		Lime Plant-1	50	---	---
		Lime Plant-2	46	---	---
		Lime Plant-3	47	---	---
	Mills	WRM	10	---	---
		Bar Mill	12	---	---
		USM	11	---	---
	Sinter Plant	Sinter Plant # 1	19	---	---
		Sinter Plant # 2	34	---	---
	PBS	Boiler - 1	14	105	107
		Boiler - 3	10	98	106
	BOF	SMS	16	---	---
November 2024	Blast Furnace	Bf-5 Cast house-1	10	---	---
		Bf-5 Cast house-2	10	---	---
		Bf-5 Stock house	12	---	---
		Bf-5 (Stove)	6	78	51
	Coke Oven	COB #10	33	133	99
		COB #11	40	137	93
		PEC	13	---	---
		CDU	30	---	---
		CDCP	35	---	---
	LDCP	Dolomite Plant	---	---	---
		Lime Plant-1	---	---	---
		Lime Plant-2	---	---	---
		Lime Plant-3	---	---	---
	Mills	WRM	18	---	---
		Bar Mill	5	---	---
		USM	10	---	---
	Sinter Plant	Sinter Plant # 1	18	---	---
		Sinter Plant # 2	14	---	---
	PBS	Boiler -A	74	153	109
		Boiler -2	16	110	118
	BOF	SMS	14	---	---

22/10/24

सहायक महाप्रबंधक (पर्यावरण प्रबंधन)
AGM (Environ. Mgmt.)
सेल-आई. एस. पी., बर्नपुर
SAIL-ISP BURNPUR

Month	Unit	Stack	PM (mg/Nm^3)	SO_2 (mg/Nm^3)	NOx (mg/Nm^3)
December 2024	Blast Furnace	Bf-5 Cast house-1	40	---	---
		Bf-5 Cast house-2	40	---	---
		Bf-5 Stock house	37	---	---
		Bf-5 (Stove)	25	55	35
	Coke Oven	COB #10	44	185	172
		COB #11	45	101	196
		PEC	12	---	---
		CDU	27	---	---
		CDCP	32	---	---
	LDCP	Dolomite Plant	17	---	---
		Lime Plant-2	50	---	---
		Lime Plant-3	46	---	---
		Lime Plant-4	47	---	---
	Mills	WRM	13	---	---
		Bar Mill	6	---	---
		USM	10	---	---
	Sinter Plant	Sinter Plant # 1	24	---	---
		Sinter Plant # 2	30	---	---
	PBS	Boiler -1	11	95	103
		Boiler -2	15	90	97
	BOF	SMS	32	---	---
January 2025	Blast Furnace	Bf-5 Cast house-1	47	---	---
		Bf-5 Cast house-2	35	---	---
		Bf-5 Stock house	48	---	---
		Bf-5 (Stove)	18	59	42
	Coke Oven	COB #10	33	124	89
		COB #11	35	99	153
		PEC	10	---	---
		CDU	25	---	---
		CDCP	43	---	---
	LDCP	Dolomite Plant	15	---	---
		Lime Plant-1	45	---	---
		Lime Plant-2	45	---	---
		Lime Plant-3	44	---	---
	Mills	WRM	12	---	---
		Bar Mill	14	---	---
		USM	13	---	---
	Sinter Plant	Sinter Plant # 1	30	---	---
		Sinter Plant # 2	25	---	---
	PBS	Boiler -1	11	99	109
		Boiler -2	16	94	102
		Boiler -B	58	137	113
	BOF	SMS	47	---	---

29/5/25

सहायक महाप्रबंधक (पर्यावरण प्रबंधन)
AGM (Environ. Mgmt.)
सेल-आई. एस. पी., बर्नपुर
SAIL-ISP, BURNPUR

Month	Unit	Stack	PM (mg/Nm^3)	SO_2 (mg/Nm^3)	NOx (mg/Nm^3)
February 2025	Blast Furnace	Bf-5 Cast house-1	15	---	---
		Bf-5 Cast house-2	16	---	---
		Bf-5 Stock house	48	---	---
		Bf-5 (Stove)	12	46	41
	Coke Oven	COB #10	29	126	86
		COB #11	34	148	92
		PEC	10	---	---
		CDU	15	---	---
		CDCP	20	---	---
	LDCP	Dolomite Plant	46	---	---
		Lime Plant-1	20	---	---
		Lime Plant-2	15	---	---
		Lime Plant-3	43	---	---
	Mills	WRM	18	---	---
		Bar Mill	11	---	---
		USM	10	---	---
	Sinter Plant	Sinter Plant # 1	48	---	---
		Sinter Plant # 2	47	---	---
	PBS	Boiler -1	12	108	118
		Boiler -3	12	104	112
		Boiler -B	48	145	107
	BOF	SMS	21	---	---
March 2025	Blast Furnace	Bf-5 Cast house-1	46	---	---
		Bf-5 Cast house-2	44	---	---
		Bf-5 Stock house	41	---	---
		Bf-5 (Stove)	13	41	36
	Coke Oven	COB #10	15	187	165
		COB #11	13	90	145
		PEC	10	---	---
		CDU	15	---	---
		CDCP	49	---	---
	LDCP	Dolomite Plant	41	---	---
		Lime Plant-1	20	---	---
		Lime Plant-2	15	---	---
		Lime Plant-3	47	---	---
	Mills	WRM	18	---	---
		Bar Mill	16	---	---
		USM	10	---	---
	Sinter Plant	Sinter Plant # 1	46	---	---
		Sinter Plant # 2	48	---	---
	PBS	Boiler -1	13	113	125
		Boiler -3	19	118	121
	BOF	SMS	22	---	---

(A. K. Roy)

सहायक महाप्रबंधक (पर्यावरण प्रबंधन)
AGM (Environ. Mgmt.)
बी.एस.एल. एस.पी., बर्नपुर
BSL-SP, BURNPUR

Ambient Air Quality Monitoring Data

Month	Location of Station		Parameters (µg/m³)			
			PM_{10}	$PM_{2.5}$	SO_2	NOx
		Norm	100	60	80	80
October 2024	Town Department		91	53	12	14
	Chhotodighari		93	56	10	13
	Rangapara		92	50	13	16
	Kuilapur		91	50	14	15
	Nakrasota		94	54	10	16
	Dharampur		96	52	15	15
November 2024	Central Town		93	54	13	16
	Chhotodighari		95	55	12	15
	Rangapara		94	52	14	17
	Kuilapur		93	51	15	17
	Nakrasota		92	53	11	15
	Dharampur		94	55	14	16
December 2024	Central Town		95	55	14	17
	Chhotodighari		93	54	13	16
	Rangapara		92	53	15	18
	Kuilapur		92	53	16	18
	Nakrasota		91	52	12	16
	Dharampur		93	54	15	15
January 2025	Central Town		94	54	15	16
	Chhotodighari		95	53	14	17
	Rangapara		93	52	13	16
	Kuilapur		91	52	14	17
	Nakrasota		90	53	13	15
	Dharampur		92	52	14	16
February 2025	Central Town		92	55	17	17
	Chhotodighari		93	51	16	19
	Rangapara		91	53	15	18
	Kuilapur		90	54	18	19
	Nakrasota		91	55	15	17
	Dharampur		94	56	16	18
March 2025	Central Town		87	49	11	14
	Chhotodighari		92	55	11	12
	Rangapara		89	50	16	17
	Kuilapur		91	51	16	22
	Nakrasota		93	52	13	25
	Dharampur		95	55	14	19

28/5/25
(A. K. Rai)

सहायक महाप्रबंधक (पर्यावरण प्रबंधन)
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Work Environment

Month	Unit	Location	Parameters			
			SPM ($\mu g/m^3$)	PM_{10} ($\mu g/m^3$)	SO_2 ($\mu g/m^3$)	NOx ($\mu g/m^3$)
October 2024	Coke Oven #10	Ram Side	1021	711	56	61
	Coke Oven #11	Ram Side	1291	782	49	77
	BF-5	Cast House	1708	889	55	79
	Sinter Plant	Floor Area	1589	1361	33	63
	BOF	Converter	1117	712	41	56
	Bar Mill	Floor Area	421	207	28	40
	RMHP	Floor Area	1575	784	32	59
	LDCP	Floor Area	1579	615	32	45
	Oxygen Plant	Floor Area	534	191	26	38
	PBS	Floor Area	683	287	29	37
November 2024	Coke Oven #10	Coke Side	1231	807	51	57
	Coke Oven #11	Coke Side	1369	919	54	72
	BF-5	Cast House	1514	771	50	69
	Sinter Plant	Floor Area	1418	1203	36	56
	BOF	Converter	1042	424	49	51
	USM	Floor Area	362	132	25	36
	RMHP	Floor Area	1435	701	28	55
	LDCP	Floor Area	1021	581	37	49
	Oxygen Plant	Floor Area	346	126	29	34
	PBS	Floor Area	411	162	31	33
December 2024	Coke Oven #10	Ram side	1359	862	48	54
	Coke Oven #11	Ram side	1411	945	56	70
	BF-5	Cast House	1804	912	57	75
	Sinter Plant	Floor Area	1608	1276	38	59
	BOF	Converter	1279	619	43	49
	WRM	Floor Area	448	217	30	38
	RMHP	Floor Area	1621	747	30	57
	LDCP	Floor Area	1617	728	34	46
	Oxygen Plant	Floor Area	428	182	28	36
	PBS	Floor Area	668	243	30	35
January 2025	Coke Oven #10	Coke side	1240	781	46	49
	Coke Oven #11	Coke side	1325	869	53	65
	BF-5	Cast House	1718	886	54	71
	Sinter Plant	Floor Area	1541	1121	43	56
	BOF	Converter	1164	588	45	47
	Bar Mill	Floor Area	428	225	32	40
	RMHP	Floor Area	1478	712	32	48
	LDCP	Floor Area	1511	667	31	44
	Oxygen Plant	Floor Area	402	196	29	38
	PBS	Floor Area	719	319	32	37

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Month	Unit	Location	Parameters			
			SPM ($\mu g/m^3$)	PM_{10} ($\mu g/m^3$)	SO_2 ($\mu g/m^3$)	NOx ($\mu g/m^3$)
February 2025	Coke Oven #10	Ram side	1312	892	51	55
	Coke Oven #11	Ram side	1419	919	56	62
	BF-5	Cast House	1779	971	50	65
	Sinter Plant	Floor Area	1415	1018	42	54
	BOF	Converter	1205	725	47	50
	USM	Floor Area	476	288	36	42
	RMHP	Floor Area	1561	793	34	50
	LDCP	Floor Area	1641	786	35	47
	Oxygen Plant	Floor Area	439	218	32	36
	PBS	Floor Area	808	296	30	35
March 2025	Coke Oven #10	Coke side	1268	700	51	60
	Coke Oven #11	Coke side	1320	760	46	68
	BF-5	Cast House	1603	1080	53	76
	Sinter Plant	Floor Area	1588	1270	51	73
	BOF	Converter	1256	860	39	59
	WRM	Floor Area	471	239	32	35
	RMHP	Floor Area	1458	910	43	66
	LDCP	Floor Area	1521	730	39	47
	Oxygen Plant	Floor Area	461	247	34	38
	PBS	Floor Area	752	326	32	37

Work Environment Noise Monitoring

Month	Chhotodighari		SCOB Gate		Vehicle Gate		Tunnel Gate		Dharampur		Kuilapur		Nakrasota	
	D	N	D	N	D	N	D	N	D	N	D	N	D	N
Oct- 2024	60	51	58	50	59	48	58	51	57	50	58	49	56	49
Nov-2024	58	50	59	52	57	46	55	49	55	51	56	48	57	47
Dec-2024	58	47	57	49	59	45	59	47	56	48	52	45	55	46
Jan-2025	59	49	64	53	63	53	64	54	61	52	57	49	58	50
Feb-2025	61	51	63	52	64	54	63	53	62	53	59	51	60	52
Mar-2025	60	52	62	53	63	52	62	52	60	51	62	52	61	53

D – During Day Time, N – During Night Time

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Coke Oven Fugitive Emission

Month	Parameters	Norm	Battery 10 (Rebuilt Batt.)	Battery 11 (New Batt.)
October 2024	PLD	10 % (COB#10)	0.77	2.12
		5 % (COB #11)		
	PLL	1 %	0.08	0.22
	PLO	4%	0.30	0.84
	Charging Emissions	50 Sec/ Charge (COB #10)	10	11
		16 Sec/ Charge (COB #11)		
November 2024	PLD	10 % (COB#10)	0.83	1.99
		5 % (COB #11)		
	PLL	1 %	0.14	0.31
	PLO	4%	0.42	1.33
	Charging Emissions	50 Sec/ Charge (COB #10)	14	14
		16 Sec/ Charge (COB #11)		
December 2024	PLD	10 % (COB#10)	0.74	1.58
		5 % (COB #11)		
	PLL	1 %	0.08	0.26
	PLO	4%	0.40	1.60
	Charging Emissions	50 Sec/ Charge (COB #10)	12	12
		16 Sec/ Charge (COB #11)		
January 2025	PLD	10 % (COB#10)	0.60	1.33
		5 % (COB #11)		
	PLL	1 %	0.08	0.11
	PLO	4%	0.32	1.20
	Charging Emissions	50 Sec/ Charge (COB #10)	12	11
		16 Sec/ Charge (COB #11)		
February 2025	PLD	10 % (COB#10)	0.58	1.51
		5 % (COB #11)		
	PLL	1 %	0.08	0.14
	PLO	4%	0.40	1.17
	Charging Emissions	50 Sec/ Charge (COB #10)	10	12
		16 Sec/ Charge (COB #11)		
March 2025	PLD	10 % (COB#10)	0.77	1.81
		5 % (COB #11)		
	PLL	1 %	0.08	0.15
	PLO	4%	0.48	1.24
	Charging Emissions	50 Sec/ Charge (COB #10)	11	12
		16 Sec/ Charge (COB #11)		

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Annexure 3

Pollution Control Equipment Installed

IISCO Steel Plant
Pollution Control Equipment Installed

Sl. No.	Shop	Pollution Control System	Nos.
1.	Coke Oven	HPLA System	2
		BOD Plant	2
		Bag Filter	5
		RO Plant	1
		Gravel filter	2
		Pressure filter	1
		ESP	5
		Chimney	5
2.	Blast Furnac e	Dust Catcher	1
		Ventury Scrubber	1
		Clarifier	2
		ESP	3
		Drum filter	2
		Chimney	6
3	SMS (BOF)	Dog House (Including ducting)	3
		ESP (Dry type attached with chimney)	2
		ESP (Wet type attached with Gas holder)	3
		Gas Holder	1
		Bag House at Transfer Points	3
		Thickener	4
		Belt press filter for sludge	4
		Chimney	4
4	Sinter Plant	Bag Filter	4
		ESP	4
		RO Plant	1
		Chimney	4
5	LDCP	Bag filter	8
		Chimney	8
6.	Power Plant	Ash Handling System	1
		RO Plant	1
		Chimney	5
7.	Rolling Mills	Fce water treatment plant	1
		Mill water treatment plant	2
		RO Plant	2
		Chimney	3

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SAIL-IISCO BURNPUR

Annexure 4

CSR Activities

CSR Activities Carried out during 2024-25

SN	CSR Activities
1	Free Coaching Centre (FCC) for school dropouts & scholarship to the meritorious students & poor students from underprivileged class
2	Financial aid to Bharati Bhavan for "Sishu Utsav"
3	Distribution of School Uniform, School Accessories to the students of Dhemomain Colliery School and Bari Vidyalaya Primary Section
4	Providing Tiffin, educational kits & accessories (school bag, water bottle, Tiffin box, pencil box, raincoat), uniform including shoes and socks, honorarium for teachers and celebration of important events to Kishalaya Preparatory School
5	Construction of new building for Burnpur Girl's High School (Approx. 98% Non-SAIL BPL)
6	Repair /renovation/ extension of class rooms and infrastructure development at Dhemomain colliery Hindi Primary school
7	Financial assistance to The Ekalavya Initiative (TEI) To sharply improve the quality of student development Amongst schoolchildren from the lowest socio-economic classes in IISCO Model Steel Village School
8	Vocational Training (Tailoring & AC-Refrigeration) for Village Youths at RKM Vocational training center & Sponsorship of BPL category students in courses viz. Computer operation & programming assistant, Welder, Fitter, Electrician from peripheral villages of ITI, RKM, Asansol
9	Skill development training on General Duty Assistant & Phlebotomy course
10	Skill development training in peripheral villages under Recognition of Prior Learning program
11	Additional Grant for Accreditation and Enrolment Fees for NSDC Certification for Vocational Training course run by RKM, Asansol
12	Training on Mushroom Cultivation and production to villagers
13	Financial aid to Lakchar Semlet for setting up CSR Outlet like furniture's, refrigerator, publicity etc. for selling handicrafts etc. made by CSR beneficiaries
14	Regular Extended OPD with help of mobile medical van, enhancement of outreach camp, Preventive action against Malaria, Dengue etc. to 35 peripheral villages/ Aarogya Mitra
15	Supplying Assistive living devices to PwDs at Burnpur, Asansol, Bankura & Purulia
16	"Stop Malnutrition" for the under privileged children and regular educational coaching to "Stop school dropout" in Chobka red light area & Bhuiapara
17	Providing tiffin to the students of Burnpur Ambagan Volunteers Social Welfare Organisation
18	Providing Cooked nutritious meal to school children (1571 nos.) of different schools in and around Burnpur through community kitchen
19	Improving Nutrition & Health of the School children (1901 children) of different schools in and around Burnpur through Gift milk programme (to be booked in capacity building)
20	AIDS awareness project cum medical camp for sex workers of Lachipur& Chobka Red-light Area
21	Organizing camp for Health & Nutrition of Mother & Pregnant ladies among underprivileged women at peripheral villages
22	Financial aid to Sri Aurobindo Yoga & Knowledge Foundation for Sharing happiness for feet, eye & smile for 1000 children in peripheral villages
23	Development/lighting of community parks/community sports grounds/fields etc.
24	Financial aid to Burnpur Mahila Voluntary Samity for stitching, knitting training & Infrastructure development at BMVS centre (Nivedita Enclave) for showcasing products made by beneficiaries
25	Providing Sanitary napkin to village women/girl
26	Financial assistance to Burnpur Mahila Voluntary Samiti for Industrial gloves making training

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27	Skill development training for village women at BMVS centre (Stitching, embroidery, advanced beautician course) End to end service
28	Up skilling of women on Kantha stitch, zardozi, Zari, batik print, fabric, applique, patch work, advanced stiching, school dress and knitting – End to end service
29	Financial assistance to BMVS for advanced Computer Training Course
30	Bidushi coaching & training for jobs to aspiring girl students (30 students) of matriculation and above
31	Ten Pink E-vehicle (Toto) to be driven by women drivers from CSR peripheral villages
32	Setting up solar submersible pump set in peripheral village & laying pipeline to provide points from pump set in different villages
33	Maintenance of Tube Wells with Hand Pump already installed in different villages
34	Maintenance and repair of existing sanitations already installed in different villages
35	Construciton of toilet for Burnpur Girl's school
36	Providing Community toilet in 5 (five) peripheral villages under "Swacha Bharat Mission" including maintenance
37	Providing training to the villagers(Boys & Girls) for Football & Kabaddi throughout the year
38	Organizing Inter village Football & Kabaddi tournament
39	Financial aid to village students for Physical education & yoga centers
40	Financial assistance to RKM, Asansol for promotion of sports activity (SAIL-KHEL)
41	Financial assistance for illumination of Burnpur Cricket Club field by installing High Mast Towers
42	Organizing Hool Divas and Sohrai Festival
43	Celebration of Dr. B. R. Ambedkar Jayanti and other events
44	Tribal Cultural functions & Dance Competition
45	Restoring the cultural heritage of IISCO Steel Plant, Burnpur (Also CSR initiatives by erstwhile IISCO & SAIL-ISP)
46	Financial aid for running Cheshire Home, Burnpur (Security, food, clothing, education, maintenance and upkeep, special trainers, warden, celebration of important days etc.)
47	Financial assistance to Asansol Anandam for providing tiffin to divyang students, honorarium for teachers, raw material for training, stationary etc. & repair & maintenance of Jacuzzi for hydrotherapy installed earlier under CSR
48	Distribution of Blanket, Clothes, Sweater, Shoes, Sandal etc. to economically poor people
49	Construction of Community centers with toilet and repairing/renovation of community centers in peripheral villages of Burnpur
50	Repair/Construction of roads/Infrastructure development in peripheral villages
51	Repair & Renovation of Peripheral market/Daily market of Burnpur
52	Afforestation & Environment development / development of parks in peripheral villages
53	Plastic waste management (Collection & Processing) (Preventive healthcare)
54	Solid waste management at Burnpur (Solid Waste to Compost and Dry Leaf to Brickets)
55	Publicity of ISP CSR Projects/activities
56	Enabling access to government schemes and documents for poor masses of peripheral villages
57	Hiring a 7 seater AC Vehicle exclusively for CSR Dept. for 1 year (for monitoring/inspeciton and visit of CSR projects sites in remote areas of peripheral villages surrounding Burnpur/Asansol
58	Upgradation (Phase-I) of existing ITI building in collaboration with RamKrishna Mission, Asansol

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