

To,

SSIL/23-24/GM/020

Shyam Steel Industries Ltd

03-319, DH-6/11, Action Area 1D, Street No. 319,

New Town, Kolkata 700156

Tel +91 33 4007 4007 / +91 33 6666 4646

Mail ssi@shyamsteel.com | www.shyamsteel.com

CIN: U27100WB2002PLC094339

Date: 12-04-2023

Deputy Director General of Forests (C)
Ministry of Env., Forest and Climate Change,
Integrated Regional Office, Kolkata IB – 198,
Sector-III, Salt Lake City, Kolkata – 700106

Sub: Six-monthly Compliance to the Environment Clearance condition vide MoEF Letter No. F No. J-11011/375/2008-IA.II (I) dated 30.09.2010 of Shyam Steel Industries Limited for Expansion of the Steel Plant for production of 2,30,000 TPA of TMT Bars and other steel items by installing induction furnace (2x15 MT), Ladle refining furnace (LRF, 1x30MT), Ferro Alloy Unit (2x9MVA), Electric Arc Furnace (EAF, 1x30MT) with one Billet Concaster (2x3 strands) and Rolling Mill (1x30 TPH) at Gopalpur (Unit 2), Bamunara, Durgapur, Dist. Paschim Bardhaman in West Bengal-713212. (For the period of October 2022 to March 2023)

Ref: Environment Clearance No. J-11011/375/2008-IA.II (I) dated 30.09.2010.

Dear Sir,

This has reference to the captioned subject and cited reference. It is to inform that we are herewith submitting six monthly compliance report for the conditions stipulated in the Environmental Clearance of Expansion of Steel Plant for production of 2,30,000 TPA of TMT Bars and other steel items by installing induction furnace (2x15 MT), Ladle refining furnace (LRF, 1x30MT), Ferro Alloy Unit (2x9MVA), Electric Arc Furnace (EAF, 1x30MT) with one Billet Concaster (2x3 strands) and Rolling Mill (1x30 TPH) for the period October 2022 to March 2023 along with monitoring data report for your kind consideration. The copy of above compliance report is also being sent in soft format through email to iro.kolkata-mefcc@gov.in for your kind perusal.

Hope the above are in line with the statutory requirements.

Thanking you, Yours faithfully,

For Shyam Steel Industries Ltd.

General Manager (Commercial)

Enclosure: As above

Copy to: The Environmental Engineer, West Bengal Pollution Control Board, Sahid Khudiram

Sarani, City Center, Durgapur, Paschim Bardhaman-713216, West Bengal.

### ENVIRONMENTAL CLEARANCE COMPLIANCE STATUS REPORT

October 2022 to March 2023

Shyam Steel Industries Limited, Gopalpur, Durgapur

Six Monthly Compliance Status report of Environmental Clearance from expansion of 2,30,000 TPA of TMT Bars and other steel items by installing induction furnace (2x15 MT), Ladle refining furnace (LRF, 1x30MT), Ferro Alloy Unit (2x9MVA), Electric Arc Furnace (EAF, 1x30MT) with one Billet Concaster (2x3 strands) and Rolling Mill (1x30 TPH).

ENVIRONMENTAL MANAGEMENT DEPARTMENT
SHYAM STEEL INDUSTRIES LIMITED

#### F. No. J-11011/375/2008-IA II (I) Date: 30/09/2010 Government of India Ministry of Environment and Forests (I.A. Division)

Six monthly compliance of conditions stipulated in Environmental Clearance of M/s Shyam Steel Industries Ltd. Expansion of the Steel Plant for production of 2,30,000 TPA of TMT Bars and other steel items by installing induction furnace (2x15 MT), Ladle refining furnace (LRF, 1x30MT), Ferro Alloy Unit (2x9MVA), Electric Arc Furnace (EAF, 1x30MT) with one Billet Concaster (2x3 strands) and Rolling Mill (1x30 TPH) at Gopalpur (Unit 2), Bamunara, Durgapur, Dist. Paschim Bardhaman, West Bengal-713212

(For the period of October 2022 to March 2023)

-	A. Specific Conditions							
Sr. No	Stipulated Conditions	Action taken / to be taken						
i	Compliance to all the specific and general conditions stipulated for the existing plant by the Central/State Government shall be ensured and regular reports submitted to the Ministry and its Regional Office at Bhubaneswar.	A soft copy of six monthly compliance report along with monitoring data is submitted on every six months to the Regional Officer, Integrated Regional Office at Kolkata. Apart from that hard copy of the same is also submitted to WBPCB.						
ii	Efforts shall be made to reduce RSPM levels in the ambient air. On-line ambient air quality monitoring and continuous stack monitoring facilities for all the stacks shall be provided and sufficient air pollution control devices viz. Electrostatic precipitator (ESP), gas cleaning plant, and bag filters etc. shall be provided to keep the emission levels below 50 mg/Nm3 by installing energy efficient technology.	Ambient air quality has been monitored at regular interval i.e. every two months by NABL accredited laboratory ITS Laboratory, Noida. Reports are analysed for PM10, PM2.5, SOx & NOx. Accordingly necessary preventive steps are taken to reduce respirable suspended particulate matter in ambient air. Ambient air quality monitoring report is enclosed as Annexure-III.						
		Monitoring frequency of various environmental parameters and other suggested improvements are implemented at working site as and when instructed.						
iii	Fume extraction system shall be provided to induction furnaces to control the emissions within the prescribed standards.	Fume extraction system has been installed at induction furnace to control the emissions within the prescribed standards.						
		Stack monitoring report is enclosed as Annexure-IV.						
iv	The National Ambient Air Quality Standards issued by the Ministry vide G.S.R. No. 826 (E) dated 16th November, 2009 shall be followed.	The national ambient air quality standard issued by the Ministry vide GSR No. 826 (E) dated 16th Nov 2015 is followed (Please refer Annexure -III).  Recent test results reveals that PM10-ranges b/w 50.1 µg/m3- 68.7 µg/m3, PM2.5(21.0µg/m3-38.2µg/m3), SO2(10.5µg/m3-17.6µg/m3) and NO2 (18.2µg/m3-35.7µg/m3) and all remain within permissible limit.						

General Manager (Commercial)

V	Secondary fugitive emissions from all the sources shall be controlled within the latest permissible limits issued by the Ministry vide G.S.R. 414(E) dated 30th May, 2008 and regularly monitored. Guidelines/Code of Practice issued by the CPCB shall be followed.	We ensure that preventive maintenance of all the potential sources are done on time to prevent the unwanted emissions. Fugitive air emission sources are identified and maintained properly to control the fugitive emissions at source itself.  Dust extraction system at different unloading bunkers for the product and raw materials handling system has been installed. Bag filters have been provided at stock house, product house, magnetic product separator, cooler discharge area and transfer points to minimize fugitive dust emission.
vi	Total water requirement shall not exceed 428m3/day. Permission from the Central Ground Water Authority (CGWA)/State Ground Water Board (SGWB) shall be obtained for drawl of ground water as may be applicable in this case. All the effluent shall be treated and used for ash handling, dust suppression and green belt development. No effluent shall be discharged and 'zero' discharge shall be adopted. Domestic sewage shall be treated in STP and treated effluent shall be used for green belt development. The water consumption shall not exceed as per the standard prescribed for the steel plants.	Ground water is withdrawn for sustaining all the necessary activities and due approval is taken from the authority. Water consumption is as per the standard prescribed for steel plants.  There is no waste water discharged outside the plant premises and all the necessary protective measures are taken to ensure that plant is maintained as Zero Effluent Discharge. Domestic effluent collected from Canteen, Toilets & Offices are appropriately treated in septic tank followed by soak pits and subsequently used for green belt development within plant premises. Waste water monitoring report is enclosed as Annexure-V.
vii	Efforts shall be made to make use of rain water harvested. If needed, capacity of the reservoir should be enhanced to meet the maximum water requirement. Only balance water requirement shall be met from other sources.	Harvesting of rainwater is done through covered surface drains channelized from various facilities within the Steel plant into reservoir tank.  Implementation of rain water harvesting measures is in progress.
viii	Regular monitoring of influent and effluent surface, sub-surface and ground water (including chromite) shall be ensured and treated wastewater should meet the norms prescribed by the State Pollution Control Board or described under the Environment (Protection) Act, 1986 whichever are more stringent. Leachate study for the effluent generated and analysis shall also be regularly carried out and report submitted to the Ministry's Regional Office at Bhubaneswar, WBPCB and CPCB.	Surface run-off quality is monitored in every two months and is ensured to meet the standards prescribed by the State Pollution Control Board or described under the Environment (Protection) Act, 1986 whichever are more stringent. Water quality monitoring report is enclosed as Annexure-VI.

SHYAM STEEL INDUSTRIES LTD.

General Manager (Commercial)

ix	Vehicular pollution due to transportation of raw material and finished products shall be controlled. Proper arrangements shall also be made to control dust emissions during loading and unloading of the raw material and finished product.	We ensure that all vehicles engaged to carry raw materials and finished products are having proper PUC certificate. This has also been ensured that all the transporting vehicles are properly covered with the tarpaulin to prevent any kind of spillage.  Water sprinkling is done on the road, material unloading area & finished product loading area inside the plant to suppress the air borne dust.
x	All internal roads shall be black topped. The roads shall be regularly cleaned with mechanical sweepers. A 3-tier avenue plantation using native species shall be developed along the roads. Facilities for parking of trucks carrying raw coal from the linked coalmines shall be created within the Unit.	All internal roads are made of concrete and is regularly cleaned by engaging manpower along with the help of water tanker. Broad leaved plants are planted along the approach road to minimise the dust and noise pollution. We always maintain sufficient stock of coal linked to coalmine to avoid overcrowding of transporting trucks within the premises.
xi	Proper handling, storage, utilization and disposal of all the solid waste shall be ensured and regular report regarding toxic metal content in the waste material and its composition, end use of solid/hazardous waste should be submitted to the Ministry's Regional Office at Bhubaneswar, WBPCB and CPCB.	Wastes segregation at source is ensured and promoted and segregated wastes are stored in earmarked locations. Further non-toxic wastes such as cartons, woods and end cuts are sold to recyclers whereas hazardous wastes are tested for TCLP test and waste passing TCLP test are subsequently used for filling purpose of low lying area. Hazardous wastes are kept separately as per the guidelines and further disposed off in environmentally friendly manner to authorised vendor. Analysis reports are submitted with six monthly EC compliance reports to the Ministry's Regional Office at Bhubaneswar, WBPCB and CPCB. Now onwards soft copy of EC compliance report will be submitted to Regional Officer, Integrated Regional Office, Kolkata. Solid waste report is enclosed as Annexure-VII.
xii	Risk and Disaster Management Plan along with the mitigation measures shall be prepared and a copy submitted to the Ministry's Regional Office at Bhubaneswar, WBPCB and CPCB within 3 months of issue of environment clearance letter.	It is already complied.
xiii	As proposed, green belt shall be developed in 33% of plant area as per the CPCB guidelines in consultation with the DFO.	Green belt development is a prime requirement and is been carried out every year inside as well as outside factory premises. Three tier plantation is being developed inside factory premises. Plantation activity is carried out in proper consultation with local forest range officer.

Seneral Manager (Commercial)

		Year wise details of plantation is enclosed as Annexure-I.
		The plantation has been raised comprising trees species like Chatim, Ashok, Bakul, kadam, Karanj & Neem etc.
xiv	All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the steel plants should be implemented.	There are recommendations under CREP guidelines for solid & hazardous waste management, water conservation, Fugitive & stack emission monitoring and adoption of clean technologies. We have implemented recommendations at our Shyam Steel Industries Ltd.
		Status report of CREP recommendation is enclosed as Annexure-II.
XV	All the commitments made to the public during the Public Hearing/Public Consultation meeting held on 14th April, 2010 should be satisfactorily implemented and a separate budget for implementing the same should be allocated and information submitted to the Ministry's Regional Office at Bhopal.	Commitments made to the public during the Public Hearing are duly complied and reviewed for its current status. In addition to that observations of inspecting authority relating to environment management is also taken care for the betterment of residing community & nature.
xvi	At least 5% of the total cost of the project should be earmarked towards the corporate social responsibility	Funds are allocated towards corporate social responsibility and expenditure is made judiciously towards CSR activities for the betterment of living standards of the villagers residing nearby.
xvii	The company shall provide housing for construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crech etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	The company is providing the necessary facilities to all contract labours engaged in activity inside plant premises such as washrooms, canteen, drinking water, medical care & creche.
B. Gei	neral Conditions	
i	The project authorities must strictly adhere to the stipulations made by the West Bengal State Pollution Control Board and the State Government.	We will abide by the conditions stipulated by the West Bengal State Pollution Control Board and the State Government.
ii	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests.	We will abide by the condition and will obtain all the necessary pre requisites for any future modification / expansion of the unit from the MoEF&CC.

SHYAM STEEL INDUSTRIES LTD.

General Manager (Commercial)

		<u> </u>
iii	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 State Board may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location.	Stack monitoring is regularly done to monitor the emission level. Accordingly corrective actions are taken to make sure the emission level remain within the norms. We are complying the specific norms for the relevant parameters.
iv	At least four ambient air quality monitoring stations should be established in the downward direction as well as where maximum ground level concentration of PM10, SO2 and NOx are anticipated in consultation with the SPCB. Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its Regional Office at Bhubaneswar and the SPCB/CPCB once in six months.	Ambient air quality as well as stack emission level is being monitored once in every two months by NABL accredited laboratory ITS Laboratory, Noida. Reports are analysed for PM10, PM2.5, SOx & NOx.  Furnaces are equipped with bag filters to control the Particulate Matter emission level below prescribed norms.  Data on ambient air quality and stack emission report has been submitted up to 30.09.2023 to Regional Officer, Integrated Regional Office, Kolkata.
V	Industrial wastewater shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended from time to time. The treated wastewater shall be utilized for plantation purpose.	There is no waste water discharged outside the plant premises and all the necessary protective measures are taken to ensure that plant is maintained as Zero Effluent Discharge and the treated water is utilized for green belt development.
vi	The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (night time).	Noise level monitoring is scheduled once in every two months in all the potential noise generation area. Accordingly we have provided noise control measures like acoustic hoods, silencers, sound proof enclosures on all sources of noise generations to keep the overall noise level in and around the plant area well within the prescribed standards.  As a protective measure we provide ear plug to all our employees to relieve them of any discomfort due to noise. There is no area inside the plant with noise level above 85dB. Noise level monitoring report is enclosed as Annexure-VIII.
vii	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	Pre-placement and periodical medical examination of the workers & contract labours engaged in the plant are being done and records maintained for corrective measures. We have well equipped first aid station with 24x7 ambulance facility to attend any emergency to our employees and contract labours. Total employee on company role is 718 & on contract is 1049.  Personal protective equipment's are being provided to all workers respective to the nature of the job. Initial and periodical awareness training is being imparted to all

eneral Manager (Commercial)

awareness training is being imparted to all workers in the Company's Vocational

	6	Training Centre located within the plant premises on Safety and Health Aspects.
viii	The company shall develop surface water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table.	Channelization of Rainwater and further its collection to settling tank is ensured from all the facilities within the steel plant. Implementation of rain water harvesting measures is in progress.
ix	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report. Further, the company must undertake socio-economic development activities in the surrounding villages like community development programmes, educational programmes, drinking water supply and health care etc.	Environment management measures of EIA/EMP reports are duly complied and reviewed for its current status. In addition to that observations of inspecting authority relating to environment management is also taken care for the betterment of residing community & nature.  Company has contributed in healthcare sector by providing monetary and logistic support as mobile healthcare vehicle with well qualified medical staff & medicines, infrastructural development of hospitals by providing Air-conditioners and furniture items and actively participated in supply of food grains to the deprived community amidst covid pandemic. To counter the covid pandemic company has made modern crematorium for proper last right to the deceased.  Massive plantation drive by providing saplings to nearby schools and carried out avenue plantation outside factory premises for ecological restoration of surrounding. Apart from that all the necessary facilities which were previously provided or constructed are maintained properly so that community can utilize the same efficiently.  Shyam Steel exclusively focuses on sanitation, drinking water facility, livelihood schemes, repair of village roads, building sports grounds, free distribution of books, helping in various religious activities & environmental sustainability.
х	Requisite amount shall be earmarked towards capital cost and recurring cost/annum for environment pollution control measures to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government. An implementation schedule for implementing all the conditions stipulated herein shall be submitted to the Regional Office of the Ministry at Bhubaneswar. The funds so provided	Pollution control measures are implemented as per the funds allocated and its maintenance are being utilized to fulfil the conditions stipulated by the Ministry as well as the State Pollution Control Board.

Ministry at Bhubaneswar. The funds so provided

shall not be diverted for any other purpose.

xi	A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad/Municipal Corporation, Urban Local Body and the local NGO, if any, from whom suggestions/representations, if any were received while processing the proposal. The clearance letter shall also be put on the web site of the company by the proponent.	It is already complied.
xii	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MOEF at Bhubaneswar. The respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectorial parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	Six monthly EC compliance is regularly uploaded on the company's website and updated. Environmental parameters are displayed at entrance of the plant.
xiii	The project proponent shall also submit six 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 Regional Office of MOEF, the respective Zonal Office of CPCB/SPCB shall monitor the stipulated conditions.	A soft copy of six monthly compliance report along with monitoring data is submitted on a regular basis to the Regional Officer, Integrated Regional Office, Kolkata. Apart from that hard copy of the same is also submitted to WBPCB.
xiv	The environmental statement for each financial year ending 31st March in Form-V as is mandated to be 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 Office of the MOEF at Bhubaneswar by e-mail.	It is being complied.
xv	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 SPCB and may also be seen at Website of the Ministry of Environment and Forests at http://envfor.nic.in. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same should be forwarded to the Regional office at Bhubaneswar.	The environmental Clearance Letter has been advertised in two local newspapers namely "Business Standard" (English Daily) Dated. 05.11.2010 and Aajkal (Bengali Daily) Dated 06.11.2010.
xvi	Project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.	We will abide by the stipulated condition.  SHYAM STEELINDUSTRIES LTD.

SHYAM STEE INDUSTRIES LTD.

### Details of Tree Plantation report for the period October 2022 to March 2023

MINISTRY OF ENVIRONMENT AND FORESTS								
INTEGRATED REGIONAL OFFICE								
KOLKATA IB – 198, SECTOR-III, SALT LAKE CITY, KOLKATA – 700106								
FORMAT FOR PROVIDING PARTICULARS ON GREEN BELT/ PLANTATION								
	UNDER F ( C ) ACT 1980 AND E ( P) ACT 1986							
1	a) Name of Project:	SHYAM STEEL INDUSTRIES LIMITED						
1	b) Envt./ Forest Clearance Nos.:	F No. J-11011/375/2008- IA II (I) Date-30.09.2010						
2	Location, Block/ Sub. Divn./ Dist./ State:	Bamunara, Durgapur, Paschim Bardhaman, West Bengal						
3	Address of communication:	Plot No. DH6/11, Premises No. 03-319, Action Area - ID, New Town, District. North 24 Parganas, Kolkata – 700 156						
	Existing vegetation in	the area/ region:						
4	a) Species (trees/ shrubs/ grasses/ climbers):	Trees						
	b) Major prevalent species of each type	Polyalthia Longifolia, Alstonia						
	Land coverage by the	project						
-	a) Total area under the project:	16 Acres Approx.						
5	b) Area covered for basic infrastructure (roads/ building/ factory etc.):	65%						
	Details about natural	vegetation:						
	a) Name and number of plant of tree/ species felled:	Nil						
6	b) Name and number of plant species still available in the area:	Not Available						
	c) By protecting the area will indigenous stock come up:	Yes						
	d) Extent of greenbelt enveloped	20%						
	Plantations required to be carried out as per:							

SHYAM STEEL INDUSTRIES LID.

	a) Conditions of Environmental clearance in ha. / Nos.:		33%						
7	b) Conditions for Forest Act © clearance in ha./ Nos.:								
		arily in ha./ los.	33%						
	Details of plantation								
		a) Total area available for plantation in each category:							
i) Green ii)Dumps iii) iv)Road Back side filled area			V) Block plantat	ion					
	Nil	Nil	Nil	2 RKM		800 Sqm			
		on details (cat							
	Year of Plantatio n	Species Planted	Spacin g	Height Attaine d	Total Area Covered	Area Still	Available		
8	2022	100 Saplings - Planted inside plant premises. 750 Saplings - Planted outside the plant premises. 250 Saplings - Distribute d to different social institutions and employees	5- 6 Ft.	3 – 6 Ft.	0.1 Ha		Filling		
	c) Surviva	l of Plantation	1						
	Year of Plantatio	2017	2018	2019	2020	2021	2022		
	Total plantatio ns (No.)	100	500	500	500	1000	1100		
	Survival (No.)	36	450	500	400	850	880		
	Survival %	30	36	100	80	75	80		

SHYAM STEEL IMOUSTRIES LTD.
General Manager (Commercial)

9	planta	carrying out tion and tenance	: Self						
	Financial	details year w	ise/plantat	ion wise / i	tem wise				
10	Sl. No.	Year	Fund a	llocated	Expenditur e made	Average cost of each surviving plant in Rs.			
	1	2019			360000				
	2	2020			360000				
	3	2021			480000				
	4	2022			500000				
11	experts ar	n of plantation and their communents and fo	ents and	: Site visit at regular interval is done after plantation for better survival of saplings.					
12	Remarks/	any other info	ormation	: Water		requently done to ensure proper th of saplings.			

SHYAM STEEL INDUSTRIES LTD
General Manager (Commercial)

### Compliance status of CREP recommendation for the period October 2022 to March 2023

Sl. No.	CREP RECOMMENDATIONS	COMPLIANCE STATUS
	CEMENT INDUSTRY	NA
1	Cement plants, which are not complying with notified standard, shall do the following to meet the standards; Augmentation of existing Air Pollution Control Devices- By July 2003 Replacement of existing Air Pollution Control Devices- By July 2004	
2	Cement plants located in critically polluted or urban areas (including 5 km distance outside urban boundary) will meet 100mg/Nm3 limit or particulate matter by December 2004 and continue working to reduce the emission of particulate matter to 50mg/Nm3.	
3	The new cement kilns to be accorded NOC/ Environmental Clearance w.e.f 01,04.2003 will meet the limit of 50 mg/Nm3 for particulate matter emissions.	
4	CPCB will revoke load based standards by December 2003	
5	CPCB and NCBM will evolve SO2 and Nox emission standards by June 2004	
6	The Cement industries will control fugitive emissions from all the raw material and products storage and transfer points by December 2003. However, the feasibility for the control of fugitive emissions form lime stones and coal storage areas will be decided by the National Task Force (NFT). The BTF shall submit its recommendations within three months.	
7	CPCB, NCBM, BIS and Oil refineries will jointly prepare the policy on use of petroleum cokes as fuel in cement kiln by July 2003.	
8	After performance evaluation of various types of continuous monitoring equivalent and feedback form the industries and equipment manufacturers, NTF will decide feasible unit operations/ sections for installation of continuous monitoring equipment. The industry will install the continuous monitoring systems (CMS) by December 2003	
9	Tripping in Kiln ESP to be minimized by July 2003 as per the recommendations of NTF.	
10	Industries will submit the target date to enhance the utilization of waste material by April, 2003.	
11	NCBM will carry out a study on hazardous waste utilization in cement kiln by December 2003.	
12	Cement industries will carry out feasibility study and submit target dates to CPCB for co-generation of power by July 2003.	
*	Non complying units shall be given bank guarantee to respective SPCBs.	
INT	EGRATED IRON & STEEL INDUSTRY	
1	COKE OVEN PLANTS- To meet the parameters PLD(% leaking coolers), PLL (% leaking lids), PLO (% leaking off take), of the notified standards under EPA within three years by December 2005). Industry will submit time bound action plan and PER Chart along with the Bank Guarantee for the implementation or the time. To rebuild at least 40% of the coke oven batteries in next 10 years (by December 2012).	NA
2	STEEL MELTING SHOP- Fugitive emissions- To reduce 30% by March 2004 and 100% by March 2008(including installation of secondary dedusting facilities).	Fugitive emission is under control with PCD
3	BLAST FURNACE- Direct inject of reducing agents by June 2013.	NA

SHYAM STEEL WOUSTRIES LTD. (5)
General Manager (Commercial)

4	SOLID WASTE/ HAZARDOUS WASTE MANAGEMENT- Utilisation of Steel Melting Shop (SMS)/ Blast Furnace (BF) slag as per the following schedule:  * By 2004 - 70%  * By 2006 - 80%  * By 2007 - 100%  Hazardous Waste- Charge of tar sludge/ ETP sludge to Coke Oven by June 2003. Inventorization of the Hazardous waste as per Hazardous Waste (M&H), Rules, 1989 as amended in 2000 and implementation of the Rules by Dec, 2003. (Tar sludge, acid sludge, waste lubricating oil and type fuel falls in the category of Hazardous waste).	To be complied.
5	WATER CONSERVATION/ WATER POLLUTION- To reduce specific water consumption to 5 m3/t for long products and 8 m3/t for flat products by December 2005.	We are maintaining water consumption within the limit.
6	Installation of Continuous stack monitoring system & its calibration in major stacks and setting up of the online ambient air quality monitoring stations by June 2005.	Online stack monitoring system to be installed.
7	To operate the existing pollution control equipment efficiently and to keep proper record of run hours, failure time and efficiency with immediate effect. Compliance report in this regard be submitted to CPCB/ SPCB every three months.	To be complied.
8	To implement the recommendations of Life Cycle Assessment (LCA) study sponsored by MoEF by December 2003.	To be complied.
9	The industry will initiate the steps to adopt the following clean technologies measures to improve the performance of industry towards production, energy land environment.  - Energy recovery of top Blast Furnace (BF) gas.  - Use of Tar- free runner linings.  - De- dusting of Cast house at tap holes, runners, skimmers ladle and charging points.  - Suppression of fugitive emissions using nitrogen gas or other inert gas.  - To study the possibilities of slag and fly ash transportation back to the abandoned mines, to fill up the cavities through empty railway wagons while they return back to the mines and its implementation.  - Procession of the waste containing flux & ferrous wastes through waste recycling plant.  - To implement rain water harvesting  - Reduction Green House Gases by:  Reduction in power consumption  Use of by- products gases for power generation  Promotion of Energy Optimisation Technology including energy/ audit  - To set targets for resource conservation such as Raw material, energy and water consumption to match International Standards.  - Up- gradation in the monitoring and analysis facilities for air and water pollution.  Also to impart elaborate training to the manpower so that realistic data is obtained in the environmental monitoring laboratories.  - To improve overall housekeeping.	NA
10	SPONGE IRON PLANTS Inventorisation of sponge iron plants to be completed by SPCBs/ CPCE by June 2003 and units will be asked to install proper air pollution control equipment by December 2003 to control primary and secondary emissions. As per rebuilding schedule submitted to CPCB/ MoEF.	NA

SHYAM STREL INDUSTRIES LTD.

General Manager (Commercial)



#### Ambient Air Quality report for the month of October'22 - March'23



Laboratory:A-114, Sector-80, Phase-II, Noida, Gautum Budh Nagar - 201305, (U.P)
An ISO 9001: 2015, ISO 14001:2015, ISO 45001:2018 Certified Laboratory)
Website: www.itslab.in, Email: itslaboratorypythtd@gmail.com, info@itslab.in,
contact@itslab.in, httr://lab@gmail.com
+91 9911659800,09958849764,9305780312,07210888634



#### **TEST REPORT**

#### Ambient Air Quality Analysis

Report Code: AAQ-090323-01

Issue Date: 13/03/2023

Issued To:

M/S. Shyam Steel Industries Ltd.

Bamunara Industrial Estate, P.O.- Bamunara,

Durgapur- 713212, Paschim Bardhaman, West Bengal, India

#### **SAMPLING & ANALYSIS DATA**

Sample Drawn By

ITS Representative

Date of Sampling

06/03/2023 To 07/03/2023

Sample Description Sampling Location

Ambient Air

Near Administrative Building Area

Sampling Plan &Procedure Analysis Duration

ITS/LAB/SOP-AAQ/08 09/03/2023 To 13/03/2023

Sampling Instrument Used

Respirable Dust Sampler (PM<sub>10</sub>) Fine Particulate

Sampler (PM2.5) With Gaseous Attachment

Weather Condition

Clear

	TEST RESULT						
S. No.	Parameter	Test Method	Results	Units	Limits as per Environment (Protection) Act.		
1.	Particulate Matter (PM <sub>10</sub> )	IS:5182 Part-XXIII	54.1	μg/m³	100		
2.	Particulate Matter (PM <sub>2.5</sub> )	CPCB Volume – 1 / Gravimetric	30.0	μg /m <sup>3</sup>	60		
3.	Sulphur dioxide (as SO <sub>2</sub> )	IS:5182 Part-II	13.9	μg /m³	80		
4.	Nitrogen dioxide (as NO <sub>2</sub> )	IS:5182 Part-VI	25.2	μg/m³	80		
5.	Ammonia (as NH <sub>3</sub> )	APHA-AIR402	32.0	$\mu g/m^3$	400		
6.	Carbon monoxide (as CO)	IS:5182 Part-X	0.27	mg/m³	4.0		
7.	Lead(as Pb)	IS:5182 Part-XXII	<1.0	μg/m³	1.0		
8.	Ozone (as O <sub>3</sub> )	IS:5182 Part-IX	16.2	μg/m³	180		
9.	Benzene ( as C <sub>6</sub> H <sub>6</sub> )	IS:5182 Part-XI	<1.0	μg/m³	5.0		
10.	Benzo (a) Pyrine	IS:5182 Part-XI	< 0.1	ng/m³	1.0		
11.	Nickel (as Ni)	APHA-AIR420	<1.0	ng/m³	20		
12.	Arsenic (as As)	APHA-AIR302	<1.0	ng/m³	6.0		

atory. 2. Samples will destroyed as per quality policy n writing within 7 days .





## ITS TESTING LABORATORY

Laboratory: A-114, Sector-80, Phase-II, Noida, Gautam Budh Nagar - 201305, (U.P.)
An ISO 9001: 2015, ISO 14001:2015, ISO 45001:2018 Certified Laboratory)
Website: www.itslab.in, Email: itslaboratorypytltd@gmail.com, info@itslab.in, contact@itslab.in, itlrclab@gmail.com +91 9911659800,09958849764,9305780312,07210888634



#### TEST REPORT

**Ambient Air Quality Analysis** 

Report Code: AAQ-090123-01

Issue Date: 13/01/2023

Issued To:

M/S. Shyam Steel Industries Ltd.

Bamunara Industrial Estate, P.O.- Bamunara,

Durgapur- 713212, Paschim Bardhaman, West Bengal, India

#### SAMPLING & ANALYSIS DATA

Sample Drawn By

Date of Sampling

Sample Description

Sampling Location

Sampling Plan & Procedure Analysis Duration

Sampling Instrument Used

Weather Condition

ITS Representative

06/01/2023 To 07/01/2023

Ambient Air

Near Administrative Building Area

ITS/LAB/SOP-AAQ/08

09/01/2023 To 13/01/2023

Respirable Dust Sampler (PM<sub>10</sub>) Fine Particulate Sampler (PM2.5) With Gaseous Attachment

Clear

	TEST RESULT							
S. No.	Parameter	Test Method	Results	Units	Limits as per Environment (Protection) Act.			
1.	Particulate Matter (PM <sub>10</sub> )	IS:5182 Part-XXIII	55.8	μg/m³	100			
2.	Particulate Matter (PM <sub>2.5</sub> )	CPCB Volume – 1 / Gravimetric	27.5	μg/m³	60			
3.	Sulphur dioxide (as SO <sub>2</sub> )	IS:5182 Part-II	13.4	μg/m³	80			
4.	Nitrogen dioxide (as NO <sub>2</sub> )	IS:5182 Part-VI	22.9	μg/m³	80			
5.	Ammonia (as NH3)	APHA-AIR402	29.0	μg/m³	400			
6.	Carbon monoxide (as CO)	IS:5182 Part-X	0.24	mg/m <sup>3</sup>	4.0			
7,	Lead(as Pb)	IS:5182 Part-XXII	<1.0	$\mu g / m^3$	1.0			
8.	Ozone (as O <sub>3</sub> )	IS:5182 Part-IX	15.8	$\mu g / m^3$	180			
9.	Benzene (as C <sub>6</sub> H <sub>6</sub> )	IS:5182 Part-XI	<1.0	μg/m³	5.0			
10,	Benzo (a) Pyrine	IS:5182 Part-XI	< 0.1	ng/m³	1.0			
11.	Nickel (as Ni)	APHA-AIR420	<1.0	ng/m³	20			
12.	Arsenic (as As)	APHA-AIR302	<1.0	ng/m³	6.0			

CHECKEI



M. 02011652800,3305780312,030588497,4,07V1080367

Was site now with the Email: contact finabilitin, intel@aslab.in, literab@gmail.com Att 157 - 9001 - 1012, ISO 14001(2015, ISO 15001-2018 Certified Labor doxy)



Report Code AAQ-091122-01 (Page-1 of 2)

### TEST REPORT

Ambient Air Quality Analysis

Report Code: AAQ-091122-01

Issue Date: 13/11/2022

Issued To:

M/S. Shyam Steel Industries Ltd.

Bamunara Industrial Estate, P.O.- Bamunara,

Durgapur- 713212, Paschim Bardhaman, West Bengal, India

#### SAMPLING & ANALYSIS DATA

Sample Drawn By

ITS Representative

Date of Sampling

07/11/2022 To 08/11/2022

Sample Description

Ambient Air

Sampling Location

Near Administrative Building Area

Sampling Plan & Procedure

ITS/LAB/SOP-AAQ/08

Analysis Duration

09/11/2022 To 13/11/2022

Sampling Instrument Used

Respirable Dust Sampler (PM<sub>10</sub>) Fine Particulate

Sampler (PM2.5) With Gaseous Attachment

Weather Condition

Clear

	TEST RESULT							
S.No.	Parameter	Test Method	Results	Units	Limits as per Environment (Protection) Act.			
1.	Particulate Matter (PM <sub>10</sub> )	lS:5182 Part-XXIII	60.5	μg/m³	100			
2.	Particulate Matter (PM <sub>2.5</sub> )	CPCB Volume – 1 / Gravimetric	24.1	μg/m³	60			
3.	Sulphur dioxide (as SO <sub>2</sub> )	IS:5182 Part-II	12.8	μg/m³	80			
4.	Nitrogen dioxide (as NO <sub>2</sub> )	IS:5182 Part-VI	19.6	μg/m³	80			
5.	Ammonia (as NH <sub>3</sub> )	APHA-AIR402	34.0	μg/m³	400			

SNATORY



Laboratory:A-91, Sector-80, Phase-2. Noida, Gautam Budh Nagar - 201301, (U.P) M.: 09911659800,9305780312,09958849764,07210888634 Website: www.itslab.in, Email: contact@itslab.in, info@itslab.in, itlrclab@gmail.com An ISO 9001: 2015, ISO 14001:2015, ISO 45001:2018 Certified Laboratory)

Report Code AAQ-091122-01 (Page-2 of 2)

6.	Carbon monoxide (as CO)	IS:5182 Part-X	0.30	mg/m³	4.0
7.	Lead(as Pb)	IS:5182 Part-XXII	<1.0	μg/m³	1.0
8.	Ozone ( as O <sub>3</sub> )	IS:5182 Part-LX	16.2	μg/m³	180
9.	Benzene (as C <sub>6</sub> H <sub>6</sub> )	IS:5182 Part-XI	<1.0	μg/m³	5.0
10.	Benzo (a) Pyrine	IS:5182 Part-XI	<0.1	ng/m³	1.0
11.	Nickel (as Ni)	APHA-AIR420	<1.0	ng/m³	20
12.	Arsenic (as As)	APHA-AIR302	<1.0	ng/m³	6.0

SIGNATORY



### ITS TESTING LABORATORY (P) LTD.

aboratory: A-114, Sector-80, Phase-II, Noida, Gautam Budh Nagar - 201305, (U.P)
An ISO 9001: 2015, ISO 14001:2015, ISO 45001:2018 Certified Laboratory)
Website: www.itslab.in, Email: itslaboratorypythtd@gmail.com, info@itslab.in,
contact@itslab.in, itlrclab@gmail.com



+91 9911659800,09958849764,9305780312,07210888634

#### TEST REPORT

**Ambient Air Quality Analysis** 

Report Code: AAQ-120323-02

Issue Date: 16/03/2023

Issued To:

M/S. Shyam Steel Industries Ltd.

Bamunara Industrial Estate, P.O.- Bamunara,

Durgapur-713212, Paschim Bardhaman, West Bengal, India

#### **SAMPLING & ANALYSIS DATA**

Sample Drawn By

: ITS Representative

Date of Sampling

09/03/2023 To 10/03/2023

Sample Description

Ambient Air

Sampling Location

Near Main Gate Area

Sampling Plan & Procedure

ITS/LAB/SOP-AAQ/08

Analysis Duration

13/03/2023 To 16/03/2023

Sampling Instrument Used

Respirable Dust Sampler (PM<sub>10</sub>) Fine Particulate Sampler (PM<sub>2.5</sub>) With Gaseous Attachment

Clear

Weather Condition

	TEST RESULT							
S. No.	Parameter	Test Method	Results	Units	Limits as per Environment (Protection) Act.			
1.	Particulate Matter (PM <sub>10</sub> )	IS:5182 Part-XXIII	56.5	μg/m³	100			
2.	Particulate Matter (PM <sub>2.5</sub> )	CPCB Volume – 1 / Gravimetric	38.2	μg/m³	60			
3.	Sulphur dioxide (as SO <sub>2</sub> )	IS:5182 Part-II	17.6	μg/m³	80			
4.	Nitrogen dioxide (as NO <sub>2</sub> )	IS:5182 Part-VI	33.8	μg/m³	. 80			
5.	Ammonia (as NH <sub>3</sub> )	APHA-AIR402	42.0	$\mu g/m^3$	400			
6.	Carbon monoxide (as CO)	IS:5182 Part-X	0.32	mg/m³	4.0			
7.	Lead(as Pb)	IS:5182 Part-XXII	<1.0	μg/m³	1.0			
8.	Ozone (as O <sub>3</sub> )	IS:5182 Part-IX	18.1	μg/m³	180			
9.	Benzene (as C <sub>6</sub> H <sub>6</sub> )	IS:5182 Part-XI	<1.0	$\mu g/m^3$	5.0			
10.	Benzo (a) Pyrine	IS:5182 Part-XI	< 0.1	ng/m³	1.0			
11.	Nickel (as Ni)	APHA-AIR420	<1.0	ng/m³	20			
12.	Arsenic (as As)	APHA-AIR302	<1.0	ng/m³	6.0			

CHECKED BY

AUTHORIZED SIGNATORY

1 Test reports are walld only for the samples tested in our laboratory, 2. Samples will destroyed as per quality policy.

Any complaints about this report should be communicated in writing within 7

Total liability of our known or the limited to involved amount.



## ITS TESTING LABORATORY

Laboratory: A-114, Sector-80, Phase-II, Noida, Gautam Budh Nugar - 201305, (U.P.) An ISO 9001: 2015, ISO 14001:2015, ISO 45001:2018 Certified Laboratory) Website: www.itslab.in, Email: itslaboratorypytltd@gmail.com, info@itslab.in, contact@itslab.in, iflrclab@gmail.com +91 9911659800,09958849764,9305780312,07210888634



#### TEST REPORT

#### Ambient Air Quality Analysis

Report Code: AAQ-120123-02

Issue Date: 16/01/2023

Issued To:

M/S. Shyam Steel Industries Ltd.

Bamunara Industrial Estate, P.O.- Bamunara,

Durgapur- 713212, Paschim Bardhaman, West Bengal, India

#### **SAMPLING & ANALYSIS DATA**

Sample Drawn By

ITS Representative

Date of Sampling

09/01/2023 To 10/01/2023

Sample Description

Ambient Air

Sampling Location

Near Main Gate Area

Sampling Plan & Procedure Analysis Duration

ITS/LAB/SOP-AAO/08 12/01/2023 To 16/01/2023

Sampling Instrument Used

Respirable Dust Sampler (PM<sub>10</sub>) Fine Particulate

Sampler (PM<sub>2.5</sub>) With Gaseous Attachment

Weather Condition

Clear

	TEST RESULT							
S. No.	Parameter	Test Method	Results	Units	Limits as per Environment (Protection) Act.			
1.	Particulate Matter (PM <sub>10</sub> )	IS:5182 Part-XXIII	68,7	μg/m³	100			
2.	Particulate Matter (PM <sub>2.5</sub> )	CPCB Volume – 1 / Gravimetric	34.9	μg/m³	60			
3.	Sulphur dioxide (as SO <sub>2</sub> )	IS:5182 Part-II	16.2	μg/m³	80			
) 4.	Nitrogen dioxide (as NO <sub>2</sub> )	IS:5182 Part-VI	26.1	$\mu g / m^3$	80			
5.	Ammonia (as NH <sub>3</sub> )	APHA-AIR402	39.0	$\mu g/m^3$	400			
6.	Carbon monoxide (as CO)	IS:5182 Part-X	0.37	mg/m³	4.0			
7.	Lead(as Pb)	lS:5182 Part-XXII	<1.0	μg/m³	1.0			
8.	Ozone ( as O <sub>3</sub> )	IS:5182 Part-IX	16.5	μg/m³	180			
9.	Benzene ( as C <sub>6</sub> H <sub>6</sub> )	IS:5182 Part-XI	<1.0	μg/m³	5.0			
10.	Benzo (a) Pyrine	IS:5182 Part-XI	< 0.1	ng/m³	1.0			
11.	Nickel (as Ni)	APHA-AIR420	<1.0	ng/m³	20			
12.	Arsenic (as As)	APHA-AIR302	<1.0	ng/m³	6.0			



er i comit region a precione con como 1970s, o 1910 doce i and the traditional contacts the many recommends. Burgain year to be An Part Service 11 A to 1 (1980), with the fall to 1985 Councilled about the



Report Code AAQ-121122-03 (Page-1 of 2)

#### TEST REPORT

Ambient Air Quality Analysis

Issue Date: 16/11/2022 Report Code: AAQ-121122-03

Issued To:

M/S. Shyam Steel Industries Ltd.

Bamunara Industrial Estate, P.O.- Bamunara,

Durgapur- 713212, Paschim Bardhaman, West Bengal, India

#### SAMPLING & ANALYSIS DATA

ITS Representative Sample Drawn By

09/11/2022 To 10/11/2022 Date of Sampling

Ambient Air Sample Description

Sampling Location Near Main Gate Area TES/LAB/SOP-AAQ/08 Sampling Plan & Procedure 12/11/2022 To 16/11/2022 Analysis Duration

Respirable Dust Sampler (PM<sub>10</sub>) Fine Particulate Sampling Instrument Used

Sampler (PM2.5) With Gaseous Attachment

Weather Condition Clear

	TEST RESULT							
S.No.	Parameter	Test Method	Results	Units	Limits as per Environment (Protection) Act.			
1.	Particulate Matter (PM <sub>10</sub> )	IS:5182 Part-XXIII	63.2	$\mu g/m^3$	100			
2.	Particulate Matter (PM <sub>2.5</sub> )	CPCB Volume – 1 / Gravimetric	28.5	μg/m³	60			
3.	Sulphur dioxide (as SO <sub>2</sub> )	IS:5182 Part-II	13.6	μg/m³	80			
4.	Nitrogen dioxide (as NO <sub>2</sub> )	IS:5182 Part-VI	18.4	μg /m³	80			
5.	Ammonia (as NH <sub>3</sub> )	APHA-AIR402	35.0	μg/m³	400			

**GNATORY** 



# ITS LABORATORY

Laboratory:A-91, Sector-80, Phase-2, Nolda, Gautam Budh Nagar - 201301, (U.P) M.: 09911659800,9305780312,09958849764,07210888634

Website: www.ltslab.in, Email: contact@ltslab.in, info@itslab.in, itlrctab@gmail.com An ISO 9001: 2015, ISO 14001:2015, ISO 45001:2018 Certified Laboratory)

Report Code AAQ-121122-03 (Page-2 of 2)

				(*
Carbon monoxide (as CO)	IS:5182 Part-X	0.33	mg/m³	4.0
Lead(as Pb)	IS:5182 Part-XXII	<1.0	μg/m³	1.0
Ozone ( as O <sub>3</sub> )	IS:5182 Part-IX	14.6	μg /m³	180
Benzene ( as C <sub>6</sub> H <sub>6</sub> )	IS:5182 Part-XI	<1.0	μg/m <sup>J</sup>	5.0
Benzo (a) Pyrine	IS:5182 Part-XI	<0.1	ng/m³	1.0
Nickel (as Ni)	APHA-AIR420	<1.0	ng/m³	20
Arsenic ( as As)	APHA-AIR302	<1.0	ng/m³	6.0
	Ozone (as O <sub>3</sub> )  Benzene (as C <sub>6</sub> H <sub>6</sub> )  Benzo (a) Pyrine  Nickel (as Ni)	Lead(as Pb)         1S:5182 Part-XXII           Ozone (as O <sub>3</sub> )         IS:5182 Part-IX           Benzene (as C <sub>6</sub> H <sub>6</sub> )         IS:5182 Part-XI           Benzo (a) Pyrine         IS:5182 Part-XI           Nickel (as Ni)         APHA-AIR420	Lead(as Pb)       1S:5182 Part-XXII       <1.0	Carbon monoxide (as CO)       IS:5182 Part-X       0.33       mg/m³         Lead(as Pb)       IS:5182 Part-XXII       <1.0

CHECKED BY



### ITS TESTING LABORATORY (P)

Laboratory:A-114, Sector-80, Phase-II, Noida, Gautam Budh Nagar - 201305. (U.P) An ISO 9001: 2015, ISO 14001:2015, ISO 45001:2018 Certified Laboratory) Website: www.itslab.in, Email: itslaboratorypytltd@gmail.com, info@itslab.in, contact@itslab.in, ittrclab@gmail.com +91 9911659800,09958849764,9305780312,07210888634



#### TEST REPORT

Ambient Air Quality Analysis

Report Code: AAQ-090323-03

Issue Date: 14/03/2023

Issued To:

M/S. Shyam Steel Industries Ltd.

Bamunara Industrial Estate, P.O.- Bamunara,

Durgapur- 713212, Paschim Bardhaman, West Bengal, India

#### **SAMPLING & ANALYSIS DATA**

ITS Representative Sample Drawn By

06/03/2023 To 07/03/2023 Date of Sampling

Ambient Air Sample Description

Sampling Location Near Material Storage Area

ITS/LAB/SOP-AAQ/08 Sampling Plan & Procedure **Analysis Duration** 09/03/2023 To 14/03/2023

Respirable Dust Sampler (PM<sub>10</sub>) Fine Particulate Sampling Instrument Used

Sampler (PM<sub>2.5</sub>) With Gaseous Attachment

Clear Weather Condition

		TEST RESU	LT		
S. No.	Parameter	Test Method	Results	Units	Limits as per Environment (Protection) Act.
1.	Particulate Matter (PM <sub>10</sub> )	IS:5182 Part-XXIII	58.4	μg/m³	100
2.	Particulate Matter (PM <sub>2.5</sub> )	CPCB Volume – 1 / Gravimetric	33.9	μg/m³	60
3.	Sulphur dioxide (as SO <sub>2</sub> )	IS:5182 Part-II	16.1	$\mu g/m^3$	80
1 4.	Nitrogen dioxide (as NO <sub>2</sub> )	IS:5182 Part-VI	35.7	$\mu g/m^3$	80
5.	Ammonia (as NH <sub>3</sub> )	APHA-AIR402	40.2	μg/m³	400
6.	Carbon monoxide (as CO)	IS:5182 Part-X	0.43	mg/m³	4.0
7.	Lead(as Pb)	IS:5182 Part-XXII	<1.0	<u>μg/m³</u>	1.0
8.	Ozone ( as O <sub>3</sub> )	IS:5182 Part-IX	17.8	$\mu g/m^3$	180
9.	Benzene ( as C <sub>6</sub> H <sub>6</sub> )	IS:5182 Part-XI	<1.0	$\mu g/m^3$	5.0
10.	Benzo (a) Pyrine	IS:5182 Part-XI	< 0.1	ng/m³	1.0
11.	Nickel (as Ni)	APHA-AIR420	<1.0	ng/m³	20
12.	Arsenic (as As)	APHA-AIR302	<1.0	ng/m³	6.0

ZÉD SIGNATORY



### ITS TESTING LABORATORY

Laboratory: A-114, Sector-80, Phase-II, Nuida, Gautam Budh Nagar - 201305, (U.P) An ISO 9001: 2015, ISO 14001:2015, ISO 45001:2018 Certified Laboratory) Website: www.itslab.in, Email: itslaboratorypyfitd@gmail.com, info@itslab.in, contact@itslab.in, itlrclab@gmail.com +91 9911659800,09958849764,9305780312,07210888634



#### TEST REPORT

Ambient Air Quality Analysis

Report Code: AAQ-090123-03

Issue Date: 14/01/2023

Issued To:

M/S. Shyam Steel Industries Ltd.

Bamunara Industrial Estate, P.O.- Bamunara,

Durgapur- 713212, Paschim Bardhaman, West Bengal, India

#### SAMPLING & ANALYSIS DATA

Sample Drawn By

ITS Representative

Date of Sampling

06/01/2023 To 07/01/2023

Sample Description

Ambient Air

Sampling Location

Near Material Storage Area

Sampling Plan & Procedure

ITS/LAB/SOP-AAQ/08

Analysis Duration

09/01/2023 To 14/01/2023

Sampling Instrument Used

Respirable Dust Sampler (PM<sub>10</sub>) Fine Particulate

Sampler (PM2.5) With Gaseous Attachment

Weather Condition Clear

		TEST RESU	LT		
S. No.	Parameter	Test Method	Results	Units	Limits as per Environment (Protection) Act.
1.	Particulate Matter (PM <sub>10</sub> )	IS:5182 Part-XXIII	61.6	$\mu g / m^3$	100
2.	Particulate Matter (PM <sub>2.5</sub> )	CPCB Volume – 1 / Gravimetric	30.2	μg/m³	60
3.	Sulphur dioxide (as SO <sub>2</sub> )	IS:5182 Part-II	15.7	$\mu g / m^3$	80
4.	Nitrogen dioxide (as NO <sub>2</sub> )	IS:5182 Part-VI	29.5	$\mu g/m^3$	80
5.	Ammonia (as NH <sub>3</sub> )	APHA-AIR402	37.8	μg/m³	400
6.	Carbon monoxide (as CO)	IS:5182 Part-X	0.34	mg/m <sup>3</sup>	4.0
7.	Lead(as Pb)	IS:5182 Part-XXII	<1.0	μg/m³	1.0
8.	Ozone (as O <sub>3</sub> )	IS:5182 Part-IX	17.3	$\mu g / m^3$	180
9.	Benzene (as C <sub>6</sub> H <sub>6</sub> )	IS:5182 Part-XI	<1.0	μg/m³	5.0
10.	Benzo (a) Pyrine	IS:5182 Part-XI	< 0.1	ng/m³	1.0
11.	Nickel (as Ni)	APHA-AIR420	<1.0	ng/m³	20
12.	Arsenic ( as As)	APHA-AIR302	<1.0	ng/m³	6.0

AUTHORIZE



### ITS LABORATORY

- Age Store A. A. J., See on EU, Clause 2. DeSt. Cheese Brith and proceedings. Per CL., 143 Bit. 30, 450 Age (2014).
- Particle Store Age (2014). Supplies a finite Store Store Age (2014).
- Particle Store Age (2014). Supplies a finite Store Age (2014). But the Control of Age (2014).
- Particle Store Age (2014). Per Additional (2014). Per Additional Age (2014).



Report Code AAQ-101122-02 (Page-1 of 2)

#### TEST REPORT

Ambient Air Quality Analysis

Report Code: AAQ-101122-02

Issuc Date: 14/11/2022

Issued To:

M/S. Shyam Steel Industries Ltd.

Bamunara Industrial Estate, P.O.- Bamunara,

Durgapur- 713212, Paschim Bardhaman, West Bengal, India

#### SAMPLING & ANALYSIS DATA

Sample Drawn By

: ITS Representative

Date of Sampling

07/11/2022 To 08/11/2022

Sample Description

Ambient Air

Sampling Location

Near Material Storage Area

Sampling Plan &Procedure

ITS/LAB/SOP-AAQ/08

Analysis Duration

10/11/2022 To 14/11/2022

Sampling Instrument Used

Respirable Dust Sampler (PM<sub>10</sub>) Fine Particulate

Sampler (PM2.5) With Gaseous Attachment

Weather Condition

Clear

	TEST RESULT							
S.No.	Parameter	Test Method	Results	Units	Limits as per Environment (Protection) Act.			
1.	Particulate Matter (PM <sub>10</sub> )	IS:5182 Part-XXIII	57.1	μg/m³	100			
2.	Particulate Matter (PM <sub>2.5</sub> )	CPCB Volume – 1 / Gravimetric	27.0	μg/m³	60			
3.	Sulphur dioxide (as SO <sub>2</sub> )	IS:5182 Part-II	14.3	μg/m³	80			
4.	Nitrogen dioxide (as NO2)	IS:5182 Part-VI	23.8	μg/m³	80			
5.	Ammonia (as NH <sub>3</sub> )	APHA-AIR402	35.1	μg/m³	400			

CHECKED BY

AUTHORIZED SIGNATORY

Terms & Conditions :

1 Test reports are valid only for the samples tested in our laboratory. 2. Samples will destroyed after 30 days from the date of issue of the test

Total liability of our laboratory is limited to involved another



## ITS LABORATORY

Laboratory: A-91, Sector-80, Phase-2, Noida, Gautam Budh Nagar - 201301, (U.P)
M.: 09911659800,9305780312,09958849764,07210888634
Website: www.itslab.in, Email; contact@itslab.in, info@itslab.in, itlrclab@gmail.com
An ISO 9001: 2015, ISO 14001:2015, ISO 45001:2018 Certified Laboratory)

Report Code AAQ-101122-02 (Page-2 of 2)

6.	Carbon monoxide (as CO)	IS:5182 Part-X	0.39	mg/m³	4.0
7.	Lead(as Pb) .	IS:5182 Part-XXII	<1.0	μg/m³	1.0
8.	Ozone ( as O <sub>3</sub> )	IS:5182 Part-IX	14.8	μg/m³	180
9.	Benzene ( as C <sub>0</sub> H <sub>0</sub> )	IS:5182 Part-XI	<1.0	μg/m³	5.0
10.	Benzo (a) Pyrine	IS:5182 Part-XI	<0.1	ng/m³	1.0
11.	Nickel (as Ni)	APHA-AIR420	<1.0	ng/m³	20
12.	Arsenic (as As)	APHA-AIR302	<1.0	ng/m³	6.0

CHECKED BY



### ITS TESTING LABORATORY (P

Laboratory: A-114, Sector-80, Phase-II, Noida, Gautam Budh Nagar - 201305, (U.P An ISO 9001: 2015, ISO 14001:2015, ISO 45001:2018 Certified Laboratory) Website: www.itslab.in, Email: itslaboratorypytltd@gmail.com, info@itslab.in, contact@itslab.in, itlrclab@gmail.com +91 9911659800,09958849764,9305780312,07210888634



### TEST REPORT

Ambient Air Quality Analysis

Report Code: AAQ-120323-04

Issue Date: 16/03/2023

Issued To:

M/S. Shyam Steel Industries Ltd.

Bamunara Industrial Estate, P.O.- Bamunara,

Durgapur- 713212, Paschim Bardhaman, West Bengal, India

#### **SAMPLING & ANALYSIS DATA**

Sample Drawn By

ITS Representative

Date of Sampling

10/03/2023 To 11/03/2023

Sample Description

Ambient Air

Sampling Location

Near RM Area

Sampling Plan & Procedure

ITS/LAB/SOP-AAQ/08

Analysis Duration

Weather Condition

13/03/2023 To 16/03/2023

Sampling Instrument Used

Respirable Dust Sampler (PM<sub>10</sub>) Fine Particulate Sampler (PM<sub>2.5</sub>) With Gaseous Attachment

Clear

TEST RESULT							
S. No.	Parameter	Test Method	Results	Units	Limits as per Environment (Protection) Act.		
1.	Particulate Matter (PM <sub>10</sub> )	IS:5182 Part-XXIII	55.4	μg/m³	100		
2.	Particulate Matter (PM <sub>2.5</sub> )	CPCB Volume – 1 / Gravimetric	29.8	μg/m³	60		
3.	Sulphur dioxide (as SO <sub>2</sub> )	IS:5182 Part-II	15.0	μg/m³	80		
4.	Nitrogen dioxide (as NO <sub>2</sub> )	IS:5182 Part-VI	25.0	μg/m³	80		
5.	Ammonia (as NH <sub>3</sub> )	APHA-AIR402	39.8	μg/m³	400		
6.	Carbon monoxide (as CO)	IS:5182 Part-X	0.37	mg/m <sup>3</sup>	4.0		
7.	Lead(as Pb)	IS:5182 Part-XXII	<1.0	<u> μg/m³</u>	1.0		
8.	Ozone (as O <sub>3</sub> )	IS:5182 Part-IX	17.1	$+ \mu g/m^3$	180		
9.	Benzene ( as C <sub>6</sub> H <sub>6</sub> )	IS:5182 Part-XI	<1.0	μg/m³	5.0		
10.	Benzo (a) Pyrine	IS:5182 Part-XI	<0.1	ng/m³	1.0		
11.	Nickel (as Ni)	APHA-AIR420	<1.0	ng/m³	20		
12.	Arsenic (as As)	APHA-AIR302	<1.0	ng/m³	6.0		



## ITS TESTING LABORATORY

An ISO 9001: 2015, ISO 14001:2015, ISO 45001:2018 Certified Laboratory) Website: www.itslab.in, Emall: itslaboratorypvtltd@gmail.com, info@.itslab.in, contacta itslab.in, itlrelabagmail.com +91 9911659800,09958849764,9305780312,07210888634



#### TEST REPORT

### **Ambient Air Quality Analysis**

Report Code: AAQ-120123-04

Issue Date: 16/01/2023

Issued To:

M/S. Shyam Steel Industries Ltd.

Bamunara Industrial Estate, P.O.- Bamunara,

Durgapur- 713212, Paschim Bardhaman, West Bengal, India

#### **SAMPLING & ANALYSIS DATA**

Sample Drawn By

ITS Representative

Pate of Sampling

10/01/2023 To 11/01/2023

Sample Description

Ambient Air

Sampling Location

Near RM Area

Sampling Plan & Procedure

ITS/LAB/SOP-AAQ/08

Analysis Duration

12/01/2023 To 16/01/2023

Sampling Instrument Used

Respirable Dust Sampler (PM10) Fine Particulate

Sampler (PM<sub>2.5</sub>) With Gaseous Attachment

Weather Condition

Clear

	TEST RESULT							
S. No.	Parameter	Test Method	Results	Units	Limits as per Environment (Protection) Act.			
1.	Particulate Matter (PM <sub>10</sub> )	IS:5182 Part-XXIII	63.9	μg/m³	100			
2.	Particulate Matter (PM <sub>2.5</sub> )	CPCB Volume – 1 / Gravimetric	27.2	μg/m³	60			
3.	Sulphur dioxide (as SO <sub>2</sub> )	IS:5182 Part-II	14.2	$\mu g/m^3$	80			
4.	Nitrogen dioxide (as NO <sub>2</sub> )	IS:5182 Part-VI	22.7	. μg/m <sup>3</sup>	80			
5.	Ammonia (as NH <sub>3</sub> )	APHA-AIR402	36.5	μg/m³	400			
6.	Carbon monoxide (as CO)	IS:5182 Part-X	0.32	mg/m <sup>3</sup>	4.0			
7.	Lead(as Pb)	IS:5182 Part-XXII	<1.0	$\mu g/m^3$	1.0			
8.	Ozone (as O <sub>3</sub> )	IS:5182 Part-IX	16.8	$\mu g/m^3$	180			
9,	Benzene ( as C <sub>6</sub> H <sub>6</sub> )	IS:5182 Part-XI	<1.0	$\mu g/m^3$	5.0			
10.	Benzo (a) Pyrine	IS:5182 Part-XI	< 0.1	ng/m³	1.0			
11.	Nickel (as Ni)	APHA-AIR420	<1.0	ng/m³	20			
12.	Arsenic ( as As)	APHA-AIR302	<1.0	ng/m³	6.0			



6. 表中的原则,包括斯特斯特的战争。这个种战争主 Combined to the physical and a superprint property of a re-AND THE SHIP OF THE A SECTION PLANT SECTION OF THE SHIP WAS A STORY



Report Code AAQ-121122-04 (Page-1 of 2)

#### TEST REPORT

### Ambient Air Quality Analysis

Report Code: AAQ-121122-04

Issue Date: 16/11/2022

Issued To:

M/S. Shyam Steel Industries Ltd.

Bamunara Industrial Estate, P.O.- Bamunara,

Durgapur- 713212, Paschim Bardhaman, West Bengal, India

#### SAMPLING & ANALYSIS DATA

Sample Drawn By

ITS Representative

Date of Sampling

10/11/2022 To 11/11/2022

Sample Description

Ambient Air

Sampling Location

Near RM Area

Sampling Plan & Procedure

ITS/LAB/SOP-AAO/08

Analysis Duration

12/11/2022 To 16/11/2022

Sampling Instrument Used

Respirable Dust Sampler (PM<sub>10</sub>) Fine Particulate

Sampler (PM25) With Gaseous Attachment

Weather Condition

Clear

(	TEST RESULT						
S.No.	Parameter	Test Method	Results	Units	Limits as per Environment (Protection) Act.		
l.	Particulate Matter (PM <sub>10</sub> )	IS:5182 Part-XXIII	56.2	μg/m³	100		
2.	Particulate Matter (PM <sub>2.5</sub> )	CPCB Volume – 1 / Gravimetric	22.5	μg/m³	60		
3.	Sulphur dioxide (as SO <sub>2</sub> )	IS:5182 Part-II	11.7	μg/m <sup>3</sup>	80		
4.	Nitrogen dioxide (as NO <sub>2</sub> )	IS:5182 Part-VI	18.4	μg/m³	80		
5,	Ammonia (as NH <sub>3</sub> )	APHA-AIR402	33.8	μg/m³	400		

MATORY



# ITS LABORATORY

Laboratory:A-91, Sector-80, Phase-2, Noida, Gautam Budh Nagar - 201301, (U.P)
M.: 09911659800,9305780312,09958849764,07210888634
Website: www.itslab.in, Email: contact@itslab.in, info@itslab.in, itlrclab@gmail.com
An ISO 9001: 2015, ISO 14001:2015, ISO 45001:2018 Certified Laboratory)

Report Code AAQ-121122-04 (Page-2 of 2)

	(Carlos many mida (as CO)		COOL MAZO INTINA (LABE		
6.	Carbon monoxide (as CO)	IS:5182 Part-X	0.29	mg/m³	4.0
7.	Lead(as Pb)	IS:5182 Part-XXII	<1.0	μg/m³	1.0
8.	Ozone ( as O <sub>3</sub> )	IS:5182 Part-IX	14.0	μg/m³	180
9,	Benzene (as C <sub>0</sub> H <sub>6</sub> )	IS:5182 Part-XI	<1.0	μg/m³	5.0
10.	Benzo (a) Pyrine	IS:5182 Part-XI	<0.1	ng/m³	1.0
11.	Nickel (as Ni)	APHA-AIR420	<1.0	ng/m³	20
12.	Arsenic (as As)	APHA-AIR302	<1.0	ng/m³	6.0

CHECKED BY



### ITS TESTING LABORATORY (P)

Laboratory: A-114, Sector-80, Phase-II, Noida, Gautam Budh Nagar - 201305. (U.P. An ISO 9001: 2015, ISO 14001:2015, ISO 45001:2018 Certified Laboratory) Website: www.itslab.in, Email: itslaboratorypytltd@gmail.com, info@itslab.in, contact@itslab.in, itlrclab@gmail.com



+91 9911659800,09958849764,9305780312,07210888634

#### TEST REPORT

#### **Ambient Air Quality Analysis**

Issue Date: 18/03/2023 Report Code: AAQ-150323-05

Issued To:

M/S. Shyam Steel Industries Ltd.

Bamunara Industrial Estate, P.O.- Bamunara,

Durgapur- 713212, Paschim Bardhaman, West Bengal, India

### SAMPLING & ANALYSIS DATA

ITS Representative Sample Drawn By

13/03/2023 To 13/03/2023 Date of Sampling

Ambient Air Sample Description

Near SMS Area Sampling Location ITS/LAB/SOP-AAO/08 Sampling Plan & Procedure

15/11/2022 To 18/11/2022 **Analysis Duration** 

Respirable Dust Sampler (PM<sub>10</sub>) Fine Particulate Sampling Instrument Used

Sampler (PM<sub>2.5</sub>) With Gaseous Attachment

Clear Weather Condition

	TEST RESULT							
S. No.	Parameter	Test Method	Results	Units	Limits as per Environment (Protection) Act.			
1.	Particulate Matter (PM <sub>10</sub> )	IS:5182 Part-XXIII	53.9	μg /m³	100			
2.	Particulate Matter (PM <sub>2.5</sub> )	CPCB Volume – 1 / Gravimetric	28.2	μg/m³	60			
3,	Sulphur dioxide (as SO <sub>2</sub> )	IS:5182 Part-II	14.5	μg/m³	80			
4.	Nitrogen dioxide (as NO <sub>2</sub> )	IS:5182 Part-VI	26.3	μg/m³	80			
5,	Ammonia (as NH <sub>3</sub> )	APHA-AIR402	35.5	μg/m³	400			
6.	Carbon monoxide (as CO)	IS:5182 Part-X	0.33	mg/m³	4.0			
7.	Lead(as Pb)	IS:5182 Part-XXII	<1.0	μg/m³	1.0			
8.	Ozone (as O <sub>3</sub> )	IS:5182 Part-IX	15.0	μg/m³	180			
9.	Benzene (as C <sub>6</sub> H <sub>6</sub> )	IS:5182 Part-XI	<1.0	$\mu g/m^3$	5.0			
10.	Benzo (a) Pyrine	IS:5182 Part-XI	<0.1	ng/m³	1.0			
11.	Nickel (as Ni)	APHA-AIR420	<1.0	ng/m³	20			
12.	Arsenic (as As)	APHA-AIR302	<1.0	ng/m³	6.0			



## ITS TESTING LABORATORY (P) LTD.

Laboratory: A-114, Sector-86, Phase-II, Noida, Gautam Budh Nagar - 201305, (U.P) An ISO 9001: 2015, ISO 14001:2015, ISO 45001:2018 Certified Laboratory) Website: www.itslab.in, Email: itslaboratorypytitd@gmail.com, info@itslab.in, contact@itslab.in, itlrclab@gmail.com +91 9911659800,09958849764,9305780312,07210888634



### TEST REPORT

**Ambient Air Quality Analysis** 

Report Code: AAQ-150123-05

Issue Date: 18/01/2023

Issued To:

M/S. Shyam Steel Industries Ltd.

Bamunara Industrial Estate, P.O.- Bamunara,

Durgapur- 713212, Paschim Bardhaman, West Bengal, India

#### **SAMPLING & ANALYSIS DATA**

Sample Drawn By

: ITS Representative

Date of Sampling

12/01/2023 To 13/01/2023

Sample Description

Ambient Air

Sampling Location

Near SMS Area

Sampling Plan & Procedure

ITS/LAB/SOP-AAQ/08

Analysis Duration

15/11/2022 To 18/11/2022

Sampling Instrument Used

Respirable Dust Sampler (PM<sub>10</sub>) Fine Particulate Sampler (PM<sub>2.5</sub>) With Gaseous Attachment

Weather Condition : Clear

	TEST RESULT							
S. No.	Parameter	Test Method	Results	Units	Limits as per Environment (Protection) Act.			
1.	Particulate Matter (PM <sub>10</sub> )	IS:5182 Part-XXIII	60.2	$\mu g/m^3$	100			
2.	Particulate Matter (PM <sub>2.5</sub> )	CPCB Volume – 1 / Gravimetric	24.5	μg/m <sup>3</sup>	60			
3.	Sulphur dioxide (as SO <sub>2</sub> )	IS:5182 Part-II	13.1	μg/m³	80			
) 4.	Nitrogen dioxide (as NO <sub>2</sub> )	IS:5182 Part-VI	21.7	$\mu g / m^3$	80			
5.	Ammonia (as NH <sub>3</sub> )	APHA-AIR402	32.8	μg/m <sup>3</sup>	400			
6.	Carbon monoxide (as CO)	IS:5182 Part-X	0.29	mg/m <sup>3</sup>	4.0			
7.	Lead(as Pb)	IS:5182 Part-XXII	<1.0	$\mu g/m^3$	1.0			
8.	Ozone ( as O <sub>3</sub> )	IS:5182 Part-IX	14.1	μg/m³	180			
9.	Benzene ( as C <sub>6</sub> H <sub>6</sub> )	IS:5182 Part-XI	<1.0	$\mu g/m^3$	5.0			
10.	Benzo (a) Pyrine	IS:5182 Part-XI	< 0.1	ng/m³	1.0			
11.	Nickel (as Ni)	APHA-AIR420	<1.0	ng/m³	20			
12.	Arsenic (as As)	APHA-AIR302	<1.0	ng/m³	6.0			

CHECKEDBY



### ITS LABORATORY

(4) As a contract of the outbrack of the best and a substituting of the contract of the con



Report Code AAQ-151122-05 (Page-1 of 2)

#### TEST REPORT

Ambient Air Quality Analysis

Report Code: AAO-151122-05 Issue Date: 18/11/2022

Issued To:

M/S. Shyam Steel Industries Ltd.

Bamunara Industrial Estate, P.O.- Bamunara,

Durgapur- 713212, Paschim Bardhaman, West Bengal, India

#### SAMPLING & ANALYSIS DATA

Sample Drawn By : ITS Representative

Date of Sampling : 12/11/2022 To 13/11/2022

Sample Description : Ambient Air
Sampling Location : Near SMS Area
Sampling Plan & Procedure : ITS/LAB/SOP-AAQ/08

Analysis Duration : 15/11/2022 To 18/11/2022

Sampling Instrument Used : Respirable Dust Sampler ( $PM_{10}$ ) Fine Particulate

Sampler (PM<sub>2.5</sub>) With Gaseous Attachment

Weather Condition : Clear

			TEST RESULT						
Parameter	Test Method	Results	Units	Limits as per Environment (Protection) Act.					
Particulate Matter (PM <sub>10</sub> )	IS:5182 Part-XXIII	54.0	μg/m <sup>3</sup>	100					
Particulate Matter (PM <sub>2.5</sub> )	CPCB Volume - 1 /	21.0	μg/m <sup>3</sup>	60					
	Gravimetric								
Sulphur dioxide (as SO <sub>2</sub> )	IS:5182 Part-II	10.5	μg/m³	80					
Nitrogen dioxide (as NO <sub>2</sub> )	IS:5182 Part-VI	18.2	μg /m³	80					
Animonia (as NH <sub>3</sub> )	APHA-AIR402	37.4	μg/m³	400					
	Particulate Matter (PM <sub>10</sub> ) Particulate Matter (PM <sub>2.5</sub> ) Sulphur dioxide (as SO <sub>2</sub> ) Nitrogen dioxide (as NO <sub>2</sub> )	Particulate Matter (PM <sub>16</sub> ) IS:5182 Part-XXIII  Particulate Matter (PM <sub>2.5</sub> ) CPCB Volume – 1 / Gravimetric  Sulphur dioxide (as SO <sub>2</sub> ) IS:5182 Part-II  Nitrogen dioxide (as NO <sub>2</sub> ) IS:5182 Part-VI	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$					

CHECKEDBY



# ITS LABORATORY

Laboratory:A-91, Sector-80, Phase-2, Noida, Gautam Budh Nagar - 201301, (U.P)
M.: 09911659800,9305780312,09958849764,07210888634

Website: www.itslab.in, Email: contact@itslab.in, info@itslab.in, itlrclab@gmail.com An ISO 9001: 2015, ISO 14001:2015, ISO 45001:2018 Certified Laboratory)

Report Code AAQ-151122-05 (Page-2 of 2)

6.	Carbon managida (as CO)		7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7		(3 442) - 44 (13.
υ.	Carbon monoxide (as CO)	1S:5182 Part-X	0.23	mg/m <sup>3</sup>	4.0
7.	Lead(as Pb)	IS:5182 Part-XXII	<1.0	μg /m³	1.0
8.	Ozone ( as O <sub>3</sub> )	IS:5182 Part-IX	12.6	μg /m³	180
9,	Benzene ( as C <sub>6</sub> H <sub>6</sub> )	IS:5182 Part-XI	<1.0	μg/m³	5,0
10.	Benzo (a) Pyrine	IS:5182 Part-XI	<0.1	ng/m³	1.0
11.	Nickel (as Ni)	APHA-AIR420	<1.0	ng/m³	20
12.	Arsenic (as As)	APHA-AIR302	<1.0	ng/m³	6.0

CHECKED BY



# ITS TESTING LABORATORY (P)

Laboratory: A-114, Sector-80, Phase-II, Noida, Gautam Budh Nagar - 201305, (U.P) An ISO 9001: 2015, ISO 14001: 2015, ISO 45001: 2018 Certified Laboratory) Website: www.itslab.in, Email: itslaboratorypythtd@gmail.com, info@itslab.in, contact@itslab.in. itlrclab@gmail.com +91 9911659800,09958849764,9305780312,07210888634



### TEST REPORT

#### Ambient Air Quality Analysis

Report Code: AAQ-150323-06

Issue Date: 18/03/2023

Issued To:

M/S. Shyam Steel Industries Ltd.

Bamunara Industrial Estate, P.O.- Bamunara,

Durgapur- 713212, Paschim Bardhaman, West Bengal, India

### SAMPLING & ANALYSIS DATA

Sample Drawn By

ITS Representative

Date of Sampling

13/03/2023 To 13/03/2023

Sample Description

Ambient Air

Sampling Location

Work Zone Area

Sampling Plan & Procedure

ITS/LAB/SOP-AAQ/08

Analysis Duration

15/03/2023 To 18/03/2023

Sampling Instrument Used

Respirable Dust Sampler (PM<sub>10</sub>) Fine Particulate Sampler (PM25) With Gaseous Attachment

Clear

Weather Condition

	TEST RESULT									
S. No.	Parameter	Test Method	Results	Units	Limits as per Environment (Protection) Act.					
1.	Particulate Matter (PM <sub>10</sub> )	IS:5182 Part-XXIII	50.1	$\mu g/m^3$	100					
2.	Particulate Matter (PM <sub>2.5</sub> )	CPCB Volume – 1 / Gravimetric	28.4	μg/m³	60					
3.	Sulphur dioxide (as SO <sub>2</sub> )	IS:5182 Part-II	12.2	μg/m³	80					
4.	Nitrogen dioxide (as NO <sub>2</sub> )	IS:5182 Part-VI	26.7	μg/m³	80					
5,	Ammonia (as NH <sub>3</sub> )	APHA-AIR402	33.5	μg/m³	400					
6.	Carbon monoxide (as CO)	IS:5182 Part-X	0.31	mg/m <sup>3</sup>	4.0					
7.	Lead(as Pb)	IS:5182 Part-XXII	<1.0	μg/m³	1.0					
8.	Ozone (as O <sub>3</sub> )	IS:5182 Part-IX	12.0	<u>μg/m'</u>	180					
9.	Benzene (as C <sub>6</sub> H <sub>6</sub> )	IS:5182 Part-XI	<1.0	$\mu g/m^3$	5.0					
10.	Benzo (a) Pyrine	IS:5182 Part-XI	< 0.1	ng/m <sup>3</sup>	1.0					
11.	Nickel (as Ni)	APHA-AIR420	<1.0	ng/m³	20					
12.	Arsenic (as Ás)	APHA-AIR302	<1.0	ng/m³	6.0					



# ITS TESTING LABORATORY (P) LTD.

Laboratory:A-f14, Sector-80, Phase-II, Noida, Gautam Budh Nagar - 201305, (U.P.)
An ISO 9001: 2015, ISO 14001:2015, ISO 45001:2018 Certified Laboratory)
Website: www.itslab.in, Email: itslaboratorypytltd@gmail.com, info@itslab.in,
contact@itslab.in, itlrclab@gmail.com
+91 9911659800,09958849764,9305780312,07210888634



### TEST REPORT

Ambient Air Quality Analysis

Report Code: AAQ-150123-06

Issue Date: 19/01/2023

Issued To:

M/S. Shyam Steel Industries Ltd.

Bamunara Industrial Estate, P.O.- Bamunara,

Durgapur- 713212, Paschim Bardhaman, West Bengal, India

## SAMPLING & ANALYSIS DATA

Sample Drawn By

ITS Representative

Date of Sampling

12/01/2023 To 13/01/2023

Sample Description

Ambient Air

Sampling Location

Work Zone Area

Sampling Plan & Procedure

ITS/LAB/SOP-AAQ/08

Analysis Duration

15/01/2023 To 19/01/2023

Sampling Instrument Used

Respirable Dust Sampler (PM<sub>10</sub>) Fine Particulate Sampler (PM<sub>2.5</sub>) With Gaseous Attachment

Clear

Weather Condition

TEST RESULT									
S. No.	Parameter	Test Method	Results	Units	Limits as per Environment (Protection) Act.				
1.	Particulate Matter (PM <sub>10</sub> )	IS:5182 Part-XXIII	55.7	μg/m³	100				
2.	Particulate Matter (PM <sub>2.5</sub> )	CPCB Volume – 1 / Gravimetric	25.9	μg/m³	60				
3.	Sulphur dioxide (as SO <sub>2</sub> )	IS:5182 Part-II	11.8	μg/m³	80				
4.	Nitrogen dioxide (as NO <sub>2</sub> )	IS:5182 Part-VI	23.4	μg/m³	80				
5.	Ammonia (as NH <sub>3</sub> )	APHA-AIR402	31.9	μg/nr³	400				
6	Carbon monoxide (as CO)	IS:5182 Part-X	0.28	mg/m³	4.0				
7.	Lead(as Pb)	IS:5182 Part-XXII	<1.0	$\mu g/m^3$	1.0				
8.	Ozone ( as O <sub>3</sub> )	IS:5182 Part-IX	11.8	μg/m³	180				
9,	Benzene ( as C <sub>6</sub> H <sub>6</sub> )	IS:5182 Part-XI	<1.0	$\mu g/m^3$	5.0				
10.	Benzo (a) Pyrine	IS:5182 Part-XI	< 0.1	ng/m³	1.0				
11.	Nickel (as Ni)	APHA-AIR420	<1.0	ng/m³	20				
12.	Arsenic ( as As)	APHA-AIR302	<1.0	ng/m³	6.0				

CHECKED BY



# ITS LABORATORY

en de la composition de de la composition della composition del

Report Code AAQ-151122-06 (Page-1 of 2)

Issue Date: 19/11/2022

#### TEST REPORT

Ambient Air Quality Analysis

Report Code: AAQ-151122-06

Issued To: M/S. Shyam Steel Industries Ltd.

Bamunara Industrial Estate, P.O.- Bamunara,

Durgapur- 713212, Paschim Bardhaman, West Bengal, India

#### SAMPLING & ANALYSIS DATA

Sample Drawn By : ITS Representative

Date of Sampling : 12/11/2022 To 13/11/2022

Sample Description : Ambient Air

Sampling Location : Work Zone Area

Sampling Plan & Procedure : ITS/LAB/SOP-AAQ/08 Analysis Duration : 15/11/2022 To 19/11/2022

Sampling Instrument Used : Respirable Dust Sampler (PM<sub>10</sub>) Fine Particulate

Sampler (PM<sub>2.5</sub>) With Gaseous Attachment

Weather Condition : Clear

TEST RESULT								
S.No.	Parameter	Test Method	Results	Units	Limits as per Environment (Protection) Act.			
1.	Particulate Matter (PM <sub>16</sub> )	IS:5182 Part-XXIII	58.1	μg/m	100			
2.	Particulate Matter (PM <sub>1.5</sub> )	CPCB Volume – 1 / Gravimetric	28.5	μg /m ,	60			
3.	Sulphur dioxide (as SO <sub>2</sub> )	IS:5182 Part-II	12.2	μg.'m'	80			
4.	Nitrogen dioxide (as NO <sub>2</sub> )	IS:5182 Part-VI	20.0	μg 'm'	80			
5.	Ammonia (as NH <sub>3</sub> )	APHA-AIR402	35.4	μg 'm³	400			

CHECKED BY

AUTHORIZED SIGNATORY

Terms & Conditions :

1 Test reports are valid only for the samples tested in our laboratory. 2. Samples will destroyed after 30 days from the date of issue of the test reports unless otherwise specified. 3. Any complaints about this report should be communicated in writing within 7 days of this report.



# TS LABORATORY

Laboratory:A-91, Sector-80, Phase-2, Noida. Gautam Budh Nagar - 201301, (U.P)

M.: 09911659800,9305780312,09958849764,07210888634

Website: www.itslab.in, Email: contact@itslab.in, info@itslab.in, itlrclab@gmail.com

An ISO 9001: 2015, ISO 14001:2015, ISO 45001:2018 Certified Laboratory)

Report Code AAQ-151122-06 (Page-2 of 2)

6.	Carbon monoxide (as CO)	IS:5182 Part-X	0.35	mg/m³	4.0
7.	Lead(as Pb)	IS:5182 Part-XXII	<1.0	μg /m³	1.0
8.	Ozone (as O <sub>3</sub> )	IS:5182 Part-IX	13.3	μg/m³	180
9.	Benzene ( as C <sub>6</sub> H <sub>6</sub> )	IS:5182 Part-XI	<1.0	μg/m³	5.0
10.	Benzo (a) Pyrine	IS:5182 Part-XI	<0.1	ng/m³	1.0
11.	Nickel (as Ni)	APHA-AIR420	<1.0	ng/m³	20
12.	Arsenic ( as As)	APHA-AIR302	<1.0	ng/m¹	6.0

CHECKED BY

## Stack Emission Monitoring report for the month of October'22 - March'23



Laboratory: A-114, Sector-80, Phase-II, Noida, Gautam Budh Nagar - 201305, (U.)
An ISO 9001: 2015, ISO 14001:2015, ISO 45001:2018 Certified Laboratory)
Website: www.itslab.in, Email: itslaboratorypvfltd@gmail.com, info@itslab.in,
contact@itslab.in, itlrclab@gmail.com
+91 9911659800,09958849784,9305780312,07210888634



#### TEST REPORT

Stack Emission Analysis

Report Code: SE-090323-01

Issue Date: 14/03/2023

Issued To:

M/S. Shyam Steel Industries Ltd.

Bamunara Industrial Estate, P.O.- Bamunara,

Durgapur- 713212, Paschim Bardhaman, West Bengal, India

#### SAMPLING & ANALYSIS DATA

Sample Drawn on 07/03/2023

Sample Drawn By ITS Representative Sample Description Stack Emission

Sampling Time 60 Minutes Sampling Plan &Procedure SOP/SE/09

Analysis Duration Ambient Temperature (°C) 09/03/2023 To 14/03/2023

30.0

Stack Temperature (°C) 228.0

Source of Emission Stack Attached to SMS

Electricity Type of Fuel used Operating Load Normal Type of Stack Metal Circular

Stack Height from Ground Level (meter) 30.0 Average Velocity of Flue Emission (m/s) 12.1 Quantity of Emission Discharged (m<sup>3</sup>/hr) 40348.65

	TEST RESULT									
S.N.	Parameter	Test Method	Results	Units	Specification / Limit (As Per CPCB Norms)					
1.	Particulate Matter (PM)	IS:11255(Part-1)	17.8	mg/Nm <sup>3</sup>	_					
2,	Sulphur Dioxide (SO <sub>2</sub> )	IS:11255(Part-2)	7.6	mg/Nm <sup>3</sup>	<b>4</b>					
3.	Nitrogen Dioxide (NO2)	IS:11255(Part-7)	13.2	mg/Nm <sup>3</sup>	Not Specified					
4	Carbon Monoxide (CO)	IS:13270	0.09	% by Vol.	1% By Volume					
5	Carbon Dioxide (CO2)	IS:13270	0.55	% by Vol.	Not Specified					



# ITS LABORATORY

டங்கள் மு.தி.பே. Sector 80, Phase 2, Noida, Gautam Bedh Nagar - 20 i 301. (U.P.) M.: 09911669800,9305780312,09958849764,07210888634 Websits: www.italab.in, Email: contact@italab.in, info@italab.in, itirclab@gmail.com An ISO 9001: 2015, ISO 14001:2015, ISO 45001:2018 Certified Laboratory)



TC-6179

Report Code SE-091122-01 (Page-1 of 2)

#### TEST REPORT

Stack Emission Analysis

Issued To:

M/S. Shyam Steel Industries Ltd.

Bamunara Industrial Estate, P.O.- Bamunara,

Durgapur-713212, Paschim Bardhaman, West Bengal, India

#### SAMPLING & ANALYSIS DATA

Sample Drawn on : 07/11/2022

Sample Drawn By : ITS Representative Sample Description : Stack Emission Sampling Time : 60 Minutes Sampling Plan & Procedure : SOP/SE/09

Analysis Duration : 09/11/2022 To 14/11/2022

Ambient Temperature (°C) : 31.0 Stack Temperature (°C) : 228.0

Source of Emission : Stack Attached to SMS

Type of Fuel used : Electricity
Operating Load : Normal
Type of Stack : Metal Circular

Stack Height from Ground Level (meter) : 30.0

Average Velocity of Flue Emission (m/s) : 12.1

Quantity of Emission Discharged (m<sup>3</sup>/hr) : 39847.65

	TEST RESULT									
S.N.	Parameter	Test Method	Results	Units	Specification / Limit (As Per CPCB Norms)					
1.	Particulate Matter (PM)	IS:11255(Part-1)	22.0	mg/Nm <sup>3</sup>	NK.					
2.	Sulphur Dioxide (SO2)	IS:11255(Part-2)	9,0	mg/Nm <sup>3</sup>	_					
3.	Nitrogen Dioxide (NO <sub>2</sub> )	IS:11255(Part-7)	17.1	mg/Nm <sup>3</sup>	Not Specified					

CHECKEDRY

AUTHORIZED SIGNATORY

Terms & Conditions:

1 Test reports are valid only for the samples tested in our laboratory. 2. Samples will destroyed after 30 days from the date of issue of the test reports unless otherwise specified. 3. Any complaints about this report should be communicated in writing within 7 days of this report.

A Test liability of our laboratory is limited to involved any unit.



# TS LABORAT

Laboratory:A-91, Sector-80, Phase-2, Noida, Gautam Budh Nagar - 201301, (U.P) M.: 09911659800,9305780312,09958849764,07210888634

Website: www.itslab.in, Email: contact@itslab.in, info@itslab.in. ftlrclab@gmail.com An ISO 9001: 2015, ISO 14001:2015, ISO 45001:2018 Certified Laboratory)

Report	Code	SE-091	122-01	(Page-2	of 2)
--------	------	--------	--------	---------	-------

4. Carbon Monoxide (Co	) IS:13270	0.09	% by Vol	1% By Volume
5. Carbon Dioxide (CO2	IS:13270	0.53	% by Vol.	Not Specified

CHECKED BY

### Waste Water Analysis report for the month of October'22 - March'23



Laboratory:A-114, Sector-80, Phase-II, Nolda, Gautam Budh Nagar - 201305, (U.P)
An ISO 9001: 2015, ISO 14001:2015, ISO 45001:2018 Certified Laboratory)
Website: www.itslab.in, Email: Itslaboratorypytitd@gmail.com, info@itslab.in,
contact@itslab.in, itlrclab@gmail.com
+91 9911659800,09958849764,9305780312,07210888634



#### TEST REPORT

Waste Water Sample Analysis

Report Code: WW-090323-01

Issue Date: 14/03/2023

Issue To

M/S. Shyam Steel Industries Ltd.

Bamunara Industrial Estate, P.O.- Bamunara,

Durgapur- 713212, Paschim Bardhaman, West Bengal, India

#### **SAMPLING & ANALYSIS DATA**

Sample Drawn On

07/03/2023 09/03/2023

Sample Received On

ITS Representative

Sample Drawn By

Waste Water from Project Site

Sample Description Sample Quantity/Packing detail

5ltr. in Plastic Cane & 500ml in Glass Bottle

**Analysis Duration** 

09/03/2023 To 14/03/2023

TEST RESULTS									
S.No.	Parameter	Test Method	Results	Units	Limit as per CPCB Norms				
1.	pH	IS:3025(Part-11):1983	7.40		5.5 - 9.0				
2.	Total Suspended Solid (TSS)	IS:3025(Part-17):1984	42.0	mg/l	100 max				
3.	Chemical Oxygen Demand (as O2)	APHA 5220 B:2005	90.0	mg/l	250 max				
4.	Biological Oxygen Demand (as O <sub>2</sub> )	IS:3025(Part-44):1993	17.0	mg/l	30 max				
5.	Oil & grease	IS:3025(Part-39):1984	<1.0	mg/l	10 max				

Remark: CPCB- Central Pollution Control Board.



# ITS TESTING LABORATORY

Laboratory: A-114, Sector-80, Phase-II, Noida, Gautam Budh Nagar - 201305 (I) Pa An ISO 9001: 2015, ISO 14001:2015, ISO 45001:2018 Certified Laboratory) Website: www.itslab.in, Email: itslaboratorypytltd@gmail.com, info@itslab.iu, contact@itslab.in, itlrclab@gmail.com +91 9911659800,09958849764,9305780312,07210888634



### TEST REPORT

Waste Water Sample Analysis

Report Code: WW-090123-01

Issue Date: 14/01/2023

Issue To

M/S. Shyam Steel Industries Ltd.

Bamunara Industrial Estate, P.O.- Bamunara,

Durgapur- 713212, Paschim Bardhaman, West Bengal, India

#### **SAMPLING & ANALYSIS DATA**

Sample Drawn On

Sample Received On

Sample Drawn By

Sample Description

Sample Quantity/Packing detail **Analysis Duration** 

07/01/2023

09/01/2023

ITS Representative

Waste Water from Project Site

5ltr. in Plastic Cane & 500ml in Glass Bottle

09/01/2023 To 14/01/2023

TEST RESULTS									
S.No.	Parameter	Test Method	Results	Units	Limit as per CPCB Norms				
1.	pН	IS:3025(Part-11):1983	7.33	**	5.5 - 9.0				
2.	Total Suspended Solid (TSS)	IS:3025(Part-17):1984	47.0	mg/l	100 max				
3.	Chemical Oxygen Demand (as O <sub>2</sub> )	APHA 5220 B:2005	82.0	mg/l	250 max				
4.	Biological Oxygen Demand (as O <sub>2</sub> )	IS:3025(Part-44):1993	15.5	mg/l	30 max				
5.	Oil & grease	IS:3025(Part-39):1984	<1.0	mg/l	10 max				

: Remark: CPCB- Central Pollution Control Board.



# ITS LABORATORY

t ah vetorytA-91. Sactor 30. Pha-9-2, Noida Condom Addit Ragar - 201301, (C.P.) Mr. 02-7(1659800,9505780312,09958849764,072(086634 Wheir - vervarslab.in Email: contact@islab.in, info@italab.in, ittralab@gmail.con

Websic., www.islab.in, Email: comiact@islab.in, info@itslab in, itirclab@gmail.com Ar, 150 9001; 2015, ISO 44001.2015, ISO 45001;2018 Certified Laboratory)



### TEST REPORT

Waste Water Sample Analysis

Report Code: WW-090722-01 Issue Date: 14/11/2022

Issue To

M/S. Shyam Steel Industries Ltd.

Bamunara Industrial Estate, P.O.- Bamunara,

Durgapur-713212, Paschim Bardhaman, West Bengal, India

### SAMPLING & ANALYSIS DATA

Sample Drawn On

Sample Received On

Sample Drawn By

Sample Description

Sample Quantity/Packing detail

Analysis Duration

07/11/2022

09/11/2022

ITS Representative

: Waste Water from Project Site

5ltr. in Plastic Cane & 500ml in Glass Bottle

09/11/2022 To 14/11/2022

TEST RESULTS									
S.No.	Parameter	Test Method	Results	Units	Limit as per CPCB Norms				
1.	pH	IS:3025(Part-11):1983	7.40		5.5 - 9.0				
2.	Total Suspended Solid (TSS)	IS:3025(Part-17):1984	53.0	mg/l	100 max				
3.	Chemical Oxygen Demand (as O <sub>2</sub> )	APHA 5220 B:2005	88.0	mg/l	250 max				
4.	Biological Oxygen Demand (as O <sub>2</sub> )	IS:3025(Part-44):1993	17.0	mg/l	30 max				
5.	Oil & grease	IS:3025(Part-39):1984	<1.0	mg/l	10 max				

Remark: CPCB- Central Pollution Control Board.

CHECKED TV

### Water Quality report for the month of October'22 - March'23



Laboratory: A-114, Sector-80, Phase-II, Noida, Gautam Budh Nagar - 201305, (U.I. An ISO 9001: 2015, ISO 14001:2015, ISO 45001:2018 Certified Laboratory)
Website: www.itslab.in, Email: itslaboratorypvihd@gmail.com, info@itslab.in, contact@itslab.in, itlrclab@gmail.com
+91 9911659800,09958849764,9305780312,07210888634

Report Code: W-090323-01 (Page- 1 of 2)

#### TEST REPORT

Water Sample Analysis

Report Code: W-090323-01

Issue Date: 14/03/2023

Issue To

M/S. Shyam Steel Industries Ltd.

Bamunara Industrial Estate, P.O.- Bamunara,

Durgapur- 713212, Paschim Bardhaman, West Bengal, India

#### SAMPLING & ANALYSIS DATA

Sample Received On

09/03/2023

Sample Drawn By

ITS Representative

Sample Description

**Drinking Water from Project Site** 

Sample Drawn On

07/03/2023

Sample Quantity

4.0 Liter Plastic Bottle & 500ml in Glass Bottle.

Analysis Duration

09/03/2023 To 14/03/2023

S.No.	Parameters	Units		lmits :10500-2012) Permissible Limit	Results	Test Method
1	Color	Hazen	5	15	<5	IS:3025(Pt-4)
2	Odour	•	Agreeable	Agreeable	Agreeable	IS:3025(Pt-5)
3	Turbidity	NTU	1	5	<1	IS:3025(Pt-10)
4	pH	•	6.5-8.5	No Relaxation	7.02	IS:3025(Pt-11)
5	Total Hardness (as CaCO3)	mg/l	200	600	66.0	IS:3025(Pt-21)
6	Iron (as Fe)	mg/l	0.3	No Relaxation	< 0.1	APHA22ndEd.,3120
7	Chlorides (as Cl)	mg/l	250	1000	32.0	IS:3025(Pt-32)
8	Fluoride (as F)	mg/l	· ·	1.5	<0.1	APHA22 <sup>nd</sup> Ed.,4500 F (D)
9	TDS	mg/l	500	2000	126	IS:3025(Pt-16)
10	Calcium (as Ca <sup>2+</sup> )	mg/l	75	200	18.8	IS:3025(Pt-40)
11	Magnesium (as Mg <sup>2</sup> ")	mg/l	30	100	4.64	APHA22 <sup>nd</sup> Ed.,3500- Mg (B)
12	Sulphate (as SO4)	mg/l	200	400	10.8	IS:3025(Pt-24)
13	Free Residual Chlorine	mg/l	0.2	1	Nil	IS:3025(Pt-26)



					Report Co	de: W-090323-01 (Page- 2 of 2)
14	Copper (as Cu)	mg/l	0.05	1.5	<0.01	APHA22 <sup>nd</sup> Ed.,3120B/3111 B(AAS)
15	Cadmium (as Cd)	mg/l	0.002	No Relaxation	<0.001	APHA 22 <sup>nd</sup> Ed., 3120 B / 3111 B (AAS)
16	Arsenic (as As)	mg/l	0.01	0.05	< 0.01	APHA 22 <sup>nd</sup> Ed., 3120 B / 3114, AAS- VGA
17	Cyanide (as CN)	mg/l	0.05	No Reinxation	< 0.01	APHA 22nd Ed., 4500CN
18	Lead (as Pb)	mg/l	0.01	No Relaxation	< 0.01	APHA 22 <sup>nd</sup> Ed., 3120 B / 3111 BAAS
19	Zinc (as Zn)	mg/l	5	15	<0.01	APHA 22 <sup>nd</sup> Ed., 3120 B/ 3111 B (AAS)
20	Nickel (as Ni)	mg/l	0.03	No Relaxation	< 0.01	APHA 3111 (B)
21	Chromium (asCr <sup>6+</sup> )	mg/l	0.04	No Relaxation	< 0.01	IS:3025(Pt-52)
22	Alkalinity (as CaCO <sub>3</sub> )	mg/l	191	600	54.0	IS:3025(Pi-23)
23	Aluminum (as Al)	mg/l	0.02	0.2	< 0.02	APHA 22 <sup>nd</sup> Ed3120 B / 3111 B (AAS) / IS3025 (pt-55)
24	Conductivityat25°C	mS	Not Specified	Not Specified	212	APHA 2510
25	Taste	-	Agreeable	Agrecable	Agreeable	IS:3025(Pt-8)
	Bacteriological Paramete	9°S				
i	Total Coliform		MPN/100ml	Shall Not Be Detectable	Not Detected (<2)	IS:1622-1981(Reaff.2003)
2	E.coli		E.coli/100ml	Shall Not Be Detectable	Absent	IS:1622-1981(Reaff.2003)



## ITS TESTING LABORATORY

An ISO 9001: 2015, ISO 14001:2015, ISO 45001:2018 Certified Laboratory) Website: www.itslab.in, Email: itslaboratorypytltd/@gmail.com, info@itslab.in, contact(a itslab.in, itlrelab(a gmail.com +91 9911659800,09958849764,9305780312,07210888634



Report Code: W-090123-01 (Page- 1 of 2)

### TEST REPORT

Water Sample Analysis

Report Code: W-090123-01

Issue Date: 14/01/2023

Issue To

M/S. Shyam Steel Industries Ltd.

Bamunara Industrial Estate, P.O.- Bamunara,

Durgapur- 713212, Paschim Bardhaman, West Bengal, India

#### **SAMPLING & ANALYSIS DATA**

Sample Received On

Sample Drawn By

Sample Description

Sample Quantity

Sample Drawn On

Analysis Duration

09/01/2023

ITS Representative

**Drinking Water from Project Site** 

07/01/2023

4.0 Liter Plastic Bottle & 500ml in Glass Bottle.

09/01/2023 To 14/01/2023

C N.	Parameters	Units	Limits (as per 1S:10500-2012)				
S.110.	rarameters	OHRS "	Desirable Limit	Permissible Limit	Results	Test Method	
1	Color	Hazen	5	15	<5	IS:3025(Pt-4)	
2	Odour	-	Agreeable	Agreeable	Agreeable	IS:3025(Pt-5)	
3	Turbidity	NTU	l	. 5	<1 .	IS:3025(Pt-10)	
4	pН	**	6.5-8.5	No Relaxation	7.08	IS:3025(Pt-11)	
5	Total Hardness (as CaCO3)	mg/l	200	600	72.0	IS:3025(Pt-21)	
6	Iron (as Fe)	mg/l	0.3	No Relaxation	< 0.1	APHA22ndEd.,3120	
7	Chlorides (as Cl)	mg/l	250	1000	28.0	IS:3025(Pt-32)	
8	Fluoride (as F)	mg/l	1	1.5	<0.1	APHA22 <sup>nd</sup> Ed.,4500 F (D)	
9	TDS	mg/l	500	2000	132	IS:3025(Pt-16)	
10	Calcium (as Ca <sup>2+</sup> )	mg/l	75	200	20.8	IS:3025(Pt-40)	
11	Magnesium (as Mg <sup>2+</sup> )	mg/l	30	100	4.89	APHA22 <sup>nd</sup> Ed.,3500- Mg (B)	
12	Sulphate (as SO4)	mg/l	200	400	11.6	IS:3025(Pt-24)	
13	Free Residual Chlorine	mg/1	0.2	: 1	Nil	IS:3025(Pt-26)	





# ITS TESTING LABORATORY (P) LTD.

Laboratory: A-114. Sector-80. Phase-II, Noida. Gautam Budh Nagar - 201305, (U.P)
An 1SO 9001: 2015, ISO 14001:2015, ISO 45001:2018 Certified Laboratory)
Website: www.ltslab.in, Email: itslaboratorypviltd@gmail.com, info@itslab.in,
confact@itslab.in, itlrclab@gmail.com
+91 9911659800,09958849764,9305780312,07210888634

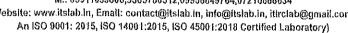
Report Code: W-090123-01 (Page- 2 of 2)

14	Copper (as Cu)	mg/l	0.05	1.5	<0.01	APHA22 <sup>nd</sup> Ed.,3120B/3111 B(AAS)
15	Cadmium (as Cd)	mg/l	0.002	No Relaxation	<0.001	APHA 22 <sup>nd</sup> Ed., 3120 B / 3111 B (AAS)
- 16	Arsenic (as As)	mg/l	0.01	0.05	<0.01	APHA 22 <sup>nd</sup> Ed., 3120 B / 3114, AAS- VGA
17	Cyanide (as CN)	mg/l	0.05	No Relaxation	< 0.01	APHA 22 <sup>nd</sup> Ed., 4500CN
	Lead (as Pb)	mg/l	0.01	No Relaxation	<0.01	APHA 22 <sup>nd</sup> Ed., 3120 B / 3111 BAAS
19	Zinc (as Zn)	mg/l	5	15	<0.01	APHA 22 <sup>nd</sup> Ed., 3120 B/ 3111 B (AAS)
<u> </u>	Nickel (as Ni)	mg/l	0.03	No Relaxation	< 0.01	APHA 3111 (B)
21	Chromium (asCr <sup>6+</sup> )	mg/l	0.04	No Relaxation	< 0.01	IS:3025(Pt-52)
22	Alkalinity (as CaCO <sub>3</sub> )	mg/l	191	600	66.0	IS:3025(Pt-23)
23		mg/l	0.02	0.2	< 0.02	APHA 22 <sup>nd</sup> Ed3120 B / 3111 B (AAS) / IS3025 (pt-55)
24	Conductivityat25°C	mS	Not Specified	Not Specified	248.0	APHA 2510
25	Taste	_	Agreeable	Agreeable	Agreeable	IS:3025(Pt-8)
1	Bacteriological Paramet	ers				
1	Total Coliform	1	MPN/100ml	Shall Not Be Detectable	Not Detected (<2)	IS:1622-1981(Reaff.2003)
2	E.coli		E.coli/100ml	Shall Not Be Detectable	Absent	IS:1622-1981(Reaff.2003)

снескер ву



Laboratory:A-91, Sector-80, Phase-2, Noida, Gautam Budh Nagar - 201301, (U.P. M.: 09911659800,9305780312,09958849764,07210888634 Website: www.itslab.in, Email: contact@itslab.in, info@itslab.in, itirclab@gmail.com





Report Code: W-091122-01 (Page- 1 of 2)

### TEST REPORT

Water Sample Analysis

Report Code: W-091122-01

:

Issue Date: 14/11/2022

Issue To

M/S. Shyam Steel Industries Ltd.

Bamunara Industrial Estate, P.O.- Bamunara,

Durgapur-713212, Paschim Bardhaman, West Bengal, India

### SAMPLING & ANALYSIS DATA

Sample Received On

09/11/2022

Sample Drawn By

ITS Representative

Sample Description

**Drinking Water from Project Site** 

Sample Drawn On

07/11/2022

Sample Quantity

4.0 Liter Plastic Bottle & 500ml in Glass Bottle.

**Analysis Duration** 

09/11/2022 To 14/11/2022

S.No.	Parameters	Units		imits :10500-2012) Permissible Limit	Results	Test Method
1	Color	Hazen	5	15	<5	IS:3025(Pt-4)
2	Odour	- ;	Agreeable	Agreeable	Agreeable	IS:3025(Pt-5)
3	Turbidity	NTU	Ī	5	<1	IS:3025(Pt-10)
4	pH		6.5-8.5	No Relaxation	7.12	IS:3025(Pt-11)
5 .	Total Hardness (as CaCO3)	mg/l	200	600	75.0	IS:3025(Pt-21)
6	Iron (as Fe)	mg/l	0.3	No Relaxation	< 0.1	APHA22 <sup>nd</sup> Ed.,3120
7	Chlorides (as CI)	mg/l	250	1000	24.0	IS:3025(Pt-32)
8	Fluoride (as F)	mg/l	1	1,5	<0,1	APHA22 <sup>nd</sup> Ed., 4500F(D)
9	TDS	mg/l	500	2000	140	IS:3025(Pt-16)
10	Calcium (as Ca <sup>2</sup> )	mg/l	75	200	19.2	IS:3025(Pt-40)
11	Magnesium (as Mg <sup>24</sup> )	mg/l	30	100	6.60	APHA22 <sup>nd</sup> Ed.,3500- Mg(B)
12	Sulphate (as SO4)	mg/l	200	400	12.2	IS:3025(Pt-24)
13	Free Residual Chlorine	mg/l	0.2	. 1	Nil	IS:3025(Pt-26)



# ITS LABORATORY

Laboratory:A-91, Sector-30, Phase-2, Noida, Gautam Bridh Nagar - 201301 (U.P.) M.: 09911659800.9305780312,09958849764,07210883634

Website: www.itslab.in-Email: contact@itslab.in, info@itslab.in. itficlab@gmail.com An ISO 9001: 2015, ISO 14091.2015 ISO 45001:2018 Certified Caboratory)

					Report Code	: W-091122-01 (Page- 2 of 2)
14	Copper (as Cu)	mg/l	0.05	1.5	<0.01	APHA22 <sup>nd</sup> Fd3120B/3111 B(AAS)
15	Cadmium(asCd)	mg/l	0.002	NoRelaxation	<0.001	APHA 22 <sup>nd</sup> Ed., 3120 B / 3111 B (AAS)
16	Arsenic(asAs)	mg/I	0.01	0.05	< 0.01	APHA 22 <sup>nd</sup> Ed., 3120 B / 3114, AAS- VGA
17	Cyanide(asCN)	mg/l	0.05	NoRelaxation	< 0.01	APHA 22 <sup>nd</sup> Ed., 4500CN
18	Lead(asPb)	mg/l	0.01	NoRelaxation	<0.0)	APHA 22 <sup>nd</sup> Ed., 3120 B / 3111 BAAS
- ď	Zinc(asZn)	mg/l	5	15	<0.01	APHA 22 <sup>nd</sup> Ed., 3120 B/ 3111 B (AAS)
20	Nickel(asNi)	mg/l	0.03	NoRelaxation	< 0.01	APHA 3111 (B)
21	Chromium(asCr <sup>6+</sup> )	mg/l	0.04	NoRelaxation	< 0.01	IS:3025(Pt-52)
22	Alkalinity(asCaCO3)	mg/l	191	600	66.0	1S:3025(Pt-23)
23	Aluminum(asAl)	mg/l	0.02	0.2	< 0.02	APHA 22 <sup>nd</sup> Ed3120 B / 3111 B (AAS) / IS3025 (pt-55)
24	Conductivityat256C	mS	Not Specified	NotSpecified	265.0	APHA 2510
25	Taste	***	Agreeable	Agreeable	Agrecable	IS:3025(Pt-8)
	<b>BacteriologicalParamete</b>	ers				
1.	Total Coliform		MPN/100ml	Shall Not Be Detectable	Not Detected (<2)	IS:1622-1981(Reaff.2003)
2	E.coli		E.coli/100ml	Shall Not Be Detectable	Absent	IS:1622-1981(Reaff.2003)

CHECKERBY

Solid Waste Analysis report for the month of October'22 - March'23



## ITS TESTING LABORATORY

Laboratory:A-114, Sector-80, Phase-II, Noida, Gautam Budh Nagar - 201305, (U.P.)
An ISO 9001: 2015, ISO 14001:2015, ISO 45001:2018 Certified Laboratory)
Website: www.itslab.ln, Email: ltslaboratorypytltd@gmail.com, info@itslab.in,
contact@itslab.in, itlrclab@gmail.com
+91 9911659800, 93505780312, 09958849764, 07210888634

Report Code: SW-090323-01, Page 1 of 2

#### TEST REPORT

Solid Waste Sample analysis

Report Code: SW: 090323-01

Issue Date: 14/03/2023

Issue To

M/S. Shyam Steel Industries Ltd.

Bamunara Industrial Estate, P.O.- Bamunara,

Durgapur- 713212, Paschim Bardhaman, West Bengal, India

Sample Received On

Sample Drawn On

Sample Drawn By

Sampling Location Sample Description

Sample Quantity

Job Start Date Job Completion date : 09/03/2023

07/03/2023

ITS Representative

Slag Dumping Yard (SMS)

Solid Waste (Induction Furnace Slag)

5 Kg.

09/03/2023 14/03/2023

**TEST RESULT** 

S. No.	Test Parameters	Protocol By TCLP	Results	Requirement / Limit Per EPA Chapter-'	
				Min.	Max.
1.	1.2Dichloroethane	EPA 5030C	BDL(DL:0.1µg/l)	-	0.5mg/l
2.	2,4-D	EPA8151A	BDL(DL:0.1µg/l	· ·	10.0mg/l
3.	2.4,6Trichlorophenol	EPA8041A	BDL(DL:0,1µg/l	*	2.0mg/l
4.	Benzene	EPA5030C	BDL(DL:0.1µg/l	24	0.5mg/l
5.	Chloro Benzene	EPA5030C	6.3	-	100.0mg/l
6	Carbon Tetra Chloride	EPA5030C	BDL(DL:0.1ug/l		0.5mg/l
7,	Chlorodane	EPA8081A	BDL(DL:0,1µg/I		0.03mg/l
8.	Chloroform	EPA5030C	BDL(DL:0.1µg/l	*	6.0mg/l
9.	1,1Dichloroethylene	EPA5030C	BDL(DL:0,1µg/l	*	0.07mg/l
10.	1.4Dichlorobenzene	EPA 5030C	BDL(DI:0.1µg/l	-	7.5mg/l
11.	2,4,5 TP (Silvex)	By GC-MS(DCM-Etraction)	Absent	] -	1.0mg/l
12.	2,4 Dinitrotoluene	By GC-MS(DCM-Etraction)	Absent	-	0.13mg/l
13.	Cresol (Total)	EPA8041A	BDL(DL:0.1µg/l	+	200.0mg/I
14.	Hexachlorobutadiene	EPA5030C	BDL(DL:0,1µg/l	*	0.5mg/l
15.	Hexachloroethane	By GC-MS(DCM-Etraction)	Absent	-	3.0mg/l
16.	Hexachlorobenzene	EPA8081A	BDL(DL:0,1µg/1		0.13mg/l
17.	m-Cresol	EPA8041A	BDL(DL:0,1µg/l	<b>-</b>	200.0mg/l
18.	Methoxychlor	EPA8081A	BDL(DL:0.1µg/l	<u> </u>	10.0mg/1
19.	Methyl Ethyle Ketone	By GC-MS(DCM-Etraction)	Absent	-	200.0mg/l





Laboratory: A-114, Sector-80, Phase-II, Noida, Gauram Budh Nagar - 201305, (U.P)
An ISO 9001: 2015, ISO 14001:2015, ISO 45001:2018 Certified Laboratory)
Website: www.trslab.in, Emall: itsluboratorypy thto gmail.com. infoa itslab.in.
contact@itslab.in, ithrelah@gmail.com
491 9911659800,09958849764,9305780312,07210888634

Report Code: SW-090323-01, Page 2 of 2

20.	o-Cresol	EPA8041A	BDL(DL:0.1μg/l)	*	200.0mg/l
21.	p-Cresol	EPA8041A	BDL(DL:0.1μg/l)	*	200.0mg1
22.	Pyridine	By GC-MS(DCM-Etraction)	Absent	*	5.0mg/l
23.	l etrachloroethylene	EPA5030C	BDL(DL:0.1µg/l)	*	0.7mg/l
24.	Loxaphene	By GC-MS(DCM-Etraction)	Absent	~	0.5mg/l
25.	Trichloroethylene	EPA5030 <b>C</b>	BDL(DL:0.1µg/1)	*	0.5mg/l
26.	2,4,5 Trichlorophenol	EPA8081A	BDL(DL:0.1µg/l)	-	400.0mg/l
27,	Barium (as Ba)	EPA200.8	4.8	*	100.0mg/l
28.	Cadmium (as Cd)	EPA200.8	BDL(DL:0.1µg/l)		1.0mg/l
29.	Total Chromium (as Cr)	EPA200.8	0.30	-	5.0mg/l
30.	Lead (ns Pb)	EPA200,8	BDL(DL:0.1µg/l)	*	5.0mg/l
31.	Arsenic (as As)	EPA200.8	BDL(DL:0.1µg/l)	*	5.0mg/L
32.	Vinyl Chloride	EPA5030C	BDL(DL:0.1µg/l)	*	0.2mg/l
33.	Mercury (as Hg)	EPA200.8	BDL(DL:0.1µg/l)	*	0.2mg/l
34.	Selenium (as Se)	EPA200.8	BDL(DL:0.1µg/l)		1.0mg/l
35.	Silver (as Ag)	EPA200.8	BDL(DL:0.1µg/l)		5.0mg/l
36.	Copper (as Cu)	, EPA200.8	0.24mg/l	*	
37.	Hexavalent Chromium (as Cr <sup>16</sup> )	By GC-MS/EPA	BDL(DL:0.5mg/kg)	*	*
38.	Endrin	EPA8081A	BDL(DL:0.1μg/l)	*	0.02mg/l
39.	Heptachlor	EPA8081A	BDL(DL:0.1µg/l)	******************************	0.008mg/l
40.	Lindane	EPA8081A	BDL(DL:0.1μg/l)	4	0.4mg/l
41.	Nitrobenzene	By GC-MS (Purge & Trap)	Absent	She di ni herine personne anteriori di si	2.0mg/l

Authorized Signatory



# ESTING LABORATORY

An ISO 9001: 2015, ISO 14001:2015, ISO 45001:2018 Certified Laboratory) Website: www.itslab.in, Email: itslaboratorypytltd@gmail.com, info@itslab.in. contact@itslab.in, itlrclab@gmail.com +91 9911659800,09958849764,9305780312,07210888634

Report Code: SW-090123-01, Page 1 of 2

## TEST REPORT

Solid Waste Sample analysis

Report Code: SW: 090123-01

Issue Date: 14/01/2023

Issue To

M/S. Shyam Steel Industries Ltd.

Bamunara Industrial Estate, P.O.- Bamunara,

Durgapur-713212, Paschim Bardhaman, West Bengal, India

Sample Received On

09/01/2023

Sample Drawn On

07/01/2023

Sample Drawn By

ITS Representative

Sampling Location

Sample Description

Slag Dumping Yard (SMS) Solid Waste (Induction Furnace Slag)

Sample Quantity

5 Kg.

Job Start Date

09/01/2023

Job Completion date

14/01/2023

### TEST RESULT

S. No.	Test Parameters	Protocol By TCLP	Results	Requireme Per EPA	nt / Limit As Chapter- 7
				Min.	Max.
1.	1.2Dichloroethane	EPA 5030C	BDL(DL:0.1µg/l)	-	0.5 mg/l
2.	2,4-D	EPA8151A	BDL(DL:0.1µg/l	74.	10.0mg/l
3.	2,4,6Trichlorophenol	EPA8041A	BDL(DL:0.1µg/l		2.0mg/l
4.	Benzene	EPA5030C	BDL(DL:0.1µg/1		0.5mg/l
5.	Chloro Benzene	EPA5030C	5.7	**	100.0mg/l
6	Carbon Tetra Chloride	EPA5030C	BDL(DL:0.1µg/I		0.5mg/l
7.	Chlorodane	EPA8081A	BDL(DL:0.1µg/l		0.03mg/l
8.	Chloroform	EPA5030C	BDL(DL:0.1µg/l	•	6.0mg/l
9,	1,lDichloroethylene	EPA5030C	BDL(DL:0.1μg/l	**	0.07mg/l
10,	1,4Dichlorobenzene	EPA 5030C	BDL(DL:0.1µg/l		7.5mg/l
11.	2,4,5 TP (Silvex)	By GC-MS(DCM-Etraction)	Absent	_	1.0mg/l
12.	2,4 Dinitrotoluene	By GC-MS(DCM-Etraction)	Absent	NA.	0.13mg/l
13.	Cresol (Total)	EPA8041A	BDL(DL:0.1µg/l	180	200.0mg/l
14,	Hexachlorobutadiene	EPA5030C	BDL(DL:0.1µg/l	-4	0.5mg/l
15.	Hexachloroethane	By GC-MS(DCM-Etraction)	Absent	*	3.0mg/l
16.	Hexachlorobenzene	EPA8081A	BDL(DL:0.1µg/1		0.13mg/l
17.	m-Cresol	EPA8041A	BDL(DL:0.1µg/l	br	200.0mg/l
18.	Methoxychlor	EPA8081A	BDL(DL:0.1µg/l		10.0mg/l
19.	Methyl Ethyle Ketone	By GC-MS(DCM-Etraction)	Absent	-	200.0mg/l

Authorized



# ITS TESTING LABORATORY (P) LTD.

Laboratory: A-114, Sector-80, Phase-H, Noida, Gautam Budh Nagar - 201305, (E.P.)
An ISO 9001: 2015, ISO 14001:2015, ISO 45001:2018 Certified Laboratory)
Website: www.itslab.in, Email: itslaboratorypythtd@gmail.com, info@itslab.in,
contact@itslab.in, ifficlab@gmail.com
491 9911659800.09958849764,9305780312,07210888634

Report Code: SW-090123-01, Page 2 of 2

			4		
20.			BDL(DL:0.1µg/l)		200.0mg/l
21.	p-Cresol	EPA8041A	BDL(DL:0.1μg/l)	200	200.0mg/l
22.	Pyridine	By GC-MS(DCM-Etraction)	Absent	-	5.0mg/l
23.	Tetrachloroethylene	EPA5030C	BDL(DL:0.1µg/l)	_	0.7mg/l
24.	Toxaphene	By GC-MS(DCM-Etraction)	Absent		0.5mg/l
25.	Trichloroethylene	EPA5030C	BDL(DL:0.1µg/l)	-34	0.5mg/l
26.	2,4,5Trichlorophenol	EPA8081A	BDL(DL:0.1μg/l)	3%	400.0mg/l
27.	Barium (as Ba)	EPA200.8	5.6		100.0mg/1
28.	Cadmium (as Cd)	EPA200.8	BDL(DL:0.1μg/l)		1.0mg/l
29.	Total Chromium (as Cr)	EPA200.8	0.20		5.0mg/l
30.	Lead (as Pb)	EPA200.8	BDL(DL:0.1µg/l)	*	5.0mg/l
31.	Arsenic (as As)	EPA200.8	BDL(DL:0.1μg/1)		5.0mg/l
32.	Vinyl Chloride	EPA5030C	BDL(DL:0.1µg/l)	**	0.2mg/l
33.	Mercury (as Hg)	EPA200.8	BDL(DL:0.1µg/l)	-	0.2mg/l
34.	Selenium (as Se)	EPA200.8	BDL(DL:0.1µg/l)	4	1.0mg/f
35.	Silver (as Ag)	EPA200.8	BDL(DL:0.1µg/l)	b#	5.0mg/l
36.	Copper (as Cu)	EPA200.8	0.18mg/l	*	-
37.	Hexavalent Chromium (as Cr <sup>+6</sup> )	By GC-MS/EPA	BDL(DL:0.5mg/kg)	***	-
38.	Endrin	EPA8081A	BDL(DL:0.1µg/l)	w	0.02mg/l
39.	Heptachlor	EPA8081A	BDL(DL:0.1μg/l)	**	0.008mg/l
40.	Lindane	EPA8081A	BDL(DL:0.1µg/l)	-	0.4mg/l
41.	Nitrobenzene	By GC-MS (Purge & Trap)	Absent	200	2.0mg/l

Checked by

Authorized Signatory



Laboratory: A-91, Sector-80, Phase-2, Noida, Gautam Budh Nagar - 201301, (U.P) M.: 09911659800,9305780312,09958849764,07210888634 Website: www.itslab.in, Email: contact@itslab.in, info@itslab.in, itlrclab@gmail.com An ISO 9001: 2015, ISO 14001:2015, ISO 45001:2018 Certified Laboratory)

Report Code: SW-091122-01, Page 1 of 2

## TEST REPORT

Solid Waste Sample analysis

Report Code: SW: 091122-01

Issue Date: 14/11/2022

Issued To

: M/S. Shyam Steel Industries Ltd.

Bamunara Industrial Estate, P.O.- Bamunara.

Durgapur- 713212, Paschim Bardhaman, West Bengal, India

Sample Received On

09/11/2022

Sample Drawn On

07/11/2022

Sample Drawn By

ITS Representative

Sampling Location

Sample Description

Slag Dumping Yard (SMS) Solid Waste (Induction Furnace Slag)

Sample Quantity

5 Kg.

Job Start Date Job Completion date

09/11/2022 14/11/2022

TEST RESULT

S. No.	Test Parameters	Protocol By TCLP	Results	Requirement / Limit As Per EPA Chapter- 7	
1	1 0102 ald a set	FTS 1 "AAAA	Tests who are constructed as a second	Min.	Max.
1.	1.2Dichloroethane	EPA 5030C	BDL(DL:0.1µg/l)	**	0.5mg/l
2.	2,4-D	EPA8151A	BDL(DL:0.1µg/l	·+	10.0mg/l
3.	2,4,6Trichlorophenol	EPA8041A	BDL(DL:0.1µg/l	+	2.0mg/l
4.	Benzene	EPA5030C	BDL(DL:0.1µg/l	**	0.5mg/l
5.	Chloro Benzene	EPA5030C	5.1	-	100.0mg/l
<u>6.</u>	Carbon Tetra Chloride	EPA5030C	BDL(DL:0.1ug/l		0.5mg/l
7.	Chlorodane	EPA8081A	BDL(DL:0.1µg/l	**	0.03mg/l
8.	Chloroform	EPA5030C	BDL(DL:0.1µg/l	-	6.0mg/l
9.	1.1Dichloroethylene	EPA5030C	BDL(DL:0.1µg/l	**	0.07mg/l
10.	1,4Dichlorobenzene	EPA 5030C	BDL(DL:0.1µg/l	64	7.5mg/l
11.	2,4,5 TP (Silvex)	By GC-MS(DCM-Etraction)	Absent	>*	1.0mg/l
12.	2.4 Dinitrotoluene	By GC-MS(DCM-Etraction)	Absent		0.13mg/l
13.	Cresol (Total)	EPA8041A	BDL(DL:0.1µg/l	-4	200.0mg/l
14.	Hexachlorobutadiene	EPA5030C	BDL(DL:0.1µg/l		0.5mg/l
15.	Hexachloroethane	By GC-MS(DCM-Etraction)	Absent	*	3.0mg/l
16.	Hexachlorobenzene	EPA8081A	BDL(DL:0.1µg/l	*	0.13mg/l
17.	m-Cresol	EPA8041A	BDL(DL:0.1µg/l		200.0mg/l
18.	Methoxychlor	EPA8081A	BDL(DL:0.1µg/l		10.0mg/l
19.	Methyl Ethyle Ketone	By GC-MS(DCM-Etraction)		**	200.0mg/l

uthorized Signatory



# ITS LABORATORY

tinhorecory.A. 91, Sector 80, Phose-2, Nolda, Gautam Budh Nagar (2013/01, (U.P) M.: 69911659300,9305199312.00958849764.07210888634

Vr-heite www.itsiab in Email: contact@itslab in, info@itslab.in. ftir-tab@gmail.com &n (SO 3001-2015, ISO 14001,2015-ISO 15001-2018 Certified Laboratory)

Report Code: SW-091122 01, Page 2 of 2

			<u>-</u>		4,7
20.	o-Cresol	1 PA8041A	BDL(DL:0.1µg/l)	*	200,0mg/t
21.	p-Cresol	FPA8041A	BDI (DL:0.1µg/l)	44	200.0mg/l
22.	Pyridine	By GC-MS(DCM-Etraction)	Absent	49	5.0mg/l
23.	Tetrachloroethylene	EPA5030C	BDL(DL:0.1µg/l)	**	0.7mg/l
3.4	Toxaphene	By GC-MS(DCM-Etraction)	Absent	**	0.5mg°l
25.	Trichloroethylene	EPA5030C	BDL(DL:0.1µg/l)	gri	0.5mg/l
26.	2,4,5Trichlorophenol	EPA8081A	BDL(DL:0.1μg/l)	.00	400.0mg/l
27.	Barium (as Ba)	EPA200.8	6.0	394	100.0mg/l
28.	Cadmium (as Cd)	EPA200.8	BDL(DL:0.1µg/l)	**	1.0mg/1
29.	Total Chromium (as Cr)	EPA200.8	0.22	*	5.0mg/l
30.	Lead (as Pb)	FPA200.8	BDL(DL:0.1µg/l)	16 <b>4</b>	5.0mg/l
31,	Arsenic (as As)	EPA200.8	BDL(DL:0.1μg/l)		5.0mg/l
32.	Vinyl Chloride	EPA5030C	BDL(DL:0.1µg/l)	*	0.2mg/l
33.	Mercury (as Hg)	EPA200.8	BDL(DL:0.1µg/l)	994	0.2mg/l
34.	Selenium (as Se)	EPA200.8	BDL(DL:0.1µg/l)	wid	1.0mg/1
35.	Silver (as Ag)	EPA200.8	BDL(DL:0.1µg/l)	*	5.0mg/l
36.	Copper (as Cu)	EPA200.8	0,13mg/l	654	
37.	Hexavalent Chromium (as Cr <sup>+6</sup> )	By GC-MS/EPA	BDL(DL:0.5mg/kg)		4
38.	Endrin	EPA8081A	BDL(DL:0.1µg/l)	*	0.02mg/l
39.	Heptachlor	EPA8081A	BDL(DL:0.1µg/l)	**	0.008mg/l
40.	Lindane	EPA8081A	BDL(DL:0.1 µg/l)	\$	0.4mg/l
41.	Nitrobenzene	By GC-MS (Purge & Trap)	Absent	**	2.0mg/l

Checked by

Authorized alguatory

## Ambient Noise Quality report for the month of October'22 - March'23



Issued To:

Laboratory:A-114, Sector-80, Phase-II, Noida, Gautam Budh Nagar - 201305, (U.P)
An ISO 9001: 2015, ISO 14001:2015, ISO 45001:2018 Certified Laboratory)
Website: www.itslab.in, Email: itslaboratorypythd@gmail.com, info@itslab.in, contact@itslab.in, ittrclab@gmail.com
+91 9911659800,09958849764,9305780312,07210888634



Issue Date: 14/03/2023

#### TEST REPORT

#### **Ambient Noise Analysis**

Report Code: N-090323-01

M/S. Shyam Steel Industries Ltd.

Bamunara Industrial Estate, P.O.- Bamunara,

Durgapur- 713212, Paschim Bardhaman, West Bengal, India

Sample Drawn On

06/03/2023 To 07/03/2023

Sample Drawn By

ITS Representative

Sample Received On

09/03/2023

Sample description

Ambient Noise

Sampling Location

Near Administrative Building Area

Sampling Duration

24 hours

Analysis Duration

09/03/2023 To 14/03/2023

		T	EST RESU	LTS		***************************************		
S. No	Test Parameters	Results	Results Units Requirement (as per CPCB Guidelines Limits indB(A) Leq					
1.	Equivalent Noise Level (6.0 Am To	53.8	dB(Λ)	Category of Area/ Zone	Day Time	Night Time		
	10.0 Pm)		******	Industrial	75	70		
	Equivalent Noise			Area				
2.	Level (10.0 Pm To 6.0 Am)	30.5	dB(A)	Commercial Area	65	55		
3.	Lmax	57.9	dB(Λ)	Residential Area	55	45		
4.	Lmin	27.4	dB(A)	Silence Zone	50	40		



# ITS TESTING LABORATOR

Laboratory: A-114, Sector-80, Phase-II, Noida, Gautam Budh Nagar - 201305, (U.P) An ISO 9001: 2015, ISO 14001:2015, ISO 45001:2018 Certified Laboratory) Website: www.itslab.in, Email: itslaboratorypytltd@gmail.com, info@itslab.in, contact@itslab.in, itlrelab@gmail.com +91 9911659800,09958849764,9305780312,07210888634



### TEST REPORT

**Ambient Noise Analysis** 

Report Code: N-090123-01

Issue Date: 14/01/2023

Issued To:

M/S. Shyam Steel Industries Ltd.

Bamunara Industrial Estate, P.O.- Bamunara,

Durgapur- 713212, Paschim Bardhaman, West Bengal, India

Sample Drawn On

Sample Drawn By

Sample Received On

Sample description

Sampling Location

Sampling Duration

Analysis Duration

06/01/2023 To 07/01/2023

ITS Representative

09/01/2023

**Ambient Noise** 

Near Administrative Building Area

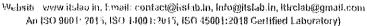
24 hours

09/01/2023 To 14/01/2023

TEST RESULTS								
S. No	Test Parameters  Equivalent Noise Level (6.0 Am To	Results 55.0	Units dB(A)	Requirement (as per CPCB Guidelines Limits indB(A) Leg				
1,				Category of Area/ Zone	Day Time	Night Time		
	10.0 Pm) Equivalent Noise			Industrial Area	75	70		
2.	Level (10.0 Pm To 6.0 Am)	31.8	dB(A)	Commercial Area	65	55		
3,	Lmax	59.6	dB(A)	Residential Area	55	45		
4.	Lmin	28.1	dB(A)	Silence Zone	50	40		



M.: 09911659800,9305789312.09958849764,07210888634





### TEST REPORT

## **Ambient Noise Analysis**

Report Code: N-101122-01 Issue Date: 14/11/2022

Issued To:

M/S. Shyam Steel Industries Ltd.

Bamunara Industrial Estate, P.O.- Bamunara,

Durgapur-713212, Paschim Bardhaman, West Bengal, India

Sample Drawn On

07/11/2022 To 08/11/2022

Sample Drawn By

ITS Representative

Sample Received On

10/11/2022

Sample description

Sampling Location

**Ambient Noise** Near Administrative Building Area

Sampling Duration

24 hours

**Analysis Duration** 

10/11/2022 To 14/11/2022

		T	EST RESU	ILTS		
S. No	Test Parameters  Equivalent Noise Level (6.0 Am To	Results 54.2	Units dB(A)	Requirement (as per CPCB Guidelines Limits in dB (A) Leq		
1.				Category of Area/Zone	Day Time	Night Time
·····	10.0 Pm)  Equivalent Noise	uivalent Noise vel (10.0 Pm To 31.0 dB(A)		Industrial Area	75	70
2.	Level (10.0 Pm To 6.0 Am)		dB(A)	Commercial Area	65	55
3.	Lmax	58.0	dB(A)	Residential Area	55	45
4.	Lmin	27.0	dB(A)	Silence Zone	50	40

SIGNATORY



# TESTING LABORATOR

Laboratory: A-114, Sector-80, Phase-II, Nolda, Gautam Budh Nagar - 201305, (U.P) An ISO 9001: 2015, ISO 14001:2015, ISO 45001:2018 Certified Laboratory) Website: www.itslab.in, Email: itslaboratorypytltd@gmail.com, info@itslab.in, contact@itslab.in, itirclab@gmail.com +91 9911659800,09958849764,9305780312,07210888634



#### TEST REPORT

**Ambient Noise Analysis** 

Report Code: N-090323-02

Issue Date: 14/03/2023

Issued To:

M/S. Shyam Steel Industries Ltd.

Bamunara Industrial Estate, P.O.- Bamunara,

Durgapur- 713212, Paschim Bardhaman, West Bengal, India

Sample Drawn On

06/03/2023 To 07/03/2023

Sample Drawn By

ITS Representative

Sample Received On

Sample description

09/03/2023

Sampling Location

Ambient Noise

Near Vill .- Side Boundary Wall Area

Sampling Duration

24 hours

Analysis Duration

09/03/2023 To 14/03/2023

TEST RESULTS								
S. No	Test Parameters	Results	sults Units Requirement (as per CPCB Guid Limits indB(A) Leq					
1.	Equivalent Noise Level (6.0 Am To	53.9	dB(Λ)	Category of Area/Zone	Day Time	Night Time		
***************************************	10.0 Pm)		***************************************	Industrial	75	70		
	Equivalent Noise	29.2	dB(A)	Area				
2.	Level (10.0 Pm To 6.0 Am)			Commercial Area	65	55		
3.	Lmax	58.5	dB(A)	Residential Area	55	45		
4,	Lmin	26.3	dB(A)	Silence Zone	50	40		

Terms & Conditions:

1 Test reports are valid only for the samples tested in our laboratory. 2. Samples will destroyed as per quality policy.
3. Any complaints about this report should be communicated in writing within 7 days.
4. Total liability of our laboratory is limited to invoiced amount.



## ITS TESTING LABORATORY (P

Laboratory: A-114, Sector-80, Phase-II, Noida, Gautam Budh Nagar - 201305, (11.P) An ISO 9001: 2015, ISO 14001:2015, ISO 45001:2018 Certified Laboratory) Website: www.itslab.in, Email: itslaboratorypvtltd@gmail.com, info@itslab.in. contact@itslab.in, itlrclab@gmail.com +91 9911659800,09958849764,9305780312,07210888634



TEST REPORT

**Ambient Noise Analysis** 

Report Code: N-090123-02

Issue Date: 14/01/2023

Issued To:

M/S. Shyam Steel Industries Ltd.

Bamunara Industrial Estate, P.O.- Bamunara,

Durgapur- 713212, Paschim Bardhaman, West Bengal, India

Sample Drawn On

06/01/2023 To 07/01/2023

Sample Drawn By

ITS Representative

Sample Received On

09/01/2023

Sample description

Sampling Location

Ambient Noise

Near Vill.- Side Boundary Wall Area

Sampling Duration

24 hours

Analysis Duration

09/01/2023 To 14/01/2023

TEST RESULTS								
S. No	Test Parameters	Results	Units	Requirement (as per CPCB Guidelines Limits indB(A) Leq				
1.	<b>Equivalent Noise Level</b> (6.0 Am To	54.5	dB(A)	Category of Area/ Zone	Day Time	Night Time		
	10.0 Pm)			Industrial	75	70		
	Equivalent Noise	30.7	dB(A)	Area	······			
2.	Level (10.0 Pm To 6.0 Am)			Commercial Area	65	55		
3.	Lmax	60.0	dB(A)	Residential Area	55	45		
4.	Lmin	27.5	dB(A)	Silence Zone	50	40		

1 Test reports are valid only for the samples tested in our laboratory. 2. Samples will destroyed as per quality policy. 3. Any complaints about this report should be communicated in writing within 7 days . 4. Total liability of our laboratory is limited to invoiced amount.



Laborator /:A-91, Sector-80. Phase-2, Noida, Gautam Budh Nagar - 201301, (U.P.) M. 09911659800,9305/80312,09958849764,07210888634 Website: www.itslaf- in, Fmail: contact@itslab.in, info@itslab.in, itle.laf.@gmail.com An ISO 9001: 2015, ISO 14001:2015, ISO 45001:2018 Certified Laboratory)



### TEST REPORT

### **Ambient Noise Analysis**

Report Code: N-101122-02

Issue Date: 14/11/2022

Issued To:

M/S. Shyam Steel Industries Ltd.

Bamunara Industrial Estate, P.O.- Bamunara,

Durgapur-713212, Paschim Bardhaman, West Bengal, India

Sample Drawn On

Sample Drawn By

Sample Received On

Sample description

Sampling Location

Sampling Duration

**Analysis Duration** 

07/11/2022 To 08/11/2022

IT'S Representative

10/11/2022

**Ambient Noise** 

Near Vill.- Side Boundary Wall Area

24 hours

10/11/2022 To 14/11/2022

		T	EST RESL	ILTS		4
S. No	Test Parameters	Results	Units	Requirement	Guidelines	
1.	<b>Equivalent Noise Level</b> (6.0 Am To	53.1	dB(A)	Category of Area/ Zone	dB (A) Leq Day Time	Night Time
	10.0 Pm)  Equivalent Noise	enderine er er ermer men met met met general vide general vide general vide general vide general vide general		Industrial Area	75	70
2.	Level (10.0 Pm To 32. 6.0 Am)	32.2	dB(A)	Commercial Area	65	55
3.	Lmax	58.1	dB(A)	Residential Area	55	45
4.	Lmin	27.9	dB(A)	Silence Zone	50	40

GNATORY

Terms & Conditions:

Terms a conditions.

1 Test reports are valid only for the samples tested in our laboratory. 2. Samples will destroyed after 30 days from the date of issue of the test reports unless otherwise specified. 3. Any complaints about this report should be communicated in writing within 7 days of this report.

4. Total liability of our laboratory is limited to invoiced amount.