

To,  
The Scientist – E,  
Ministry of Environment, Forest and Climate Change,  
Sub Office, Kolkata  
IB – 198, Sector – III, Salt Lake City, Kolkata – 700106.

Date : 21.11.2024

Ref: Environmental Clearance letter no. –F.No.– J–11011/887/2007-IA(I) dated 16<sup>th</sup> November, 2021.

Subject: Submission of Six-Monthly Compliance Report for the period of April – 2024 to September – 2024 for Environmental Compliance Status of M/s Shyam Sel & Power Limited, Vill – Dhasna, P.O.- Bahadurpur, P.S.- Jamuria, Dist- Paschim Bardhaman, Pin – 713362, West Bengal.

Respected Madam/Sir,

We are submitting herewith the Six Monthly Environmental Compliance Report status for the period of **April – 2024 to September – 2024** for the condition as stated in Environmental Clearance letter in favor of M/s Shyam Sel & Power Limited, Vill – Dhasna, P.O.- Bahadurpur, P.S.- Jamuria, Dist- Paschim Bardhaman, Pin – 713362, West Bengal.

Kindly find the enclosed Six-Monthly Compliance Report along with required Annexures as attached herewith.

Thanking You.

Regards

For Shyam Sel & Power Limited, Jamuria

Shyam Sel & Power Ltd.



Director/Authorized Signatory

Prashant Kumar  
(Authorized Signatory)

CC:

1. IRO – Bhubaneswar.
2. EIM Cell, West Bengal Pollution Control Board, Parivesh Bhawan, Kolkata.
3. West Bengal Pollution Control Board, Asansol Regional Office.

SHYAM SEL AND POWER LIMITED

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**Your (Half Yearly Compliance Report) has been Submitted with following details**

<b>Proposal No</b>	IA/WB/IND/6700/2008
<b>Compliance ID</b>	78857109
<b>Compliance Number(For Tracking)</b>	EC/M/COMPLIANCE/78857109/2024
<b>Reporting Year</b>	2024
<b>Reporting Period</b>	01 Dec(01 Apr - 30 Sep)
<b>Submission Date</b>	28-11-2024
<b>RO/SRO Name</b>	ARTATRANA MISHRA
<b>RO/SRO Email</b>	jhk109@ifs.nic.in
<b>State</b>	WEST BENGAL
<b>RO/SRO Office Address</b>	Integrated Regional Offices, Kolkata
<b>Note:-</b> SMS and E-Mail has been sent to ARTATRANA MISHRA, WEST BENGAL with Notification to Project Proponent.	

**Half Yearly Compliance Report****2024****01 Dec(01 Apr - 30 Sep)****Acknowledgement**

<b>Proposal Name</b>	Proposed Integrated Steel Plant		
<b>Name of Entity / Corporate Office</b>	Prashant Kumar		
<b>Village(s)</b>	N/A		
<b>District</b>	PASCHIM  BARDHAMAN		
<b>Proposal No.</b>	IA/WB/IND/6700/2008	<b>Category</b>	Industrial Projects - 1
<b>Plot / Survey / Khasra No.</b>	N/A	<b>Sub-District</b>	N/A
<b>State</b>	WEST BENGAL	<b>Entity's PAN</b>	*****9421J
<b>MoEF File No.</b>	J-11011/887/2007-IA.II(I)	<b>Entity name as per PAN</b>	SHYAM SEL & POWER LIMITED

**Compliance Reporting Details**

**Reporting Year** 2024  
**Remarks (if any)**  
**Reporting Period** 01 Dec(01 Apr - 30 Sep)

**Details of Production and Project Area**

**Name of Entity / Corporate Office** Prashant Kumar

	<b>Project Area as per EC Granted</b>	<b>Actual Project Area in Possession</b>
Private	284.09	284.09
Revenue Land	0	0
Forest	0	0
Others	0	0
<b>Total</b>	<b>284.09</b>	<b>284.09</b>

**Production Capacity**

Sr. no	Product Name	units	Valid Upto	Capacity	Production last year	Capacity as per CTO
1	Iron Ore Pellet	Million Tons per Annum (MTPA)	31/07/2028	3.0	1.721	3.0
2	Direct Reduced Iron	Million Tons per Annum (MTPA)	31/07/2028	2.22	1.110	1.58
3	Steel Melting Shop	Million Tons per Annum (MTPA)	31/07/2028	2.88	0.790	1.18
4	Rolling Mill (TMT)	Million Tons per Annum (MTPA)	31/07/2028	0.15	0.138	0.15
5	Rolling Mill (Structural)	Million Tons per Annum (MTPA)	31/07/2028	0.20	0.165	0.20
6	Rolling Mill (WRM)	Million Tons per Annum (MTPA)	31/07/2028	0.3	0.260	0.3
7	Rolling Mill (Long Product)	Million Tons per Annum (MTPA)	31/07/2028	0.7	0.225	0.5
8	Captive Power Plant	MW	31/07/2028	316	171	171
9	Producer Gas Plant	Cu.M/Hr	31/07/2028	84000	48000	48000
10	Oxygen Plant	Cu.M/Hr	31/07/2028	416.66	200	200
11	Coke Oven	Million Tons per Annum (MTPA)	N/A	0.45	0	0
12	Blast Furnace	Million Tons per Annum (MTPA)	N/A	0.77	0	0
13	Sinter	Million Tons per Annum (MTPA)	N/A	1.11	0	0
14	D I Pipe	Million Tons per Annum (MTPA)	N/A	0.25	0	0

## Conditions

### Specific Conditions

Sr.No.	Condition Type	Condition Details
1	WATER QUALITY MONITORING AND PRESERVATION	Cold Rolling Mill (CRM) shall have ETP to treat and recycle the treated water from CRM complex. Sludge generated at CRM ETP shall be sent to TSDF.
<b>PPs Submission:</b> Agreed to Comply Installation of CRM is not yet completed. Whenever the installation is completed, the stipulated condition will be complied.		Date: 21/11/2024
2	AIR QUALITY MONITORING AND PRESERVATION	Four Continuous Ambient Air Quality monitoring stations under installation shall be commissioned and connected to the SPCB/CPCB server by end of October, 2021. Compliance status in this regard shall be submitted to the Ministry and Regional Office of the MoEF&CC.
<b>PPs Submission:</b> Complied 04 Nos. of Continuous Ambient Air Quality Monitoring stations installed and connected to SPCB/CPCB server. Compliance status in this regard shall be submitted to the Ministry and Regional Office of the MoEF CC.		Date: 21/11/2024
3	GREENBELT	The nallah passing through the project sites shall not be disturbed. Landscaping shall be done on both embankments with green belt covering 10 m land on both sides of the nallah.
<b>PPs Submission:</b> Complied Development of Green Belt on Both Side of the Nallah is completed throughout its presence inside the project site.		Date: 21/11/2024
4	GREENBELT	Green Belt shall be developed in 97 hectares of land (34 % of total land) with tree density of 2500 trees per ha by 31/12/2024 all along the periphery of the project site. This shall include, gap filling which shall be done in existing green belt developed area wherever tree density is less than 2500 trees per ha. In addition to this 18.4 hectares (45.5acros) of land outside the project premises located adjacent to the main plant shall also be brought under green belt development as committed by the PP.
<b>PPs Submission:</b> Complied Green Belt Development on 34 percent of the land area (97 Hectares of land) inside the boundary is completed. Green Belt Development/ Plantation Programme on 18.4 Hectares of Land outside the project premises is also going on. A three-year Action Plan has been prepared. Plantation programme has already been completed on 23 Acres of land outside the project premises and Balance green belt development is also in process, and gradually will be completed within a period of three years in line with the approval from LRO of Asansol.		Date: 21/11/2024
5	GREENBELT	Project proponent shall conserve eight water bodies exist in the project site by developing green belt development all along the boundary of the water body.
<b>PPs Submission:</b> Complied Complied and maintained accordingly.		Date: 21/11/2024
6	WASTE MANAGEMENT	Solid waste utilization • Maximum 90 days of slag storage area shall be permitted inside the plant. • PP shall recycle/reuse 100 % solid waste generated in the plant. • Used refractories shall be

		recycled.	
<b>PPs Submission:</b> Complied Solid waste utilization is done on continuous basis.			Date: 21/11/2024
7	WASTE MANAGEMENT	Sinter Plant shall be equipped with sinter cooler waste recovery system to generate process steam or power.	
<b>PPs Submission:</b> Complied Sinter cooler waste recovery system is done.			Date: 21/11/2024
8	WASTE MANAGEMENT	BF shall be equipped with Top Recovery Turbine, dry gas cleaning plant, stove waste heat recovery, cast house and stock house ventilation system and slag granulation facility.	
<b>PPs Submission:</b> Complied Blust Furnace Dry gas cleaning plant, Stove waste heat recovery, Cast house and stock house ventilation system etc. is already installed.			Date: 21/11/2024
9	AIR QUALITY MONITORING AND PRESERVATION	Secondary fume extraction system shall be installed on converters of Steel Melting Shop.	
<b>PPs Submission:</b> Complied Secondary Fume Extraction System is Installed in Steel Melting Shop.			Date: 21/11/2024
10	AIR QUALITY MONITORING AND PRESERVATION	Basic Furnace (BF) and LD gas shall be cleaned dry.	
<b>PPs Submission:</b> Complied BF Gas is being cleaned dry through Gas Cleaning Plant.			Date: 21/11/2024
11	AIR QUALITY MONITORING AND PRESERVATION	Submerged Arc Furnace and Electric Arc Furnace shall be closed type with 4th hole extraction system.	
<b>PPs Submission:</b> Agreed to Comply Not applicable at present. No SEAF had been installed after obtaining current EC. The Electric Arc Furnace as proposed in our expansion proposal is not yet installed. The Electric Arc Furnace whenever will be installed will be equipped with 4th Hole Extraction System.			Date: 21/11/2024
12	ENERGY PRESERVATION MEASURES	85-90 % of billets/slabs shall be rolled directly in hot stage. Only 10-15 % rolling shall be done through RHF using only Light Diesel Oil or BF gas.	
<b>PPs Submission:</b> Complied Complied and maintained accordingly.			Date: 21/11/2024
13	AIR QUALITY MONITORING AND PRESERVATION	Particulate emissions from the stacks shall be less than 30 mg /Nm3	
<b>PPs Submission:</b> Complied Particulate emissions from the process stack is less than 30 mg/Nm3 other than exigencies. Monthly Stack monitoring is done as per the guidelines of CPCB by the third party registered with SPCB.			Date: 21/11/2024

14	AIR QUALITY MONITORING AND PRESERVATION	Performance test shall be conducted on all pollution control systems every year and report shall be submitted to Regional Office of the MoEF&CC.
<b>PPs Submission:</b> Complied Performance Test of all Pollution control system is done.		Date: 21/11/2024
15	AIR QUALITY MONITORING AND PRESERVATION	DI plant shall have the following provisions: a. Wet scrubbers for Volatile Organic Compounds in annealing furnace. b. Bag filter for Zn coating and Mg converter area. c. Wet scrubber in paint and bitumen coating area. d. Bag Filter in Cement lining Area. e. PTFE dipped bags shall be used in the plant. f. PM emission from BF in Zinc coating area shall be 5 mg/Nm <sup>3</sup> . g. ETP with recycling facility shall be included. All scrubber effluent shall be treated in ETP.
<b>PPs Submission:</b> Agreed to Comply Installation of DI Plant is not yet completed. Whenever the installation is completed, the stipulated condition will be complied.		Date: 21/11/2024
16	MISCELLANEOUS	Parking area for trucks/dumpers shall be provided within the plant. No truck/dumper shall be parked outside the plant premises.
<b>PPs Submission:</b> Complied Trucks/Dumpers is parked in designated area within the plant.		Date: 21/11/2024
17	WATER QUALITY MONITORING AND PRESERVATION	Water requirement for the plant shall be met from Ajay River bed and Asansol Municipal Development Authority. Ground water abstraction is not permitted.
<b>PPs Submission:</b> Complied Water requirement for plant operation is met from Ajay River. No ground water extraction is done		Date: 21/11/2024
<b>General Conditions</b>		
Sr.No.	Condition Type	Condition Details
1	MISCELLANEOUS	The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
<b>PPs Submission:</b> Complied Environmental Clearance letter has been submitted to all concerned authority and also available in company website <a href="https://www.shyammetalics.com/wp-content/uploads/2023/08/EC-Certificate.pdf">https://www.shyammetalics.com/wp-content/uploads/2023/08/EC-Certificate.pdf</a>		Date: 21/11/2024
2	AIR QUALITY MONITORING AND PRESERVATION	Monitor CO, HC and O <sub>2</sub> in flue gases of the coke oven battery to detect combustion efficiency and cross leakages in the combustion chamber.
<b>PPs Submission:</b> Complied OCEMS is Installed. As per engineering design of the coke oven plant all the chambers are separated from each other so there is no chance of cross leakage in the combustion chamber. Emission monitoring will be done by NABL accredited laboratory covering CO, HC and O <sub>2</sub> parameters.		Date: 21/11/2024
3	AIR QUALITY MONITORING AND	Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.

	PRESERVATION	
<b>PPs Submission:</b> Complied Wind Shelter Fence is provided in Raw Material Stock Pile Area.		Date: 21/11/2024
4	AIR QUALITY MONITORING AND PRESERVATION	Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.
<b>PPs Submission:</b> Complied Adequate ventilation system provided in the designated area.		Date: 21/11/2024
5	WATER QUALITY MONITORING AND PRESERVATION	The project proponent shall install 24.x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R 277 (E) dated 31st March 2012 (Integrated iron & Steel); G.S.R 414 (E) dated 30th May 2008 (Sponge Iron) as amended from time to time; S.O. 3303 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
<b>PPs Submission:</b> Complied Commissioning of ETP is done and CEMS has been installed. Online connection with SPCB and CPCB Servers has been established.		Date: 21/11/2024
6	WATER QUALITY MONITORING AND PRESERVATION	The project proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of piezometers /sampling wells in the plant and adjacent areas through labs recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories.
<b>PPs Submission:</b> Complied Ground water quality checked by third party NABL accredited laboratories.		Date: 21/11/2024
7	WATER QUALITY MONITORING AND PRESERVATION	The project proponent shall provide the ETP for coke oven to meet the standards prescribed in G.S.R 277 (E) dated 31st March 2012 (integrated iron & Steel); G.S.R 414 (E) dated 30th May 2008 (Sponge Iron) as amended from time to time; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time as amended from time to time;
<b>PPs Submission:</b> Complied Centralized ETP is installed. Third party NABL accredited laboratory will be engaged for effluent monitoring.		Date: 21/11/2024
8	WATER QUALITY MONITORING AND PRESERVATION	Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
<b>PPs Submission:</b> Complied Sewage treatment plant installed and Third party testing is also conducted on quarterly basis.		Date: 21/11/2024
9	WATER QUALITY MONITORING AND PRESERVATION	Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.

<p><b>PPs Submission:</b> Complied Garland Drains and Collection Pits is provided in Raw Material stock pile area.</p>		<p>Date: 21/11/2024</p>
10	<p>WATER QUALITY MONITORING AND PRESERVATION</p>	<p>Tyre washing facilities shall be provided at the entrance of the plant gates.</p>
<p><b>PPs Submission:</b> Complied Wheel/ Tire washing facility provided.</p>		<p>Date: 21/11/2024</p>
11	<p>WATER QUALITY MONITORING AND PRESERVATION</p>	<p>Water meters shall be provided at the inlet to all unit processes in the steel plants.</p>
<p><b>PPs Submission:</b> Complied Water meter provided at the inlet area.</p>		<p>Date: 21/11/2024</p>
12	<p>Noise Monitoring &amp; Prevention</p>	<p>Noise pollution shall be monitored as per the prescribed Noise Pollution (Regulation and Control) Rules. 2000 and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.</p>
<p><b>PPs Submission:</b> Complied Monitoring of Noise pollution is done on Quarterly basis by Third Party as per Noise Pollution Rules 2000.</p>		<p>Date: 21/11/2024</p>
13	<p>ENERGY PRESERVATION MEASURES</p>	<p>Use torpedo ladle for hot metal transfer as far as possible. If ladles not used, provide covers for open top ladles.</p>
<p><b>PPs Submission:</b> Complied After metal tapping in ladle we are using redex for metal cover and after ladle put on caster we cover the ladle top with steel ladle cover.</p>		<p>Date: 21/11/2024</p>
14	<p>ENERGY PRESERVATION MEASURES</p>	<p>Restrict Gas flaring to &lt; 1%.</p>
<p><b>PPs Submission:</b> Complied Complied</p>		<p>Date: 21/11/2024</p>
15	<p>ENERGY PRESERVATION MEASURES</p>	<p>Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly.</p>
<p><b>PPs Submission:</b> Complied Floating Solar power generation facility of 1.084 MW provided in the premises and is maintained and Roof top solar power generation Facility 1.366 MW under project.</p>		<p>Date: 21/11/2024</p>
16	<p>ENERGY PRESERVATION MEASURES</p>	<p>Provide LED lights in their offices and residential areas.</p>
<p><b>PPs Submission:</b> Complied LED Lights Provided in Offices and residential areas.</p>		<p>Date: 21/11/2024</p>
17	<p>ENERGY PRESERVATION MEASURES</p>	<p>Ensure installation of regenerative type burners on all reheating furnaces.</p>

<b>PPs Submission:</b> Complied Complied.		Date: 21/11/2024
18	WASTE MANAGEMENT	Oil Collection pits shall be provided in oil cellars to collect and reuse/recycle spilled oil. Oil collection trays shall be provided under coils on saddles in cold rolled coil storage area.
<b>PPs Submission:</b> Agreed to Comply Will be Complied after completion of project work.		Date: 21/11/2024
19	WASTE MANAGEMENT	Kitchen waste shall be composted or converted to biogas for further use.
<b>PPs Submission:</b> Complied Composter provided and waste food including kitchen waste is being composted into the Composter on regular basis.		Date: 21/11/2024
20	GREENBELT	The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration by trees.
<b>PPs Submission:</b> Complied GHG emission inventory prepared and will be maintained on yearly basis. .		Date: 21/11/2024
21	Human Health Environment	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
<b>PPs Submission:</b> Complied Hazard Identification and Risk Assessment. Emergency Preparedness Plan (Disaster Management Plan) countersigned by Area Factory Inspector is already Implemented in organization.		Date: 21/11/2024
22	Human Health Environment	The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms.
<b>PPs Submission:</b> Complied We are doing heat stress analysis for the workmen who works in high temperature work zone on regular basis.		Date: 21/11/2024
23	Human Health Environment	Occupational health surveillance of the workers shall be done on a regular basis and records maintained.
<b>PPs Submission:</b> Complied We are conducting occupational health surveillance on regular frequency for all employees and health checkup records are maintained accordingly.		Date: 21/11/2024
24	Human Health Environment	The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.

<b>PPs Submission:</b> Complied Environmental Policy Established Approved by Managing Director.		Date: 21/11/2024
25	Human Health Environment	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
<b>PPs Submission:</b> Complied Environment Cell Established. .		Date: 21/11/2024
26	MISCELLANEOUS	The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently
<b>PPs Submission:</b> Complied Public notification on newspapers regarding accordance of the said Environmental clearance was published in newspaper on dated 28.12.2021.		Date: 21/11/2024
27	Statutory compliance	The Environment Clearance (EC) granted to the project /activity is strictly under the provisions of the EIA Notification, 2006 and its amendments issued from time to time. It does not tantamount/ construe to approvals/ consent/ permissions etc., required to be obtained or standards/ conditions to be followed under any other Acts/Rules/Subordinate legislation, etc., as may be applicable to the project.
<b>PPs Submission:</b> Agreed to Comply Noted and will be followed accordingly		Date: 21/11/2024
28	AIR QUALITY MONITORING AND PRESERVATION	The project proponent shall install 24X7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS shall be connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
<b>PPs Submission:</b> Complied In all stacks OCMS is mounted and is connected with SPCB/CPCB Servers.		Date: 21/11/2024
29	AIR QUALITY MONITORING AND PRESERVATION	The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
<b>PPs Submission:</b> Complied The Quarterly Monitoring of fugitive emissions is conducted by a third party NABL accredited lab.		Date: 21/11/2024
30	AIR QUALITY MONITORING AND PRESERVATION	Sampling facility at process stacks and at quenching towers shall be provided as per CPCB guidelines for manual monitoring of emissions.

<p><b>PPs Submission:</b> Complied Sampling facility provided at all process stacks for manual monitoring of emissions.</p>		<p>Date: 21/11/2024</p>
31	<p>AIR QUALITY MONITORING AND PRESERVATION</p>	<p>Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards</p>
<p><b>PPs Submission:</b> Complied Dry Fog, Sprinkler and Bag Filters are already provided in raw material handling area. Mist canon is also provided to control fugitive emissions.</p>		<p>Date: 21/11/2024</p>
32	<p>AIR QUALITY MONITORING AND PRESERVATION</p>	<p>The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.</p>
<p><b>PPs Submission:</b> Complied Manometer and Automated Air purging system already incorporated with Bag Filter system for better maintenance of bags.</p>		<p>Date: 21/11/2024</p>
33	<p>AIR QUALITY MONITORING AND PRESERVATION</p>	<p>Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.</p>
<p><b>PPs Submission:</b> Complied Suction based sweeping machine is being used for cleaning plant area.</p>		<p>Date: 21/11/2024</p>
34	<p>AIR QUALITY MONITORING AND PRESERVATION</p>	<p>Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration.</p>
<p><b>PPs Submission:</b> Complied Recycle and reuse of raw materials are carried out as collected from pollution control device.</p>		<p>Date: 21/11/2024</p>
35	<p>AIR QUALITY MONITORING AND PRESERVATION</p>	<p>The project proponent use leak proof trucks/ dumpers carrying coal and other raw materials and cover them with tarpaulin.</p>
<p><b>PPs Submission:</b> Complied Tarpaulin is made mandatory for all raw materials and waste materials carrying vehicles in plant premises.</p>		<p>Date: 21/11/2024</p>
36	<p>AIR QUALITY MONITORING AND PRESERVATION</p>	<p>Facilities for spillage collection shall be provided for coal and coke on wharf of coke oven batteries (Chain conveyors, land based industrial vacuum cleaning facility).</p>
<p><b>PPs Submission:</b> Complied Facilities of collection of spillages of Coal and Coke land based vacuum cleaning system has been considered for spillage.</p>		<p>Date: 21/11/2024</p>
37	<p>AIR QUALITY MONITORING AND PRESERVATION</p>	<p>Land-based APC system shall be installed to control coke pushing emissions.</p>
<p><b>PPs Submission:</b> Complied Guide Car system has been considered for APC System for coal pushing emission.</p>		<p>Date: 21/11/2024</p>

38	MISCELLANEOUS	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
<b>PPs Submission:</b> Complied Six Monthly Compliance Report for the period of Oct-23 to March 24 is uploaded in the website. Reference link: <a href="https://www.shyammetalics.com/wp-content/themes/shyam/assets/investors/environment-clearance/Six-Monthly-Compliance-Report-Oct-23-to-Mar-24-SSPL-Jamuria.pdf">https://www.shyammetalics.com/wp-content/themes/shyam/assets/investors/environment-clearance/Six-Monthly-Compliance-Report-Oct-23-to-Mar-24-SSPL-Jamuria.pdf</a>		Date: 21/11/2024
39	MISCELLANEOUS	The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
<b>PPs Submission:</b> Complied Display board is available at the Main Gate of the plant and is functioning properly for the display of ambient monitoring data continuously to general public.		Date: 21/11/2024
40	MISCELLANEOUS	The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
<b>PPs Submission:</b> Complied Submitted on regular basis.		Date: 21/11/2024
41	MISCELLANEOUS	The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
<b>PPs Submission:</b> Complied Environment Statement is uploaded in Website and will be continued. Link for your reference: <a href="https://www.shyammetalics.com/wp-content/themes/shyam/assets/investors/environment-clearance/Environmental-Statement-FY-2023-24-SSPL-Jamuria.pdf">https://www.shyammetalics.com/wp-content/themes/shyam/assets/investors/environment-clearance/Environmental-Statement-FY-2023-24-SSPL-Jamuria.pdf</a>		Date: 21/11/2024
42	MISCELLANEOUS	The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
<b>PPs Submission:</b> Complied Our expansion is totally based on internal accruals. Land development work has already completed. Production has also started. details of production as on date are available in Consent to Operates issued by the State Pollution Control Board.		Date: 21/11/2024
43	MISCELLANEOUS	The project proponent shall abide by all the commitments and recommendations made in the EIA / EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
<b>PPs Submission:</b> Complied Condition is completed against the commitment made during Public Hearing . Some activities / works are continuous process for the compliance.		Date: 21/11/2024

44	MISCELLANEOUS	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
PPs Submission: Complied Noted		Date: 21/11/2024
45	MISCELLANEOUS	Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act. 1986.
PPs Submission: Complied Noted		Date: 21/11/2024
46	MISCELLANEOUS	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
PPs Submission: Complied Noted		Date: 21/11/2024
47	MISCELLANEOUS	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
PPs Submission: Complied Noted		Date: 21/11/2024
48	MISCELLANEOUS	The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
PPs Submission: Complied Noted		Date: 21/11/2024
49	MISCELLANEOUS	Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
PPs Submission: Complied Noted		Date: 21/11/2024
50	Corporate Environmental Responsibility	The project proponent shall comply with the provisions contained in this Ministry OM vide F. No. 22-65/2017-IA.III dated 30/09/2020.
PPs Submission: Complied CER/CSR Expenditure prepared on yearly basis and maintain records accordingly.		Date: 21/11/2024
<b>Visit Remarks</b>		
<b>Last Site Visit Report Date:</b>		N/A
<b>Additional Remarks:</b>		

**Note:** This acknowledgement is as per the details submitted by project proponent. In no way is this document to be

considered as conclusion on any action on the compliance of the project. This is strictly for the project proponent's reference purpose.



# SHYAM SEL & POWER LIMITED

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## ENVIRONMENTAL COMPLIANCE REPORT

**EC Clearance File No: J-11011/887/2007-IA.II(I)**

**EC Identification No: EC21A008WB117492**

**Compliance Period: 1<sup>st</sup> April-2024 to 31<sup>st</sup> September-2024**



# SHYAM SEL & POWER LIMITED

Vill. - Dhasna, P.O. – Bahadurpur, Dist. – Paschim Bardhaman, West Bengal, 713362

## HALF YEARLY ENVIRONMENTAL COMPLIANCE REPORT

**Name of the Project/ Industry** : M/s Shyam Sel & Power Ltd, Vill- Dhasna, P.O- Bahadurpur, P.S- Jamuria, Dist- Paschim Bardhaman, PIN- 713362, West Bengal.

**EC Clearance File No** : J-11011/887/2007-IA. II(I) Dated: 16th Nov-2021

**EC Identification No** : EC21A008WB117492

**Compliance Period** : 1<sup>st</sup> April-2024 to 31<sup>st</sup> September-2024

Sl No	EC Compliance Condition	Condition Status
<b>A</b>	<b>Specific Condition</b>	
i	Four Continuous Ambient Air Quality monitoring stations under installation shall be commissioned and connected to the SPCB/CPCB server by end of October, 2021. Compliance status in this regard shall be submitted to the Ministry and Regional Office of the MoEF&CC.	04 Nos. of Continuous Ambient Air Quality Monitoring stations installed and connected to SPCB/CPCB server. <b>Photographs of Ambient Air Monitoring Stations is attached as Annexure - I</b>
ii	The nallah passing through the project sites shall not be disturbed. Landscaping shall be done on both embankments with green belt covering 10 m land on both sides of the nallah.	Development of Green Belt on Both Side of the Nallah is completed throughout its presence inside the project site. <b>Photographs of Green Belt Development in both side of Nallah is attached as Annexure - II</b>
iii	Green Belt shall be developed in 97 hectares of land (34 % of total land) with tree density of 2500 trees per ha by 31/12/2024 all along the periphery of the project site. This shall include, gap filling which shall be done in existing green belt developed area wherever tree density is less than 2500 trees per ha. In addition to this 18.4 hectares (45.5 acres) of land outside the project premises located adjacent to the main plant shall also be brought under green belt development as committed by the PP.	Green Belt Development on 34% of the land area (97 Hectares of land) inside the boundary is completed.  Green Belt Development/ Plantation Programme on 18.4 Hectares of Land outside the project premises is also going on. A three-year Action Plan has been prepared. Copy of the Action Plan is attached as <b>Annexure - III(A)</b> . Plantation programme has already been completed on 23 Acres of land outside the project premises and photographs of the same is attached as <b>Annexure - III(B)</b> . Balance green belt development is also in process, and gradually will be completed within a period of three years in line with the approval from LRO of Asansol.
iv	Project proponent shall conserve eight water bodies exist in the project site by developing green belt development all along the boundary of the water body.	Complied and maintained accordingly.
v	Solid waste utilization <ul style="list-style-type: none"><li>• Maximum 90 days of slag storage area shall be permitted inside the plant.</li><li>• PP shall recycle/reuse 100 % solid waste generated in the plant.</li></ul>	Solid waste utilization is done on continuous basis. <b>Copy of Solid Waste Utilization is attached as Annexure - IV.</b>

Sl No	EC Compliance Condition	Condition Status
	• Used refractories shall be recycled.	
vi	Sinter Plant shall be equipped with sinter cooler waste recovery system to generate process steam or power.	Sinter cooler waste recovery system is done. <b>Photographs of the same is as Annexure - V.</b>
vii	BF shall be equipped with Top Recovery Turbine, dry gas cleaning plant, stove waste heat recovery, cast house and stock house ventilation system and slag granulation facility.	Blust Furnace Dry gas cleaning plant, Stove waste heat recovery, Cast house and stock house ventilation system etc. is already installed. <b>Photographs of the same is attached as Annexure - VI.</b>
viii	Secondary fume extraction system shall be installed on converters of Steel Melting Shop.	Secondary Fume Extraction System is Installed in Steel Melting Shop. <b>Photographs of Secondary Fume Extraction System is Attached As Annexure - VII</b>
ix	Basic Furnace (BF) and LD gas shall be cleaned dry.	BF Gas is being cleaned dry through Gas Cleaning Plant.
x	Submerged Arc Furnace and Electric Arc Furnace shall be closed type with 4th hole extraction system.	Not applicable at present. No SEAF had been installed after obtaining current EC. The Electric Arc Furnace as proposed in our expansion proposal is not yet installed. The Electric Arc Furnace whenever will be installed will be equipped with 4 <sup>th</sup> Hole Extraction System.
xi	85-90 % of billets/slabs shall be rolled directly in hot stage. Only 10-15 % rolling shall be done through RHF using only Light Diesel Oil or BF gas.	Complied and maintained accordingly.
xii	Particulate emissions from all the stacks shall be less than 30 mg /Nm <sup>3</sup>	Particulate emissions from the process stack is less than 30 mg/Nm <sup>3</sup> other than exigencies. <b>Monthly Stack monitoring is done as per the guidelines of CPCB by the third party registered with SPCB. Copy of third party Stack Monitoring is attached as Annexure - VIII</b>
xiii	Performance test shall be conducted on all pollution control systems every year and report shall be submitted to Regional Office of the MoEF&CC.	Performance Test of all Pollution control system is done. Copy of Third Party Equipment Efficiency <b>Test report is attached as Annexure - IX</b>
xiv	Cold Rolling Mill (CRM) shall have ETP to treat and recycle the treated water from CRM complex. Sludge generated at CRM ETP shall be sent to TSDF.	Installation of CRM is not yet completed. Whenever the installation is completed, the stipulated condition will be complied.
xv	DI plant shall have the following provisions: a. Wet scrubbers for Volatile Organic Compounds in annealing furnace. b. Bag filter for Zn coating and Mg converter area. c. Wet scrubber in paint and bitumen coating area. d. Bag Filter in Cement lining Area. e. PTFE dipped bags shall be used in the plant. f. PM emission from BF in Zinc coating area shall be 5 mg/Nm <sup>3</sup> . g. ETP with recycling facility shall be included. All scrubber effluent shall be treated in ETP.	Installation of DI Plant is not yet completed. Whenever the installation is completed, the stipulated condition will be complied.



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Sl No	EC Compliance Condition	Condition Status
xvi	Parking area for trucks/dumpers shall be provided within the plant. No truck/dumper shall be parked outside the plant premises.	Trucks/Dumpers is parked in designated area within the plant. <b>Photographs of Parking Area is attached as Annexure – X</b>
xvii	Water requirement for the plant shall be met from Ajay River bed and Asansol Municipal Development Authority. Ground water abstraction is not permitted.	Water requirement for plant operation is met from Ajay River. No ground water extraction is done.

<b>B</b>	<b>General Conditions</b>	
<b>I</b>	<b>Statutory Compliance</b>	
i	The Environment Clearance (EC) granted to the project /activity is strictly under the provisions of the EIA Notification, 2006 and its amendments issued from time to time. It does not tantamount/ construe to approvals/ consent/ permissions etc., required to be obtained or standards/ conditions to be followed under any other Acts/Rules/Subordinate legislation, etc., as may be applicable to the project.	Noted and will be followed accordingly
<b>II</b>	<b>Air quality monitoring and preservation</b>	
i	The project proponent shall install 24X7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS shall be connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.	In all stacks OCMS is mounted and is connected with SPCB/CPCB Servers. <b>Copy of OCMS details is attached as Annexure – XI.</b>
ii	The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.	The Quarterly Monitoring of fugitive emissions is conducted by a third party NABL accredited lab. <b>Copy of Third-Party test report is attached as Annexure – XII</b>
iii	Sampling facility at process stacks and at quenching towers shall be provided as per CPCB guidelines for manual monitoring of emissions.	Sampling facility provided at all process stacks for manual monitoring of emissions. <b>Photographs of Stack Sampling facility is attached as Annexure – XIII</b>
iv	Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable	Dry Fog, Sprinkler and Bag Filters are already provided in raw material handling area. Mist canon is also provided to control fugitive emissions. Photographs of dry fog system and mist canon is given in <b>Annexure</b>

Sl No	EC Compliance Condition	Condition Status
	sources, so as to comply prescribed stack emission and fugitive emission standards.	<b>XIV.</b>
v	The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.	Manometer and Automated Air purging system already incorporated with Bag Filter system for better maintenance of bags. <b>Photographs of Manometer &amp; Air Purging system is attached as Annexure - XV</b>
vi	Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.	Suction based sweeping machine is being used for cleaning plant area. <b>Photographs of Sweeping Machine is attached as Annexure - XVI</b>
vii	Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration.	Recycle & reuse of raw materials are carried out as collected from pollution control device.
viii	The project proponent use leak proof trucks/ dumpers carrying coal and other raw materials and cover them with tarpaulin.	Tarpaulin is made mandatory for all raw materials & waste materials carrying vehicles in plant premises. <b>Photographs of Tarpaulin covered Trucks is attached as Annexure -XVII</b>
ix	Facilities for spillage collection shall be provided for coal and coke on wharf of coke oven batteries (Chain conveyors, land based industrial vacuum cleaning facility).	Facilities of collection of spillages of Coal and Coke land based vacuum cleaning system has been considered for spillage collection of coke and coal as per the condition mentioned in the EC. <b>Annexure -XVIII(A)</b>
x	Land-based APC system shall be installed to control coke pushing emissions.	Guide Car system has been considered for APC System for coal pushing emission. <b>Annexure -XVIII(B)</b>
xi	Monitor CO, HC and O <sub>2</sub> in flue gases of the coke oven battery to detect combustion efficiency and cross leakages in the combustion chamber.	OCMS is Installed. As per engineering design of the coke oven plant all the chambers are separated from each other so there is no chance of cross leakage in the combustion chamber. Emission monitoring will be done by NABL accredited laboratory covering CO, HC and O <sub>2</sub> parameters.
xii	Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.	Wind Shelter Fence is provided in Raw Material Stock Pile Area. <b>Photographs of Wind Shelter Fence is Attached as Annexure - XIX</b>
xiii	Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.	Adequate ventilation system provided in the designated area.
<b>III</b>	<b>Water Quality Monitoring and Preservation</b>	
i	The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R 277 (E) dated 31st March 2012 (Integrated iron & Steel); G.S.R 414 (E) dated 30th May 2008 (Sponge Iron) as amended from time to time; S.O. 3303 (E) dated 7th December 2015	Commissioning of ETP is done and CEMS has been installed. Online connection with SPCB and CPCB Servers has been established. <b>Photographs of ETP is attached as Annexure -XX and Copy of OCMS details is attached as Annexure - XI.</b>



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Sl No	EC Compliance Condition	Condition Status
	(Thermal Power Plants) as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.	
ii	The project proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of piezometers /sampling wells in the plant and adjacent areas through labs recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories.	Ground water quality checked by third party NABL accredited laboratories. <b>Copy of Third-Party Ground Water test report is attached as Annexure - XXI</b>
iii	The project proponent shall provide the ETP for coke oven to meet the standards prescribed in G.S.R 277 (E) dated 31st March 2012 (integrated iron & Steel); G.S.R 414 (E) dated 30th May 2008 (Sponge Iron) as amended from time to time; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time as amended from time to time;	Centralized ETP is installed. Third party NABL accredited laboratory will be engaged for effluent monitoring.
iv	Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.	Sewage treatment plant installed and Third party testing is also conducted on quarterly basis. . <b>Copy of Third-Party STP test report is attached as Annexure - XXII</b>
v	Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.	Garland Drains and Collection Pits is provided in Raw Material stock pile area <b>Photographs of Garland drains is attached as Annexure -XXIII</b>
vi	Tyre washing facilities shall be provided at the entrance of the plant gates.	Wheel/ Tire washing facility provided <b>Photographs of Tire Washing Facility is attached as Annexure -XXIV.</b>
vii	Water meters shall be provided at the inlet to all unit processes in the steel plants.	Water meter provided at the inlet area. <b>Photographs of Water meter is attached as Annexure -XXV.</b>
<b>IV</b>	<b>Noise monitoring and prevention</b>	
i	Noise pollution shall be monitored as per the prescribed Noise Pollution (Regulation and Control) Rules. 2000 and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.	Monitoring of Noise pollution is done on Quarterly basis by Third Party as per Noise Pollution Rules 2000. <b>Copy of Third-Party Noise level test report is attached as Annexure -XXVI.</b>
<b>V</b>	<b>Energy Conservation measures</b>	



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Sl No	EC Compliance Condition	Condition Status
i	Use torpedo ladle for hot metal transfer as far as possible. If ladles not used, provide covers for open top ladles.	After metal tapping in ladle we are using redex for metal cover & after ladle put on caster we cover the ladle top with steel ladle cover. <b>Photographs of Ladle cover is attached as Annexure – XXVII</b>
ii	Restrict Gas flaring to < 1%.	Complied
iii	Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly.	Floating Solar power generation facility of 1.084 MW provided in the premises and is maintained and Roof top solar power generation Facility 1.366 MW under project. <b>Photographs of Solar power generation is attached as Annexure –XXVIII.</b>
iv	Provide LED lights in their offices and residential areas.	LED Lights Provided in Offices & residential areas
v	Ensure installation of regenerative type burners on all reheating furnaces.	Complied.
<b>VI</b>	<b>Waste Management</b>	
i	Oil Collection pits shall be provided in oil cellars to collect and reuse/recycle spilled oil. Oil collection trays shall be provided under coils on saddles in cold rolled coil storage area.	Will be Complied after completion of project work.
ii	Kitchen waste shall be composted or converted to biogas for further use.	Composter provided and waste food including kitchen waste is being composted into the Composter on regular basis. <b>Photographs of Composter is attached as Annexure –XXVIX.</b>
<b>VII</b>	<b>Green Belt</b>	
i	The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration by trees.	GHG emission inventory prepared and will be maintained on yearly basis. . <b>Copy of Third-Party Inventory Report is attached as Annexure –XXX.</b>
<b>VIII</b>	<b>Public hearing and Human health issues</b>	
i	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.	Hazard Identification & Risk Assessment. Emergency Preparedness Plan (Disaster Management Plan) countersigned by Area Factory Inspector is already Implemented in organization. <b>Copy of HIRA is attached as Annexure –XXXI.</b>
ii	The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms.	We are doing heat stress analysis for the workmen who works in high temperature work zone on regular basis. <b>Copy of Heat stress report is attached as Annexure – XXXII.</b>
iii	Occupational health surveillance of the workers shall be done on a regular basis and records maintained.	We are conducting occupational health surveillance on regular frequency for all employees and health checkup records are maintained accordingly. <b>Copy of Health checkup report is attached as Annexure –XXXIII.</b>
<b>IX</b>	<b>Environment Management</b>	
i	The project proponent shall comply with the provisions contained in this Ministry's OM vide F. No. 22-65/2017-IA.III dated 30/09/2020.	CER/CSR Expenditure prepared on yearly basis and maintain records accordingly. <b>Copy of CER details is attached as Annexure –XXXIV.</b>
ii	The company shall have a well laid down environmental policy duly approve by the Board of Directors. The	Environmental Policy Established Approved by Managing Director. <b>Copy of Policy is attached as Annexure –XXXV</b>

SI No	EC Compliance Condition	Condition Status
	environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental/ forest /wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms/ conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.	
iii	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.	Environment Cell Established. . <b>Copy of Environmental Cell is attached as Annexure –XXXVI.</b>
<b>X</b>	<b>Miscellaneous</b>	
i	The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.	Public notification on newspapers regarding accordance of the said Environmental clearance was published in newspaper on dated 28.12.2021. <b>Copy of Newspaper cutting is attached as Annexure –XXXVII.</b>
ii	The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.	Environmental Clearance letter has been submitted to all concerned authority and also available in company website <a href="https://www.shyammetalics.com/wp-content/uploads/2023/08/EC-Certificate.pdf">https://www.shyammetalics.com/wp-content/uploads/2023/08/EC-Certificate.pdf</a>
iii	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.	Six Monthly Compliance Report for the period of Oct-23 to March 24 is uploaded in the website. Reference link: <a href="https://www.shyammetalics.com/wp-content/themes/shyam/assets/investors/environment-clearance/Six-Monthly-Compliance-Report-Oct-23-to-Mar-24-SSPL-Jamuraia.pdf">https://www.shyammetalics.com/wp-content/themes/shyam/assets/investors/environment-clearance/Six-Monthly-Compliance-Report-Oct-23-to-Mar-24-SSPL-Jamuraia.pdf</a>
iv	The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical	Display board is available at the Main Gate of the plant & is functioning properly for the display of ambient monitoring data continuously to general public.. <b>Photographs of Display Board is attached as</b>



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SI No	EC Compliance Condition	Condition Status
	sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.	<b>Annexure -XXXVIII.</b>
v	The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.	Submitted on regular basis.
vi	The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.	Environment Statement is uploaded in Website and will be continued. Link for your reference: <a href="https://www.shyammetalics.com/wp-content/themes/shyam/assets/investors/environment-clearance/Environmental-Statement-FY-2023-24-SSPL-Jamuria.pdf">https://www.shyammetalics.com/wp-content/themes/shyam/assets/investors/environment-clearance/Environmental-Statement-FY-2023-24-SSPL-Jamuria.pdf</a>
vii	The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.	Our expansion is totally based on internal accruals. Land development work has already completed. Production has also started. details of production as on date are available in Consent to Operates issued by the State Pollution Control Board.-
viii	The project proponent shall abide by all the commitments and recommendations made in the EIA / EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.	Condition is completed against the commitment made during Public Hearing . Some activities / works are continuous process for the compliance.
ix	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).	Noted
x	Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act. 1986.	Noted
xi	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Noted
xii	The Ministry reserves the right to stipulate additional conditions if found	Noted



# SHYAM SEL & POWER LIMITED

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SI No	EC Compliance Condition	Condition Status
	necessary. The Company in a time bound manner shall implement these conditions.	
xiii	The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.	Noted
xiv	Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.	Noted

# ANNEXURE - I



**Monitoring Station No. 01**



**Analyzer**



**Station-1**

**Location: Main Gate No-1**



**Monitoring Station No. 02**

**Analyzer**



**Station-2**

**Location: Sabjibagan**



**Monitoring Station No. 03**

**Analyzer**



**Station-3**

**Location: Near Dog Gate (Main Gate No-2)**



**Monitoring Station No. 04**

**Analyzer**

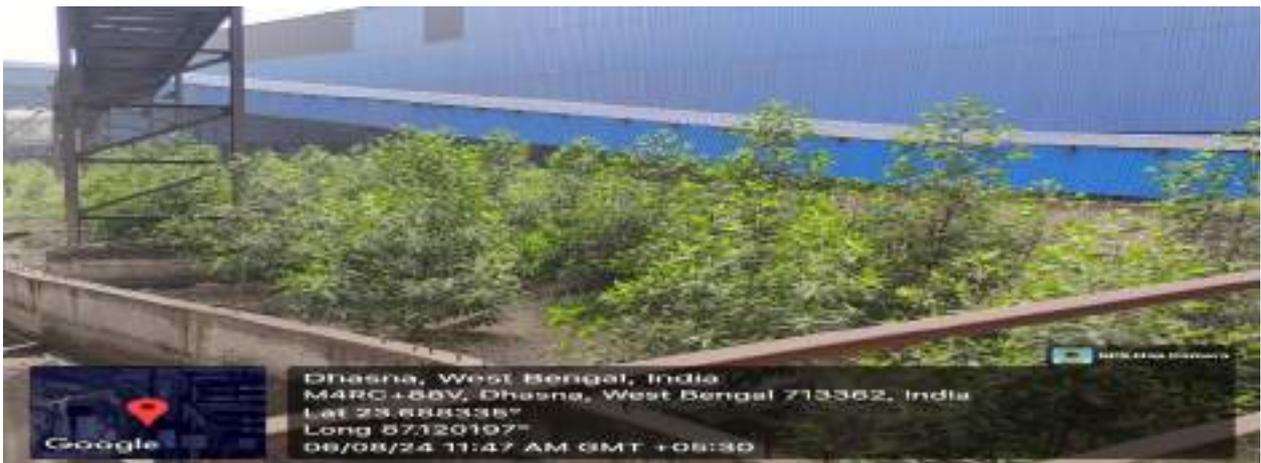


**Station-4**

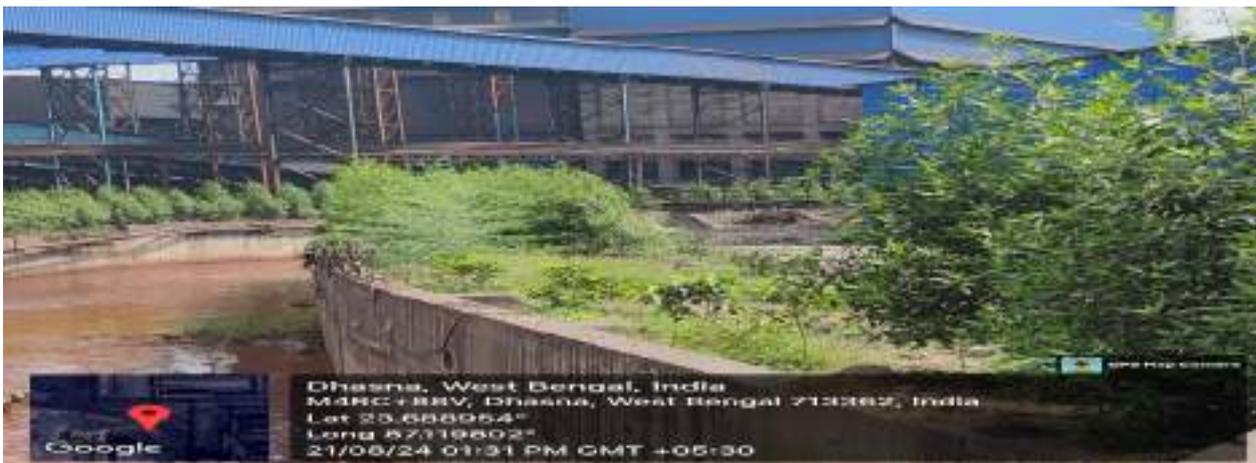
**Location: Near Batching Plant**

## ANNEXURE - II

## GREEN BELT DEVELOPMENT BESIDE NALLAH







# ANNEXURE - III

Location wise plantation details - FY 2023-24				
SI No	Location of Plantation	In Acre	No of trees	Remarks
1	Hizalgora Community	1.3	1313	<b>Plantation has already done</b>
2	Bahadurpur GP	2.1	2121	
3	Jamuria Municipality	1.7	1717	
4	Darbardanga village	2.6	2626	
5	Patharchur village	1.8	1818	
	<b>Total Area/Plantation</b>	<b>9.5</b>	<b>9595</b>	
Location wise plantation details - Action Plan for FY 2024-25				
SI No	Location of Plantation	In Acre	No of trees	Remark
1	Bhootbangla	3.0	3030	<b>14000 trees have already been planted. Plantation work is going on.</b>
2	Coke oven - outside boundry	0.5	657	
3	Railway siding	0.5	657	
4	Bijaynagar	1.0	1010	
5	Jamuria Municipal Corporation	3.7	3737	
6	Hizolgora	1.0	1010	
8	Taltor	5.0	5050	
9	Shyamla GP	5.0	5050	
10	Dhasna	2.9	2940	
	<b>Total Area/Plantation</b>	<b>23</b>	<b>23140</b>	
Location wise plantation details - Action Plan for FY 2025-26				
SI No	Location of Plantation	In Acre	No of trees	Remark
1	Bahadurpur Panchayat	2.0	2020	<b>Plantation to be done</b>
2	Dhasal	0.5	505	
3	Hizalgora Panchayat	3.0	3030	
4	Satgram ground	0.5	505	
5	Nandi location	2.0	2020	
6	Churulia & Chuchuria Location	2.0	2020	
8	Jamsol area	2.5	2525	
	<b>Total Area/Plantation</b>	<b>13</b>	<b>12625</b>	

## PHOTOGRAPHS OF PLANTATION OUTSIDE THE PROJECT PREMISES





# ANNEXURE - IV

**SOLID WASTE GENERATION & UTILIZATION**

**Solid Waste Generation Details**

<b>TYPES OF SOLID WASTE</b>	<b>Duration (Apr-24 To Sep – 2024)</b>	<b>WASTE MANAGEMENT FACILITY</b>
<b>(A) FROM PROCES</b>	Quantity (MT)	Remarks
i) Kiln Accretion	3344.640	Disposed in Solid waste Disposal Site/ Road Making
ii) Char	103794.068	Reuse in CPP as fuel.
iii) Bottom Ash	101707.791	Reuse in Bricks manufacturing and also in flooring and also supply to party for Bricks and other construction materials manufacturing and rest is used for mine voids filing.
iv) Slag from Ferro Alloy	13709.874	Secured land filling.
v) Slag from IF	24342.11	Ferrous content materials recover through Magnetic separator and reuse in process as raw materials and rest non-ferrous are used for land filing & Road making.
vi) Mill Scale	5830.258	Reuse in Pelletization process
vii) Scraps & End Cutting	11605.607	Reused in Induction Furnace as raw materials.
viii) PGP Ash	43213.767	Disposed in Solid waste Disposal Site/ Road Making.
<b>(B) FROM POLLUTION CONTROL FACILITIES</b>	Quantity (MT)	Remarks
(i) Dust from APC Device	111435.623	Disposed in abandoned mines pit of ECL.
(ii) Fly Ash	145261.915	Reuse in Fly ash Bricks manufacturing for plant own construction purpose & also supply to other Bricks Manufacturing industries and rest amount is used to filling mine voids.
(iii) Granulated Iron fines from APC System	17379.056	Reused in Process through Beneficiation unit.
(iv) Pollution Dust	22164.908	Reuse in CPP as fuel with mixing with Coal & Dolochar.
<b>Solid Waste Utilization Details</b>		
<b>(C) QUANTITY RECYCLED OR REUTILIZED IN THE UNIT</b>	Quantity (MT)	Remarks
i) Char	103794.068	Reuse in CPP as fuel.
ii) Slag From IF	4138.159	Ferrous content materials recover through Magnetic separator and reuse in process as raw materials and rest non-ferrous are used for land filing & Road making.
iii) Scraps & End Cutting	11605.607	Reused in Induction Furnace as raw materials.
iv) Mill Scale	5830.258	Reuse in Pelletization process
v) Granulated Iron Ore Fines	17379.056	Reused in Process through Beneficiation unit.
vi) Pollution Dust	22164.908	Reuse in CPP as fuel with mixing with Coal & Dolochar.

# ANNEXURE - V

Photographs of Sinter Cooler Waste Recovery System



# ANNEXURE - VI

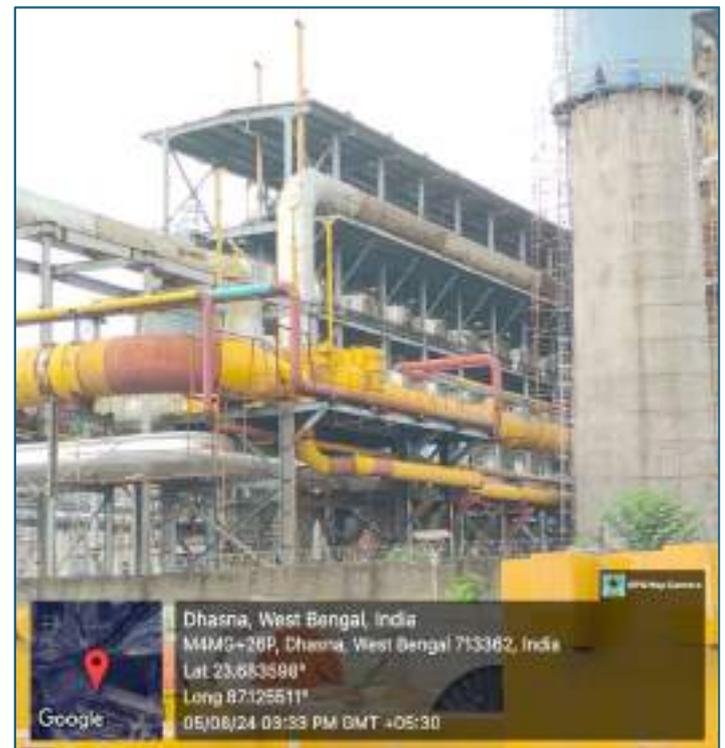
## PHOTOGRAPH OF BLAST FURNACE (BF)



**STOVE**



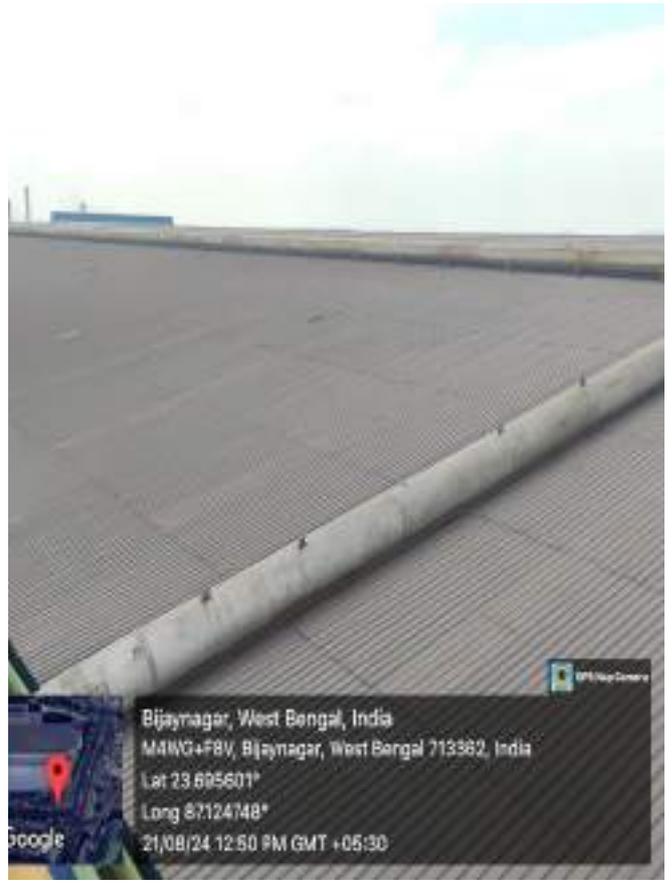
**TOP RECOVERY TURBINE**



**GAS CLEANING PLANT**

# ANNEXURE - VII

## SECONDARY FUME EXTRACTION SYSTEM AT SMS



# ANNEXURE - VIII



# INDICATIVE CONSULTANT INDIA



(GOVT. REGISTERED TEST HOUSE)



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## TEST REPORT

Date: 21.09.2024	Report No: ICI/HL/A/TC-851/2024	Format No: ICI/FM/H/58
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/A-851
Address	Dhasna, Bahadurpur, Jamuria, Dist.- Paschim Bardhaman, PIN -713 362	Sampling Date : 07.09.2024
#Customer Representative Name & Contact Number	Sr. Executive	Sampling Time : 03:40 PM
#Work Order No.	3000019828 Dtd. 01.04.2024	Analysis Start Date : 19.09.2024
#Sample Description	STACK AIR	Analysis complete Date : 20.09.2024
#Location	ROTARY KILN NO. - 11 & 12 (COMMON STACK) 700 TPD EACH, THROUGH WHRB	
Sample Condition	In Glass Microfiber Thimble & Plastic Bottle	
Sampling Method	CPCB, Emission Regulation (Part III)	

### A.] # GENERAL INFORMATION ABOUT STACK:

<b>Particulars of the Plant</b>	Shape of Stack	: Circular
Stack attached to	Material of Construction	: Concrete
Emission due to	Stack ID at sampling point (M)	: 4.83
Fuel Used	At Bottom (M)	: -
Rated Fuel Consumption	At Top (M)	: -
Working Fuel Consumption	<b>Height Details :</b>	
Calorific Value(Kcal/kg)	a) Total Ht. Of stack from GL(M)	: 80.0
Sulphur Content (% by Wt)	b) Total Ht. Of stack from RL(M)	: -
Ash Content (% by Wt)	c) Ht. of sampling port from GL(M)	: 35.0
Pollution Control Device	d) Ht. of port from disturbance zone (M)	: -
Whether Stack is provided with permanent Platform / Ladder:	Yes	

### B.] PHYSICAL DATA:

Flue Gas Temperature (°C)	: 153	<b>Steam Generation Capacity:</b>
Barometric Pressure,(mm Hg)	: 744	a) Rated
Velocity of Gas flow (m/s)	: 12.52	b) Running
Quantity of Gas flow (Nm <sup>3</sup> /hr)	: 549085.45	<b>Load :</b> a) Rated
Pressure	: -	b) Running
		: 700 TPD (Each)
		: 600 TPD (Each)

### C.] RESULT OF SAMPLING:

Sl. No.	Parameters	Result Obtained	Test Method
01.	Particulate Matter (mg/Nm <sup>3</sup> )	25.0 at 10.2% CO <sub>2</sub>	IS 11255 (Part -1): 1985 (RA 2019)
02.	Particulate Matter Normalised to 12% CO <sub>2</sub> (V/V) - (mg/Nm <sup>3</sup> )	29.0	
03.	Sulphur di-oxide (mg/ Nm <sup>3</sup> )	335.59	IS 11255 (Part -2): 1985 (RA 2019)
04.	Carbon mono oxides (as CO)-% (V/V)	<0.2	IS 13270:1992 (RA 2019)
05.	Carbon di oxides (as CO <sub>2</sub> )-% (V/V)	10.2	IS 13270:1992 (RA 2019)

Prepared By: P. Das

Checked By: N. Pramanik

For, INDICATIVE CONSULTANT INDIA

Parbati Golui  
(Quality Manager)  
Signatory Authority

Test Witnessed By: Nil (Sampling was done in front of customer representatives)  
Estimated Uncertainty: Not Required

Parbati Golui  
Quality Manager  
INDICATIVE CONSULTANT INDIA

- Note:
- Information provided by customer
  - Sample is drawn by M/s. Indicative Consultant India.
  - Sample submitted and identified by customer as: NA
  - Test results shown in this test report relate only to the sample (s) only.
  - The test results referred in test report are based on observations & measurements under the stated environmental conditions.
  - The reproduction of the report except in full is invalid without written approval of the laboratory.
  - Once issued, the test report/certificate is in public domain and laboratory is not responsible for the authenticity of photocopied test report
  - Retention period of tested samples (Thimbles) is 180 days from the date of issue unless otherwise specified.
  - Location of Testing: Haldia Laboratory

End of Report

Page 1 of 1

Reviewed By: QM/ITM



# INDICATIVE CONSULTANT INDIA



(GOVT. REGISTERED TEST HOUSE)



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## TEST REPORT

Date: 21.09.2024	Report No: ICI/HL/A/TC-852/2024	Format No: ICI/FM/II/58
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/A-852
Address	Dhasna, Bahadurpur, Jamuria, Dist. - Paschim Bardhaman, PIN -713 362	Sampling Date : 07.09.2024
#Customer Representative Name & Contact Number	Sr. Executive	Sampling Time : 12:05 PM
#Work Order No.	3000019828 Dtd. 01.04.2024	Analysis Start Date : 19.09.2024
#Sample Description	STACK AIR	Analysis complete Date : 20.09.2024
#Location	ROTARY KILN NO. - 7 & 8 (COMMON STACK) 450 TPD EACH, THROUGH WHRB	
Sample Condition	In Glass Microfiber Thimble & Plastic Bottle	
Sampling Method	CPCB, Emission Regulation (Part III)	

### A.) # GENERAL INFORMATION ABOUT STACK:

<b>Particulars of the Plant</b>		Shape of Stack	: Circular
Stack attached to	ROTARY KILN NO. - 7 & 8 (COMMON STACK) 450 TPD EACH, THROUGH WHRB	Material of Construction	: Concrete
Emission due to	Reduction of Pellet & Oxidation of Coal	Stack ID at sampling point (M)	: 4.0
Fuel Used	Coal	At Bottom (M)	: -
Rated Fuel Consumption	-	At Top (M)	: -
Working Fuel Consumption	16 TPH/Kiln	<b>Height Details :</b>	
Calorific Value (Kcal/kg)	-	a) Total Ht. Of stack from GL(M)	: 63.0
Sulphur Content (% by Wt)	-	b) Total Ht. Of stack from RL(M)	: -
Ash Content (% by Wt.)	-	c) Ht. of sampling port from GL(M)	: 20.0
Pollution Control Device	ESP	d) Ht. of port from disturbance zone (M)	: -
Whether Stack is provided with permanent Platform / Ladder : Yes			

### B.) PHYSICAL DATA:

Flue Gas Temperature (°C)	143	<b>Steam Generation Capacity:</b>	
Barometric Pressure, (mm Hg)	744	a) Rated	: -
Velocity of Gas flow (m/s)	11.72	b) Running	: -
Quantity of Gas flow (Nm <sup>3</sup> /hr)	359144.50	<b>Load :</b> a) Rated	: 450 TPD (Each)
Pressure	-	b) Running	: 375 TPD (Each)

### C.) RESULT OF SAMPLING:

Sl. No.	Parameters	Result Obtained	Test Method
01.	Particulate Matter (mg/Nm <sup>3</sup> )	22.0 at 10.4% CO <sub>2</sub>	IS 11255 (Part -1): 1985 (RA 2019)
02.	Particulate Matter Normalised to 12% CO <sub>2</sub> (V/V) - (mg/Nm <sup>3</sup> )	25.0	
03.	Sulphur di-oxide (mg/ Nm <sup>3</sup> )	325.42	IS 11255 (Part -2): 1985 (RA 2019)
04.	Carbon mono oxides (as CO)-% (V/V)	<0.2	IS 13270:1992 (RA 2019)
05.	Carbon di oxides (as CO <sub>2</sub> )-% (V/V)	10.4	IS 13270:1992 (RA 2019)

Prepared By: P. Das

Checked By: N. Pramanik

For, INDICATIVE CONSULTANT INDIA

Parbati Golu  
(Quality Manager)  
Signatory Authority

Test Witnessed By: Nil (Sampling was done in front of customer representatives)  
Estimated Uncertainty: Not Required

Parbati Golu  
Quality Manager  
INDICATIVE CONSULTANT INDIA

- Note:
- Information provided by customer
  - Sample is drawn by ICI, Indicative Consultant India.
  - Sample submitted and identified by customer as: NA
  - Test results shown in this test report relate only to the sample (s) only.
  - The test results referred in test report are based on observations & measurements under the stated environmental conditions.
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  - Once issued, the test report/certificate is in public domain and laboratory is not responsible for the authenticity of photocopied test report
  - Retention period of tested samples (Thimbles) is 180 days from the date of issue unless otherwise specified.
  - Location of Testing: Haldia Laboratory

End of Report

Page 1 of 1

Reviewed By: QM/TM

Towards Sustainable Growth



# INDICATIVE CONSULTANT INDIA



(GOVT. REGISTERED TEST HOUSE)



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## TEST REPORT

Date: 21.09.2024	Report No: ICI/HL/A/TC-853/2024	Format No: ICI/FM/H/58
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/A-853
Address	Dhasna, Bahadurpur, Januria, Dist.- Paschim Bardhaman, PIN -713 362	Sampling Date : 07.09.2024
#Customer Representative Name & Contact Number	Sr. Executive	Sampling Time : 02:10 PM
#Work Order No.	3000019828 Dtd. 01.04.2024	Analysis Start Date : 19.09.2024
#Sample Description	STACK AIR	Analysis complete Date : 20.09.2024
#Location	ROTARY KILN NO. - 9 & 10 (450 TPD EACH) (COMMON STACK) THROUGH WHRB	
Sample Condition	In Glass Microfiber Thimble & Plastic Bottle	
Sampling Method	CPCB, Emission Regulation (Part III)	

### A.] # GENERAL INFORMATION ABOUT STACK:

Particulars of the Plant	Stack attached to	Shape of Stack	Material of Construction
	ROTARY KILN NO. - 9 & 10 (450 TPD EACH) (COMMON STACK) THROUGH WHRB	Circular	Concrete
Emission due to	Reduction of Pellet & Oxidation of Coal	Stack ID at sampling point (M)	4.0
Fuel Used	Coal	At Bottom (M)	-
Rated Fuel Consumption	-	At Top (M)	-
Working Fuel Consumption	16 TPH/Kiln	Height Details:	
Calorific Value (Kcal/kg)	-	a) Total Ht. Of stack from GL(M)	63.0
Sulphur Content (% by Wt)	-	b) Total Ht. Of stack from RL(M)	-
Ash Content (% by Wt.)	-	c) Ht. of sampling port from GL(M)	31.0
Pollution Control Device	ESP	d) Ht. of port from disturbance zone (M)	-
Whether Stack is provided with permanent Platform / Ladder: Yes			

### B.] PHYSICAL DATA:

Flue Gas Temperature (°C)	147	Steam Generation Capacity:	
Barometric Pressure (mm Hg)	744	a) Rated	-
Velocity of Gas flow (m/s)	11.71	b) Running	-
Quantity of Gas flow (Nm <sup>3</sup> /hr)	355439.70	Load : a) Rated	450 TPD (Each)
Pressure	-	b) Running	375 TPD (Each)

### C.] RESULT OF SAMPLING:

Sl. No.	Parameters	Result Obtained	Test Method
01.	Particulate Matter (mg/Nm <sup>3</sup> )	25.0 at 10.2% CO <sub>2</sub>	IS 11255 (Part-1): 1985 (RA 2019)
02.	Particulate Matter Normalised to 12% CO <sub>2</sub> (V/V) - (mg/Nm <sup>3</sup> )	29.0	
03.	Sulphur di-oxide (mg/ Nm <sup>3</sup> )	335.59	IS 11255 (Part-2): 1985 (RA 2019)
04.	Carbon mono oxides (as CO)-% (V/V)	<0.2	IS 13270:1992 (RA 2019)
05.	Carbon di oxides (as CO <sub>2</sub> )-% (V/V)	10.2	IS 13270:1992 (RA 2019)

Prepared By: P. Das

Checked By: N. Pramanik

For, INDICATIVE CONSULTANT INDIA

Parbati Gouli  
(Quality Manager)  
Signatory Authority

Test Witnessed By: Nil (Sampling was done in front of customer representatives)  
Estimated Uncertainty: Not Required

Parbati Gouli  
Quality Manager  
INDICATIVE CONSULTANT INDIA

- Note:
- Information provided by customer
  - Sample is drawn by M/s. Indicative Consultant India
  - Sample submitted and identified by customer as: Nil
  - Test results shown in this test report relate only to the sample (s) only.
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  - Location of Testing: Halda Laboratory

End of Report

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Reviewed By: QM/IM



### TEST REPORT

Date: 21.09.2024	Report No: ICI/HL/A/TC-855/2024	Format No: ICI/FM/II/58
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/A-855
Address	Dhasna, Bahadurpur, Jamuria, Dist.- Paschim Bardhaman, PIN -713 362	Sampling Date : 09.09.2024
#Customer Representative Name & Contact Number	Sr. Executive	Sampling Time : 01:45 PM
#Work Order No.	3000019828 Dtd. 01.04.2024	Analysis Start Date : 19.09.2024
#Sample Description	STACK AIR	Analysis complete Date : 20.09.2024
#Location	COOLER DISCHARGE FOR KILN NO. - 7, 8, 9 & 10	
Sample Condition	In Glass Microfiber Thimble	
Sampling Method	CPCB, Emission Regulation (Part III)	

#### A.) # GENERAL INFORMATION ABOUT STACK:

<b>Particulars of the Plant</b>		Shape of Stack	: Circular
Stack attached to	COOLER DISCHARGE FOR KILN NO.-7, 8, 9 & 10	Material of Construction	: M.S.
Emission due to	Process Activity	Stack ID at sampling point (M)	: 1.0
Fuel Used	-	At Bottom (M)	: -
Rated Fuel Consumption	-	At Top (M)	: -
Working Fuel Consumption	-	<b>Height Details:</b>	
Calorific Value(Kcal/kg)	-	a) Total Ht. Of stack from GL(M)	: 32.0
Sulphur Content (% by Wt)	-	b) Total Ht. Of stack from RL(M)	: -
Ash Content (% by Wt.)	-	c) Ht. of sampling port from GL(M)	: -
Pollution Control Device	Bag Filter	d) Ht. of port from disturbance zone (M)	: -
Whether Stack is provided with permanent Platform / Ladder : Yes			

#### B.) PHYSICAL DATA:

Flue Gas Temperature (°C)	: 46	<b>Steam Generation Capacity:</b>	
Barometric Pressure, (mm Hg)	: 743	a) Rated	: -
Velocity of Gas flow (m/s)	: 11.51	b) Running	: -
Quantity of Gas flow (Nm <sup>3</sup> /hr)	: 29714.50	<b>Load :</b> a) Rated	: -
Pressure	: -	b) Running	: -

#### C.) RESULT OF SAMPLING:

Sl. No.	Parameters	Result Obtained	Test Method
01.	Particulate Matter (mg/Nm <sup>3</sup> )	20.0	IS 11255 (Part -1): 1985 (RA 2019)
02.	Particulate Matter Normalised to 12% CO <sub>2</sub> (V/V) - (mg/Nm <sup>3</sup> )	-	
03.	Carbon mono oxides (as CO)-% (V/V)	<0.2	IS 13270:1992 (RA 2019)
04.	Carbon di oxide (as CO <sub>2</sub> )-% (V/V)	<0.2	IS 13270:1992 (RA 2019)

For, INDICATIVE CONSULTANT INDIA

Prepared By: P. Das

Checked By: N. Pramanik

Parbati Golui  
(Quality Manager)  
Signatory Authority

Parbati Golui  
Quality Manager  
INDICATIVE CONSULTANT INDIA

Test Witnessed By: Nil (Sampling was done in front of customer representatives)  
Estimated Uncertainty: Not Required

- Note:
- Information provided by customer
  - Sample is drawn by M/s. Indicative Consultant India.
  - Sample submitted and identified by customer as: Nil
  - Test results shown in this test report relate only to the sample (s) only.
  - The test results referred in test report are based on observations & measurements under the stated environmental conditions.
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  - Retention period of tested samples (Thimbles) is 180 days from the date of issue unless otherwise specified.
  - Location of Testing: Haldia Laboratory

End of Report

Page 1 of 1

Reviewed By: QM/ITM



# INDICATIVE CONSULTANT INDIA



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## TEST REPORT

Date: 21.09.2024	Report No: ICI/HL/A/TC-856/2024	Format No: ICI/FM/H/58
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/A-856
Address	Dhasna, Bahadurpur, Jamuria, Dist.- Paschim Bardhaman, PIN -713 362	Sampling Date : 09.09.2024
#Customer Representative Name & Contact Number	Sr. Executive	Sampling Time : 12:10 PM Analysis Start Date : 19.09.2024
#Work Order No.	3000019828 Dtd. 01.04.2024	Analysis complete Date : 20.09.2024
#Sample Description	STACK AIR	
#Location	PRODUCT SEPARATOR HOUSE (PSH) FOR KILN NO. 7, 8, 9 & 10	
Sample Condition	In Glass Microfiber Thimble	
Sampling Method	CPCB, Emission Regulation (Part III)	

### A.] # GENERAL INFORMATION ABOUT STACK:

<b>Particulars of the Plant</b>		Shape of Stack	: Circular
Stack attached to	PRODUCT SEPARATOR HOUSE (PSH) FOR KILN NO. 7, 8, 9 & 10	Material of Construction	: M.S.
Emission due to	Process Activity	Stack ID at sampling point (M)	: 1.5
Fuel Used	-	At Bottom (M)	: -
Rated Fuel Consumption	-	At Top (M)	: -
Working Fuel Consumption	-	<b>Height Details:</b>	
Calorific Value(Kcal/kg)	-	a) Total Ht. Of stack from GL(M)	: 30.0
Sulphur Content (% by Wt)	-	b) Total Ht. Of stack from RL(M)	: -
Ash Content (% by Wt.)	-	c) Ht. of sampling port from GL(M)	: -
Pollution Control Device	Bag Filter	d) Ht. of port from disturbance zone (M)	: -
Whether Stack is provided with permanent Platform / Ladder: Yes			

### B.] PHYSICAL DATA:

Flue Gas Temperature (°C)	: 33	<b>Steam Generation Capacity:</b>	
Barometric Pressure, (mm Hg)	: 743	a) Rated	: -
Velocity of Gas flow (m/s)	: 17.02	b) Running	: -
Quantity of Gas flow (Nm <sup>3</sup> /hr)	: 103038.42	<b>Load :</b> a) Rated	: -
Pressure	: -	b) Running	: -

### C.] RESULT OF SAMPLING:

Sl. No.	Parameters	Result Obtained	Test Method
01.	Particulate Matter (mg/Nm <sup>3</sup> )	25.0	IS 11255 (Part -1): 1985 (RA 2019)
02.	Particulate Matter Normalised to 12% CO <sub>2</sub> (V/V) - (mg/Nm <sup>3</sup> )	-	
03.	Carbon mono oxides (as CO)-% (V/V)	<0.2	IS 13270:1992 (RA 2019)
04.	Carbon di oxide (as CO <sub>2</sub> )-% (V/V)	<0.2	IS 13270:1992 (RA 2019)

For, INDICATIVE CONSULTANT INDIA

Prepared By: P. Das

Checked By: N. Pramanik

Parbati Golui  
(Quality Manager)  
Signatory Authority

Parbati Golui  
Quality Manager  
INDICATIVE CONSULTANT INDIA

Test Witnessed By: Nil (Sampling was done in front of customer representatives)  
Estimated Uncertainty: Not Required

- Note:
- Information provided by customer
  - Sample is drawn by M/s. Indicative Consultant India
  - Sample submitted and identified by customer as: NA
  - Test results shown in this test report relate only to the sample (s) only.
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  - Retention period of tested samples (Thimbles) is 180 days from the date of issue unless otherwise specified.
  - Location of Testing: Haldia Laboratory

End of Report

Page 1 of 1

Reviewed By: QM/TM



### TEST REPORT

Date: 21.09.2024	Report No: ICDHL/A/TC-857/2024	Format No: ICI/FM/H/58
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/A-857
Address	Dhasna, Bahadurpur, Januria, Dist.- Paschim Bardhaman, PIN -713 362	Sampling Date : 09.09.2024
#Customer Representative Name & Contact Number	Sr. Executive	Sampling Time : 10:05 AM
#Work Order No.	3000019828 Dtd. 01.04.2024	Analysis Start Date : 19.09.2024
#Sample Description	STACK AIR	Analysis complete Date : 20.09.2024
#Location	COOLER DISCHARGE FOR KILN NO. - 11 & 12	
Sample Condition	In Glass Microfiber Thimble	
Sampling Method	CPCB, Emission Regulation (Part III)	

#### A.] # GENERAL INFORMATION ABOUT STACK:

<b>Particulars of the Plant</b>		Shape of Stack	: Circular
Stack attached to	COOLER DISCHARGE FOR KILN NO. - 11 & 12	Material of Construction	: M.S.
Emission due to	Process Activity	Stack ID at sampling point (M)	: 1.0
Fuel Used	-	At Bottom (M)	: -
Rated Fuel Consumption	-	At Top (M)	: -
Working Fuel Consumption	-	<b>Height Details :</b>	
Calorific Value(Kcal/kg)	-	a) Total Ht. Of stack from GL(M)	: 30.0
Sulphur Content (% by Wt)	-	b) Total Ht. Of stack from RL(M)	: -
Ash Content (% by Wt.)	-	c) Ht. of sampling port from GL(M)	: 22.0
Pollution Control Device	Bag Filter	d) Ht. of port from disturbance zone (M)	: -
Whether Stack is provided with permanent Platforms / Ladder : Yes			

#### B.] PHYSICAL DATA:

Flue Gas Temperature (°C)	: 41	<b>Steam Generation Capacity:</b>	
Barometric Pressure,(mm Hg)	: 743	a) Rated	: -
Velocity of Gas flow (m/s)	: 7.77	b) Running	: -
Quantity of Gas flow (Nm <sup>3</sup> /hr)	: 20385.50	<b>Load :</b> a) Rated	: -
Pressure	: -	b) Running	: -

#### C.] RESULT OF SAMPLING:

Sl. No.	Parameters	Result Obtained	Test Method
01.	Particulate Matter (mg/Nm <sup>3</sup> )	: 24.0	IS 11255 (Part -1): 1985 (RA 2019)
02.	Particulate Matter Normalised to 12% CO <sub>2</sub> (V/V) - (mg/Nm <sup>3</sup> )	: -	
03.	Carbon mono oxides (as CO)-%(V/V)	: <0.2	IS 13270:1992 (RA 2019)

For, INDICATIVE CONSULTANT INDIA

Prepared By: P. Das

Checked By: N. Pramanik

Parbati Golui  
(Quality Manager)  
Signatory Authority

Test Witnessed By: Nil (Sampling was done in front of customer representatives)  
Estimated Uncertainty: Not Required

Parbati Golui  
Quality Manager  
INDICATIVE CONSULTANT INDIA

- Note:
- Information provided by customer
  - Sample is drawn by M/s. Indicative Consultant India
  - Sample submitted and identified by customer as: Nil
  - Test results shown in this test report relate only to the sample (s) only.
  - The test results referred in test report are based on observations & measurements under the stated environmental conditions.
  - The reproduction of the report except in full is invalid without written approval of the laboratory.
  - Once issued, the test report/certificate is in public domain and laboratory is not responsible for the authenticity of photocopied test report
  - Retention period of tested samples (Thimbles) is 180 days from the date of issue unless otherwise specified.
  - Location of Testing, Haldia Laboratory

End of Report

Page 1 of 1

Reviewed By: QM/TM



# INDICATIVE CONSULTANT INDIA



(GOVT. REGISTERED TEST HOUSE)



EMAIL : indicativeconsultantindia@gmail.com / indicativeconsultantindia.kol@gmail.com

## TEST REPORT

Date: 21.09.2024	Report No: ICI/HL/A/TC-858/2024	Format No: ICI/FM/H/58
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/A-858
Address	Dhasna, Bahadurpur, Jamuria, Dist. - Paschim Bardhaman, PIN -713 362	Sampling Date : 09.09.2024
#Customer Representative Name & Contact Number	Sr. Executive	Sampling Time : 03:10 PM
#Work Order No.	3000019828 Dtd. 01.04.2024	Analysis Start Date : 19.09.2024
#Sample Description	STACK AIR	Analysis complete Date : 20.09.2024
#Location	ROTARY KILN - 3 & 4 (150 TPD EACH) (COMMON STACK) THROUGH WHRB	
Sample Condition	In Glass Microfiber Thimble & Plastic Bottle	
Sampling Method	CPCB, Emission Regulation (Part III)	

### A.] # GENERAL INFORMATION ABOUT STACK:

<b>Particulars of the Plant</b>		Shape of Stack	: Circular
Stack attached to	ROTARY KILN - 3 & 4 (150 TPD EACH) (COMMON STACK) THROUGH WHRB	Material of Construction	: Concrete
Emission due to	Reduction of Pellet & Oxidation of Coal	Stack ID at sampling point (M)	: 2.0
Fuel Used	Coal	At Bottom (M)	: -
Rated Fuel Consumption	-	At Top (M)	: -
Working Fuel Consumption	5.5 TPH/Kiln	<b>Height Details :</b>	
Calorific Value(Kcal/kg)	-	a) Total Ht. Of stack from GL(M)	: 45.0
Sulphur Content (% by Wt)	-	b) Total Ht. Of stack from RL(M)	: -
Ash Content (% by Wt.)	-	c) Ht. of sampling port from GL(M)	: 25.0
		d) Ht. of port from disturbance zone (M)	: -
Pollution Control Device	ESP		
Whether Stack is provided with permanent Platform / Ladder : Yes			

### B.] PHYSICAL DATA:

Flue Gas Temperature (°C)	: 139	<b>Steam Generation Capacity:</b>	
Barometric Pressure.(mm Hg)	: 743	a) Rated	: -
Velocity of Gas flow (m/s)	: 8.60	b) Running	: -
Quantity of Gas flow (Nm <sup>3</sup> /hr)	: 66813.63	<b>Load :</b> a) Rated	: 150 TPD/Kiln
Pressure	: -	b) Running	: 117 TPD/Kiln

### C.] RESULT OF SAMPLING:

Sl. No.	Parameters	Result Obtained	Test Method
01.	Particulate Matter (mg/Nm <sup>3</sup> )	: 26.0 at 10.4% CO <sub>2</sub>	IS 11255 (Part -1): 1985 (RA 2019)
02.	Particulate Matter Normalised to 12% CO <sub>2</sub> (V/V) - (mg/Nm <sup>3</sup> )	: 30.0	
03.	Sulphur di-oxide (mg/ Nm <sup>3</sup> )	: 345.76	IS 11255 (Part -2): 1985 (RA 2019)
04.	Carbon mono oxides (as CO)-% (V/V)	: <0.2	IS 13270:1992 (RA 2019)
05.	Carbon di oxides (as CO <sub>2</sub> )-% (V/V)	: 10.4	IS 13270:1992 (RA 2019)

Prepared By: P. Das

Checked By: N. Prumanik

For, INDICATIVE CONSULTANT INDIA

Parbati Golui  
(Quality Manager)  
Signatory Authority

Test Witnessed By: Nil (Sampling was done in front of customer representatives)  
Estimated Uncertainty: Not Required

Parbati Golui  
Quality Manager  
INDICATIVE CONSULTANT INDIA

- Note
1. Information provided by customer
  2. Sample is done by M/s. Indicative Consultant India.
  3. Sample submitted and identified by customer as: NA
  4. Test results shown in this test report relate only to the sample (s) only.
  5. The test results referred to test report are based on observations & measurements under the stated environmental conditions.
  6. The reproduction of the report except in full is invalid without written approval of the laboratory.
  7. Once issued, the test report/certificate is in public domain and laboratory is not responsible for the authenticity of photocopied test report.
  8. Retention period of tested samples (Thinblot) is 180 days from the date of issue unless otherwise specified.
  9. Location of Testing: Haldia Laboratory.

End of Report

Page 1 of 1

Reviewed By: QM/TM



# INDICATIVE CONSULTANT INDIA

(GOVT. REGISTERED TEST HOUSE)

EMAIL : indicativeconsultantindia@gmail.com / indicativeconsultantindia.kol@gmail.com



## TEST REPORT

Date: 21.09.2024	Report No: ICI/HL/A/TC-859/2024	Format No: ICI/FM/H/58
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/A-859
Address	Dhasna, Bahadurpur, Jamuria, Dist.- Paschim Bardhaman, PIN -713 362	Sampling Date : 09.09.2024
#Customer Representative Name & Contact Number	Sr. Executive	Sampling Time : 04:40 PM
#Work Order No.	3000019828 Dtd. 01.04.2024	Analysis Start Date : 19.09.2024
#Sample Description	STACK AIR	Analysis complete Date : 20.09.2024
#Location	ROTARY KILN - 1 & 2 (150 TPD EACH) (COMMON STACK) THROUGH WHRB	
Sample Condition	In Glass Microfiber Thimble & Plastic Bottle	
Sampling Method	CPCB, Emission Regulation (Part III)	

### A.] # GENERAL INFORMATION ABOUT STACK:

<b>Particulars of the Plant</b>		Shape of Stack	: Circular
Stack attached to	ROTARY KILN - 1 & 2 (150 TPD EACH) (COMMON STACK) THROUGH WHRB	Material of Construction	: Concrete
Emission due to	Reduction of Pellet & Oxidation of Coal	Stack ID at sampling point (M)	: 2.0
Fuel Used	Coal	At Bottom (M)	: -
Rated Fuel Consumption	-	At Top (M)	: -
Working Fuel Consumption	5.5 TPH/ For Kiln No. - 2	<b>Height Details :</b>	
Calorific Value(Kcal/kg)	-	a) Total Ht. Of stack from GL(M)	: 45.0
Sulphur Content (% by Wt)	-	b) Total Ht. Of stack from RL(M)	: -
Ash Content (% by Wt.)	-	c) Ht. of sampling port from GL(M)	: 25.0
Pollution Control Device	ESP	d) Ht. of port from disturbance zone (M)	: -
Whether Stack is provided with permanent Platform / Ladder :Yes			

### B.] PHYSICAL DATA:

Flue Gas Temperature (°C)	: 108	<b>Steam Generation Capacity:</b>	
Barometric Pressure,(mm Hg)	: 743	a) Rated	: -
Velocity of Gas flow (m/s)	: 6.83	b) Running	: -
Quantity of Gas flow (Nm <sup>3</sup> /hr)	: 57398.42	<b>Load :</b> a) Rated	: 150 TPD/Kiln
Pressure	: -	b) Running	: 117 TPD/ For Kiln No. - 2

### C.] RESULT OF SAMPLING:

Sl. No.	Parameters	Result Obtained	Test Method
01.	Particulate Matter (mg/Nm <sup>3</sup> )	: 23.0 at 10.0% CO <sub>2</sub>	IS 11255 (Part -1): 1985 (RA 2019)
02.	Particulate Matter Normalised to 12% CO <sub>2</sub> (V/V) - (mg/Nm <sup>3</sup> )	: 28.0	
03.	Sulphur di-oxide (mg/ Nm <sup>3</sup> )	: 305.09	IS 11255 (Part -2): 1985 (RA 2019)
04.	Carbon mono oxides (as CO <sub>2</sub> )-% (V/V)	: <0.2	IS 13270:1992 (RA 2019)
05.	Carbon di oxides (as CO <sub>2</sub> )-% (V/V)	: 10.0	IS 13270:1992 (RA 2019)

Prepared By: P. Das

Checked By: N. Pramanik

For, INDICATIVE CONSULTANT INDIA

Parbati Golui  
(Quality Manager)  
Signatory Authority

Test Witnessed By: Nil (Sampling was done in front of customer representatives)

Estimated Uncertainty: Not Required

Parbati Golui  
Quality Manager  
INDICATIVE CONSULTANT INDIA

- Note:
- 1 Information provided by customer
  - 2 Sample is drawn by M/s. Indicative Consultant India.
  - 3 Sample submitted and identified by customer as: NA
  - 4 Test results shown in this test report relate only to the sample (s) only
  - 5 The test results referred in test report are based on observations & measurements under the stated environmental conditions.
  - 6 The reproduction of the report except in full is invalid without written approval of the laboratory.
  - 7 Once issued, the test report/certificate is in public domain and laboratory is not responsible for the authenticity of photocopied test report
  - 8 Retention period of tested samples (Thimbles) is 180 days from the date of issue unless otherwise specified.
  - 9 Location of Testing: Haldia Laboratory

End of Report

Page 1 of 1

Reviewed By: QM/TM



# INDICATIVE CONSULTANT INDIA



(GOVT. REGISTERED TEST HOUSE)



EMAIL : indicativeconsultantindia@gmail.com / indicativeconsultantindia.kol@gmail.com

## TEST REPORT

Date: 21.09.2024	Report No: ICI/HL/A/TC-860/2024	Format No: ICI/FM/H/58
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/A-860
Address	Dhasna, Bahadurpur, Jamuria, Dist- Paschim Bardhaman, PIN -713 362	Sampling Date : 10.09.2024
#Customer Representative Name & Contact Number	Sr. Executive	Sampling Time : 09:35 AM
#Work Order No.	3000019828 Dtd. 01.04.2024	Analysis Start Date : 19.09.2024
#Sample Description	STACK AIR	Analysis complete Date : 20.09.2024
#Location	ROTARY KILN - 5 & 6 (450 TPD EACH) THROUGH WHRB	
Sample Condition	In Glass Microfiber Thimble & Plastic Bottle	
Sampling Method	CPCB, Emission Regulation (Part III)	

### A.] # GENERAL INFORMATION ABOUT STACK:

<b>Particulars of the Plant</b>		Shape of Stack	: Circular
Stack attached to	ROTARY KILN - 5 & 6 (450 TPD EACH) THROUGH WHRB	Material of Construction	: Concrete
Emission due to	Reduction of Pellet & Oxidation of Coal	Stack ID at sampling point (M)	: 4.0
Fuel Used	Coal	At Bottom (M)	: -
Rated Fuel Consumption	-	At Top (M)	: -
Working Fuel Consumption	16 TPH/Kiln	<b>Height Details :</b>	
Calorific Value(Kcal/kg)	-	a) Total Ht. Of stack from GL(M)	: 55.0
Sulphur Content (% by Wt)	-	b) Total Ht. Of stack from RL(M)	: -
Ash Content (% by Wt.)	-	c) Ht. of sampling port from GL(M)	: 20.0
Pollution Control Device	ESP	d) Ht. of port from disturbance zone (M)	: -
Whether Stack is provided with permanent Platform / Ladder : Yes			

### B.] PHYSICAL DATA:

Flue Gas Temperature (°C)	: 147	<b>Steam Generation Capacity:</b>	
Barometric Pressure,(mm Hg)	: 743	a) Rated	: -
Velocity of Gas flow (m/s)	: 9.18	b) Running	: -
Quantity of Gas flow (Nm <sup>3</sup> /hr)	: 279069.57	<b>Load :</b> a) Rated	: 450 TPD/Kiln
Pressure	: -	b) Running	: 375 TPD/Kiln

### C.] RESULT OF SAMPLING:

Sl No.	Parameters	Result Obtained	Test Method
01.	Particulate Matter (mg/Nm <sup>3</sup> )	20.0 at 10.2% CO <sub>2</sub>	IS 11255 (Part -1): 1985 (RA 2019)
02.	Particulate Matter Normalised to 12% CO <sub>2</sub> (V/V) - (mg/Nm <sup>3</sup> )	24.0	
03.	Sulphur di-oxide (mg/ Nm <sup>3</sup> )	325.42	IS 11255 (Part -2): 1985 (RA 2019)
04.	Carbon mono oxides (as CO)-% (V/V)	<0.2	IS 13270:1992 (RA 2019)
05.	Carbon di oxides (as CO <sub>2</sub> )-% (V/V)	10.2	IS 13270:1992 (RA 2019)

Prepared By: P. Das

Checked By: N. Pramanik

For, INDICATIVE CONSULTANT INDIA

Parbati Golli  
(Quality Manager)  
Signatory Authority

Test Witnessed By: Nil (Sampling was done in front of customer representatives)  
Estimated Uncertainty: Not Required

Parbati Golli  
Quality Manager  
INDICATIVE CONSULTANT INDIA

- Note:
1. Information provided by customer
  2. Sample is drawn by Nil, Indicative Consultant India
  3. Sample submitted and identified by customer as: Nil
  4. Test results shown in this test report relate only to the sample (s) only.
  5. The test results referred in test report are based on observations & measurements under the stated environmental conditions.
  6. The reproduction of the report except in full is invalid without written approval of the laboratory.
  7. Once issued, the test report/certificate is in public domain and laboratory is not responsible for the authenticity of photocopied test report.
  8. Retention period of issued samples (Thinfiles) is 180 days from the date of issue unless otherwise specified.
  9. Location of Testing: Haldia Laboratory

End of Report

Page 1 of 1

Reviewed By: QM/IM



# INDICATIVE CONSULTANT INDIA



(GOVT. REGISTERED TEST HOUSE)



EMAIL : indicativeconsultantindia@gmail.com / indicativeconsultantindia.kol@gmail.com

## TEST REPORT

Date: 21.09.2024	Report No: ICI/HL/A/TC-861/2024	Format No: ICI/FM/H/58
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID/No : 2024/A-861
Address	Dhasna, Bahadurpur, Jamuria, Dist- Paschim Bardhaman, PIN -713 362	Sampling Date : 10.09.2024
#Customer Representative Name & Contact Number	Sr. Executive	Sampling Time : 11:10 AM
#Work Order No.	3000019828 Dtd. 01.04.2024	Analysis Start Date : 19.09.2024
#Sample Description	STACK AIR	Analysis complete Date : 20.09.2024
#Location	COOLER DISCHARGE FOR KILN NO. - 1, 2, 3 & 4	
Sample Condition	In Glass Microfiber Thimble	
Sampling Method	CPCB, Emission Regulation (Part III)	

### A.] # GENERAL INFORMATION ABOUT STACK:

Particulars of the Plant	Stack attached to	COOLER DISCHARGE FOR KILN NO. - 1, 2, 3 & 4	Shape of Stack	Circular
Emission due to	Fuel Used	Process Activity	Material of Construction	M.S.
Rated Fuel Consumption	Working Fuel Consumption	Calorific Value(Kcal/kg)	Stack ID at sampling point (M)	1.0
Sulphur Content (% by Wt)	Ash Content (% by Wt.)		At Bottom (M)	-
Pollution Control Device	Whether Stack is provided with permanent Platform / Ladder	Bag Filter	At Top (M)	-
			<b>Height Details :</b>	
			a) Total Ht. Of stack from GL(M)	30.0
			b) Total Ht. Of stack from RL(M)	-
			c) Ht. of sampling port from GL(M)	22.0
			d) Ht. of port from disturbance zone (M)	-

### B.] PHYSICAL DATA:

Flue Gas Temperature (°C)	51	Steam Generation Capacity:	
Barometric Pressure,(mm Hg)	743	a) Rated	-
Velocity of Gas flow (m/s)	9.47	b) Running	-
Quantity of Gas flow (Nm <sup>3</sup> /hr)	24096.96	Load :	
Pressure	-	a) Rated	-
		b) Running	-

### C.] RESULT OF SAMPLING:

Sl. No.	Parameters	Result Obtained	Test Method
01.	Particulate Matter (mg/Nm <sup>3</sup> )	24.0	IS 11255 (Part -I): 1985 (RA 2019)
02.	Particulate Matter Normalised to 12% CO <sub>2</sub> (V/V) - (mg/Nm <sup>3</sup> )	-	
03.	Carbon mono oxides (as CO)-% (V/V)	<0.2	IS 13270:1992 (RA 2019)

For, INDICATIVE CONSULTANT INDIA

Prepared By: P. Das

Checked By: N. Pramanik

Parbati Golui  
(Quality Manager)  
Signatory Authority

Test Witnessed By: Nil (Sampling was done in front of customer representatives)  
Estimated Uncertainty: Not Required

Parbati Golui  
Quality Manager  
INDICATIVE CONSULTANT INDIA

- Note:
1. Information provided by customer
  2. Sample is drawn by M/s. Indicative Consultant India.
  3. Sample submitted and identified by customer as: NA
  4. Test results shown in this test report relate only to the sample (s) only.
  5. The test results referred in test report are based on observations & measurements under the stated environmental conditions.
  6. The reproduction of the report except in full is invalid without written approval of the laboratory.
  7. Once issued, the test report/certificate is in public domain and laboratory is not responsible for the authenticity of photocopied test report.
  8. Retention period of tested samples (Thimbles) is 180 days from the date of issue unless otherwise specified.
  9. Location of Testing: Haldia Laboratory

End of Report

Page 1 of 1

Reviewed By: QAI/TM



# INDICATIVE CONSULTANT INDIA



(GOVT. REGISTERED TEST HOUSE)



EMAIL: indicativeconsultantindia@gmail.com / indicativeconsultantindia.koi@gmail.com

## TEST REPORT

Date: 21.09.2024	Report No: ICI/HL/A/TC-862/2024	Format No: ICI/FM/H/58
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/A-862
Address	Dhasna, Bahadurpur, Jamuria, Dist.- Paschim Bardhaman, PIN -713 362	Sampling Date : 10.09.2024
#Customer Representative Name & Contact Number	Sr. Executive	Sampling Time : 12:15 PM
#Work Order No.	3000019828 Dtd 01.04.2024	Analysis Start Date : 19.09.2024
#Sample Description	STACK AIR	Analysis complete Date : 20.09.2024
#Location	PRODUCT SEPARATOR HOUSE (PSH) KILN NO. - 1, 2, 3 & 4 (SPONG IRON UNIT)	
Sample Condition	In Glass Microfiber Thimble	
Sampling Method	CPCB, Emission Regulation (Part III)	

### A.) # GENERAL INFORMATION ABOUT STACK:

<b>Particulars of the Plant</b>		Shape of Stack	: Circular
Stack attached to	PRODUCT SEPARATOR HOUSE (PSH) KILN NO. - 1, 2, 3 & 4 (SPONG IRON UNIT)	Material of Construction	: M.S.
Emission due to	Process Activity	Stack ID at sampling point (M)	: 1.0
Fuel Used	-	At Bottom (M)	: -
Rated Fuel Consumption	-	At Top (M)	: -
Working Fuel Consumption	-	<b>Height Details :</b>	
Calorific Value (Kcal/kg)	-	a) Total Ht. Of stack from GL(M)	: 30.0
Sulphur Content (% by Wt)	-	b) Total Ht. Of stack from RL(M)	: -
Ash Content (% by Wt.)	-	c) Ht. of sampling port from GL(M)	: 23.0
		d) Ht. of port from disturbance zone (M)	: -
Pollution Control Device	Bag Filter		
Whether Stack is provided with permanent Platform / Ladder :Yes			

### B.) PHYSICAL DATA:

Flue Gas Temperature (°C)	: 35	<b>Steam Generation Capacity:</b>	
Barometric Pressure, (mm Hg)	: 743	a) Rated	: -
Velocity of Gas flow (m/s)	: 7.84	b) Running	: -
Quantity of Gas flow (Nm <sup>3</sup> /hr)	: 21062.28	<b>Load :</b> a) Rated	: -
Pressure	: -	b) Running	: -

### C.) RESULT OF SAMPLING:

Sl. No.	Parameters	Result Obtained	Test Method
01.	Particulate Matter (mg/Nm <sup>3</sup> )	26.0	IS 11255 (Part -1) 1985 (RA 2019)
02.	Particulate Matter Normalised to 12% CO <sub>2</sub> (V/V) - (mg/Nm <sup>3</sup> )	-	
03.	Carbon mono oxides (as CO)-% (V/V)	<0.2	IS 13270:1992 (RA 2019)

For, INDICATIVE CONSULTANT INDIA

Prepared By: P. Das

Checked By: N. Pramanik

Parbati Gouli  
(Quality Manager)  
Signatory Authority

Test Witnessed By: Nil (Sampling was done in front of customer representatives)  
Estimated Uncertainty: Not Required

Parbati Gouli  
Quality Manager  
INDICATIVE CONSULTANT INDIA

- Note:
1. Information provided by customer
  2. Sample is drawn by M/s. Indicative Consultant India
  3. Sample submitted and identified by customer as: NA
  4. Test results shown in this test report relate only to the sample (s) only.
  5. The test results referred in test reports are based on observations & measurements under the stated environmental conditions.
  6. The reproduction of the report except in full is invalid without written approval of the laboratory.
  7. Once issued, the test report/certificate is in public domain and laboratory is not responsible for the authenticity of photocopied test report.
  8. Retention period of tested samples (Thimbles) is 180 days from the date of issue unless otherwise specified.
  9. Location of Testing: Haldia Laboratory

Page 1 of 1

End of Report

Reviewed By: QM/TM



# INDICATIVE CONSULTANT INDIA

(GOVT. REGISTERED TEST HOUSE)

EMAIL : indicativeconsultantindia@gmail.com / indicativeconsultantindia.kol@gmail.com



## TEST REPORT

Date: 21.09.2024	Report No: ICI/HL/A/TC-863/2024	Format No: ICI/FM/H/58
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/A-863
Address	Dhasna, Bahadurpur, Jamuria, Dist.- Paschim Bardhaman, PIN -713 362	Sampling Date : 10.09.2024
#Customer Representative Name & Contact Number	Sr. Executive	Sampling Time : 01:50 PM
#Work Order No.	3000019828 Dtd. 01.04.2024	Analysis Start Date : 19.09.2024
#Sample Description	STACK AIR	Analysis complete Date : 20.09.2024
#Location	PRODUCT SEPARATOR HOUSE (PSH) FOR KILN NO. 5 & 6	
Sample Condition	In Glass Microfiber Thimble	
Sampling Method	CPCB, Emission Regulation (Part III)	

### A.] # GENERAL INFORMATION ABOUT STACK:

<b>Particulars of the Plant</b>		Shape of Stack	: Circular
Stack attached to	PRODUCT SEPARATOR HOUSE (PSH) FOR KILN NO. 5 & 6	Material of Construction	: M.S.
Emission due to	Process Activity	Stack ID at sampling point (M)	: 1.0
Fuel Used	-	At Bottom (M)	: -
Rated Fuel Consumption	-	At Top (M)	: -
Working Fuel Consumption	-	<b>Height Details :</b>	
Calorific Value(Kcal/kg)	-	a) Total Ht. Of stack from GL(M)	: 30.0
Sulphur Content (% by Wt)	-	b) Total Ht. Of stack from RL(M)	: -
Ash Content (% by Wt.)	-	c) Ht. of sampling port from GL(M)	: 22.0
		d) Ht. of port from disturbance zone (M)	: -
Pollution Control Device	Bag Filter		
Whether Stack is provided with permanent Platform / Ladder :Yes			

### B.] PHYSICAL DATA:

Flue Gas Temperature (°C)	: 36	<b>Steam Generation Capacity:</b>	
Barometric Pressure.(mm Hg)	: 743	a) Rated	: -
Velocity of Gas flow (m/s)	: 9.59	b) Running	: -
Quantity of Gas flow (Nm <sup>3</sup> /hr)	: 25587.92	<b>Load :</b>	
Pressure	: -	a) Rated	: -
		b) Running	: -

### C.] RESULT OF SAMPLING:

Sl. No.	Parameters	Result Obtained	Test Method
01.	Particulate Matter (mg/Nm <sup>3</sup> )	27.0	IS 11255 (Part -1): 1985 (RA 2019)
02.	Particulate Matter Normalised to 12% CO <sub>2</sub> (V/V) • (mg/Nm <sup>3</sup> )	-	
03.	Carbon mono oxides (as CO)-% (V/V)	<0.2	IS 13270:1992 (RA 2019)

For, INDICATIVE CONSULTANT INDIA

Prepared By: P. Das

Checked By: N. Pramanik

Parbati Golui  
(Quality Manager)  
Signatory Authority

Test Witnessed By: Nil (Sampling was done in front of customer representatives)  
Estimated Uncertainty: Not Required

Parbati Golui  
Quality Manager  
INDICATIVE CONSULTANT INDIA

- Note:
1. Information provided by customer
  2. Sample is drawn by M/s. Indicative Consultant India
  3. Sample submitted and identified by customer as: NA
  4. Test results shown in this test report relate only to the sample (s) (s):
  5. The test results referred in test report are based on observations & measurements under the stated environmental conditions.
  6. The reproduction of the report except in full is invalid without written approval of the Laboratory.
  7. Once issued, the test report/certificate is in public domain and laboratory is not responsible for the authenticity of photocopied test report
  8. Retention period of tested samples (Thimbles) is 180 days from the date of issue unless otherwise specified.
  9. Location of Testing: Haldia Laboratory

End of Report

Page 1 of 1

Reviewed By: QM/ITM

CENTRAL LABORATORY : HPL Link Road, Basudevpur, Khanjanchak, Haldia, Purba Medinipur, Pin- 721602

Phone No. : 03224-275765, 9434017594, 9232395890, 7797506973

KOLKATA LABORATORY : B-1, 190/1, G. Sanyal Street, Block B, Subhashida, Kolkata 700143, India. 7707945810, 7707506973



# INDICATIVE CONSULTANT INDIA



(GOVT. REGISTERED TEST HOUSE)

EMAIL : indicativeconsultantindia@gmail.com / indicativeconsultantindia.kol@gmail.com



## TEST REPORT

Date: 21.09.2024	Report No: ICI/HL/A/TC-865/2024	Format No: ICI/FM/H/58
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/A-865
Address	Dhasna, Bahadurpur, Jamuria, Dist.- Paschim Bardhaman, PIN -713 362	Sampling Date : 10.09.2024
#Customer Representative Name & Contact Number	Sr. Executive	Sampling Time : 04:25 PM
#Work Order No.	3000019828 Dtd. 01.04.2024	Analysis Start Date : 19.09.2024
#Sample Description	STACK AIR	Analysis complete Date : 20.09.2024
#Location	DRI - 3 & 4 PRODUCT SILO WITH DISPATCH	
Sample Condition	In Glass Microfiber Thimble	
Sampling Method	CPCB, Emission Regulation (Part III)	

### A.] # GENERAL INFORMATION ABOUT STACK:

Particulars of the Plant	Stack attached to	DRI - 3 & 4 PRODUCT SILO WITH DISPATCH	Shape of Stack	Circular
Emission due to	Process Activity		Material of Construction	M.S.
Fuel Used	-		Stack ID at sampling point (M)	1.0
Rated Fuel Consumption	-		At Bottom (M)	-
Working Fuel Consumption	-		At Top (M)	-
Calorific Value(Kcal/kg)	-		Height Details :	
Sulphur Content (% by Wt)	-		a) Total Ht. Of stack from GL(M)	30.0
Ash Content (% by Wt.)	-		b) Total Ht. Of stack from RL(M)	-
Pollution Control Device	Bag Filter		c) Ht. of sampling port from GL(M)	21.0
Whether Stack is provided with permanent Platform / Ladder	Yes		d) Ht. of port from disturbance zone (M)	-

### B.] PHYSICAL DATA:

Flue Gas Temperature (°C)	36	Steam Generation Capacity:
Barometric Pressure,(mm Hg)	743	a) Rated
Velocity of Gas flow (m/s)	27.13	b) Running
Quantity of Gas flow (Nm <sup>3</sup> /hr)	72609.95	Load : a) Rated
Pressure	-	b) Running

### C.] RESULT OF SAMPLING:

Sl. No.	Parameters	Result Obtained	Test Method
01.	Particulate Matter (mg/Nm <sup>3</sup> )	22.0	IS 11255 (Part -I): 1985
02.	Particulate Matter Normalised to 12% CO <sub>2</sub> (V/V) - (mg/Nm <sup>3</sup> )	-	(RA 2019)

Prepared By: P. Das

Checked By: N. Pramanik

For, INDICATIVE CONSULTANT INDIA

Parbati Golui  
(Quality Manager)  
Signatory Authority

Parbati Golui  
Quality Manager  
INDICATIVE CONSULTANT INDIA

Test Witnessed By: Nil (Sampling was done in front of customer representatives)  
Estimated Uncertainty: Not Required

- Note:
- Information provided by customer
  - Sample is drawn by M/s. Indicative Consultant India.
  - Sample submitted and identified by customer or: NA
  - Test results shown in this test report relate only to the sample (s) only.
  - The test results referred in test report are based on observations & measurements under the stated environmental conditions.
  - The reproduction of the report except in full is invalid without written approval of the laboratory.
  - Once issued, the test reports/certificates is in public domain and laboratory is not responsible for the authenticity of photocopied test report
  - Retention period of tested samples (Thinfiles) is 180 days from the date of issue unless otherwise specified.
  - Location of Testing: Haldia Laboratory

End of Report

Page 1 of 1

Reviewed By: QM/TM



### TEST REPORT

Date: 21.09.2024	Report No: ICI/HL/A/TC-866/2024	Format No: ICI/FM/H/58
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/A-866
Address	Dhasna, Bahadurpur, Jamuria, Dist.- Paschim Bardhaman, PIN -713 362	Sampling Date : 11.09.2024
#Customer Representative Name & Contact Number	Sr. Executive	Sampling Time : 09:40 AM
		Analysis Start Date : 19.09.2024
#Work Order No.	3000019828 Dtd. 01.04.2024	Analysis complete Date : 20.09.2024
#Sample Description	STACK AIR	
#Location	FERRO PLANT SEAF NO. - 1 & 2 (9.0 MVA EACH) ATTACHED WITH COMMON STACK	
Sample Condition	In Glass Microfiber Thimble	
Sampling Method	CPCB, Emission Regulation (Part III)	

#### A.] # GENERAL INFORMATION ABOUT STACK:

<b>Particulars of the Plant</b>		Shape of Stack	: Circular
Stack attached to	FERRO PLANT SEAF NO. 1 & 2 (9.0 MVA EACH) ATTACHED WITH COMMON STACK	Material of Construction	: M.S.
Emission due to	Reduction of Mn Ore	Stack ID at sampling point (M)	: 1.4
Fuel Used	Electricity	At Bottom (M)	: -
Rated Fuel Consumption	-	At Top (M)	: -
Working Fuel Consumption	-	<b>Height Details:</b>	
Calorific Value(Kcal/kg)	-	a) Total Ht. Of stack from GL(M)	: 30.0
Sulphur Content (% by Wt)	-	b) Total Ht. Of stack from RL(M)	: -
Ash Content (% by Wt.)	-	c) Ht. of sampling port from GL(M)	: 22.0
Pollution Control Device	F.D. & Air Cooled Heat Exchanger & Bag Filter	d) Ht. of port from disturbance zone (M)	: -
Whether Stack is provided with permanent Platform / Ladder	: Yes		

#### B.] PHYSICAL DATA:

Flue Gas Temperature (°C)	: 78	<b>Steam Generation Capacity:</b>	
Barometric Pressure,(mm Hg)	: 743	a) Rated	: -
Velocity of Gas flow (m/s)	: 8.00	b) Running	: -
Quantity of Gas flow (Nm <sup>3</sup> /hr)	: 36822.60	<b>Load :</b> a) Rated	: 9.0 MVA (Each)
Pressure	: -	b) Running	: 9.0 MVA (Each)

#### C.] RESULT OF SAMPLING:

Sl. No.	Parameters	Result Obtained	Test Method
01.	Particulate Matter (mg/Nm <sup>3</sup> )	: 34.0	IS 11255 (Part -1): 1985 (RA 2019)
02.	Particulate Matter Normalised to 12% CO <sub>2</sub> (V/V) - (mg/Nm <sup>3</sup> )	: -	
03.	Carbon mono oxides (as CO)-% (V/V)	: <0.2	IS 13270:1992 (RA 2019)
04.	Carbon di oxides (as CO <sub>2</sub> )-% (V/V)	: 1.2	IS 13270:1992 (RA 2019)

Prepared By: P. Das

Checked By: N. Pramanik

For, INDICATIVE CONSULTANT INDIA

Parbati Golui  
(Quality Manager)  
Signatory Authority

Test Witnessed By: Nil (Sampling was done in front of customer representatives)

Estimated Uncertainty: Not Required

Parbati Golui  
Quality Manager  
INDICATIVE CONSULTANT INDIA

- Note:
- Information provided by customer
  - Sample is drawn by M/s. Indicative Consultant India
  - Sample submitted and identified by customer as: NA
  - Test results shown in this test report relate only to the sample (s) only
  - The test results referred in test report are based on observations & measurements under the stated environmental conditions
  - The reproduction of the report accept in full is invalid without written approval of the laboratory
  - Once issued, the test report/certificate is in public domain and laboratory is not responsible for the authenticity of photocopied test report
  - Retention period of tested samples (Thimbles) is 180 days from the date of issue unless otherwise specified
  - Location of Testing: Haldia Laboratory

End of Report

Page 1 of 1

Reviewed By: [Signature]



# INDICATIVE CONSULTANT INDIA



(GOVT. REGISTERED TEST HOUSE)



EMAIL : indicativeconsultantindia@gmail.com / indicativeconsultantindia.kol@gmail.com

## TEST REPORT

Date: 21.09.2024	Report No: ICI/HL/A/TC-867/2024	Format No: ICI/FM/H/58
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/A-867
Address	Dhasna, Bahadurpur, Jamuria, Dist.- Paschim Bardhaman, PIN -713 362	Sampling Date : 11.09.2024
#Customer Representative Name & Contact Number	Sr. Executive	Sampling Time : 11:00 AM
#Work Order No.	3000019828 Dtd. 01.04.2024	Analysis Start Date : 19.09.2024
#Sample Description	STACK AIR	Analysis complete Date : 20.09.2024
#Location	FERRO PLANT SEAF NO. 3 (9.0 MVA)	
Sample Condition	In Glass Microfiber Thimble	
Sampling Method	CPCB, Emission Regulation (Part III)	

### A. # GENERAL INFORMATION ABOUT STACK:

<b>Particulars of the Plant</b>		Shape of Stack	: Circular
Stack attached to	: FERRO PLANT SEAF NO. 3 (9.0 MVA)	Material of Construction	: M.S.
Emission due to	: Reduction of Mn Ore	Stack ID at sampling point (M)	: 1.4
Fuel Used	: Electricity	At Bottom (M)	: -
Rated Fuel Consumption	: -	At Top (M)	: -
Working Fuel Consumption	: -	<b>Height Details:</b>	
Calorific Value(Kcal/kg)	: -	a) Total Ht. Of stack from GL.(M)	: 30.0
Sulphur Content (% by Wt)	: -	b) Total Ht. Of stack from RL.(M)	: -
Ash Content (% by Wt.)	: -	c) Ht. of sampling port from GL.(M)	: 22.0
		d) Ht. of port from disturbance zone (M)	: -
Pollution Control Device	: Water Cooled Heat Exchanger & Bag Filter		
Whether Stack is provided with permanent Platform / Ladder : Yes			

### B. | PHYSICAL DATA:

Flue Gas Temperature (°C)	: 65	<b>Steam Generation Capacity:</b>	
Barometric Pressure, (mm Hg)	: 743	a) Rated	: -
Velocity of Gas flow (m/s)	: 8.09	b) Running	: -
Quantity of Gas flow (Nm <sup>3</sup> /hr)	: 51957.04	<b>Load :</b> a) Rated	: 9.0 MVA
Pressure	: -	b) Running	: 9.0 MVA

### C. | RESULT OF SAMPLING:

Sl. No.	Parameters	Result Obtained	Test Method
01.	Particulate Matter (mg/Nm <sup>3</sup> )	42.0	IS 11255 (Part -1). 1985 (RA 2019)
02.	Particulate Matter Normalised to 12% CO <sub>2</sub> (V/V) - (mg/Nm <sup>3</sup> )	-	
03.	Carbon mono oxides (as CO)-% (V/V)	<0.2	IS 13270:1992 (RA 2019)
04.	Carbon di oxides (as CO <sub>2</sub> )-% (V/V)	1.0	IS 13270:1992 (RA 2019)

For, INDICATIVE CONSULTANT INDIA

Prepared By: P. Das

Checked By: N. Pramanik

Parbati Golui  
(Quality Manager)  
Signatory Authority

Test Witnessed By: Nil (Sampling was done in front of customer representatives)  
Estimated Uncertainty: Not Required

Parbati Golui  
Quality Manager  
INDICATIVE CONSULTANT INDIA

- Note:
1. Information provided by customer
  2. Sample is drawn by M/s. Indicative Consultant India.
  3. Sample unaltered and identified by customer as: NA
  4. Test results shown in this test report relate only to the sample (s) only.
  5. The test results referred to test report are based on site visitations & measurements under the stated environmental conditions.
  6. The reproduction of the report except in full is invalid without written approval of the laboratory.
  7. Once issued, the test report/certificate is in public domain and laboratory is not responsible for the authenticity of photocopied test report.
  8. Retention period of tested samples (Thimbles) is 180 days from the date of issue unless others are specified.
  9. Location of Testing: Haldia Laboratory

End of Report

Page 1 of 1

Reviewed By: QM/TM



# INDICATIVE CONSULTANT INDIA



(GOVT. REGISTERED TEST HOUSE)



EMAIL : indicativeconsultantindia@gmail.com / indicativeconsultantindia.kol@gmail.com

## TEST REPORT

Date: 21.09.2024	Report No: ICI/HL/A/TC-868/2024	Format No: ICI/FM/H/58
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/A-868
Address	Dhasna, Bahadurpur, Jamuria, Dist.- Paschim Bardhaman, PIN -713 362	Sampling Date : 11.09.2024
#Customer Representative Name & Contact Number	Sr. Executive	Sampling Time : 12:10 PM
#Work Order No.	3000019828 Dtd. 01.04.2024	Analysis Start Date : 19.09.2024
#Sample Description	STACK AIR	Analysis complete Date : 20.09.2024
#Location	FERRO PLANT SEAF NO. 4 (9.0 MVA)	
Sample Condition	In Glass Microfiber Thimble	
Sampling Method	CPCB, Emission Regulation (Part III)	

### A.] # GENERAL INFORMATION ABOUT STACK:

<b>Particulars of the Plant</b>		Shape of Stack	: Circular
Stack attached to	FERRO PLANT SEAF NO. 4 (9.0 MVA)	Material of Construction	: M.S.
Emission due to	Reduction of Mn Ore	Stack ID at sampling point (M)	: 1.4
Fuel Used	Electricity	At Bottom (M)	: -
Rated Fuel Consumption	-	At Top (M)	: -
Working Fuel Consumption	-	<b>Height Details:</b>	
Calorific Value(Kcal/kg)	-	a) Total Ht. Of stack from GL(M)	: 32.0
Sulphur Content (% by Wt.)	-	b) Total Ht. Of stack from RL(M)	: -
Ash Content (% by Wt.)	-	c) Ht. of sampling port from GL(M)	: 22.0
		d) Ht. of port from disturbance zone (M)	: -
Pollution Control Device	Air Cooled Heat Exchanger & Bag Filter		
Whether Stack is provided with permanent Platform / Ladder : Yes			

### B.] PHYSICAL DATA:

Flue Gas Temperature (°C)	: 94	<b>Steam Generation Capacity:</b>	
Barometric Pressure. (mm Hg)	: 743	a) Rated	: -
Velocity of Gas flow (m/s)	: 13.51	b) Running	: -
Quantity of Gas flow (Nm <sup>3</sup> /hr)	: 59417.13	<b>Load :</b> a) Rated	: 9.0 MVA
Pressure	: -	b) Running	: 9.0 MVA

### C.] RESULT OF SAMPLING:

Sl. No.	Parameters	Result Obtained	Test Method
01.	Particulate Matter (mg/Nm <sup>3</sup> )	37.0	IS 11255 (Part -1): 1985 (RA 2019)
02.	Particulate Matter Normalised to 12% CO <sub>2</sub> (V/V) - (mg/Nm <sup>3</sup> )	-	
03.	Carbon mono oxides (as CO)-%(V/V)	<0.2	IS 13270:1992 (RA 2019)
04.	Carbon di oxides (as CO <sub>2</sub> )-%(V/V)	1.4	IS 13270:1992 (RA 2019)

For, INDICATIVE CONSULTANT INDIA

Prepared By: P. Das

Checked By: N. Pramanik

Parbati Golui  
(Quality Manager)  
Signatory Authority

Test Witnessed By: Nil (Sampling was done in front of customer representatives)  
Estimated Uncertainty: Not Required

Parbati Golui  
Quality Manager  
INDICATIVE CONSULTANT INDIA

- Note:
- Information provided by customer
  - Sample is drawn by M/s. Indicative Consultant India.
  - Sample submitted and identified by customer as: NA
  - Test results shown in this test report relate only to the sample (s) only.
  - The test results referred in test report are based on observations & measurements under the stated environmental conditions.
  - The reproduction of the report except in full is invalid without written approval of the laboratory.
  - Once issued, the test report/certificate is in public domain and laboratory is not responsible for the authenticity of photocopied test report
  - Retention period of tested samples (Thimbles) is 180 days from the date of issue unless otherwise specified.
  - Location of Testing: Haldia Laboratory

End of Report

Page 1 of 1

Reviewed By: QM/TM



# INDICATIVE CONSULTANT INDIA



(GOVT. REGISTERED TEST HOUSE)



EMAIL : indicativeconsultantindia@gmail.com / indicativeconsultantindia.kol@gmail.com

## TEST REPORT

Date: 21.09.2024	Report No: ICI/HL/A/TC-869/2024	Format No: ICI/FM/H/58
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/A-869
Address	Dhasna, Bahadurpur, Jamuria, Dist.- Paschim Bardhaman, PIN -713 362	Sampling Date : 11.09.2024
#Customer Representative Name & Contact Number	Sr. Executive	Sampling Time : 01:50 PM
#Work Order No.	3000019828 Dtd. 01.04.2024	Analysis Start Date : 19.09.2024
#Sample Description	STACK AIR	Analysis complete Date : 20.09.2024
#Location	FERRO PLANT SEAF NO. - 1 (4.5 MVA)	
Sample Condition	In Glass Microfiber Thimble	
Sampling Method	CPCB, Emission Regulation (Part III)	

### A.) # GENERAL INFORMATION ABOUT STACK:

<b>Particulars of the Plant</b>		Shape of Stack	: Circular
Stack attached to	FERRO PLANT SEAF NO. - 1 (4.5 MVA)	Material of Construction	: M.S.
Emission due to	Reduction of Mn Ore	Stack ID at sampling point (M)	: 1.4
Fuel Used	Electricity	At Bottom (M)	: -
Rated Fuel Consumption	-	At Top (M)	: -
Working Fuel Consumption	-	<b>Height Details:</b>	
Calorific Value(Kcal/kg)	-	a) Total Ht. Of stack from GL(M)	: 30.0
Sulphur Content (% by Wt)	-	b) Total Ht. Of stack from RL(M)	: -
Ash Content (% by Wt.)	-	c) Ht. of sampling port from GL(M)	: 21.0
Pollution Control Device	Air Cooled Heat Exchanger & Bag Filter	d) Ht. of port from disturbance zone (M)	: -
Whether Stack is provided with permanent Platform / Ladder : Yes			

### B.) PHYSICAL DATA:

Flue Gas Temperature (°C)	: 69	<b>Steam Generation Capacity:</b>	
Barometric Pressure, (mm Hg)	: 743	a) Rated	: -
Velocity of Gas flow (m/s)	: 7.98	b) Running	: -
Quantity of Gas flow (Nm <sup>3</sup> /hr)	: 37697.65	<b>Load:</b> a) Rated	: 4.5 MVA
Pressure	: -	b) Running	: 4.5 MVA

### C.) RESULT OF SAMPLING:

Sl. No.	Parameters	Result Obtained	Test Method
01.	Particulate Matter (mg/Nm <sup>3</sup> )	40.0	IS 11255 (Part -1) 1985 (RA 2019)
02.	Particulate Matter Normalised to 12% CO <sub>2</sub> (V/V) - (mg/Nm <sup>3</sup> )	-	
03.	Carbon mono oxides (as CO)-% (V/V)	<0.2	IS 13270:1992 (RA 2019)
04.	Carbon di oxides (as CO <sub>2</sub> )-% (V/V)	1.0	IS 13270:1992 (RA 2019)

For, INDICATIVE CONSULTANT INDIA

Prepared By: P. Das

Checked By: N. Pramanik

Parbati Golui  
(Quality Manager)  
Signatory Authority

Test Witnessed By: Nil (Sampling was done in front of customer representatives)  
Estimated Uncertainty: Not Required

Parbati Golui  
Quality Manager  
INDICATIVE CONSULTANT INDIA

- Note:
- Information provided by customer
  - Sample is drawn by M/s. Indicative Consultant India.
  - Sample submitted and identified by customer as: NA
  - Test results shown in this test report relate only to the sample (s) only.
  - The test results referred in test report are based on observations & measurements under the stated environmental conditions.
  - The reproduction of the report except in full is invalid without written approval of the laboratory.
  - Once issued, the test report/certificate is in public domain and laboratory is not responsible for the authenticity of photocopied test report
  - Retention period of tested samples (Thimbles) is 180 days from the date of issue unless otherwise specified.
  - Location of Testing: Haldia Laboratory

End of Report

Page 1 of 1

Reviewed by: QIR/TM



# INDICATIVE CONSULTANT INDIA



(GOVT. REGISTERED TEST HOUSE)



EMAIL : indicativeconsultantindia@gmail.com / indicativeconsultantindia.kol@gmail.com

## TEST REPORT

Date: 21.09.2024	Report No: ICI/HLA/TC-870/2024	Format No: ICI/FM/H/58
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID/No : 2024/A-870
Address	Dhasna, Bahadurpur, Jamuria, Dist.- Paschim Bardhaman, PIN -713 362	Sampling Date : 11.09.2024
#Customer Representative Name & Contact Number	Sr. Executive	Sampling Time : 03:05 PM
#Work Order No.	3000019828 Dtd. 01.04.2024	Analysis Start Date : 19.09.2024
#Sample Description	STACK AIR	Analysis complete Date : 20.09.2024
#Location	FERRO PLANT SEAF NO. 2 (4.5 MVA)	
Sample Condition	In Glass Microfiber Thimble	
Sampling Method	CPCB, Emission Regulation (Part III)	

### A.] # GENERAL INFORMATION ABOUT STACK:

<b>Particulars of the Plant</b>		Shape of Stack	: Circular
Stack attached to	FERRO PLANT SEAF NO. 2 (4.5 MVA)	Material of Construction	: M.S.
Emission due to	Reduction of Mn Ore	Stack ID at sampling point (M)	: 1.4
Fuel Used	Electricity	At Bottom (M)	: -
Rated Fuel Consumption	-	At Top (M)	: -
Working Fuel Consumption	-	<b>Height Details :</b>	
Calorific Value(Kcal/kg)	-	a) Total Ht. Of stack from GL(M)	: 32.0
Sulphur Content (% by Wt)	-	b) Total Ht. Of stack from RL(M)	: -
Ash Content (% by Wt.)	-	c) Ht. of sampling port from GL(M)	: -
Pollution Control Device	Air Cooled Heat Exchanger & Bag Filter	d) Ht. of port from disturbance zone (M)	: -
Whether Stack is provided with permanent Platform / Ladder	Yes		

### B.] PHYSICAL DATA:

Flue Gas Temperature (°C)	: 63	<b>Steam Generation Capacity:</b>	
Barometric Pressure, (mm Hg)	: 743	a) Rated	: -
Velocity of Gas flow (m/s)	: 8.74	b) Running	: -
Quantity of Gas flow (Nm <sup>3</sup> /hr)	: 42034.23	<b>Load :</b> a) Rated	: 4.5 MVA
Pressure	: -	b) Running	: 4.5 MVA

### C.] RESULT OF SAMPLING:

Sl. No.	Parameters	Result Obtained	Test Method
01.	Particulate Matter (mg/Nm <sup>3</sup> )	: 36.0	IS 11255 (Part -1): 1985 (RA 2019)
02.	Particulate Matter Normalised to 12% CO <sub>2</sub> (V/V) - (mg/Nm <sup>3</sup> )	: -	
03.	Carbon mono oxides (as CO)-% (V/V)	: <0.2	IS 13270:1992 (RA 2019)
04.	Carbon di oxides (as CO <sub>2</sub> )-% (V/V)	: 1.4	IS 13270:1992 (RA 2019)

For, INDICATIVE CONSULTANT INDIA

Prepared By: P. Das

Checked By: N. Pramanik

Parbati Golui  
(Quality Manager)  
Signatory Authority

Test Witnessed By: Nil (Sampling was done in front of customer representatives)  
Estimated Uncertainty: Not Required

Parbati Golui  
Quality Manager  
INDICATIVE CONSULTANT INDIA

- Note:
- Information provided by customer
  - Sample is drawn by M/s. Indicative Consultant India
  - Sample submitted and identified by customer as: NA
  - Test results shown in this test report relate only to the sample (a) only.
  - The test results referred in test report are based on observations & measurements under the stated environmental conditions.
  - The reproduction of the report except in full is invalid without written approval of the laboratory.
  - Once issued, the test report/certificate is in public domain and laboratory is not responsible for the authenticity of photocopied test report.
  - Retention period of tested samples (Thimbles) is 180 days from the date of issue unless otherwise specified.
  - Location of Testing: Haldia Laboratory

—End of Report—

Page 1 of 1

Reviewed By: QM/TM



# INDICATIVE CONSULTANT INDIA



(GOVT. REGISTERED TEST HOUSE)



9001:2015



45001:2018



TC-11628

EMAIL : indicativeconsultantindia@gmail.com / indicativeconsultantindia.kol@gmail.com

## TEST REPORT

Date: 21.09.2024	Report No: ICI/HLA/TC-871/2024	Format No: ICI/FM/II/58
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/A-871
Address	Dhasna, Bahadurpur, Jamuria, Dist.- Paschim Bardhaman, PIN -713 362	Sampling Date : 13.09.2024
#Customer Representative Name & Contact Number	Sr. Executive	Sampling Time : 09:40 AM
#Work Order No.	3000019828 Dtd. 01.04.2024	Analysis Start Date : 19.09.2024
#Sample Description	STACK AIR	Analysis complete Date : 20.09.2024
#Location	POWER PLANT CFBC BOILER	
Sample Condition	In Glass Microfiber Thimble & Plastic Bottle	
Sampling Method	CPCB, Emission Regulation (Part III)	

### A.) # GENERAL INFORMATION ABOUT STACK:

<b>Particulars of the Plant</b>		Shape of Stack	: Circular
Stack attached to	POWER PLANT CFBC BOILER	Material of Construction	: Concrete
Emission due to	Combustion of Coal & Dolochar	Stack ID at sampling point (M)	: 4.2
Fuel Used	Coal & Dolochar	At Bottom (M)	: -
Rated Fuel Consumption	-	At Top (M)	: -
Working Fuel Consumption	Coal - 33 TPH Dolochar - 13.7 TPH	<b>Height Details:</b>	
Calorific Value (Kcal/kg)	-	a) Total Ht. Of stack from GL(M)	: 90.0
Sulphur Content (% by Wt)	-	b) Total Ht. Of stack from RL(M)	: -
Ash Content (% by Wt.)	-	c) Ht. of sampling port from GL(M)	: 36.0
Pollution Control Device	ESP	d) Ht. of port from disturbance zone (M)	: -
Whether Stack is provided with permanent Platform / Ladder: Yes			

### B.) PHYSICAL DATA:

Flue Gas Temperature (°C)	: 135	<b>Steam Generation Capacity:</b>	
Barometric Pressure, (mm Hg)	: 743	a) Rated	: 180 TPH
Velocity of Gas flow (m/s)	: 13.60	b) Running	: 174 TPH
Quantity of Gas flow (Nm <sup>3</sup> /hr)	: 468992.18	<b>Load:</b> a) Rated	: 90 MW
Pressure	: -	b) Running	: 76 MW

### C.) RESULT OF SAMPLING:

Sl. No.	Parameters	Result Obtained	Test Method
01.	Particulate Matter (mg/Nm <sup>3</sup> )	21.0 at 10.0 % O <sub>2</sub>	IS 11255 (Part -1): 1985 (RA 2019)
02.	Particulate Matter Normalized to 6% O <sub>2</sub> (V/V)-(mg/Nm <sup>3</sup> )	29.0	
03.	Sulphur di-oxide (mg/ Nm <sup>3</sup> )	274.58 at 10.0 % O <sub>2</sub>	IS 11255 (Part -2): 1985 (RA 2019)
04.	Sulphur di-oxide Normalized to 6% O <sub>2</sub> - (mg/ Nm <sup>3</sup> )	375.35	
05.	Oxides of Nitrogen (as NO <sub>x</sub> )-(mg/m <sup>3</sup> )	187.55 at 10.0% O <sub>2</sub>	IS 11255 (Part -7): 2005 (RA 2017)
06.	Oxides of Nitrogen (as NO <sub>x</sub> )-(Normalized to 6% O <sub>2</sub> )-(mg/ m <sup>3</sup> )	256.38	
07.	Carbon mono-oxides (as CO)-% (V/V)	<0.2	IS 13270:1992 (RA 2019)
08.	Carbon di oxides (as CO <sub>2</sub> )-% (V/V)	9.8	IS 13270:1992 (RA 2019)
09.	Oxygen (as O <sub>2</sub> )-% (V/V)	10.0	IS 13270:1992 (RA 2019)

Prepared By: P. Das

Checked By: N. Pramanik

For, INDICATIVE CONSULTANT INDIA

Parbati Golui  
(Quality Manager)  
Signatory Authority

Test Witnessed By: Nil (Sampling was done in front of customer representatives)

Estimated Uncertainty: Not Required

Parbati Golui  
Quality Manager  
INDICATIVE CONSULTANT INDIA

Note:

- Information provided by customer
- Sample is drawn by M/s. Indicative Consultant India
- Sample collected and identified by customer as: NA
- Test results shown in this test report relate only to the sample (s) only
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- Once issued, the test reports/certificate is in public domain and laboratory is not responsible for the authenticity of photocopied test report
- Retention period of tested samples (Thimbles) is 180 days from the date of issue unless otherwise specified
- Location of Testing: Haldia Laboratory

End of Report

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Reviewed By: QM/TM



# INDICATIVE CONSULTANT INDIA



(GOVT. REGISTERED TEST HOUSE)



EMAIL : indicativeconsultantindia@gmail.com / indicativeconsultantindia.kol@gmail.com

## TEST REPORT

Date: 21.09.2024	Report No: ICI/HL/A/TC-872/2024	Format No: ICI/FM/H/58
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/A-872
Address	Dhasna, Bahadarpur, Jamuria, Dist.- Paschim Bardhaman, PIN -713 362	Sampling Date : 13.09.2024
#Customer Representative Name & Contact Number	Sr. Executive	Sampling Time : 11:30 AM
		Analysis Start Date : 19.09.2024
#Work Order No.	3000019828 Dtd. 01.04.2024	Analysis complete Date : 20.09.2024
#Sample Description	STACK AIR	
#Location	SMS - 3, INDUCTION (6 X 8 MT) FURNACE EXTENSION - 2 X 18 MT	
Sample Condition	In Glass Microfiber Thimble	
Sampling Method	CPCB, Emission Regulation (Part III)	

### A.] # GENERAL INFORMATION ABOUT STACK:

<b>Particulars of the Plant</b>		Shape of Stack	: Circular
Stack attached to	SMS - 3, INDUCTION (6 X 8 MT) FURNACE EXTENSION - 2 X 18 MT	Material of Construction	: M.S.
Emission due to	Melting of Spong Iron & Scrap	Stack ID at sampling point (M)	: 1.2
Fuel Used	-	At Bottom (M)	: -
Rated Fuel Consumption	-	At Top (M)	: -
Working Fuel Consumption	3 MW/Hr.(6x8MT) Furnace 6 MW/Hr.(2x18MT)Furnace	<b>Height Details :</b>	
Calorific Value (Kcal/kg)	-	a) Total Ht. Of stack from GL(M)	: 32.0
Sulphur Content (% by Wt)	-	b) Total Ht. Of stack from RL(M)	: -
Ash Content (% by Wt.)	-	c) Ht. of sampling port from GL(M)	: -
		d) Ht. of port from disturbance zone (M)	: -
Pollution Control Device	Bag Filter		
Whether Stack is provided with permanent Platform / Ladder : Yes			

### B.] PHYSICAL DATA:

Flue Gas Temperature (°C)	: 63	<b>Steam Generation Capacity:</b>	
Barometric Pressure, (mm Hg)	: 743	a) Rated	: -
Velocity of Gas flow (m/s)	: 8.74	b) Running	: -
Quantity of Gas flow (Nm <sup>3</sup> /hr)	: 30881.04	<b>Load :</b> a) Rated	: 6 X 8 MT
Pressure	: -		Extension - (2 X 18 MT)
		b) Running	: 6 X 8 MT
			Extension - (2 X 18 MT)

### C.] RESULT OF SAMPLING:

Sl. No.	Parameters	Result Obtained	Test Method
01.	Particulate Matter (mg/Nm <sup>3</sup> )	34.0	IS 11255 (Part -1): 1985 (RA 2019)
02.	Particulate Matter Normalised to 12% CO <sub>2</sub> (V/V) - (mg/Nm <sup>3</sup> )	-	
03.	Carbon mono oxides (as CO)-% (V/V)	<0.2	IS 13270:1992 (RA 2019)
04.	Carbon di oxides (as CO <sub>2</sub> )-% (V/V)	1.4	IS 13270:1992 (RA 2019)

Prepared By: P. Das

Checked By: N. Pramanik

For, INDICATIVE CONSULTANT INDIA

Parbati Golui  
(Quality Manager)  
Signatory Authority

Test Witnessed By: Nil (Sampling was done in front of customer representatives)

Estimated Uncertainty: Not Required

Parbati Golui  
Quality Manager  
INDICATIVE CONSULTANT INDIA

Note:

- Information provided by customer
- Sample is drawn by M/s. Indicative Consultant India
- Sample submitted and identified by customer as: NA
- Test results shown in this test report relate only to the sample (s) only.
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- Location of Testing: Haldia Laboratory

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End of Report

Reviewed By: QM/TM

Towards Sustainable Growth



# INDICATIVE CONSULTANT INDIA

(GOVT. REGISTERED TEST HOUSE)



EMAIL : indicativeconsultantindia@gmail.com / indicativeconsultantindia.kol@gmail.com

## TEST REPORT

Date: 21.09.2024	Report No: ICI/HL/A/TC-873/2024	Format No: ICI/FM/II/58
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/A-873
Address	Dhasna, Bahadurpur, Jamuria, Dist.- Paschim Bardhaman, PIN -713 362	Sampling Date : 13.09.2024
#Customer Representative Name & Contact Number	Sr. Executive	Sampling Time : 02:00 PM
#Work Order No.	3000019828 Did 01/04/2024	Analysis Start Date : 19.09.2024
#Sample Description	STACK AIR	Analysis complete Date : 20.09.2024
#Location	POWER PLANT CFBC BOILER	
Sample Condition	In Glass Microfiber Thimble & Plastic Bottle	
Sampling Method	CPCB, Emission Regulation (Part III)	

### A.] # GENERAL INFORMATION ABOUT STACK:

<b>Particulars of the Plant</b>		Shape of Stack	: Circular
Stack attached to	POWER PLANT CFBC BOILER	Material of Construction	: Concrete
Emission due to	Combustion of Coal & Dolochar	Stack ID at sampling point (M)	: 5.7
Fuel Used	Coal & Dolochar	At Bottom (M)	: -
Rated Fuel Consumption	-	At Top (M)	: -
Working Fuel Consumption	Coal - 29.5 Ton/Hr. Dolochar - 12.6 Ton/Hr.	<b>Height Details:</b>	
Calorific Value (Kcal/kg)	-	a) Total Ht. Of stack from GL(M)	: 90.0
Sulphur Content (% by Wt)	-	b) Total Ht. Of stack from RL(M)	: -
Ash Content (% by Wt)	-	c) Ht. of sampling port from GL(M)	: 45.0
Pollution Control Device	ESP	d) Ht. of port from disturbance zone (M)	: -
Whether Stack is provided with permanent Platform / Ladder: Yes			

### B.] PHYSICAL DATA:

Flue Gas Temperature (°C)	: 133	<b>Steam Generation Capacity:</b>	
Barometric Pressure, (mm Hg)	: 743	a) Rated	: 135 TPH
Velocity of Gas flow (m/s)	: 10.24	b) Running	: 125 TPH
Quantity of Gas flow (Nm <sup>3</sup> /hr)	: 654381.22	<b>Load:</b> a) Rated	: 43.0 MW
Pressure	: -	b) Running	: 41.0 MW

### C.] RESULT OF SAMPLING:

Sl. No.	Parameters	Result Obtained	Test Method
01.	Particulate Matter (mg/Nm <sup>3</sup> )	21.0 at 9.0% O <sub>2</sub>	IS 11255 (Part -1): 1985 (RA 2019)
02.	Particulate Matter Normalized to 6% O <sub>2</sub> (V/V)-(mg/Nm <sup>3</sup> )	26.0	
03.	Sulphur di-oxide (mg/ Nm <sup>3</sup> )	284.75 at 9.0% O <sub>2</sub>	IS 11255 (Part -2): 1985 (RA 2019)
04.	Sulphur di-oxide Normalized to 6% O <sub>2</sub> - (mg/ Nm <sup>3</sup> )	356.54	
05.	Oxides of Nitrogen (as NO <sub>x</sub> )-(mg/m <sup>3</sup> )	162.37 at 9.0% O <sub>2</sub>	IS 11255 (Part -7): 2005 (RA 2017)
06.	Oxides of Nitrogen (as NO <sub>x</sub> )-(Normalized to 6% O <sub>2</sub> )-(mg/ m <sup>3</sup> )	203.30	
07.	Carbon mono oxides (as CO)-% (V/V)	<0.2	IS 13270:1992 (RA 2019)
08.	Carbon di oxides (as CO <sub>2</sub> )-% (V/V)	10.8	IS 13270:1992 (RA 2019)
09.	Oxygen (as O <sub>2</sub> )-% (V/V)	9.0	IS 13270:1992 (RA 2019)

Prepared By: P. Das

Checked By: N. Pramanik

For, INDICATIVE CONSULTANT INDIA

Parbati Goluji  
(Quality Manager)  
Signatory Authority

Test Witnessed By: Nil (Sampling was done in front of customer representatives)  
Estimated Uncertainty: Not Required

Parbati Goluji  
Quality Manager  
INDICATIVE CONSULTANT INDIA

- Note:
- Information provided by customer
  - Sample is drawn by M/s. Indicative Consultant India.
  - Sample submitted and identified by customer as: NA
  - Test results shown in this test report relate only to the sample (s) only.
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  - Location of Testing: Haldia Laboratory

End of Report

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Reviewed By: QM/TM



# INDICATIVE CONSULTANT INDIA

(GOVT. REGISTERED TEST HOUSE)



EMAIL : indicativeconsultantindia@gmail.com / indicativeconsultantindia.koi@gmail.com

## TEST REPORT

Date: 21.09.2024	Report No: ICI/HIL/A/TC-874/2024	Format No: ICI/FM/H/58
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/A-874
Address	Dhasna, Bahadurpur, Jamuria, Dist.- Paschim Bardhaman, PIN -713 362	Sampling Date : 13.09.2024
#Customer Representative Name & Contact Number	Sr. Executive	Sampling Time : 03:50 PM
#Work Order No.	3000019828 Dtd 01.04.2024	Analysis Start Date : 19.09.2024
#Sample Description	STACK AIR	Analysis complete Date : 20.09.2024
#Location	POWER PLANT AFBC BOILER (18 MW)	
Sample Condition	In Glass Microfiber Thimble & Plastic Bottle	
Sampling Method	CPCB, Emission Regulation (Part III)	

### A.) # GENERAL INFORMATION ABOUT STACK:

Particulars of the Plant	Shape of Stack	: Circular
Stack attached to	Material of Construction	: Concret e
Emission due to	Stack ID at sampling point (M)	: 2.0
Fuel Used	At Bottom (M)	: -
Rated Fuel Consumption	At Top (M)	: -
Working Fuel Consumption	Height Details:	
Calorific Value (Kcal/kg)	a) Total Ht. Of stack from GL(M)	: 65.0
Sulphur Content (% by Wt)	b) Total Ht. Of stack from RL(M)	: -
Ash Content (% by Wt)	c) Ht. of sampling port from GL(M)	: 20.0
Pollution Control Device	d) Ht. of port from disturbance zone (M)	: -
Whether Stack is provided with permanent Platform / Ladder: Yes		

### B.) PHYSICAL DATA:

Flue Gas Temperature (°C)	: 117	Steam Generation Capacity:	
Barometric Pressure, (mm Hg)	: 743	a) Rated	: 54 TPH
Velocity of Gas flow (m/s)	: 10.96	b) Running	: 49TPH
Quantity of Gas flow (Nm <sup>3</sup> /hr)	: 89553.86	Load: a) Rated	: 18 MW
Pressure	: -	b) Running	: 17.5 MW

### C.) RESULT OF SAMPLING:

Sl. No.	Parameters	Result Obtained	Test Method
01.	Particulate Matter (mg/Nm <sup>3</sup> )	21.0 at 9.2 % O <sub>2</sub>	IS 11255 (Part -1): 1985 (RA 2019)
02.	Particulate Matter Normalized to 6% O <sub>2</sub> (V/V)-(mg/Nm <sup>3</sup> )	27.0	
03.	Sulphur di-oxide (mg/ Nm <sup>3</sup> )	274.58 at 9.2 % O <sub>2</sub>	IS 11255 (Part -2): 1985 (RA 2019)
04.	Sulphur di-oxide Normalized to 6% O <sub>2</sub> - (mg/ Nm <sup>3</sup> )	349.68	
05.	Oxides of Nitrogen (as NOx)- (mg/m <sup>3</sup> )	182.92 at 9.2% O <sub>2</sub>	IS 11255 (Part -7): 2005 (RA 2017)
06.	Oxides of Nitrogen (as NOx)-(Normalized to 6% O <sub>2</sub> )-(mg/ m <sup>3</sup> )	232.95	
07.	Carbon mono oxides (as CO)-% (V/V)	<0.2	IS 13270:1992 (RA 2019)
08.	Carbon di oxides (as CO <sub>2</sub> )-% (V/V)	10.4	IS 13270:1992 (RA 2019)
09.	Oxygen (as O <sub>2</sub> )-% (V/V)	9.2	IS 13270:1992 (RA 2019)

Prepared By: P. Dus

Checked By: N. Pramanik

For, INDICATIVE CONSULTANT INDIA  
Parbati Golu  
(Quality Manager)  
Signatory Authority

Test Witnessed By: Nil (Sampling was done in front of customer representatives)

Estimated Uncertainty: Not Required

Note:

- Information provided by customer
- Sample is drawn by M/s. Indicative Consultant India
- Sample submitted and identified by customer as 'Nil'
- Test results shown in this test report relate only to the sample (s) only
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- Retention period of tested samples (Thimbles) is 180 days from the date of issue unless otherwise specified.
- Location of Testing: Haldia Laboratory

End of Report

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Reviewed By: QM/TM

CENTRAL LABORATORY

HPL Link Road, Basudevpur, Khanjanachak, Haldia, Purba Medinipur, Pin- 721602  
Phone No. : 03224-275765, 9434017184, 9232395890, 7797506973



# INDICATIVE CONSULTANT INDIA



(GOVT. REGISTERED TEST HOUSE)



EMAIL : indicativeconsultantindia@gmail.com / indicativeconsultantindia.kol@gmail.com

## TEST REPORT

Date: 21.09.2024	Report No: ICI/HL/ATC-875/2024	Format No: ICI/FM/H/58
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/A-875
Address	Dhasna, Bahadurpur, Jamuria, Dist.- Paschim Bardhaman, PIN -713 362	Sampling Date : 14.09.2024
#Customer Representative Name & Contact Number	Sr. Executive	Sampling Time : 09:35 AM
#Work Order No.	3000019828 Dtd. 01.04.2024	Analysis Start Date : 19.09.2024
#Sample Description	STACK AIR	Analysis complete Date : 20.09.2024
#Location	TRAVEL GREAT & ROTARY KILN NO. - 3 (PELLET PLANT)	
Sample Condition	In Glass Microfiber Thimble & Plastic Bottle	
Sampling Method	CPCB, Emission Regulation (Part III)	

### A.] # GENERAL INFORMATION ABOUT STACK:

Particulars of the Plant	Shape of Stack	:	Circular
Stack attached to	Material of Construction	:	Concrete
Emission due to	Stack ID at sampling point (M)	:	4.5
Fuel Used	At Bottom (M)	:	-
Rated Fuel Consumption	At Top (M)	:	-
Working Fuel Consumption	Height Details:		
Calorific Value (Kcal/kg)	a) Total Ht. Of stack from GL(M)	:	60.0
Sulphur Content (% by Wt)	b) Total Ht. Of stack from RL(M)	:	-
Ash Content (% by Wt.)	c) Ht. of sampling port from GL(M)	:	28.0
Pollution Control Device	d) Ht. of port from disturbance zone (M)	:	-
Whether Stack is provided with permanent Platform / Ladder: Yes			

### B.] PHYSICAL DATA:

Flue Gas Temperature (°C)	: 123	Steam Generation Capacity:	
Barometric Pressure, (mm Hg)	: 743	a) Rated	:
Velocity of Gas flow (m/s)	: 12.03	b) Running	:
Quantity of Gas flow (Nm <sup>3</sup> /hr)	: 492320.42	Load:	
Pressure	:	a) Rated	: 138 TPH
		b) Running	: 123 TPH

### C.] RESULT OF SAMPLING:

Sl. No.	Parameters	Result Obtained	Test Method
01.	Particulate Matter (mg/Nm <sup>3</sup> )	20.0 at 8.8% CO <sub>2</sub>	IS 11255 (Part -1): 1985 (RA 2019)
02.	Particulate Matter Normalised to 12% CO <sub>2</sub> (V/V) - (mg/Nm <sup>3</sup> )	27.0	
03.	Sulphur di-oxide (mg/ Nm <sup>3</sup> )	274.58	IS 11255 (Part -2): 1985 (RA 2019)
04.	Oxides of Nitrogen (as NO <sub>x</sub> )-(mg/m <sup>3</sup> )	210.97	IS 11255 (Part -7): 2005 (RA 2017)
05.	Carbon mono oxides (as CO)-% (V/V)	<0.2	IS 13270:1992 (RA 2019)
06.	Carbon di oxides (as CO <sub>2</sub> )-% (V/V)	8.8	IS 13270:1992 (RA 2019)

Prepared By: P. Das

Checked By: N. Pramanik

For, INDICATIVE CONSULTANT INDIA

Parbati Golui  
(Quality Manager)  
Signatory Authority

Test Witnessed By: Nil (Sampling was done in front of customer representatives)

Estimated Uncertainty: Not Required

Note

- Information provided by customer
- Sample is drawn by M/s. Indicative Consultant India
- Sample submitted and identified by customer as: NA
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- Location of Testing: Haldia Laboratory

End of Report

Page 1 of 1

Reviewed By: QM/TM



# INDICATIVE CONSULTANT INDIA



(GOVT. REGISTERED TEST HOUSE)



EMAIL : indicativeconsultantindia@gmail.com / indicativeconsultantindia.kol@gmail.com

## TEST REPORT

Date: 21.09.2024	Report No: ICI/HLA/TC-876/2024	Format No: ICI/FM/H/58
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/A-876
Address	Dhasna, Bahadurpur, Jamuria, Dist.- Paschim Bardhaman, PIN -713 362	Sampling Date : 14.09.2024
#Customer Representative Name & Contact Number	Sr. Executive	Sampling Time : 11:10 AM
#Work Order No.	3000019828 Dtd. 01.04.2024	Analysis Start Date : 19.09.2024
#Sample Description	STACK AIR	Analysis complete Date : 20.09.2024
#Location	TRAVEL GREAT & ROTARY KILN NO. - 2 (PELLET PLANT)	
Sample Condition	In Glass Microfiber Thimble & Plastic Bottle	
Sampling Method	CPCB, Emission Regulation (Part III)	

### A.] # GENERAL INFORMATION ABOUT STACK:

Particulars of the Plant	Shape of Stack	: Circular
Stack attached to	Material of Construction	: Concrete
Emission due to	Stack ID at sampling point (M)	: 4.5
Fuel Used	At Bottom (M)	: -
Rated Fuel Consumption	At Top (M)	: -
Working Fuel Consumption	Height Details:	
Calorific Value (Kcal/kg)	a) Total Ht. Of stack from GL(M)	: 53.0
Sulphur Content (% by Wt)	b) Total Ht. Of stack from RL(M)	: -
Ash Content (% by Wt)	c) Ht. of sampling port from GL(M)	: 31.0
Pollution Control Device	d) Ht. of port from disturbance zone (M)	: -
Whether Stack is provided with permanent Platform / Ladder: Yes		

### B.] PHYSICAL DATA:

Flue Gas Temperature (°C)	: 87	Steam Generation Capacity:	
Barometric Pressure, (mm Hg)	: 743	a) Rated	: -
Velocity of Gas flow (m/s)	: 16.23	b) Running	: -
Quantity of Gas flow (Nm <sup>3</sup> /hr)	: 731145.31	Load: a) Rated	: 113.6 TPH
Pressure	: -	b) Running	: 113.6 TPH

### C.] RESULT OF SAMPLING:

Sl. No.	Parameters	Result Obtained	Test Method
01.	Particulate Matter (mg/Nm <sup>3</sup> )	20.0 at 8.4% CO <sub>2</sub>	IS 11255 (Part -1): 1985 (RA 2019)
02.	Particulate Matter Normalised to 12% CO <sub>2</sub> (V/V) - (mg/Nm <sup>3</sup> )	29.0	
03.	Sulphur di-oxide (mg/ Nm <sup>3</sup> )	274.58	IS 11255 (Part -2): 1985 (RA 2019)
04.	Oxides of Nitrogen (as NOx)-(mg/m <sup>3</sup> )	189.74	IS 11255 (Part -7): 2005 (RA 2017)
05.	Carbon mono oxides (as CO)-% (V/V)	<0.2	IS 13270:1992 (RA 2019)
06.	Carbon di oxides (as CO <sub>2</sub> )-% (V/V)	8.4	IS 13270:1992 (RA 2019)

Prepared By: P. Das

Checked By: N. Pramanik

For, INDICATIVE CONSULTANT INDIA  
Parbati Golui  
(Quality Manager)  
Signatory Authority

Test Witnessed By: Nil (Sampling was done in front of customer representatives)  
Estimated Uncertainty: Not Required

Parbati Golui  
Quality Manager  
INDICATIVE CONSULTANT INDIA

- Note:
1. Information provided by customer
  2. Sample is drawn by ICI, Indicative Consultant India
  3. Sample submitted and identified by customer as: NA
  4. Test results shown in this test report relate only to the sample (s) only
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  8. Retention period of tested samples (Thimbles) is 180 days from the date of issue unless otherwise specified.
  9. Location of Testing: Haldia Laboratory

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End of Report

Reviewed By: QM/TM



# INDICATIVE CONSULTANT INDIA



(GOVT. REGISTERED TEST HOUSE)



EMAIL : indicativeconsultantindia@gmail.com / indicativeconsultantindia.kol@gmail.com

## TEST REPORT

Date: 21.09.2024	Report No: ICI/HL/A/TC-877/2024	Format No: ICI/FM/H/58
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/A-877
Address	Dhasna, Bahadurpur, Jamuria, Dist. - Paschim Bardhaman, PIN -713 362	Sampling Date : 14.09.2024
#Customer Representative Name & Contact Number	Sr. Executive	Sampling Time : 01:40 PM
#Work Order No.	3000019828 Dtd 01.04.2024	Analysis Start Date : 19.09.2024
#Sample Description	STACK AIR	Analysis complete Date : 20.09.2024
#Location	SMS - 2 INDUCTION (4x 5 MT) FURNACE (2x 8 MT)	
Sample Condition	In Glass Microfiber Thimble	
Sampling Method	CPCB, Emission Regulation (Part III)	

### A.] # GENERAL INFORMATION ABOUT STACK:

<b>Particulars of the Plant</b>		Shape of Stack	: Circular
Stack attached to	SMS - 2 INDUCTION (4x5 MT) FURNACE (2x8 MT)	Material of Construction	: M.S.
Emission due to	Melting of Spong Iron & Scrap	Stack ID at sampling point (M)	: 1.0
Fuel Used	-	At Bottom (M)	: -
Rated Fuel Consumption	-	At Top (M)	: -
Working Fuel Consumption	Electricity-3.0 MW/Hr./Furnace	<b>Height Details :</b>	
Calorific Value(Kcal/kg)	-	a) Total Ht. Of stack from GL(M)	: 30.0
Sulphur Content (% by Wt)	-	b) Total Ht. Of stack from RL(M)	: -
Ash Content (% by Wt.)	-	c) Ht. of sampling port from GL(M)	: 22.0
Pollution Control Device	Bag Filter	d) Ht. of port from disturbance zone (M)	: -
Whether Stack is provided with permanent Platform / Ladder	: Yes		

### B.] PHYSICAL DATA:

Flue Gas Temperature (°C)	: 68	<b>Steam Generation Capacity:</b>	
Barometric Pressure, (mm Hg)	: 743	a) Rated	: -
Velocity of Gas flow (m/s)	: 8.08	b) Running	: -
Quantity of Gas flow (Nm <sup>3</sup> /hr)	: 19531.89	<b>Load :</b> a) Rated	: -
Pressure	: -	b) Running	: 4 x 5 MT 2 x 8 MT

### C.] RESULT OF SAMPLING:

Sl. No.	Parameters	Result Obtained	Test Method
01.	Particulate Matter (mg/Nm <sup>3</sup> )	33.0	IS 11255 (Part-1): 1985 (RA 2019)
02.	Particulate Matter Normalised to 12% CO <sub>2</sub> (V/V) - (mg/Nm <sup>3</sup> )	-	
03.	Carbon mono oxides (as CO)-%(V/V)	<0.2	IS 13270:1992 (RA 2019)
04.	Carbon di oxides (as CO <sub>2</sub> )-%(V/V)	1.2	IS 13270:1992 (RA 2019)

For, INDICATIVE CONSULTANT INDIA

Prepared By: P. Das

Checked By: N. Pramanik

Parbati Golui  
(Quality Manager)  
Signatory Authority

Test Witnessed By: Nil (Sampling was done in front of customer representatives)  
Estimated Uncertainty: Not Required

Parbati Golui  
Quality Manager  
INDICATIVE CONSULTANT INDIA

- Note:
- Information provided by customer
  - Sample is drawn by M/s. Indicative Consultant India
  - Sample submitted and identified by customer as: NA
  - Test results shown in this test report relate only to the sample (s) only
  - The test results referred in test report are based on observations & measurements under the stated environmental conditions.
  - The reproduction of the report except in full is invalid without written approval of the laboratory.
  - Once issued, the test report/certificate is in public domain and laboratory is not responsible for the authenticity of photocopied test report
  - Retention period of tested samples (Thimbles) is 180 days from the date of issue unless otherwise specified.
  - Location of Testing: Haldia Laboratory

End of Report

Page 1 of 1

Reviewed By: QM/TM



# INDICATIVE CONSULTANT INDIA



(GOVT. REGISTERED TEST HOUSE)



EMAIL : indicativeconsultantindia@gmail.com / indicativeconsultantindia.kol@gmail.com

## TEST REPORT

Date: 21.09.2024	Report No: ICI/HL/A/TC-878/2024	Format No: ICI/FM/H/58
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/A-878
Address	Dhasna, Bahadurpur, Jamuria, Dist.- Paschim Bardhaman, PIN -713 362	Sampling Date : 14.09.2024
#Customer Representative Name & Contact Number	Sr. Executive	Sampling Time : 03:15 PM
#Work Order No.	3000019828 Dtd. 01.04.2024	Analysis Start Date : 19.09.2024
#Sample Description	STACK AIR	Analysis complete Date : 20.09.2024
#Location	SMS - I (EXTENSION) INDUCTION (4 x 20 MT) FURNACE	
Sample Condition	In Glass Microfiber Thimble & Plastic Bottle	
Sampling Method	CPCB, Emission Regulation (Part III)	

### A.] # GENERAL INFORMATION ABOUT STACK:

<b>Particulars of the Plant</b>		Shape of Stack	: Circular
Stack attached to	SMS - I (EXTENSION) INDUCTION (4 x 20 MT) FURNACE	Material of Construction	: M.S.
Emission due to	Melting of Sponge Iron & Scrap	Stack ID at sampling point (M)	: 1.8
Fuel Used	-	At Bottom (M)	: -
Rated Fuel Consumption	-	At Top (M)	: -
Working Fuel Consumption	8 MW/Hr/Furnace	<b>Height Details:</b>	
Calorific Value (Kcal/kg)	-	a) Total Ht. Of stack from GL(M)	: 30.0
Sulphur Content (% by Wt)	-	b) Total Ht. Of stack from RL(M)	: -
Ash Content (% by Wt)	-	c) Ht. of sampling port from GL(M)	: 21.0
Pollution Control Device	Bag Filter	d) Ht. of port from disturbance zone (M)	: -
Whether Stack is provided with permanent Platform / Ladder: Yes			

### B.] PHYSICAL DATA:

Flue Gas Temperature (°C)	: 54	<b>Steam Generation Capacity:</b>	
Barometric Pressure, (mm Hg)	: 743	a) Rated	: -
Velocity of Gas flow (m/s)	: 7.80	b) Running	: -
Quantity of Gas flow (Nm <sup>3</sup> /hr)	: 63742.67	<b>Load:</b> a) Rated	: 4 x 20 MT
Pressure	: -	b) Running	: 4 x 20 MT

### C.] RESULT OF SAMPLING:

Sl. No.	Parameters	Result Obtained	Test Method
01.	Particulate Matter (mg/Nm <sup>3</sup> )	24.0	IS 11255 (Part -1) 1985 (RA 2019)
02.	Particulate Matter Normalised to 12% CO <sub>2</sub> (V/V) - (mg/Nm <sup>3</sup> )	-	
03.	Carbon mono oxides (as CO)-% (V/V)	<0.2	IS 13270:1992 (RA 2019)
04.	Carbon di oxides (as CO <sub>2</sub> )-% (V/V)	1.2	IS 13270:1992 (RA 2019)

Prepared By: P. Das

Checked By: N. Pramanik

For, INDICATIVE CONSULTANT INDIA

Parbati Golui  
(Quality Manager)  
Signatory Authority

Test Witnessed By: Nil (Sampling was done in front of customer representatives)  
Estimated Uncertainty: Not Required

Parbati Golui  
Quality Manager  
INDICATIVE CONSULTANT INDIA

- Note:
- Information provided by customer
  - Sample is drawn by M/s. Indicative Consultant India
  - Sample submitted and identified by customer as: NA
  - Test results shown in this test report relate only to the sample (s) only.
  - The test results referred in test reports are based on observations & measurements under the stated environmental conditions.
  - The reproduction of the report except in full is invalid without written approval of the laboratory.
  - Once issued, the test report certificate is in public domain and laboratory is not responsible for the authenticity of photocopied test report.
  - Retention period of tested sample (Thimble) is 150 days from the date of issue unless otherwise specified.
  - Location of Testing: Haldia Laboratory

-----End of Report-----

Page 1 of 1

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# INDICATIVE CONSULTANT INDIA



(GOVT. REGISTERED TEST HOUSE)



EMAIL : indicativeconsultantindia@gmail.com / indicativeconsultantindia.kol@gmail.com

## TEST REPORT

Date: 21.09.2024	Report No: ICI/HLA/TC-879/2024	Format No: ICI/FM/H/58
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID/No : 2024/A-879
Address	Dhasna, Bahadurpur, Jamuria, Dist.- Paschim Bardhaman, PIN -713 362	Sampling Date : 14.09.2024
#Customer Representative Name & Contact Number	Sr. Executive	Sampling Time : 04:40 PM
#Work Order No.	3000019828 Dtd. 01.04.2024	Analysis Start Date : 19.09.2024
#Sample Description	STACK AIR	Analysis complete Date : 20.09.2024
#Location	SMS - 1 INDUCTION (2x15 MT, 4x18 MT) FURNACE	
Sample Condition	In Glass Microfiber Thimble	
Sampling Method	CPCB, Emission Regulation (Part III)	

### A.] # GENERAL INFORMATION ABOUT STACK:

<b>Particulars of the Plant</b>		Shape of Stack	: Circular
Stack attached to	SMS - 1 INDUCTION (2x15 MT, 4x18 MT) FURNACE	Material of Construction	: M.S.
Emission due to	Melting of Spong Iron & Scrap	Stack ID at sampling point (M)	: 1.0
Fuel Used	-	At Bottom (M)	: -
Rated Fuel Consumption	-	At Top (M)	: -
Working Fuel Consumption	6 MW/Hr./Furnace	<b>Height Details :</b>	
Calorific Value(Kcal/kg)	-	a) Total Ht. Of stack from GL(M)	: 30.0
Sulphur Content (% by Wt)	-	b) Total Ht. Of stack from RL(M)	: -
Ash Content (% by Wt.)	-	c) Ht. of sampling port from GL(M)	: 22.0
Pollution Control Device	Bag Filter	d) Ht. of port from disturbance zone (M)	: -
Whether Stack is provided with permanent Platform / Ladder : Yes			

### B.] PHYSICAL DATA:

Flue Gas Temperature (°C)	: 66	<b>Steam Generation Capacity:</b>	
Barometric Pressure, (mm Hg)	: 743	a) Rated	: -
Velocity of Gas flow (m/s)	: 8.22	b) Running	: -
Quantity of Gas flow (Nm <sup>3</sup> /hr)	: 19987.54	Load : a) Rated	: -
Pressure	: -	b) Running	: 2 x 15 MT
			4 x 18 MT

### C.] RESULT OF SAMPLING:

Sl. No.	Parameters	Result Obtained	Test Method
01.	Particulate Matter (mg/Nm <sup>3</sup> )	: 38.0	IS 11255 (Part -1): 1985 (RA 2019)
02.	Particulate Matter Normalised to 12% CO <sub>2</sub> (V/V) - (mg/Nm <sup>3</sup> )	: -	
03.	Carbon mono oxides (as CO)-% (V/V)	: <0.2	IS 13270:1992 (RA 2019)
04.	Carbon di oxides (as CO <sub>2</sub> )-% (V/V)	: 1.0	IS 13270:1992 (RA 2019)

Prepared By: P. Das

Checked By: N. Pramanik

For, INDICATIVE CONSULTANT INDIA

Parbati Gouli  
(Quality Manager)  
Signatory Authority

Test Witnessed By: Nil (Sampling was done in front of customer representatives)  
Estimated Uncertainty: Not Required

Parbati Gouli  
Quality Manager  
INDICATIVE CONSULTANT INDIA

- Note:
1. Information provided by customer
  2. Sample is drawn by M/s. Indicative Consultant India.
  3. Sample submitted and identified by customer as: NA
  4. Test results shown in this test report relate only to the sample (s) only.
  5. The test results referred in test report are based on observations & measurements under the stated environmental conditions.
  6. The reproduction of the report except in full is invalid without written approval of the laboratory.
  7. Once issued, the test report/certificate is in public domain and laboratory is not responsible for the authenticity of photocopied test report.
  8. Retention period of tested samples (Thimbles) is 180 days from the date of issue unless otherwise specified.
  9. Location of Testing: Haldia Laboratory

End of Report

Page 1 of 1

Reviewed By: QM/TM



# INDICATIVE CONSULTANT INDIA



(GOVT. REGISTERED TEST HOUSE)



EMAIL : indicativeconsultantindia@gmail.com / indicativeconsultantindia.kol@gmail.com

## TEST REPORT

Date: 21.09.2024	Report No: ICI/HL/A/TC-854/2024	Format No: ICI/FM/H/58
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/A-854
Address	Dhasna, Bahadurpur, Jamuria, Dist.- Paschim Bardhaman, PIN -713 362	Sampling Date : 07.09.2024
#Customer Representative Name & Contact Number	Sr. Executive	Sampling Time : 05:05 PM
#Work Order No.	3000019828 Dtd 01.04.2024	Analysis Start Date : 19.09.2024
#Sample Description	STACK AIR	Analysis complete Date : 20.09.2024
#Location	PRODUCT HOUSE FOR KILN NO. 11 & 12	
Sample Condition	In Glass Microfiber Thimble	
Sampling Method	CPCB, Emission Regulation (Part III)	

### A.) # GENERAL INFORMATION ABOUT STACK:

<b>Particulars of the Plant</b>			
Stack attached to	PRODUCT HOUSE FOR KILN NO. 11 & 12	Shape of Stack	Circular
Emission due to	Process Activity	Material of Construction	M.S.
Fuel Used	-	Stack ID at sampling point (M)	1.0
Rated Fuel Consumption	-	At Bottom (M)	-
Working Fuel Consumption	-	At Top (M)	-
Calorific Value(Kcal/kg)	-	<b>Height Details :</b>	
Sulphur Content (% by Wt)	-	a) Total Ht. Of stack from GL(M)	30.0
Ash Content (% by Wt.)	-	b) Total Ht. Of stack from RL(M)	-
Pollution Control Device	Bag Filter	c) Ht. of sampling port from GL(M)	22.0
Whether Stack is provided with permanent Platform / Ladder	Yes	d) Ht. of port from disturbance zone (M)	-

### B.) PHYSICAL DATA:

Flue Gas Temperature (°C)	37	<b>Steam Generation Capacity:</b>	
Barometric Pressure,(mm Hg)	744	a) Rated	-
Velocity of Gas flow (m/s)	24.06	b) Running	-
Quantity of Gas flow (Nm <sup>3</sup> /hr)	63974.02	<b>Load :</b> a) Rated	-
Pressure	-	b) Running	-

### C.) RESULT OF SAMPLING:

Sl. No.	Parameters	Result Obtained	Test Method
01.	Particulate Matter (mg/Nm <sup>3</sup> )	23.0	IS 11255 (Part -1) 1985 (RA 2019)
02.	Particulate Matter Normalised to 12% CO <sub>2</sub> (V/V) - (mg/Nm <sup>3</sup> )	-	
03.	Carbon mono oxides (as CO)-% (V/V)	<0.2	IS 13270 1992 (RA 2019)

For, INDICATIVE CONSULTANT INDIA

Prepared By: P. Das

Checked By: N. Pramanik

Parbati Golui  
(Quality Manager)  
Signatory Authority

Test Witnessed By: Nil (Sampling was done in front of customer representatives)  
Estimated Uncertainty: Not Required

Parbati Golui  
Quality Manager  
INDICATIVE CONSULTANT INDIA

- Note:
- Information provided by customer
  - Sample is drawn by M/s. Indicative Consultant India.
  - Sample submitted and identified by customer as: NA
  - Test results shown in this test report relate only to the sample (s) only.
  - The test results referred in test report are based on observations & measurements under the stated environmental conditions.
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  - Once issued, the test report/certificate is in public domain and laboratory is not responsible for the authenticity of photocopied test report
  - Retention period of tested samples (Thimbles) is 180 days from the date of issue unless otherwise specified.
  - Location of Testing: Haldia Laboratory

End of Report

Page 1 of 1

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Towards Sustainable Growth



# INDICATIVE CONSULTANT INDIA



(GOVT. REGISTERED TEST HOUSE)



EMAIL : indicativeconsultantindia@gmail.com / indicativeconsultantindia.kol@gmail.com

## TEST REPORT

Date: 21.09.2024	Report No: ICI/HLA/TC-864/2024	Format No: ICI/FM/H/58
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/A-864
Address	Dhasna, Bahadurpur, Jamuria, Dist.- Paschim Bardhaman, PIN -713 362	Sampling Date : 10.09.2024
#Customer Representative Name & Contact Number	Sr. Executive	Sampling Time : 03:00 PM
#Work Order No.	3000019828 Dtd. 01.04.2024	Analysis Start Date : 19.09.2024
#Sample Description	STACK AIR	Analysis complete Date : 20.09.2024
#Location	TRH - 5 (TRANSFER HOUSE) SPONG IRON UNIT	
Sample Condition	In Glass Microfiber Thimble	
Sampling Method	CPCB, Emission Regulation (Part III)	

### A.] # GENERAL INFORMATION ABOUT STACK:

<b>Particulars of the Plant</b>		Shape of Stack	: Circular
Stack attached to	TRH - 5 (TRANSFER HOUSE) SPONG IRON UNIT	Material of Construction	: M.S.
Emission due to	Process Activity	Stack ID at sampling point (M)	: 1.0
Fuel Used	-	At Bottom (M)	: -
Rated Fuel Consumption	-	At Top (M)	: -
Working Fuel Consumption	-	<b>Height Details :</b>	
Calorific Value(Kcal/kg)	-	a) Total Ht. Of stack from GL(M)	: 30.0
Sulphur Content (% by Wt)	-	b) Total Ht. Of stack from RL(M)	: -
Ash Content (% by Wt.)	-	c) Ht. of sampling port from GL(M)	: 20.8
		d) Ht. of port from disturbance zone (M)	: -
<b>Pollution Control Device</b>	: Bag Filter		
Whether Stack is provided with permanent Platform / Ladder : Yes			

### B.] PHYSICAL DATA:

Flue Gas Temperature (°C)	: 35	<b>Steam Generation Capacity:</b>	
Barometric Pressure.(mm Hg)	: 743	a) Rated	: -
Velocity of Gas flow (m/s)	: 9.23	b) Running	: -
Quantity of Gas flow (Nm <sup>3</sup> /hr)	: 24707.66	<b>Load :</b> a) Rated	: -
Pressure	: -	b) Running	: -

### C.] RESULT OF SAMPLING:

Sl. No.	Parameters	Result Obtained	Test Method
01.	Particulate Matter (mg/Nm <sup>3</sup> )	24.0	IS 11255 (Part -1): 1985 (RA 2019)
02.	Particulate Matter Normalised to 12% CO <sub>2</sub> (V/V) - (mg/Nm <sup>3</sup> )	-	
03.	Carbon mono oxides (as CO)-% (V/V)	<0.2	IS 13270:1992 (RA 2019)

For, INDICATIVE CONSULTANT INDIA

Prepared By: P. Das

Checked By: N. Pramanik

Parbati Golui  
(Quality Manager)  
Signatory Authority

Test Witnessed By: Nil (Sampling was done in front of customer representatives)  
Estimated Uncertainty: Not Required

Parbati Golui  
Quality Manager  
INDICATIVE CONSULTANT INDIA

Note

- Information provided by customer
- Sample is drawn by M/s. Indicative Consultant India
- Sample collected and identified by customer as: NA
- Test results shown in this test report relate only to the sample (s) only
- The test results referred in test report are based on observations & measurements under the stated environmental conditions.
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- Retention period of tested samples (Thimbles) is 180 days from the date of issue unless otherwise specified.
- Location of Testing: Haldia Laboratory

End of Report

Page 1 of 1

Reviewed By: QM/TM

# ANNEXURE - IX

# EFFICIENCY TEST REPORT

OF

## **M/s SHYAM SEL & POWER LIMITED**

DHASNA, BAHADURPUR, JAMURIA,  
DIST. - PASCHIM BARDHAMAN, WEST  
BENGAL PIN - 713 362

November – 2023

Prepared By



An ISO 9001:2015, ISO 18001:2007 & ISO 14001:2004 Certified Laboratory

Reg. Off. - HDD-272 Phase-3, Kabir Nagar, Raipur (C.G.)-492099

Pb-(0771)-4027777, [ultimatenviro@gmail.com](mailto:ultimatenviro@gmail.com)

## LIST OF ANNEXURE

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**Efficiency Test Report of Air Pollution Control  
Equipment Attached to CD Bag Filter, PSB Bag Filter & Pallet Plant - 3, ESP**

**Introduction**

We (**Ultimate Enviroltycal Solutions**) are environment consultancy in various parameters analysis field. We have established laboratory with latest equipment to monitor and analysis various environmental parameters. Our laboratory is NABL accredited and MOEF & CC recognized .

M/s **Shyam Sel & Power Limited** has assigned us work order no. 3000016207, dated: 06/11/2023 for evaluation of performance of air pollution control equipments installed at Dhasna, Bahadurpur, Jamuria, West Bengal, Pin Code 713 362.

M/s **Shyam Sel & Power Limited** is very much interested to control any possible air pollution generation from the plant.

It may be noted that mainly possible air pollution inside the premises are fugitive emission from transfer points like hoppers and conveyor. To control fugitive emission bag filter are also installed.

The company has also installed ESPs to control source emission of kiln as well as power section.

We provide reliable and comprehensive environmental analytical testing services including organic and inorganic analysis of Air, water, waste characterization and fuels.

**Efficiency Test Report of Air Pollution Control  
Equipment Attached to CD Bag Filter, PSB Bag Filter & Pallet Plant - 3, ESP**

**Observation:**

It is certified that the Bag Filter inlet / Stack emission monitoring work has done from 24/11/2023 and 25/11/2023 to cross check the performance evaluation of Air Pollution Control equipment. Thus Bag House efficiency of CD Bag Filter, PSB Bag Filter & Pallet Plant - 3, ESP installed at Dhasna, Bahadurpur, Jamuria, Dist. - Paschim Bardhaman, Pin - 713 362, work order no. 3000016207, on the basis of our result, we conclude that there is no increase in pollution load after adding of 5% dust in the Bag House.

**Details of measured parameters are as given below for reference**

<b>CD Bag Filter</b>				
<b>Parameters</b>	<b>Unit</b>	<b>Inlet Bag House</b>	<b>Outlet Bag House</b>	<b>Efficiency</b>
Flue Gas Temperature	°C	40.0	31.0	99.05
Flue Gas Velocity	M/s	22.11	25.76	
Total Gas Quantity	Nm <sup>3</sup> /h	59488.5	71361.0	
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	1490.1	14.1	

<b>PSB Bag Filter</b>				
<b>Parameters</b>	<b>Unit</b>	<b>Inlet Bag House</b>	<b>Outlet Bag House</b>	<b>Efficiency</b>
Flue Gas Temperature	°C	39.0	32.0	99.28
Flue Gas velocity	M/s	29.44	17.35	
Total Gas Quantity	Nm <sup>3</sup> /h	178794.5	107788.0	
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	1640.5	11.8	

**Efficiency Test Report of Air Pollution Control  
Equipment Attached to CD Bag Filter, PSB Bag Filter & Pallet Plant - 3, ESP**

<b>Pallet Plant - 3, ESP</b>				
<b>Parameters</b>	<b>Unit</b>	<b>ESP Inlet</b>	<b>ESP Outlet</b>	<b>Efficiency</b>
Flue Gas velocity	M/s	14.01	13.91	99.11
Total Gas Quantity	Nm <sup>3</sup> /h	409810.5	582835.7	
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	1043.5	9.3	

<b>PRODUCT SEPARATOR HOUSE (psh) KILN NO. 11 &amp; 12, BAG FILTER</b>				
<b>Parameters</b>	<b>Unit</b>	<b>Inlet Bag House</b>	<b>Outlet Bag House</b>	<b>Efficiency</b>
Flue Gas Temperature	°C	48.0	36.0	99.05
Flue Gas velocity	M/s	23.16	19.23	
Total Gas Quantity	Nm <sup>3</sup> /h	60760.6	52409.4	
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	2217.0	21.0	

<b>TRAVEL GREAT &amp; ROTARY KILN NO. - 3 (PELLET PLANT), ESP</b>				
<b>Parameters</b>	<b>Unit</b>	<b>ESP Inlet</b>	<b>ESP Outlet</b>	<b>Efficiency</b>
Flue Gas Temperature	°C	193.0	127.0	99.07
Flue Gas velocity	M/s	10.21	9.74	
Total Gas Quantity	Nm <sup>3</sup> /h	373639.9	415252.7	
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	2368.0	22.0	

**Efficiency Test Report of Air Pollution Control  
Equipment Attached to CD Bag Filter, PSB Bag Filter & Pallet Plant - 3, ESP**

<b>SMS - I (EXTENSION) INDUCTION (4X20 MT) FURNACE, BAG FILTER</b>				
<b>Parameters</b>	<b>Unit</b>	<b>Inlet Bag House</b>	<b>Outlet Bag House</b>	<b>Efficiency</b>
Flue Gas Temperature	°C	61.0	53.0	
Flue Gas velocity	M/s	8.69	7.54	99.08
Total Gas Quantity	Nm <sup>3</sup> /h	70991.6	63108.4	
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	2617.0	24.0	

<b>POWER PLANT (CFBC BOILER), ESP</b>				
<b>Parameters</b>	<b>Unit</b>	<b>ESP Inlet</b>	<b>ESP Outlet</b>	<b>Efficiency</b>
Flue Gas Temperature	°C	196.0	135.0	
Flue Gas velocity	M/s	8.26	7.29	99.04
Total Gas Quantity	Nm <sup>3</sup> /h	261634.0	265432.7	
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	2363.0	22.6	

<b>POWER PLANT (CFBC BOILER), ESP</b>				
<b>Parameters</b>	<b>Unit</b>	<b>ESP Inlet</b>	<b>ESP Outlet</b>	<b>Efficiency</b>
Flue Gas Temperature	°C	189.0	123.0	
Flue Gas velocity	M/s	10.44	9.74	99.06
Total Gas Quantity	Nm <sup>3</sup> /h	618296.3	672979.6	
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	2478.0	23.2	

**Efficiency Test Report of Air Pollution Control  
Equipment Attached to CD Bag Filter, PSB Bag Filter & Pallet Plant - 3, ESP**

<b>POWER PLANT (AFBC BOILER), ESP</b>				
<b>Parameters</b>	<b>Unit</b>	<b>ESP Inlet</b>	<b>ESP Outlet</b>	<b>Efficiency</b>
Flue Gas Temperature	°C	178.0	111.0	
Flue Gas velocity	M/s	9.68	8.76	99.10
Total Gas Quantity	Nm <sup>3</sup> /h	72301.5	76846.0	
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	2614.0	23.4	

<b>ROTARY KILN - 9 &amp; 10 (450 TPD EACH) THROUGH WHRB (ATTACHED WITH A COMMON STACK), ESP</b>				
<b>Parameters</b>	<b>Unit</b>	<b>ESP Inlet</b>	<b>ESP Outlet</b>	<b>Efficiency</b>
Flue Gas Temperature	°C	197.0	138.0	
Flue Gas velocity	M/s	11.35	10.67	99.09
Total Gas Quantity	Nm <sup>3</sup> /h	325391.7	349809.0	
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	2843.0	25.6	

<b>PRODUCT SEPARATOR HOUSE (PSH) KILN NO. 5 &amp; 6 (SPONGE IRON UNIT), BAG FILTER</b>				
<b>Parameters</b>	<b>Unit</b>	<b>Inlet Bag House</b>	<b>Outlet Bag House</b>	<b>Efficiency</b>
Flue Gas Temperature	°C	49.0	37.0	
Flue Gas velocity	M/s	9.11	8.65	99.04
Total Gas Quantity	Nm <sup>3</sup> /h	23826.0	23498.6	
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	2631.0	25.2	

**Efficiency Test Report of Air Pollution Control  
Equipment Attached to CD Bag Filter, PSB Bag Filter & Pallet Plant - 3, ESP**

<b>ROTARY KILN - 1 &amp; 2 (150 TPD EACH) THROUGH WHRB, ESP</b>				
<b>Parameters</b>	<b>Unit</b>	<b>ESP Inlet</b>	<b>ESP Outlet</b>	<b>Efficiency</b>
Flue Gas Temperature	°C	189.0	138.0	
Flue Gas velocity	M/s	9.14	8.58	99.13
Total Gas Quantity	Nm <sup>3</sup> /h	66642.7	70322.4	
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	2396.0	20.9	

<b>ROTARY KILN - 3 &amp; 4 (150 TPD EACH) THROUGH WHRB, ESP</b>				
<b>Parameters</b>	<b>Unit</b>	<b>ESP Inlet</b>	<b>ESP Outlet</b>	<b>Efficiency</b>
Flue Gas Temperature	°C	179.0	111.0	
Flue Gas velocity	M/s	7.89	7.27	99.07
Total Gas Quantity	Nm <sup>3</sup> /h	58801.3	63775.2	
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	2853.0	26.4	

<b>ROTARY KILN - 5 &amp; 6 (450 TPD EACH) THROUGH WHRB , ESP</b>				
<b>Parameters</b>	<b>Unit</b>	<b>ESP Inlet</b>	<b>ESP Outlet</b>	<b>Efficiency</b>
Flue Gas Temperature	°C	211.0	148.0	
Flue Gas velocity	M/s	9.31	8.73	99.06
Total Gas Quantity	Nm <sup>3</sup> /h	259186.7	279409.1	
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	2879.0	27.2	

**Efficiency Test Report of Air Pollution Control  
Equipment Attached to CD Bag Filter, PSB Bag Filter & Pallet Plant - 3, ESP**

<b>TRH - 5 (TRANSFER HOUSE) SPONG IRON UNIT, BAG FILTER</b>				
<b>Parameters</b>	<b>Unit</b>	<b>Inlet Bag House</b>	<b>Outlet Bag House</b>	<b>Efficiency</b>
Flue Gas Temperature	°C	49.0	36.0	
Flue Gas velocity	M/s	9.39	8.92	99.08
Total Gas Quantity	Nm <sup>3</sup> /h	24558.3	24310.6	
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	2841.0	26.0	

<b>SMS - I INDUCTION (2X15 MT, 4X18 MT) FURNACE INLET, BAG FILTER</b>				
<b>Parameters</b>	<b>Unit</b>	<b>Inlet Bag House</b>	<b>Outlet Bag House</b>	<b>Efficiency</b>
Flue Gas Temperature	°C	76.0	63.0	
Flue Gas velocity	M/s	8.31	7.91	99.05
Total Gas Quantity	Nm <sup>3</sup> /h	20052.3	19825.6	
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	2536.0	24.1	

<b>SMS - II, INDUCTION (4X5 MT, 2X8 MT) FURNACE, BAG FILTER</b>				
<b>Parameters</b>	<b>Unit</b>	<b>Inlet Bag House</b>	<b>Outlet Bag House</b>	<b>Efficiency</b>
Flue Gas Temperature	°C	78.0	69.0	
Flue Gas velocity	M/s	7.81	7.46	99.12
Total Gas Quantity	Nm <sup>3</sup> /h	18738.4	18369.7	
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	2675.0	23.6	

**Efficiency Test Report of Air Pollution Control  
Equipment Attached to CD Bag Filter, PSB Bag Filter & Pallet Plant - 3, ESP**

**SMS - III, INDUCTION (6X8 MT) FURNACE EXTENSION - 2 X 18 MT , BAG FILTER**

Parameters	Unit	Inlet Bag House	Outlet Bag House	Efficiency
Flue Gas Temperature	°C	73.0	61.0	
Flue Gas velocity	M/s	8.64	8.16	99.02
Total Gas Quantity	Nm <sup>3</sup> /h	30282.3	29627.5	
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	2632.0	25.8	

**PRODUCT SEPARATOR HOUSE (PSH) KILN NO. - 1, 2, 3 & 4 (SPONGE IRON UNIT), BAG FILTER**

Parameters	Unit	Inlet Bag House	Outlet Bag House	Efficiency
Flue Gas Temperature	°C	47.0	35.0	
Flue Gas velocity	M/s	7.85	7.54	99.07
Total Gas Quantity	Nm <sup>3</sup> /h	20658.9	20616.2	
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	2588.0	24.0	

**COOLER DISCHARGE FOR KILN NO. - 1, 2, 3 & 4, BAG FILTER**

Parameters	Unit	Inlet Bag House	Outlet Bag House	Efficiency
Flue Gas Temperature	°C	65.0	53.0	
Flue Gas velocity	M/s	9.32	8.76	99.09
Total Gas Quantity	Nm <sup>3</sup> /h	23221.4	22629.5	
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	2864.0	26.2	

**Efficiency Test Report of Air Pollution Control  
Equipment Attached to CD Bag Filter, PSB Bag Filter & Pallet Plant - 3, ESP**

<b>PRODUCT SEPARATOR HOUSE (PSH) FOR KILN NO. 7, 8, 9 &amp; 10, BAG FILTER</b>				
<b>Parameters</b>	<b>Unit</b>	<b>Inlet Bag House</b>	<b>Outlet Bag House</b>	<b>Efficiency</b>
Flue Gas Temperature	°C	49.0	37.0	
Flue Gas velocity	M/s	16.67	15.84	99.03
Total Gas Quantity	Nm <sup>3</sup> /h	98095.9	96819.9	
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	2956.0	28.7	

<b>COOLER DISCHARGE FOR KILN NO. - 7, 8, 9 &amp; 10, BAG FILTER</b>				
<b>Parameters</b>	<b>Unit</b>	<b>Inlet Bag House</b>	<b>Outlet Bag House</b>	<b>Efficiency</b>
Flue Gas Temperature	°C	58.0	46.0	
Flue Gas velocity	M/s	11.02	10.47	99.13
Total Gas Quantity	Nm <sup>3</sup> /h	28037.7	27640.4	
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	2537.0	22.0	

<b>ROTARY KILN NO. - 7 (450 TPD) &amp; 8 (450 TPD) COMMON STACK THROUGH WHRB, ESP</b>				
<b>Parameters</b>	<b>Unit</b>	<b>ESP Inlet</b>	<b>ESP Outlet</b>	<b>Efficiency</b>
Flue Gas Temperature	°C	214.0	147.0	
Flue Gas velocity	M/s	11.43	10.97	99.07
Total Gas Quantity	Nm <sup>3</sup> /h	316246.5	351937.7	
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	2719.0	25.3	

**Efficiency Test Report of Air Pollution Control  
Equipment Attached to CD Bag Filter, PSB Bag Filter & Pallet Plant - 3, ESP**

<b>FERRO PLANT SEAF NO. 2 (4.5 MVA), BAG FILTER</b>				
<b>Parameters</b>	<b>Unit</b>	<b>Inlet Bag House</b>	<b>Outlet Bag House</b>	<b>Efficiency</b>
Flue Gas Temperature	°C	81.0	62.0	
Flue Gas velocity	M/s	7.96	7.47	99.09
Total Gas Quantity	Nm <sup>3</sup> /h	37115.4	36806.1	
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	2894.0	26.4	

<b>FERRO PLANT SEAF NO. 1 (4.5 MVA), BAG FILTER</b>				
<b>Parameters</b>	<b>Unit</b>	<b>Inlet Bag House</b>	<b>Outlet Bag House</b>	<b>Efficiency</b>
Flue Gas Temperature	°C	84.0	67.0	
Flue Gas velocity	M/s	7.85	7.38	99.06
Total Gas Quantity	Nm <sup>3</sup> /h	36294.9	35827.9	
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	2973.0	27.9	

<b>FERRO PLANT SEAF NO. 3 (9.0 MVA), BAG FILTER</b>				
<b>Parameters</b>	<b>Unit</b>	<b>Inlet Bag House</b>	<b>Outlet Bag House</b>	<b>Efficiency</b>
Flue Gas Temperature	°C	83.0	61.0	
Flue Gas velocity	M/s	7.88	7.56	99.09
Total Gas Quantity	Nm <sup>3</sup> /h	36536.0	37361.1	
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	2849.0	25.8	

**Efficiency Test Report of Air Pollution Control  
Equipment Attached to CD Bag Filter, PSB Bag Filter & Pallet Plant - 3, ESP**

<b>FERRO PLANT SEAF NO. 1 &amp; 2 (9.0 MVA EACH) ATTACHED WITH A COMMON STACK, BAG FILTER</b>				
<b>Parameters</b>	<b>Unit</b>	<b>Inlet Bag House</b>	<b>Outlet Bag House</b>	<b>Efficiency</b>
Flue Gas Temperature	°C	94.0	78.0	
Flue Gas velocity	M/s	8.15	7.74	99.08
Total Gas Quantity	Nm <sup>3</sup> /h	36655.2	36398.1	
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	2367.0	21.7	

<b>FERRO PLANT SEAF NO. 4 (9.0 MVA), BAG FILTER</b>				
<b>Parameters</b>	<b>Unit</b>	<b>Inlet Bag House</b>	<b>Outlet Bag House</b>	<b>Efficiency</b>
Flue Gas Temperature	°C	103.0	89.0	
Flue Gas velocity	M/s	15.75	14.96	99.09
Total Gas Quantity	Nm <sup>3</sup> /h	69141.2	68213.1	
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	2581.0	23.5	

<b>TRAVEL GREAT &amp; ROTARY KILN NO. - 2 (PELLET PLANT), ESP</b>				
<b>Parameters</b>	<b>Unit</b>	<b>ESP Inlet</b>	<b>ESP Outlet</b>	<b>Efficiency</b>
Flue Gas Temperature	°C	153.0	87.0	
Flue Gas velocity	M/s	15.94	15.14	99.15
Total Gas Quantity	Nm <sup>3</sup> /h	638105.0	717194.3	
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	2493.0	21.3	

**Efficiency Test Report of Air Pollution Control  
Equipment Attached to CD Bag Filter, PSB Bag Filter & Pallet Plant - 3, ESP**

<b>COOLER DISCHARGE FOR KILN NO. - 11 &amp; 12, BAG FILTER</b>				
<b>Parameters</b>	<b>Unit</b>	<b>Inlet Bag House</b>	<b>Outlet Bag House</b>	<b>Efficiency</b>
Flue Gas Temperature	°C	48.0	39.0	
Flue Gas velocity	M/s	9.12	8.65	99.17
Total Gas Quantity	Nm <sup>3</sup> /h	23926.4	23348.0	
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	2287.0	19.0	

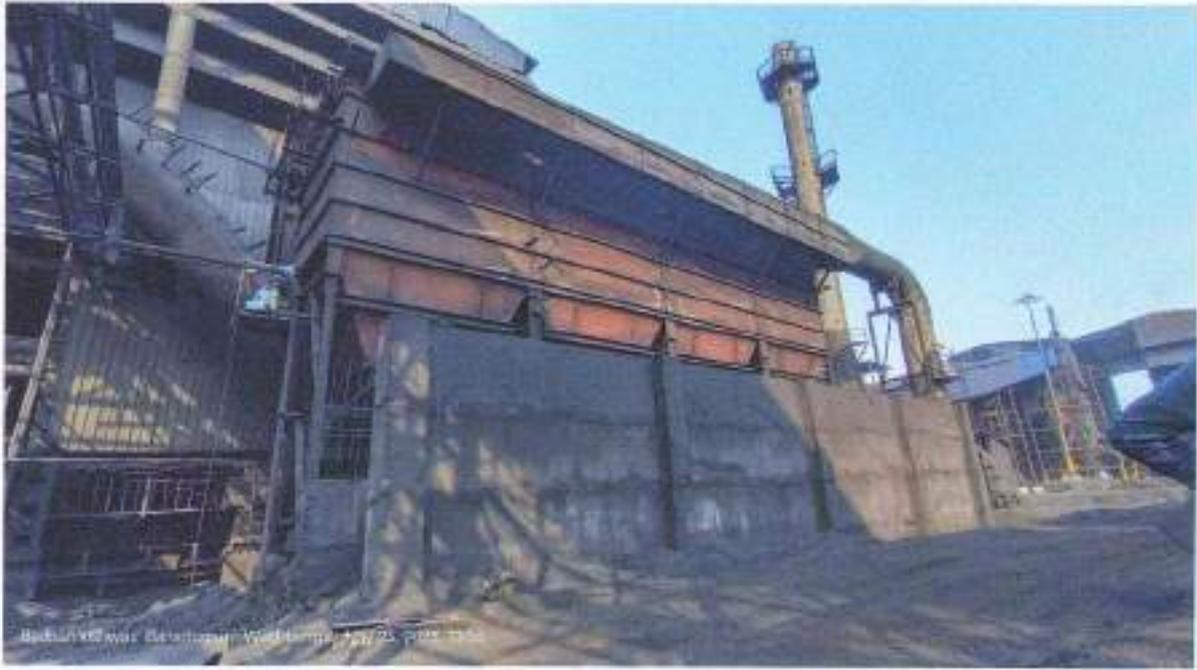
<b>ROTARY KILN NO. - 11 &amp; 12 (700 TPD) THROUGH WHRB (COMMON STACK), ESP</b>				
<b>Parameters</b>	<b>Unit</b>	<b>ESP Inlet</b>	<b>ESP Outlet</b>	<b>Efficiency</b>
Flue Gas Temperature	°C	195.0	128.0	
Flue Gas velocity	M/s	8.27	7.76	99.15
Total Gas Quantity	Nm <sup>3</sup> /h	347170.1	380189.0	
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	2465.0	21.0	

**Conclusion:**

Hence as described in the report above, we conclude that there is no increase in pollution load after adding of 5 % dust in the Bag House.

**Efficiency Test Report of Air Pollution Control  
Equipment Attached to CD Bag Filter, PSB Bag Filter & Pallet Plant - 3, ESP**

**Photographs:**



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HDD-272, Phase III - Near JP Chowk  
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

Name & Address Of The Customer		REPORT NO.	UES/TR/23-24/06524	
<b>To,</b> <b>M/s SHYAM SEL &amp; POWER LIMITED</b> <b>DHASNA, BAHADURPUR, JAMURIA,</b> <b>DIST. - PASCHIM BARDHAMAN</b> <b>PIN - 713 362</b>		LAB REF NO.	UES/23-24/ST/012349	
		DATE OF SAMPLING	24/11/2023	
		DATE OF RECEIPT	27/11/2023	
		DATE OF REPORT	30/11/2023	
		DATE OF ANALYSIS	Start: 27/11/2023	End: 30/11/2023
<b>SAMPLE DETAILS</b>				
Monitoring For	BAG HOUSE INLET EMISSION MONITORING			
Customer Ref. No. & Date	P.O. NO. 3000016207, DATED: 06/11/2023			
Sampling Location	PRODUCT SEPARATOR HOUSE (PSH) KILN NO. 11 & 12 INLET			
Sample Collected By	LABORATORY CHEMIST			
Sampling Procedure	IS 11255 Part 1,2-1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003			
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.			

## TEST REPORT

<b>Stack details</b>			
Stack Identity	PRODUCT SEPARATOR HOUSE (PSH) KILN NO. 11 & 12 INLET		
Stack Attached To	BAG FILTER		
Material of Construction	M. S.		
Height of the stack from ground level (Meter)	30.0 MTR		
Stack Diameter	1.0 MTR		
Stack Shape At Top	CIRCULAR		
Type of Fuel	-		
Parameter	Unit	Method Reference	Result
Flue Gas Temperature	°C	IS:11255:(Part -3):2008	48.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	23.16
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255 :(Part -3):2008	60760.6
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985	2217

REMARKS: RESULTS ARE AS ABOVE

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-----End of the test report-----



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<b>Name &amp; Address Of The Customer</b> <b>To,</b> <b>M/s SHYAM SEL &amp; POWER LIMITED</b> <b>DHASNA, BAHADURPUR, JAMURIA,</b> <b>DIST. - PASCHIM BARDHAMAN</b> <b>PIN - 713 362</b>	REPORT NO.	UES/TR/23-24/06525	
	LAB REF NO.	UES/23-24/ST/012350	
	DATE OF SAMPLING	24/11/2023	
	DATE OF RECEIPT	27/11/2023	
	DATE OF REPORT	30/11/2023	
	DATE OF ANALYSIS	Start: 27/11/2023	End: 30/11/2023
<b>SAMPLE DETAILS</b>			
Monitoring For	BAG HOUSE OUTLET EMISSION MONITORING		
Customer Ref. No. & Date	P.O. NO. 3000016207, DATED: 06/11/2023		
Sampling Location	PRODUCT SEPARATOR HOUSE (PSH) KILN NO. 11 & 12 OUTLET		
Sample Collected By	LABORATORY CHEMIST		
Sampling Procedure	IS 11255 Part 1,2-1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.		

## TEST REPORT

<b>Stack details</b>			
Stack Identity	PRODUCT SEPARATOR HOUSE (PSH) KILN NO. 11 & 12 OUTLET		
Stack Attached To	BAG FILTER		
Material of Construction	M. S.		
Height of the stack from ground level (Meter)	30.0 MTR		
Stack Diameter	1.0 MTR		
Stack Shape At Top	CIRCULAR		
Type of Fuel	--		
<b>Parameter</b>	<b>Unit</b>	<b>Method Reference</b>	<b>Result</b>
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	36.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	19.23
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	52409.4
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985	21.0

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<i>Name &amp; Address Of The Customer</i>		REPORT NO.	UES/TR/23-24/06526		
<b>To,</b> <b>M/s SHYAM SEL &amp; POWER LIMITED</b> <b>DHASNA, BAHADURPUR, JAMURIA,</b> <b>DIST. - PASCHIM BARDHAMAN</b> <b>PIN - 713 362</b>		LAB REF NO.	UES/23-24/ST/012351		
		DATE OF SAMPLING	24/11/2023		
		DATE OF RECEIPT	27/11/2023		
		DATE OF REPORT	30/11/2023		
		DATE OF ANALYSIS	Start: 27/11/2023	End: 30/11/2023	
		<b>SAMPLE DETAILS</b>			
Monitoring For	ESP INLET EMISSION MONITORING				
Customer Ref. No. & Date	P.O. NO. 3000016207, DATED: 06/11/2023				
Sampling Location	TRAVEL GREAT & ROTARY KILN NO. - 3 (PELLET PLANT) INLET				
Sample Collected By	LABORATORY CHEMIST				
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003				
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.				

## TEST REPORT

<b>Stack details</b>			
Stack Identity	TRAVEL GREAT & ROTARY KILN NO. - 3 (PELLET PLANT) INLET		
Stack Attached To	ESP		
Material of Construction	CONCRETE		
Height of the stack from ground level (Meter)	60.0 MTR		
Stack Diameter	4.5 MTR		
Stack Shape At Top	CIRCULAR		
Type of Fuel	PULVERISED COAL & PGP		
Parameter	Unit	Method Reference	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	193.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	10.21
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	373639.9
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985, RA 2003	2368.0

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Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

<b>Name &amp; Address Of The Customer</b> <b>To,</b> <b>M/s SHYAM SEL &amp; POWER LIMITED</b> <b>DHASNA, BAHADURPUR, JAMURIA,</b> <b>DIST. - PASCHIM BARDHAMAN</b> <b>PIN - 713 362</b>	REPORT NO.	UES/TR/23-24/06527	
	LAB REF NO.	UES/23-24/ST/012352	
	DATE OF SAMPLING	24/11/2023	
	DATE OF RECEIPT	27/11/2023	
	DATE OF REPORT	30/11/2023	
	DATE OF ANALYSIS	Start: 27/11/2023	End: 30/11/2023
<b>SAMPLE DETAILS</b>			
Monitoring For	ESP OUTLET EMISSION MONITORING		
Customer Ref. No. & Date	P.O. NO. 3000016207, DATED: 06/11/2023		
Sampling Location	TRAVEL GREAT & ROTARY KILN NO. - 3 (PELLET PLANT) OUTLET		
Sample Collected By	LABORATORY CHEMIST		
Sampling Procedure	IS 11255 Part 1,2-1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2001		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.		

## TEST REPORT

<b>Stack details</b>			
Stack Identity	TRAVEL GREAT & ROTARY KILN NO. - 3 (PELLET PLANT) OUTLET		
Stack Attached To	ESP		
Material of Construction	CONCRETE		
Height of the stack from ground level (Meter)	60.0 MTR		
Stack Diameter	4.5 MTR		
Stack Shape At Top	CIRCULAR		
Type of Fuel	PULVERISED COAL & PGP		
<b>Parameter</b>	<b>Unit</b>	<b>Method Reference</b>	<b>Result</b>
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	127.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	9.74
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	415252.7
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985, RA 2003	22.0

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<b>Name &amp; Address Of The Customer</b> <b>To,</b> <b>M/s SHYAM SEL &amp; POWER LIMITED</b> <b>DHASNA, BAHADURPUR, JAMURIA,</b> <b>DIST. - PASCHIM BARDHAMAN</b> <b>PIN - 713 362</b>	REPORT NO.	UES/TR/23-24/06528	
	LAB REF NO.	UES/23-24/ST/012353	
	DATE OF SAMPLING	24/11/2023	
	DATE OF RECEIPT	27/11/2023	
	DATE OF REPORT	30/11/2023	
	DATE OF ANALYSIS	Start: 27/11/2023	End: 30/11/2023
<b>SAMPLE DETAILS</b>			
Monitoring For	BAG HOUSE INLET EMISSION MONITORING		
Customer Ref. No. & Date	P.O. NO. 3000016207, DATED: 06/11/2023		
Sampling Location	SMS - I (EXTENSION) INDUCTION (4X20 MT) FURNACE INLET		
Sample Collected By	LABORATORY CHEMIST		
Sampling Procedure	IS 11255 Part 1,2-1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.		

## TEST REPORT

<b>Stack details</b>			
Stack Identity	SMS - I (EXTENSION) INDUCTION (4X20 MT) FURNACE INLET		
Stack Attached To	BAG FILTER		
Material of Construction	M. S.		
Height of the stack from ground level (Meter)	30.0 MTR		
Stack Diameter	1.8 MTR		
Stack Shape At Top	CIRCULAR		
Type of Fuel	-		
<b>Parameter</b>	<b>Unit</b>	<b>Method Reference</b>	<b>Result</b>
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	61.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	8.69
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	70991.6
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985, RA 2003	2617.0

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HDD-272, Phase III - Near JP Chowk  
 Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
 Ph : 0771 - 4027777 | Email : ultimatenviron@gmail.com

<b>Name &amp; Address Of The Customer</b> <b>To,</b> <b>M/s SHYAM SEL &amp; POWER LIMITED</b> <b>DHASNA, BAHADURPUR, JAMURIA,</b> <b>DIST. - PASCHIM BARDHAMAN</b> <b>PIN - 713 362</b>	REPORT NO.	UES/TR/23-24/06529	
	LAB REF NO.	UES/23-24/ST/012354	
	DATE OF SAMPLING	24/11/2023	
	DATE OF RECEIPT	27/11/2023	
	DATE OF REPORT	30/11/2023	
	DATE OF ANALYSIS	Start: 27/11/2023	End: 30/11/2023
<b>SAMPLE DETAILS</b>			
Monitoring For	BAG HOUSE OUTLET EMISSION MONITORING		
Customer Ref. No. & Date	P.O. NO. 3000016207, DATED: 06/11/2023		
Sampling Location	SMS - I (EXTENSION) INDUCTION (4X20 MT) FURNACE OUTLET		
Sample Collected By	LABORATORY CHEMIST		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.		

## TEST REPORT

<b>Stack details</b>			
Stack Identity	SMS - I (EXTENSION) INDUCTION (4X20 MT) FURNACE OUTLET		
Stack Attached To	BAG FILTER		
Material of Construction	M. S.		
Height of the stack from ground level (Meter)	30.0 MTR		
Stack Diameter	1.8 MTR		
Stack Shape At Top	CIRCULAR		
Type of Fuel	--		
<b>Parameter</b>	<b>Unit</b>	<b>Method Reference</b>	<b>Result</b>
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	53.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	7.54
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255 :(Part -3):2008	63108.4
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985, RA 2003	24.0

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Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

<b>Name &amp; Address Of The Customer</b> <b>To,</b> <b>M/s SHYAM SEL &amp; POWER LIMITED</b> <b>DHASNA, BAHADURPUR, JAMURIA,</b> <b>DIST. - PASCHIM BARDHAMAN</b> <b>PIN - 713 362</b>	REPORT NO.	UES/TR/23-24/06530	
	LAB REF NO.	UES/23-24/ST/012355	
	DATE OF SAMPLING	24/11/2023	
	DATE OF RECEIPT	27/11/2023	
	DATE OF REPORT	30/11/2023	
	DATE OF ANALYSIS	Start: 27/11/2023	End: 30/11/2023
<b>SAMPLE DETAILS</b>			
Monitoring For	ESP INLET EMISSION MONITORING		
Customer Ref. No. & Date	P.O. NO. 3000016207, DATED: 06/11/2023		
Sampling Location	POWER PLANT (CFBC BOILER) INLET		
Sample Collected By	LABORATORY CHEMIST		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.		

## TEST REPORT

<b>Stack details</b>			
Stack Identity	POWER PLANT (CFBC BOILER) INLET		
Stack Attached To	ESP		
Material of Construction	CONCRETE		
Height of the stack from ground level (Meter)	90.0 MTR		
Stack Diameter	4.2 MTR		
Stack Shape At Top	CIRCULAR		
Type of Fuel	COAL & DOLOCHAR		
<b>Parameter</b>	<b>Unit</b>	<b>Method Reference</b>	<b>Result</b>
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	196.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	8.26
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	261634.0
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985, RA 2003	2363.0

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Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
Ph : 0771 - 4027777 | Email : ultimatenviron@gmail.com

<b>Name &amp; Address Of The Customer</b> <b>To,</b> <b>M/s SHYAM SEL &amp; POWER LIMITED</b> <b>DHASNA, BAHADURPUR, JAMURIA,</b> <b>DIST. - PASCHIM BARDHAMAN</b> <b>PIN - 713 362</b>	REPORT NO.	UES/TR/23-24/06531	
	LAB REF NO.	UES/23-24/ST/012356	
	DATE OF SAMPLING	24/11/2023	
	DATE OF RECEIPT	27/11/2023	
	DATE OF REPORT	30/11/2023	
	DATE OF ANALYSIS	Start: 27/11/2023	End: 30/11/2023
<b>SAMPLE DETAILS</b>			
Monitoring For	ESP OUTLET EMISSION MONITORING		
Customer Ref. No. & Date	P.O. NO. 3000015207, DATED: 06/11/2023		
Sampling Location	POWER PLANT (CFBC BOILER) OUTLET		
Sample Collected By	LABORATORY CHEMIST		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.		

## TEST REPORT

<b>Stack details</b>			
Stack Identity	POWER PLANT (CFBC BOILER) OUTLET		
Stack Attached To	ESP		
Material of Construction	CONCRETE		
Height of the stack from ground level (Meter)	90.0 MTR		
Stack Diameter	4.2 MTR		
Stack Shape At Top	CIRCULAR		
Type of Fuel	COAL & DOLOCHAR		
<b>Parameter</b>	<b>Unit</b>	<b>Method Reference</b>	<b>Result</b>
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	135.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	7.29
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	265432.7
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985, RA 2003	22.6

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Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

<i>Name &amp; Address Of The Customer</i>		REPORT NO.	UES/TR/23-24/06532	
<b>To, M/s SHYAM SEL &amp; POWER LIMITED DHASNA, BAHADURPUR, JAMURIA, DIST. - PASCHIM BARDHAMAN PIN - 713 362</b>		LAB REF NO.	UES/23-24/ST/012357	
		DATE OF SAMPLING	24/11/2023	
		DATE OF RECEIPT	27/11/2023	
		DATE OF REPORT	30/11/2023	
		DATE OF ANALYSIS	Start: 27/11/2023	End: 30/11/2023
<b>SAMPLE DETAILS</b>				
Monitoring For	ESP INLET EMISSION MONITORING			
Customer Ref. No. & Date	P.O. NO. 3000016207, DATED: 06/11/2023			
Sampling Location	POWER PLANT (CFBC BOILER) INLET			
Sample Collected By	LABORATORY CHEMIST			
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003			
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.			

## TEST REPORT

<b>Stack details</b>			
Stack Identity	POWER PLANT (CFBC BOILER) INLET		
Stack Attached To	ESP		
Material of Construction	CONCRETE		
Height of the stack from ground level (Meter)	90.0 MTR		
Stack Diameter	5.7 MTR		
Stack Shape At Top	CIRCULAR		
Type of Fuel	COAL & DOLOCHAR		
<b>Parameter</b>	<b>Unit</b>	<b>Method Reference</b>	<b>Result</b>
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	189.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	10.44
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	618296.3
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985, RA 2003	2478.0

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Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

<b>Name &amp; Address Of The Customer</b> <b>To,</b> <b>M/s SHYAM SEL &amp; POWER LIMITED</b> <b>DHASNA, BAHADURPUR, JAMURIA,</b> <b>DIST. - PASCHIM BARDHAMAN</b> <b>PIN - 713 362</b>	REPORT NO.	UES/TR/23-24/06533	
	LAB REF NO.	UES/23-24/ST/012358	
	DATE OF SAMPLING	24/11/2023	
	DATE OF RECEIPT	27/11/2023	
	DATE OF REPORT	30/11/2023	
	DATE OF ANALYSIS	Start: 27/11/2023	End: 30/11/2023
<b>SAMPLE DETAILS</b>			
Monitoring For	ESP OUTLET EMISSION MONITORING		
Customer Ref. No. & Date	P.O. NO. 3000016207, DATED: 06/11/2023		
Sampling Location	POWER PLANT (CFBC BOILER) OUTLET		
Sample Collected By	LABORATORY CHEMIST		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.		

## TEST REPORT

<b>Stack details</b>			
Stack Identity	POWER PLANT (CFBC BOILER) OUTLET		
Stack Attached To	ESP		
Material of Construction	CONCRETE		
Height of the stack from ground level (Meter)	90.0 MTR		
Stack Diameter	5.7 MTR		
Stack Shape At Top	CIRCULAR		
Type of Fuel	COAL & DOLOCHAR		
<b>Parameter</b>	<b>Unit</b>	<b>Method Reference</b>	<b>Result</b>
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	123.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	9.74
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	672979.6
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985, RA 2003	23.2

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HDD-272, Phase III - Near JP Chowk  
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

<i>Name &amp; Address Of The Customer</i>		REPORT NO.	UES/TR/23-24/06534		
<b>To, M/s SHYAM SEL &amp; POWER LIMITED DHASNA, BAHADURPUR, JAMURIA, DIST. - PASCHIM BARDHAMAN PIN - 713 362</b>		LAB REF NO.	UES/23-24/ST/012359		
		DATE OF SAMPLING	24/11/2023		
		DATE OF RECEIPT	27/11/2023		
		DATE OF REPORT	30/11/2023		
		DATE OF ANALYSIS	Start: 27/11/2023	End: 30/11/2023	
		<b>SAMPLE DETAILS</b>			
Monitoring For	ESP INLET EMISSION MONITORING				
Customer Ref. No. & Date	P.O. NO. 3000016207, DATED: 06/11/2023				
Sampling Location	POWER PLANT (AFBC BOILER) INLET				
Sample Collected By	LABORATORY CHEMIST				
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003				
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.				

## TEST REPORT

<b>Stack details</b>			
Stack Identity	POWER PLANT (AFBC BOILER) INLET		
Stack Attached To	ESP		
Material of Construction	CONCRETE		
Height of the stack from ground level (Meter)	65.0 MTR		
Stack Diameter	2.0 MTR		
Stack Shape At Top	CIRCULAR		
Type of Fuel	COAL & DOLOCHAR		
Parameter	Unit	Method Reference	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	178.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	9.68
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	72301.5
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985, RA 2003	2614

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Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

<i>Name &amp; Address Of The Customer</i>		REPORT NO.	UES/TR/23-24/06535	
<b>To,</b> <b>M/s SHYAM SEL &amp; POWER LIMITED</b> <b>DHASNA, BAHADURPUR, JAMURIA,</b> <b>DIST. - PASCHIM BARDHAMAN</b> <b>PIN - 713 362</b>		LAB REF NO.	UES/23-24/ST/012360	
		DATE OF SAMPLING	24/11/2023	
		DATE OF RECEIPT	27/11/2023	
		DATE OF REPORT	30/11/2023	
		DATE OF ANALYSIS	Start: 27/11/2023	End: 30/11/2023
<b>SAMPLE DETAILS</b>				
Monitoring For	ESP OUTLET EMISSION MONITORING			
Customer Ref. No. & Date	P.O. NO. 3000016207, DATED: 06/11/2023			
Sampling Location	POWER PLANT (AFBC BOILER) OUTLET			
Sample Collected By	LABORATORY CHEMIST			
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003			
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.			

## TEST REPORT

<b>Stack details</b>			
Stack Identity	POWER PLANT (AFBC BOILER) OUTLET		
Stack Attached To	ESP		
Material of Construction	CONCRETE		
Height of the stack from ground level (Meter)	65.0 MTR		
Stack Diameter	2.0 MTR		
Stack Shape At Top	CIRCULAR		
Type of Fuel	COAL & DOLOCHAR		
<b>Parameter</b>	<b>Unit</b>	<b>Method Reference</b>	<b>Result</b>
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	111.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	8.76
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	76846.0
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985, RA 2003	23.4

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HDD-272, Phase III - Near JP Chowk  
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

<b>Name &amp; Address Of The Customer</b> <b>To,</b> <b>M/s SHYAM SEL &amp; POWER LIMITED</b> <b>DHASNA, BAHADURPUR, JAMURIA,</b> <b>DIST. - PASCHIM BARDHAMAN</b> <b>PIN - 713 362</b>	<b>REPORT NO.</b>	UES/TR/23-24/06536	
	<b>LAB REF NO.</b>	UES/23-24/ST/012361	
	<b>DATE OF SAMPLING</b>	24/11/2023	
	<b>DATE OF RECEIPT</b>	27/11/2023	
	<b>DATE OF REPORT</b>	30/11/2023	
	<b>DATE OF ANALYSIS</b>	Start: 27/11/2023	End: 30/11/2023
	<b>SAMPLE DETAILS</b>		
<b>Monitoring For</b>	ESP INLET EMISSION MONITORING		
<b>Customer Ref. No. &amp; Date</b>	P.O. NO. 3000016207, DATED: 06/11/2023		
<b>Sampling Location</b>	ROTARY KILN - 9 & 10 (450 TPD EACH) THROUGH WHRB (ATTACHED WITH A COMMON STACK) INLET		
<b>Sample Collected By</b>	LABORATORY CHEMIST		
<b>Sampling Procedure</b>	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
<b>Sample Quantity/Packing</b>	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.		

## TEST REPORT

<b>Stack details</b>			
<b>Stack Identity</b>			ROTARY KILN - 9 & 10 (450 TPD EACH) THROUGH WHRB (ATTACHED WITH A COMMON STACK) INLET
<b>Stack Attached To</b>			ESP
<b>Material of Construction</b>			CONCRETE
<b>Height of the stack from ground level (Meter)</b>			63.0 MTR
<b>Stack Diameter</b>			4.0 MTR
<b>Stack Shape At Top</b>			CIRCULAR
<b>Type of Fuel</b>			COAL
<b>Parameter</b>	<b>Unit</b>	<b>Method Reference</b>	<b>Result</b>
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	197.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	11.35
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	325391.7
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985, RA 2003	2843.0

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-----End of the test report-----



HDD-272, Phase III - Near JP Chowk  
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

<i>Name &amp; Address Of The Customer</i>		REPORT NO.	UES/TR/23-24/06537	
<b>To, M/s SHYAM SEL &amp; POWER LIMITED DHASNA, BAHADURPUR, JAMURIA, DIST. - PASCHIM BARDHAMAN PIN - 713 362</b>		LAB REF NO.	UES/23-24/ST/012362	
		DATE OF SAMPLING	24/11/2023	
		DATE OF RECEIPT	27/11/2023	
		DATE OF REPORT	30/11/2023	
		DATE OF ANALYSIS	Start: 27/11/2023	End: 30/11/2023
		<b>SAMPLE DETAILS</b>		
Monitoring For	ESP OUTLET EMISSION MONITORING			
Customer Ref. No. & Date	P.O. NO. 3000016207, DATED: 06/11/2023			
Sampling Location	ROTARY KILN - 9 & 10 (450 TPD EACH) THROUGH WHRB (ATTACHED WITH A COMMON STACK) OUTLET			
Sample Collected By	LABORATORY CHEMIST			
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003			
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.			

## TEST REPORT

<b>Stack details</b>			
Stack Identity		ROTARY KILN - 9 & 10 (450 TPD EACH) THROUGH WHRB (ATTACHED WITH A COMMON STACK) OUTLET	
Stack Attached To		ESP	
Material of Construction		CONCRETE	
Height of the stack from ground level (Meter)		63.0 MTR	
Stack Diameter		4.0 MTR	
Stack Shape At Top		CIRCULAR	
Type of Fuel		COAL	
Parameter	Unit	Method Reference	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	138.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	10.67
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	349809.0
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985, RA 2003	25.6

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HDD-272, Phase III - Near JP Chowk  
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

Name & Address Of The Customer		REPORT NO.	UES/TR/23-24/06538
<b>To,</b> <b>M/s SHYAM SEL &amp; POWER LIMITED</b> <b>DHASNA, BAHADURPUR, JAMURIA,</b> <b>DIST. - PASCHIM BARDHAMAN</b> <b>PIN - 713 362</b>		LAB REF NO.	UES/23-24/ST/012363
		DATE OF SAMPLING	24/11/2023
		DATE OF RECEIPT	27/11/2023
		DATE OF REPORT	30/11/2023
		DATE OF ANALYSIS	Start: 27/11/2023      End: 30/11/2023
<b>SAMPLE DETAILS</b>			
Monitoring For	BAG HOUSE INLET EMISSION MONITORING		
Customer Ref. No. & Date	P.O. NO. 3000016207, DATED: 06/11/2023		
Sampling Location	PRODUCT SEPARATOR HOUSE (PSH) KILN NO. 5 & 6 (SPONGE IRON UNIT) INLET		
Sample Collected By	LABORATORY CHEMIST		
Sampling Procedure	IS 11255 Part 1,2-1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.		

## TEST REPORT

<b>Stack details</b>			
Stack Identity		PRODUCT SEPARATOR HOUSE (PSH) KILN NO. 5 & 6 (SPONGE IRON UNIT) INLET	
Stack Attached To		BAG FILTER	
Material of Construction		M.S.	
Height of the stack from ground level (Meter)		30.0 MTR	
Stack Diameter		1.0 MTR	
Stack Shape At Top		CIRCULAR	
Type of Fuel		--	
Parameter	Unit	Method Reference	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	49.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	9.11
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	23826.0
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985, RA 2003	2631.0

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HDD-272, Phase III - Near JP Chowk  
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

<i>Name &amp; Address Of The Customer</i>		REPORT NO.	UES/TR/23-24/06539
<b>To,</b>		LAB REF NO.	UES/23-24/ST/012364
<b>M/s SHYAM SEL &amp; POWER LIMITED</b>		DATE OF SAMPLING	24/11/2023
<b>DHASNA, BAHADURPUR, JAMURIA,</b>		DATE OF RECEIPT	27/11/2023
<b>DIST. - PASCHIM BARDHAMAN</b>		DATE OF REPORT	30/11/2023
<b>PIN - 713 362</b>		DATE OF ANALYSIS	Start: 27/11/2023      End: 30/11/2023
<b>SAMPLE DETAILS</b>			
Monitoring For	BAG HOUSE OUTLET EMISSION MONITORING		
Customer Ref. No. & Date	P.O. NO. 3000016207, DATED: 06/11/2023		
Sampling Location	PRODUCT SEPARATOR HOUSE (PSH) KILN NO. 5 & 6 (SPONGE IRON UNIT) OUTLET		
Sample Collected By	LABORATORY CHEMIST		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.		

## TEST REPORT

<b>Stack details</b>			
Stack Identity		PRODUCT SEPARATOR HOUSE (PSH) KILN NO. 5 & 6 (SPONGE IRON UNIT) OUTLET	
Stack Attached To		BAG FILTER	
Material of Construction		M.S.	
Height of the stack from ground level (Meter)		30.0 MTR	
Stack Diameter		1.0 MTR	
Stack Shape At Top		CIRCULAR	
Type of Fuel		--	
Parameter	Unit	Method Reference	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	37.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	8.65
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	23498.6
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985, RA 2003	25.2

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HDD-272, Phase III - Near JP Chowk  
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

<i>Name &amp; Address Of The Customer</i> <b>To,</b> <b>M/s SHYAM SEL &amp; POWER LIMITED</b> <b>DHASNA, BAHADURPUR, JAMURIA,</b> <b>DIST. - PASCHIM BARDHAMAN</b> <b>PIN - 713 362</b>	REPORT NO.	UES/TR/23-24/06540	
	LAB REF NO.	UES/23-24/ST/012365	
	DATE OF SAMPLING	24/11/2023	
	DATE OF RECEIPT	27/11/2023	
	DATE OF REPORT	30/11/2023	
	DATE OF ANALYSIS	Start: 27/11/2023	End: 30/11/2023
<b>SAMPLE DETAILS</b>			
Monitoring For	ESP INLET EMISSION MONITORING		
Customer Ref. No. & Date	P.O. NO. 3000016207, DATED: 06/11/2023		
Sampling Location	ROTARY KILN - 1 & 2 (150 TPD EACH) THROUGH WHRB INLET		
Sample Collected By	LABORATORY CHEMIST		
Sampling Procedure	IS 11255 Part 1,2-1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.		

## TEST REPORT

<b>Stack details</b>			
Stack Identity	ROTARY KILN - 1 & 2 (150 TPD EACH) THROUGH WHRB INLET		
Stack Attached To	ESP		
Material of Construction	M.S.		
Height of the stack from ground level (Meter)	45.0 MTR		
Stack Diameter	2.0 MTR		
Stack Shape At Top	CIRCULAR		
Type of Fuel	COAL		
Parameter	Unit	Method Reference	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	189.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	9.14
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	66642.7
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985, RA 2003	2396.0

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-----End of the test report-----



HDD-272, Phase III - Near JP Chowk  
 Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
 Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

Name & Address Of The Customer <b>To,</b> <b>M/s SHYAM SEL &amp; POWER LIMITED</b> <b>DHASNA, BAHADURPUR, JAMURIA,</b> <b>DIST. - PASCHIM BARDHAMAN</b> <b>PIN - 713 362</b>	REPORT NO.	UES/TR/23-24/06541	
	LAB REF NO.	UES/23-24/ST/012366	
	DATE OF SAMPLING	24/11/2023	
	DATE OF RECEIPT	27/11/2023	
	DATE OF REPORT	30/11/2023	
	DATE OF ANALYSIS	Start: 27/11/2023	End: 30/11/2023
<b>SAMPLE DETAILS</b>			
Monitoring For	ESP OUTLET EMISSION MONITORING		
Customer Ref. No. & Date	P.O. NO. 3000016207, DATED: 06/11/2023		
Sampling Location	ROTARY KILN - 1 & 2 (150 TPD EACH) THROUGH WHRB OUTLET		
Sample Collected By	LABORATORY CHEMIST		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.		

## TEST REPORT

<b>Stack details</b>			
Stack Identity	ROTARY KILN - 1 & 2 (150 TPD EACH) THROUGH WHRB OUTLET		
Stack Attached To	ESP		
Material of Construction	M.S.		
Height of the stack from ground level (Meter)	45.0 MTR		
Stack Diameter	2.0 MTR		
Stack Shape At Top	CIRCULAR		
Type of Fuel	COAL		
Parameter	Unit	Method Reference	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	138.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	8.58
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	70322.4
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985, RA 2003	20.9

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HDD-272, Phase III - Near JP Chowk  
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

<i>Name &amp; Address Of The Customer</i> <b>To,</b> <b>M/s SHYAM SEL &amp; POWER LIMITED</b> <b>DHASNA, BAHADURPUR, JAMURIA,</b> <b>DIST. - PASCHIM BARDHAMAN</b> <b>PIN - 713 362</b>	REPORT NO.	UES/TR/23-24/06544	
	LAB REF NO.	UES/23-24/ST/012369	
	DATE OF SAMPLING	24/11/2023	
	DATE OF RECEIPT	27/11/2023	
	DATE OF REPORT	30/11/2023	
	DATE OF ANALYSIS	Start: 27/11/2023	End: 30/11/2023
<b>SAMPLE DETAILS</b>			
Monitoring For	ESP INLET EMISSION MONITORING		
Customer Ref. No. & Date	P.O. NO. 3000016207, DATED: 06/11/2023		
Sampling Location	ROTARY KILN - 5 & 6 (450 TPD EACH) THROUGH WHRB INLET		
Sample Collected By	LABORATORY CHEMIST		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.		

## TEST REPORT

<b>Stack details</b>			
Stack Identity	ROTARY KILN - 5 & 6 (450 TPD EACH) THROUGH WHRB INLET		
Stack Attached To	ESP		
Material of Construction	CONCRETE		
Height of the stack from ground level (Meter)	55.0 MTR		
Stack Diameter	4.0 MTR		
Stack Shape At Top	CIRCULAR		
Type of Fuel	COAL		
<b>Parameter</b>	<b>Unit</b>	<b>Method Reference</b>	<b>Result</b>
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	211
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	9.31
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	259186.7
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985, RA 2003	2879.0

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HDD-272, Phase III - Near JP Chowk  
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
Ph : 0771 - 4027777 | Email : ultimatenenviro@gmail.com

<b>Name &amp; Address Of The Customer</b> <b>To,</b> <b>M/s SHYAM SEL &amp; POWER LIMITED</b> <b>DHASNA, BAHADURPUR, JAMURIA,</b> <b>DIST. - PASCHIM BARDHAMAN</b> <b>PIN - 713 362</b>	<b>REPORT NO.</b>	UES/TR/23-24/06545	
	<b>LAB REF NO.</b>	UES/23-24/ST/012370	
	<b>DATE OF SAMPLING</b>	24/11/2023	
	<b>DATE OF RECEIPT</b>	27/11/2023	
	<b>DATE OF REPORT</b>	30/11/2023	
	<b>DATE OF ANALYSIS</b>	Start: 27/11/2023	End: 30/11/2023
<b>SAMPLE DETAILS</b>			
<b>Monitoring For</b>	ESP OUTLET EMISSION MONITORING		
<b>Customer Ref. No. &amp; Date</b>	P.O. NO. 3000016207, DATED: 06/11/2023		
<b>Sampling Location</b>	ROTARY KILN - 5 & 6 (450 TPD EACH) THROUGH WHRB OUTLET		
<b>Sample Collected By</b>	LABORATORY CHEMIST		
<b>Sampling Procedure</b>	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
<b>Sample Quantity/Packing</b>	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.		

## TEST REPORT

<b>Stack details</b>			
<b>Stack Identity</b>		ROTARY KILN - 5 & 6 (450 TPD EACH) THROUGH WHRB OUTLET	
<b>Stack Attached To</b>		ESP	
<b>Material of Construction</b>		CONCRETE	
<b>Height of the stack from ground level (Meter)</b>		55.0 MTR	
<b>Stack Diameter</b>		4.0 MTR	
<b>Stack Shape At Top</b>		CIRCULAR	
<b>Type of Fuel</b>		COAL	
<b>Parameter</b>	<b>Unit</b>	<b>Method Reference</b>	<b>Result</b>
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	148
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	8.73
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	279409.1
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985, RA 2003	27.2

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-----End of the test report-----



HDD-272, Phase III - Near JP Chowk  
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

<b>Name &amp; Address Of The Customer</b> <b>To,</b> <b>M/s SHYAM SEL &amp; POWER LIMITED</b> <b>DHASNA, BAHADURPUR, JAMURIA,</b> <b>DIST. - PASCHIM BARDHAMAN</b> <b>PIN - 713 362</b>	REPORT NO.	UES/TR/23-24/06542	
	LAB REF NO.	UES/23-24/ST/012367	
	DATE OF SAMPLING	24/11/2023	
	DATE OF RECEIPT	27/11/2023	
	DATE OF REPORT	30/11/2023	
	DATE OF ANALYSIS	Start: 27/11/2023	End: 30/11/2023
<b>SAMPLE DETAILS</b>			
Monitoring For	ESP INLET EMISSION MONITORING		
Customer Ref. No. & Date	P.O. NO. 3000016207, DATED: 06/11/2023		
Sampling Location	ROTARY KILN - 3 & 4 (150 TPD EACH) THROUGH WHRB INLET		
Sample Collected By	LABORATORY CHEMIST		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.		

## TEST REPORT

<b>Stack details</b>			
Stack Identity	ROTARY KILN - 3 & 4 (150 TPD EACH) THROUGH WHRB INLET		
Stack Attached To	ESP		
Material of Construction	CONCRETE		
Height of the stack from ground level (Meter)	45.0 MTR		
Stack Diameter	2.0 MTR		
Stack Shape At Top	CIRCULAR		
Type of Fuel	COAL		
Parameter	Unit	Method Reference	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	179.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	7.89
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	58801.3
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985, RA 2003	2853.0

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-----End of the test report-----



HDD-272, Phase III - Near JP Chowk  
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

<i>Name &amp; Address Of The Customer</i> <b>To,</b> <b>M/s SHYAM SEL &amp; POWER LIMITED</b> <b>DHASNA, BAHADURPUR, JAMURIA,</b> <b>DIST. - PASCHIM BARDHAMAN</b> <b>PIN - 713 362</b>	REPORT NO.	UES/TR/23-24/06543	
	LAB REF NO.	UES/23-24/ST/012368	
	DATE OF SAMPLING	24/11/2023	
	DATE OF RECEIPT	27/11/2023	
	DATE OF REPORT	30/11/2023	
	DATE OF ANALYSIS	Start: 27/11/2023	End: 30/11/2023
<b>SAMPLE DETAILS</b>			
Monitoring For	ESP OUTLET EMISSION MONITORING		
Customer Ref. No. & Date	P.O. NO. 3000016207, DATED: 06/11/2023		
Sampling Location	ROTARY KILN - 3 & 4 (150 TPD EACH) THROUGH WHRB OUTLET		
Sample Collected By	LABORATORY CHEMIST		
Sampling Procedure	IS 11255 Part 1,2-1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.		

## TEST REPORT

<b>Stack details</b>			
Stack Identity	ROTARY KILN - 3 & 4 (150 TPD EACH) THROUGH WHRB OUTLET		
Stack Attached To	ESP		
Material of Construction	CONCRETE		
Height of the stack from ground level (Meter)	45.0 MTR		
Stack Diameter	2.0 MTR		
Stack Shape At Top	CIRCULAR		
Type of Fuel	COAL		
<b>Parameter</b>	<b>Unit</b>	<b>Method Reference</b>	<b>Result</b>
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	111.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	7.27
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	63775.2
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985, RA 2003	26.4

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HDD-272, Phase III - Near JP Chowk  
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
Ph : 0771 - 4027777 | Email : ultimatenviron@gmail.com

<b>Name &amp; Address Of The Customer</b> <b>To,</b> <b>M/s SHYAM SEL &amp; POWER LIMITED</b> <b>DHASNA, BAHADURPUR, JAMURIA,</b> <b>DIST. - PASCHIM BARDHAMAN</b> <b>PIN - 713 362</b>	REPORT NO.	UES/TR/23-24/06546	
	LAB REF NO.	UES/23-24/ST/012371	
	DATE OF SAMPLING	24/11/2023	
	DATE OF RECEIPT	27/11/2023	
	DATE OF REPORT	30/11/2023	
	DATE OF ANALYSIS	Start: 27/11/2023	End: 30/11/2023
<b>SAMPLE DETAILS</b>			
Monitoring For	BAG HOUSE INLET EMISSION MONITORING		
Customer Ref. No. & Date	P.O. NO. 3000016207, DATED: 06/11/2023		
Sampling Location	TRH - 5 (TRANSFER HOUSE) SPONG IRON UNIT INLET		
Sample Collected By	LABORATORY CHEMIST		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.		

## TEST REPORT

<b>Stack details</b>			
Stack Identity	TRH - 5 (TRANSFER HOUSE) SPONG IRON UNIT INLET		
Stack Attached To	BAG FILTER		
Material of Construction	M.S.		
Height of the stack from ground level (Meter)	30.0 MTR		
Stack Diameter	1.0 MTR		
Stack Shape At Top	CIRCULAR		
Type of Fuel	--		
<b>Parameter</b>	<b>Unit</b>	<b>Method Reference</b>	<b>Result</b>
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	49.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	9.39
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	24558.3
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985, RA 2003	2841.0

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HDD-272, Phase III - Near JP Chowk  
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

<i>Name &amp; Address Of The Customer</i> <b>To,</b> <b>M/s SHYAM SEL &amp; POWER LIMITED</b> <b>DHASNA, BAHADURPUR, JAMURIA,</b> <b>DIST. - PASCHIM BARDHAMAN</b> <b>PIN - 713 362</b>	REPORT NO.	UES/TR/23-24/06547	
	LAB REF NO.	UES/23-24/ST/012372	
	DATE OF SAMPLING	24/11/2023	
	DATE OF RECEIPT	27/11/2023	
	DATE OF REPORT	30/11/2023	
	DATE OF ANALYSIS	Start: 27/11/2023	End: 30/11/2023
<b>SAMPLE DETAILS</b>			
Monitoring For	BAG HOUSE OUTLET EMISSION MONITORING		
Customer Ref. No. & Date	P.O. NO. 3000016207, DATED: 06/11/2023		
Sampling Location	TRH - 5 (TRANSFER HOUSE) SPONG IRON UNIT OUTLET		
Sample Collected By	LABORATORY CHEMIST		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.		

## TEST REPORT

<b>Stack details</b>			
Stack Identity	TRH - 5 (TRANSFER HOUSE) SPONG IRON UNIT OUTLET		
Stack Attached To	BAG FILTER		
Material of Construction	M.S.		
Height of the stack from ground level (Meter)	30.0 MTR		
Stack Diameter	1.0 MTR		
Stack Shape At Top	CIRCULAR		
Type of Fuel	-		
<b>Parameter</b>	<b>Unit</b>	<b>Method Reference</b>	<b>Result</b>
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	36.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	8.92
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	24310.6
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985, RA 2003	26.0

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HDD-272, Phase III - Near JP Chowk  
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

<b>Name &amp; Address Of The Customer</b> <b>To,</b> <b>M/s SHYAM SEL &amp; POWER LIMITED</b> <b>DHASNA, BAHADURPUR, JAMURIA,</b> <b>DIST. - PASCHIM BARDHAMAN</b> <b>PIN - 713 362</b>	REPORT NO.	UES/TR/23-24/06548	
	LAB REF NO.	UES/23-24/ST/012373	
	DATE OF SAMPLING	24/11/2023	
	DATE OF RECEIPT	27/11/2023	
	DATE OF REPORT	30/11/2023	
	DATE OF ANALYSIS	Start: 27/11/2023	End: 30/11/2023
<b>SAMPLE DETAILS</b>			
Monitoring For	BAG HOUSE INLET EMISSION MONITORING		
Customer Ref. No. & Date	P.O. NO. 3000016207, DATED: 06/11/2023		
Sampling Location	SMS - I INDUCTION (2X15 MT, 4X18 MT) FURNACE INLET		
Sample Collected By	LABORATORY CHEMIST		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.		

## TEST REPORT

<b>Stack details</b>			
Stack Identity	SMS - I INDUCTION (2X15 MT, 4X18 MT) FURNACE INLET		
Stack Attached To	BAG FILTER		
Material of Construction	M.S.		
Height of the stack from ground level (Meter)	30.0 MTR		
Stack Diameter	1.0 MTR		
Stack Shape At Top	CIRCULAR		
Type of Fuel	--		
<b>Parameter</b>	<b>Unit</b>	<b>Method Reference</b>	<b>Result</b>
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	76.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	8.31
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	20052.3
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985, RA 2003	2536.0

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HDD-272, Phase III - Near JP Chowk  
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

<i>Name &amp; Address Of The Customer</i>		REPORT NO.	UES/TR/23-24/06549	
<b>To, M/s SHYAM SEL &amp; POWER LIMITED DHASNA, BAHADURPUR, JAMURIA, DIST. - PASCHIM BARDHAMAN PIN - 713 362</b>		LAB REF NO.	UES/23-24/ST/012374	
		DATE OF SAMPLING	24/11/2023	
		DATE OF RECEIPT	27/11/2023	
		DATE OF REPORT	30/11/2023	
		DATE OF ANALYSIS	Start: 27/11/2023	End: 30/11/2023
<b>SAMPLE DETAILS</b>				
Monitoring For	BAG HOUSE OUTLET EMISSION MONITORING			
Customer Ref. No. & Date	P.O. NO. 3000016207, DATED: 06/11/2023			
Sampling Location	SMS - I INDUCTION (2X15 MT, 4X18 MT) FURNACE OUTLET			
Sample Collected By	LABORATORY CHEMIST			
Sampling Procedure	IS 11255 Part 1,2-1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003			
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.			

## TEST REPORT

<b>Stack details</b>			
Stack Identity	SMS - I INDUCTION (2X15 MT, 4X18 MT) FURNACE OUTLET		
Stack Attached To	BAG FILTER		
Material of Construction	M.S.		
Height of the stack from ground level (Meter)	30.0 MTR		
Stack Diameter	1.0 MTR		
Stack Shape At Top	CIRCULAR		
Type of Fuel	--		
<b>Parameter</b>	<b>Unit</b>	<b>Method Reference</b>	<b>Result</b>
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	63.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	7.91
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	19825.6
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985, RA 2003	24.1

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HDD-272, Phase III - Near JP Chowk  
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

<b>Name &amp; Address Of The Customer</b> <b>To,</b> <b>M/s SHYAM SEL &amp; POWER LIMITED</b> <b>DHASNA, BAHADURPUR, JAMURIA,</b> <b>DIST. - PASCHIM BARDHAMAN</b> <b>PIN - 713 362</b>	REPORT NO.	UES/TR/23-24/06550	
	LAB REF NO.	UES/23-24/ST/012375	
	DATE OF SAMPLING	24/11/2023	
	DATE OF RECEIPT	27/11/2023	
	DATE OF REPORT	30/11/2023	
	DATE OF ANALYSIS	Start: 27/11/2023	End: 30/11/2023
<b>SAMPLE DETAILS</b>			
Monitoring For	BAG HOUSE INLET EMISSION MONITORING		
Customer Ref. No. & Date	P.O. NO. 3000016207, DATED: 06/11/2023		
Sampling Location	SMS - II, INDUCTION (4X5 MT, 2X8 MT) FURNACE INLET		
Sample Collected By	LABORATORY CHEMIST		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.		

## TEST REPORT

<b>Stack details</b>			
Stack Identity	SMS - II, INDUCTION (4X5 M, 2X8 MT) FURNACE INLET		
Stack Attached To	BAG FILTER		
Material of Construction	M.S.		
Height of the stack from ground level (Meter)	30.0 MTR		
Stack Diameter	1.0 MTR		
Stack Shape At Top	CIRCULAR		
Type of Fuel	-		
Parameter	Unit	Method Reference	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	78.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	7.81
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	18738.4
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985, RA 2003	2675.0

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<b>Name &amp; Address Of The Customer</b> <b>To,</b> <b>M/s SHYAM SEL &amp; POWER LIMITED</b> <b>DHASNA, BAHADURPUR, JAMURIA,</b> <b>DIST. - PASCHIM BARDHAMAN</b> <b>PIN - 713 362</b>	<b>REPORT NO.</b>	UES/TR/23-24/06551	
	<b>LAB REF NO.</b>	UES/23-24/ST/012376	
	<b>DATE OF SAMPLING</b>	24/11/2023	
	<b>DATE OF RECEIPT</b>	27/11/2023	
	<b>DATE OF REPORT</b>	30/11/2023	
	<b>DATE OF ANALYSIS</b>	Start: 27/11/2023	End: 30/11/2023
<b>SAMPLE DETAILS</b>			
<b>Monitoring For</b>	BAG HOUSE OUTLET EMISSION MONITORING		
<b>Customer Ref. No. &amp; Date</b>	P.O. NO. 3000016207, DATED: 06/11/2023		
<b>Sampling Location</b>	SMS - II, INDUCTION (4X5 MT, 2X8 MT) FURNACE OUTLET		
<b>Sample Collected By</b>	LABORATORY CHEMIST		
<b>Sampling Procedure</b>	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
<b>Sample Quantity/Packing</b>	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.		

## TEST REPORT

<b>Stack details</b>			
<b>Stack Identity</b>	SMS - II, INDUCTION (4X5 MT, 2X8 MT) FURNACE OUTLET		
<b>Stack Attached To</b>	BAG FILTER		
<b>Material of Construction</b>	M.S.		
<b>Height of the stack from ground level (Meter)</b>	30.0 MTR		
<b>Stack Diameter</b>	1.0 MTR		
<b>Stack Shape At Top</b>	CIRCULAR		
<b>Type of Fuel</b>	-		
<b>Parameter</b>	<b>Unit</b>	<b>Method Reference</b>	<b>Result</b>
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	69.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	7.46
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	18369.7
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985, RA 2003	23.6

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HDD-272, Phase III - Near JP Chowk  
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

<b>Name &amp; Address Of The Customer</b> <b>To,</b> <b>M/s SHYAM SEL &amp; POWER LIMITED</b> <b>DHASNA, BAHADURPUR, JAMURIA,</b> <b>DIST. - PASCHIM BARDHAMAN</b> <b>PIN - 713 362</b>	REPORT NO.	UES/TR/23-24/06552	
	LAB REF NO.	UES/23-24/ST/012377	
	DATE OF SAMPLING	24/11/2023	
	DATE OF RECEIPT	27/11/2023	
	DATE OF REPORT	30/11/2023	
	DATE OF ANALYSIS	Start: 27/11/2023	End: 30/11/2023
<b>SAMPLE DETAILS</b>			
Monitoring For	BAG HOUSE INLET EMISSION MONITORING		
Customer Ref. No. & Date	P.O. NO. 3000016207, DATED: 06/11/2023		
Sampling Location	SMS - III, INDUCTION (6X8 MT) FURNACE EXTENSION - 2 X 18 MT INLET		
Sample Collected By	LABORATORY CHEMIST		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.		

## TEST REPORT

<b>Stack details</b>			
Stack Identity	SMS - III, INDUCTION (6X8 MT) FURNACE EXTENSION - 2 X 18 MT INLET		
Stack Attached To	BAG FILTER		
Material of Construction	M.S.		
Height of the stack from ground level (Meter)	32.0 MTR		
Stack Diameter	1.2 MTR		
Stack Shape At Top	CIRCULAR		
Type of Fuel	--		
<b>Parameter</b>	<b>Unit</b>	<b>Method Reference</b>	<b>Result</b>
Flue Gas Temperature	°C	IS:11255:(Part -3):2008	73.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	8.64
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255:(Part -3):2008	30282.3
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985, RA 2003	2632.0

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HDD-272, Phase III - Near JP Chowk  
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

<b>Name &amp; Address Of The Customer</b> <b>To,</b> <b>M/s SHYAM SEL &amp; POWER LIMITED</b> <b>DHASNA, BAHADURPUR, JAMURIA,</b> <b>DIST. - PASCHIM BARDHAMAN</b> <b>PIN - 713 362</b>	REPORT NO.	UES/TR/23-24/06553	
	LAB REF NO.	UES/23-24/ST/012378	
	DATE OF SAMPLING	24/11/2023	
	DATE OF RECEIPT	27/11/2023	
	DATE OF REPORT	30/11/2023	
	DATE OF ANALYSIS	Start: 27/11/2023	End: 30/11/2023
<b>SAMPLE DETAILS</b>			
Monitoring For	BAG HOUSE OUTLET EMISSION MONITORING		
Customer Ref. No. & Date	P.O. NO. 3000016207, DATED: 06/11/2023		
Sampling Location	SMS - III, INDUCTION (6X8 MT) FURNACE EXTENSION - 2 X 18 MT OUTLET		
Sample Collected By	LABORATORY CHEMIST		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.		

## TEST REPORT

<b>Stack details</b>			
Stack Identity	SMS - III, INDUCTION (6X8 MT) FURNACE EXTENSION - 2 X 18 MT OUTLET		
Stack Attached To	BAG FILTER		
Material of Construction	M.S.		
Height of the stack from ground level (Meter)	32.0 MTR		
Stack Diameter	1.2 MTR		
Stack Shape At Top	CIRCULAR		
Type of Fuel	-		
Parameter	Unit	Method Reference	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	61.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	8.16
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	29627.5
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985, RA 2003	25.8

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Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
Ph : 0771 - 4027777 | Email : ultimatenviron@gmail.com

<b>Name &amp; Address Of The Customer</b> <b>To,</b> <b>M/s SHYAM SEL &amp; POWER LIMITED</b> <b>DHASNA, BAHADURPUR, JAMURIA,</b> <b>DIST. - PASCHIM BARDHAMAN</b> <b>PIN - 713 362</b>	REPORT NO.	UES/TR/23-24/06554	
	LAB REF NO.	UES/23-24/ST/012379	
	DATE OF SAMPLING	24/11/2023	
	DATE OF RECEIPT	27/11/2023	
	DATE OF REPORT	30/11/2023	
	DATE OF ANALYSIS	Start: 27/11/2023	End: 30/11/2023
<b>SAMPLE DETAILS</b>			
Monitoring For	BAG HOUSE INLET EMISSION MONITORING		
Customer Ref. No. & Date	P.O. NO. 3006016207, DATED: 06/11/2023		
Sampling Location	PRODUCT SEPARATOR HOUSE (PSH) KILN NO. - 1, 2, 3 & 4 (SPONGE IRON UNIT) INLET		
Sample Collected By	LABORATORY CHEMIST		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.		

## TEST REPORT

<b>Stack details</b>			
Stack Identity		PRODUCT SEPARATOR HOUSE (PSH) KILN NO. - 1, 2, 3 & 4 (SPONGE IRON UNIT) INLET	
Stack Attached To		BAG FILTER	
Material of Construction		M.S.	
Height of the stack from ground level (Meter)		30.0 MTR	
Stack Diameter		1.0 MTR	
Stack Shape At Top		CIRCULAR	
Type of Fuel		-	
Parameter	Unit	Method Reference	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	47.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	7.85
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	20658.9
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985, RA 2003	2588.0

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HDD-272, Phase III - Near JP Chowk  
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

<b>Name &amp; Address Of The Customer</b> <b>To,</b> <b>M/s SHYAM SEL &amp; POWER LIMITED</b> <b>DHASNA, BAHADURPUR, JAMURIA,</b> <b>DIST. - PASCHIM BARDHAMAN</b> <b>PIN - 713 362</b>	REPORT NO.	UES/TR/23-24/06555	
	LAB REF NO.	UES/23-24/ST/012380	
	DATE OF SAMPLING	24/11/2023	
	DATE OF RECEIPT	27/11/2023	
	DATE OF REPORT	30/11/2023	
	DATE OF ANALYSIS	Start: 27/11/2023	End: 30/11/2023
<b>SAMPLE DETAILS</b>			
Monitoring For	BAG HOUSE OUTLET EMISSION MONITORING		
Customer Ref. No. & Date	P.O. NO. 3000016207, DATED: 06/11/2023		
Sampling location	PRODUCT SEPARATOR HOUSE (PSH) KILN NO. - 1, 2, 3 & 4 (SPONGE IRON UNIT) OUTLET		
Sample Collected By	LABORATORY CHEMIST		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.		

## TEST REPORT

<b>Stack details</b>			
Stack Identity		PRODUCT SEPARATOR HOUSE (PSH) KILN NO. - 1, 2, 3 & 4 (SPONGE IRON UNIT) OUTLET	
Stack Attached To		BAG FILTER	
Material of Construction		M.S.	
Height of the stack from ground level (Meter)		30.0 MTR	
Stack Diameter		1.0 MTR	
Stack Shape At Top		CIRCULAR	
Type of Fuel		-	
Parameter	Unit	Method Reference	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	35.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	7.54
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	20616.2
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985, RA 2003	24.0

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Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

<i>Name &amp; Address Of The Customer</i>		REPORT NO.	UES/TR/23-24/06556	
<b>To, M/s SHYAM SEL &amp; POWER LIMITED DHASNA, BAHADURPUR, JAMURIA, DIST. - PASCHIM BARDHAMAN PIN - 713 362</b>		LAB REF NO.	UES/23-24/ST/012381	
		DATE OF SAMPLING	24/11/2023	
		DATE OF RECEIPT	27/11/2023	
		DATE OF REPORT	30/11/2023	
		DATE OF ANALYSIS	Start: 27/11/2023	End: 30/11/2023
		<b>SAMPLE DETAILS</b>		
Monitoring For	BAG HOUSE INLET EMISSION MONITORING			
Customer Ref. No. & Date	P.O. NO. 3000016207, DATED: 06/11/2023			
Sampling Location	COOLER DISCHARGE FOR KILN NO. - 1, 2, 3 & 4 INLET			
Sample Collected By	LABORATORY CHEMIST			
Sampling Procedure	IS 11255 Part 1,2-1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003			
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.			

## TEST REPORT

<b>Stack details</b>			
Stack Identity	COOLER DISCHARGE FOR KILN NO. - 1, 2, 3 & 4 INLET		
Stack Attached To	BAG FILTER		
Material of Construction	M.S.		
Height of the stack from ground level (Meter)	30.0 MTR		
Stack Diameter	1.0 MTR		
Stack Shape At Top	CIRCULAR		
Type of Fuel	-		
Parameter	Unit	Method Reference	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	65.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	9.32
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	23221.4
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985, RA 2003	2864.0

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Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

<b>Name &amp; Address Of The Customer</b> <b>To,</b> <b>M/s SHYAM SEL &amp; POWER LIMITED</b> <b>DHASNA, BAHADURPUR, JAMURIA,</b> <b>DIST. - PASCHIM BARDHAMAN</b> <b>PIN - 713 362</b>	REPORT NO.	UES/TR/23-24/06557	
	LAB REF NO.	UES/23-24/ST/012382	
	DATE OF SAMPLING	24/11/2023	
	DATE OF RECEIPT	27/11/2023	
	DATE OF REPORT	30/11/2023	
	DATE OF ANALYSIS	Start: 27/11/2023	End: 30/11/2023
	<b>SAMPLE DETAILS</b>		
Monitoring For	BAG HOUSE OUTLET EMISSION MONITORING		
Customer Ref. No. & Date	P.O. NO. 3000016207, DATED: 06/11/2023		
Sampling Location	COOLER DISCHARGE FOR KILN NO. - 1, 2, 3 & 4 OUTLET		
Sample Collected By	LABORATORY CHEMIST		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.		

## TEST REPORT

<b>Stack details</b>			
Stack Identity	COOLER DISCHARGE FOR KILN NO. - 1, 2, 3 & 4 OUTLET		
Stack Attached To	BAG FILTER		
Material of Construction	M.S.		
Height of the stack from ground level (Meter)	30.0 MTR		
Stack Diameter	1.0 MTR		
Stack Shape At Top	CIRCULAR		
Type of Fuel	-		
Parameter	Unit	Method Reference	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	53.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	8.76
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	22629.5
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985, RA 2003	26.2

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Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

<b>Name &amp; Address Of The Customer</b> <b>To,</b> <b>M/s SHYAM SEL &amp; POWER LIMITED</b> <b>DHASNA, BAHADURPUR, JAMURIA,</b> <b>DIST. - PASCHIM BARDHAMAN</b> <b>PIN - 713 362</b>	<b>REPORT NO.</b>	UES/TR/23-24/06558	
	<b>LAB REF NO.</b>	UES/23-24/ST/012383	
	<b>DATE OF SAMPLING</b>	24/11/2023	
	<b>DATE OF RECEIPT</b>	27/11/2023	
	<b>DATE OF REPORT</b>	30/11/2023	
	<b>DATE OF ANALYSIS</b>	Start: 27/11/2023	End: 30/11/2023
<b>SAMPLE DETAILS</b>			
<b>Monitoring For</b>	BAG HOUSE INLET EMISSION MONITORING		
<b>Customer Ref. No. &amp; Date</b>	P.O. NO. 3000016207, DATED: 06/11/2023		
<b>Sampling Location</b>	PRODUCT SEPARATOR HOUSE (PSH) FOR KILN NO. 7, 8, 9 & 10 INLET		
<b>Sample Collected By</b>	LABORATORY CHEMIST		
<b>Sampling Procedure</b>	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
<b>Sample Quantity/Packing</b>	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.		

## TEST REPORT

<b>Stack details</b>			
<b>Stack Identity</b>	PRODUCT SEPARATOR HOUSE (PSH) FOR KILN NO. 7, 8, 9 & 10 INLET		
<b>Stack Attached To</b>	BAG FILTER		
<b>Material of Construction</b>	M.S.		
<b>Height of the stack from ground level (Meter)</b>	30.0 MTR		
<b>Stack Diameter</b>	1.5 MTR		
<b>Stack Shape At Top</b>	CIRCULAR		
<b>Type of Fuel</b>	--		
<b>Parameter</b>	<b>Unit</b>	<b>Method Reference</b>	<b>Result</b>
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	49.0
Flue Gas Velocity	M/s	IS :11255 : (Part -3):2008	16.67
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	98095.9
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 : (Part -1):1985, RA 2003	2956.0

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HDD-272, Phase III - Near JP Chowk  
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

<b>Name &amp; Address Of The Customer</b> <b>To,</b> <b>M/s SHYAM SEL &amp; POWER LIMITED</b> <b>DHASNA, BAHADURPUR, JAMURIA,</b> <b>DIST. - PASCHIM BARDHAMAN</b> <b>PIN - 713 362</b>	REPORT NO.	UES/TR/23-24/06559	
	LAB REF NO.	UES/23-24/ST/012384	
	DATE OF SAMPLING	24/11/2023	
	DATE OF RECEIPT	27/11/2023	
	DATE OF REPORT	30/11/2023	
	DATE OF ANALYSIS	Start: 27/11/2023	End: 30/11/2023
<b>SAMPLE DETAILS</b>			
Monitoring For	BAG HOUSE OUTLET EMISSION MONITORING		
Customer Ref. No. & Date	P.O. NO. 3000016207, DATED: 06/11/2023		
Sampling Location	PRODUCT SEPARATOR HOUSE (PSH) FOR KILN NO. 7, 8, 9 & 10 OUTLET		
Sample Collected By	LABORATORY CHEMIST		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.		

## TEST REPORT

<b>Stack details</b>			
Stack Identity	PRODUCT SEPARATOR HOUSE (PSH) FOR KILN NO. 7, 8, 9 & 10 OUTLET		
Stack Attached To	BAG FILTER		
Material of Construction	M.S.		
Height of the stack from ground level (Meter)	30.0 MTR		
Stack Diameter	1.5 MTR		
Stack Shape At Top	CIRCULAR		
Type of Fuel	-		
<b>Parameter</b>	<b>Unit</b>	<b>Method Reference</b>	<b>Result</b>
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	37.0
Flue Gas Velocity	M/s	IS :11255 : (Part -3):2008	15.84
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	96819.9
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 : (Part -1):1985, RA 2003	28.7

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HDD-272, Phase III - Near JP Chowk  
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

<b>Name &amp; Address Of The Customer</b> <b>To,</b> <b>M/s SHYAM SEL &amp; POWER LIMITED</b> <b>DHASNA, BAHADURPUR, JAMURIA,</b> <b>DIST. - PASCHIM BARDHAMAN</b> <b>PIN - 713 362</b>		REPORT NO.	UES/TR/23-24/06560	
		LAB REF NO.	UES/23-24/ST/012385	
		DATE OF SAMPLING	24/11/2023	
		DATE OF RECEIPT	27/11/2023	
		DATE OF REPORT	30/11/2023	
		DATE OF ANALYSIS	Start: 27/11/2023	End: 30/11/2023
<b>SAMPLE DETAILS</b>				
Monitoring For	BAG HOUSE INLET EMISSION MONITORING			
Customer Ref. No. & Date	P.O. NO. 3000016207, DATED: 06/11/2023			
Sampling Location	COOLER DISCHARGE FOR KILN NO. - 7, 8, 9 & 10 INLET			
Sample Collected By	LABORATORY CHEMIST			
Sampling Procedure	IS 11255 Part 1,2-1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003			
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.			

## TEST REPORT

<b>Stack details</b>			
Stack Identity	COOLER DISCHARGE FOR KILN NO. - 7, 8, 9 & 10 INLET		
Stack Attached To	BAG FILTER		
Material of Construction	M.S.		
Height of the stack from ground level (Meter)	32.0 MTR		
Stack Diameter	1.0 MTR		
Stack Shape At Top	CIRCULAR		
Type of Fuel	--		
<b>Parameter</b>	<b>Unit</b>	<b>Method Reference</b>	<b>Result</b>
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	58.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	11.02
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	28037.7
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985, RA 2003	2537.0

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HDD-272, Phase III - Near JP Chowk  
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

<i>Name &amp; Address Of The Customer</i> <b>To,</b> <b>M/s SHYAM SEL &amp; POWER LIMITED</b> <b>DHASNA, BAHADURPUR, JAMURIA,</b> <b>DIST. - PASCHIM BARDHAMAN</b> <b>PIN - 713 362</b>	REPORT NO.	UES/TR/23-24/06561	
	LAB REF NO.	UES/23-24/ST/012386	
	DATE OF SAMPLING	24/11/2023	
	DATE OF RECEIPT	27/11/2023	
	DATE OF REPORT	30/11/2023	
	DATE OF ANALYSIS	Start: 27/11/2023	End: 30/11/2023
<b>SAMPLE DETAILS</b>			
Monitoring For	BAG HOUSE OUTLET EMISSION MONITORING		
Customer Ref. No. & Date	P.O. NO. 3000016207, DATED: 06/11/2023		
Sampling Location	COOLER DISCHARGE FOR KILN NO. - 7, 8, 9 & 10 OUTLET		
Sample Collected By	LABORATORY CHEMIST		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.		

## TEST REPORT

<b>Stack details</b>			
Stack Identity	COOLER DISCHARGE FOR KILN NO. - 7, 8, 9 & 10 OUTLET		
Stack Attached To	BAG FILTER		
Material of Construction	M.S.		
Height of the stack from ground level (Meter)	32.0 MTR		
Stack Diameter	1.0 MTR		
Stack Shape At Top	CIRCULAR		
Type of Fuel	--		
<b>Parameter</b>	<b>Unit</b>	<b>Method Reference</b>	<b>Result</b>
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	46.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	10.47
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	27640.4
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985, RA 2003	22.0

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Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

<i>Name &amp; Address Of The Customer</i>		REPORT NO.	UES/TR/23-24/06562
<b>To,</b>		LAB REF NO.	UES/23-24/ST/012387
<b>M/s SHYAM SEL &amp; POWER LIMITED</b>		DATE OF SAMPLING	24/11/2023
<b>DHASNA, BAHADURPUR, JAMURIA,</b>		DATE OF RECEIPT	27/11/2023
<b>DIST. - PASCHIM BARDHAMAN</b>		DATE OF REPORT	30/11/2023
<b>PIN - 713 362</b>		DATE OF ANALYSIS	Start: 27/11/2023   End: 30/11/2023
<b>SAMPLE DETAILS</b>			
Monitoring For	ESP INLET EMISSION MONITORING		
Customer Ref. No. & Date	P.O. NO. 3000016207, DATED: 06/11/2023		
Sampling Location	ROTARY KILN NO. - 7 (450 TPD) & 8 (450 TPD) COMMON STACK THROUGH WHRB INLET		
Sample Collected By	LABORATORY CHEMIST		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 30) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.		

## TEST REPORT

<b>Stack details</b>			
Stack Identity		ROTARY KILN NO. - 7 (450 TPD) & 8 (450 TPD) COMMON STACK THROUGH WHRB INLET	
Stack Attached To		ESP	
Material of Construction		CONCRETE	
Height of the stack from ground level (Meter)		63.0 MTR	
Stack Diameter		4.0 MTR	
Stack Shape At Top		CIRCULAR	
Type of Fuel		COAL	
Parameter	Unit	Method Reference	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	214.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	11.43
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	316246.5
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985, RA 2003	2719.0

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Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

<b>Name &amp; Address Of The Customer</b> <b>To,</b> <b>M/s SHYAM SEL &amp; POWER LIMITED</b> <b>DHASNA, BAHADURPUR, JAMURIA,</b> <b>DIST. - PASCHIM BARDHAMAN</b> <b>PIN - 713 362</b>	REPORT NO.	UES/TR/23-24/06563	
	LAB REF NO.	UES/23-24/ST/012388	
	DATE OF SAMPLING	24/11/2023	
	DATE OF RECEIPT	27/11/2023	
	DATE OF REPORT	30/11/2023	
	DATE OF ANALYSIS	Start: 27/11/2023	End: 30/11/2023
<b>SAMPLE DETAILS</b>			
Monitoring For	ESP OUTLET EMISSION MONITORING		
Customer Ref. No. & Date	P.O. NO. 3000016207, DATED: 06/11/2023		
Sampling Location	ROTARY KILN NO. - 7 (450 TPD) & 8 (450 TPD) COMMON STACK THROUGH WHRB OUTLET		
Sample Collected By	LABORATORY CHEMIST		
Sampling Procedure	IS 11255 Part 1,2-1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.		

## TEST REPORT

<b>Stack details</b>			
Stack Identity		ROTARY KILN NO. - 7 (450 TPD) & 8 (450 TPD) COMMON STACK THROUGH WHRB OUTLET	
Stack Attached To		ESP	
Material of Construction		CONCRETE	
Height of the stack from ground level (Meter)		63.0 MTR	
Stack Diameter		4.0 MTR	
Stack Shape At Top		CIRCULAR	
Type of Fuel		COAL	
<b>Parameter</b>	<b>Unit</b>	<b>Method Reference</b>	<b>Result</b>
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	147.0
Flue Gas Velocity	M/s	IS :11255 : (Part -3):2008	10.97
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	351937.7
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 : (Part -1):1985, RA 2003	25.3

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HDD-272, Phase III - Near JP Chowk  
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

<i>Name &amp; Address Of The Customer</i>		REPORT NO.	UES/TR/23-24/06564		
<b>To, M/s SHYAM SEL &amp; POWER LIMITED DHASNA, BAHADURPUR, JAMURIA, DIST. - PASCHIM BARDHAMAN PIN - 713 362</b>		LAB REF NO.	UES/23-24/ST/012389		
		DATE OF SAMPLING	24/11/2023		
		DATE OF RECEIPT	27/11/2023		
		DATE OF REPORT	30/11/2023		
		DATE OF ANALYSIS	Start: 27/11/2023	End: 30/11/2023	
		<b>SAMPLE DETAILS</b>			
Monitoring For	BAG HOUSE INLET EMISSION MONITORING				
Customer Ref. No. & Date	P.O. NO. 3000016207, DATED: 06/11/2023				
Sampling location	FERRO PLANT SEAF NO. 2 (4.5 MVA) INLET				
Sample Collected By	LABORATORY CHEMIST				
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003				
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.				

## TEST REPORT

<b>Stack details</b>			
Stack Identity	FERRO PLANT SEAF NO. 2 (4.5 MVA) INLET		
Stack Attached To	AIR COOLED HEAT EXCHANGER & BAG FILTER		
Material of Construction	M.S.		
Height of the stack from ground level (Meter)	32.0 MTR		
Stack Diameter	1.4 MTR		
Stack Shape At Top	CIRCULAR		
Type of Fuel	ELECTRICITY		
<b>Parameter</b>	<b>Unit</b>	<b>Method Reference</b>	<b>Result</b>
Flue Gas Temperature	°C	IS:11255:(Part -3):2008	81.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	7.96
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	37115.4
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985, RA 2003	2894.0

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HDD-272, Phase III - Near JP Chowk  
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

<i>Name &amp; Address Of The Customer</i>		REPORT NO.	UES/TR/23-24/06565	
<b>To,</b> <b>M/s SHYAM SEL &amp; POWER LIMITED</b> <b>DHASNA, BAHADURPUR, JAMURIA,</b> <b>DIST. - PASCHIM BARDHAMAN</b> <b>PIN - 713 362</b>		LAB REF NO.	UES/23-24/ST/012390	
		DATE OF SAMPLING	24/11/2023	
		DATE OF RECEIPT	27/11/2023	
		DATE OF REPORT	30/11/2023	
		DATE OF ANALYSIS	Start: 27/11/2023	End: 30/11/2023
<b>SAMPLE DETAILS</b>				
Monitoring For	BAG HOUSE OUTLET EMISSION MONITORING			
Customer Ref. No. & Date	P.O. NO. 3000016207, DATED: 06/11/2023			
Sampling Location	FERRO PLANT SEAF NO. 2 (4.5 MVA) OUTLET			
Sample Collected By	LABORATORY CHEMIST			
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003			
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.			

## TEST REPORT

<b>Stack details</b>				
Stack identity	FERRO PLANT SEAF NO. 2 (4.5 MVA) OUTLET			
Stack Attached To	AIR COOLED HEAT EXCHANGER & BAG FILTER			
Material of Construction	M.S.			
Height of the stack from ground level (Meter)	32.0 MTR			
Stack Diameter	1.4 MTR			
Stack Shape At Top	CIRCULAR			
Type of Fuel	ELECTRICITY			
<b>Parameter</b>	<b>Unit</b>	<b>Method Reference</b>	<b>Result</b>	
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	62.0	
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	7.47	
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	36806.1	
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985, RA 2003	26.4	

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HDD-272, Phase III - Near JP Chowk  
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

<b>Name &amp; Address Of The Customer</b> <b>To,</b> <b>M/s SHYAM SEL &amp; POWER LIMITED</b> <b>DHASNA, BAHADURPUR, JAMURIA,</b> <b>DIST. - PASCHIM BARDHAMAN</b> <b>PIN - 713 362</b>	<b>REPORT NO.</b>	UES/TR/23-24/06566	
	<b>LAB REF NO.</b>	UES/23-24/ST/012391	
	<b>DATE OF SAMPLING</b>	24/11/2023	
	<b>DATE OF RECEIPT</b>	27/11/2023	
	<b>DATE OF REPORT</b>	30/11/2023	
	<b>DATE OF ANALYSIS</b>	Start: 27/11/2023	End: 30/11/2023
<b>SAMPLE DETAILS</b>			
<b>Monitoring For</b>	BAG HOUSE INLET EMISSION MONITORING		
<b>Customer Ref. No. &amp; Date</b>	P.O. NO. 3000016207, DATED: 06/11/2023		
<b>Sampling Location</b>	FERRO PLANT SEAF NO. 1 (4.5 MVA) INLET		
<b>Sample Collected By</b>	LABORATORY CHEMIST		
<b>Sampling Procedure</b>	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
<b>Sample Quantity/Packing</b>	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.		

## TEST REPORT

<b>Stack details</b>			
<b>Stack identity</b>	FERRO PLANT SEAF NO. 1 (4.5 MVA) INLET		
<b>Stack Attached To</b>	AIR COOLED HEAT EXCHANGER & BAG FILTER		
<b>Material of Construction</b>	M.S.		
<b>Height of the stack from ground level (Meter)</b>	30.0 MTR		
<b>Stack Diameter</b>	1.4 MTR		
<b>Stack Shape At Top</b>	CIRCULAR		
<b>Type of Fuel</b>	ELECTRICITY		
<b>Parameter</b>	<b>Unit</b>	<b>Method Reference</b>	<b>Result</b>
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	84.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	7.85
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	36294.9
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985, RA 2003	2973.0

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HDD-272, Phase III - Near JP Chowk  
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

Name & Address Of The Customer  <b>To,</b> <b>M/s SHYAM SEL &amp; POWER LIMITED</b> <b>DHASNA, BAHADURPUR, JAMURIA,</b> <b>DIST. - PASCHIM BARDHAMAN</b> <b>PIN - 713 362</b>	REPORT NO.	UES/TR/23-24/06567	
	LAB REF NO.	UES/23-24/ST/012392	
	DATE OF SAMPLING	24/11/2023	
	DATE OF RECEIPT	27/11/2023	
	DATE OF REPORT	30/11/2023	
	DATE OF ANALYSIS	Start: 27/11/2023	End: 30/11/2023
<b>SAMPLE DETAILS</b>			
Monitoring For	BAG HOUSE OUTLET EMISSION MONITORING		
Customer Ref. No. & Date	P.O. NO. 3000016207, DATED: 06/11/2023		
Sampling Location	FERRO PLANT SEAF NO. 1 (4.5 MVA) OUTLET		
Sample Collected By	LABORATORY CHEMIST		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.		

## TEST REPORT

<b>Stack details</b>			
Stack Identity	FERRO PLANT SEAF NO. 1 (4.5 MVA) OUTLET		
Stack Attached To	AIR COOLED HEAT EXCHANGER & BAG FILTER		
Material of Construction	M.S.		
Height of the stack from ground level (Meter)	30.0 MTR		
Stack Diameter	1.4 MTR		
Stack Shape At Top	CIRCULAR		
Type of Fuel	ELECTRICITY		
Parameter	Unit	Method Reference	Result
Flue Gas Temperature	°C	IS:11255; (Part -3):2008	67.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	7.38
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	35827.9
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985, RA 2003	27.9

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HDD-272, Phase III - Near JP Chowk  
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

<b>Name &amp; Address Of The Customer</b> <b>To,</b> <b>M/s SHYAM SEL &amp; POWER LIMITED</b> <b>DHASNA, BAHADURPUR, JAMURIA,</b> <b>DIST. - PASCHIM BARDHAMAN</b> <b>PIN - 713 362</b>	REPORT NO.	UES/TR/23-24/06568	
	LAB REF NO.	UES/23-24/ST/012393	
	DATE OF SAMPLING	24/11/2023	
	DATE OF RECEIPT	27/11/2023	
	DATE OF REPORT	30/11/2023	
	DATE OF ANALYSIS	Start: 27/11/2023	End: 30/11/2023
<b>SAMPLE DETAILS</b>			
Monitoring For	BAG HOUSE INLET EMISSION MONITORING		
Customer Ref. No. & Date	P.O. NO. 3000016207, DATED: 06/11/2023		
Sampling Location	FERRO PLANT SEAF NO. 3 (9.0 MVA) INLET		
Sample Collected By	LABORATORY CHEMIST		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.		

## TEST REPORT

<b>Stack details</b>			
Stack Identity	FERRO PLANT SEAF NO. 3 (9.0 MVA) INLET		
Stack Attached To	WATER COOLED HEAT EXCHANGER & BAG FILTER		
Material of Construction	M.S.		
Height of the stack from ground level (Meter)	30.0 MTR		
Stack Diameter	1.4 MTR		
Stack Shape At Top	CIRCULAR		
Type of Fuel	ELECTRICITY		
<b>Parameter</b>	<b>Unit</b>	<b>Method Reference</b>	<b>Result</b>
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	83.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	7.88
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	36536.0
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985, RA 2003	2849.0

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HDD-272, Phase III - Near JP Chowk  
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

<i>Name &amp; Address Of The Customer</i>		REPORT NO.	UES/TR/23-24/06569	
<b>To,</b> <b>M/s SHYAM SEL &amp; POWER LIMITED</b> <b>DHASNA, BAHADURPUR, JAMURIA,</b> <b>DIST. - PASCHIM BARDHAMAN</b> <b>PIN - 713 362</b>		LAB REF NO.	UES/23-24/ST/012394	
		DATE OF SAMPLING	24/11/2023	
		DATE OF RECEIPT	27/11/2023	
		DATE OF REPORT	30/11/2023	
		DATE OF ANALYSIS	Start: 27/11/2023	End: 30/11/2023
<b>SAMPLE DETAILS</b>				
Monitoring For	BAG HOUSE OUTLET EMISSION MONITORING			
Customer Ref. No. & Date	P.O. NO. 3000016207, DATED: 06/11/2023			
Sampling Location	FERRO PLANT SEAF NO. 3 (9.0 MVA) OUTLET			
Sample Collected By	LABORATORY CHEMIST			
Sampling Procedure	IS 11255 Part 1,2-1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003			
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.			

## TEST REPORT

<b>Stack details</b>			
Stack Identity	FERRO PLANT SEAF NO. 3 (9.0 MVA) OUTLET		
Stack Attached To	WATER COOLED HEAT EXCHANGER & BAG FILTER		
Material of Construction	M.S.		
Height of the stack from ground level (Meter)	30.0 MTR		
Stack Diameter	1.4 MTR		
Stack Shape At Top	CIRCULAR		
Type of Fuel	ELECTRICITY		
<b>Parameter</b>	<b>Unit</b>	<b>Method Reference</b>	<b>Result</b>
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	61.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	7.56
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	37361.1
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985, RA 2003	25.8 **

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HDD-272, Phase III - Near JP Chowk  
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

<b>Name &amp; Address Of The Customer</b> <b>To,</b> <b>M/s SHYAM SEL &amp; POWER LIMITED</b> <b>DHASNA, BAHADURPUR, JAMURIA,</b> <b>DIST. - PASCHIM BARDHAMAN</b> <b>PIN - 713 362</b>	REPORT NO.	UES/TR/23-24/06570	
	LAB REF NO.	UES/23-24/ST/012395	
	DATE OF SAMPLING	24/11/2023	
	DATE OF RECEIPT	27/11/2023	
	DATE OF REPORT	30/11/2023	
	DATE OF ANALYSIS	Start: 27/11/2023	End: 30/11/2023
<b>SAMPLE DETAILS</b>			
Monitoring For	BAG HOUSE INLET EMISSION MONITORING		
Customer Ref. No. & Date	P.O. NO. 3000016207, DATED: 06/11/2023		
Sampling Location	FERRO PLANT SEAF NO. 1 & 2 (9.0 MVA EACH) ATTACHED WITH A COMMON STACK INLET		
Sample Collected By	LABORATORY CHEMIST		
Sampling Procedure	IS 11255 Part 1,2-1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.		

## TEST REPORT

<b>Stack details</b>			
Stack Identity	FERRO PLANT SEAF NO. 1 & 2 (9.0 MVA EACH) ATTACHED WITH A COMMON STACK INLET		
Stack Attached To	F. D. AIR COOLED HEAT EXCHANGER & BAG FILTER		
Material of Construction	M.S.		
Height of the stack from ground level (Meter)	30.0 MTR		
Stack Diameter	1.4 MTR		
Stack Shape At Top	CIRCULAR		
Type of Fuel	ELECTRICITY		
<b>Parameter</b>	<b>Unit</b>	<b>Method Reference</b>	<b>Result</b>
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	94.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	8.15
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	36655.2
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985, RA 2003	2367.0

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*R. Balle*

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-----End of the test report-----



HDD-272, Phase III - Near JP Chowk  
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
Ph : 0771 - 4027777 | Email : ultimatenenviro@gmail.com

<i>Name &amp; Address Of The Customer</i>		REPORT NO.	UES/TR/23-24/06571
<b>To,</b>		LAB REF NO.	UES/23-24/ST/012396
<b>M/s SHYAM SEL &amp; POWER LIMITED</b>		DATE OF SAMPLING	24/11/2023
<b>DHASNA, BAHADURPUR, JAMURIA,</b>		DATE OF RECEIPT	27/11/2023
<b>DIST. - PASCHIM BARDHAMAN</b>		DATE OF REPORT	30/11/2023
<b>PIN - 713 362</b>		DATE OF ANALYSIS	Start: 27/11/2023      End: 30/11/2023
<b>SAMPLE DETAILS</b>			
Monitoring For	BAG HOUSE OUTLET EMISSION MONITORING		
Customer Ref. No. & Date	P.O. NO. 3000016207, DATED: 06/11/2023		
Sampling Location	FERRO PLANT SEAF NO. 1 & 2 (9.0 MVA EACH) ATTACHED WITH A COMMON STACK OUTLET		
Sample Collected By	LABORATORY CHEMIST		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.		

## TEST REPORT

<b>Stack details</b>			
Stack Identity	FERRO PLANT SEAF NO. 1 & 2 (9.0 MVA EACH) ATTACHED WITH A COMMON STACK OUTLET		
Stack Attached To	F. D. AIR COOLED HEAT EXCHANGER & BAG FILTER		
Material of Construction	M.S.		
Height of the stack from ground level (Meter)	30.0 MTR		
Stack Diameter	1.4 MTR		
Stack Shape At Top	CIRCULAR		
Type of Fuel	ELECTRICITY		
<b>Parameter</b>	<b>Unit</b>	<b>Method Reference</b>	<b>Result</b>
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	78.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	7.74
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	36398.1
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985, RA 2003	21.7

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-----End of the test report-----



HDD-272, Phase III - Near JP Chowk  
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

<i>Name &amp; Address Of The Customer</i> <b>To,</b> <b>M/s SHYAM SEL &amp; POWER LIMITED</b> <b>DHASNA, BAHADURPUR, JAMURIA,</b> <b>DIST. - PASCHIM BARDHAMAN</b> <b>PIN - 713 362</b>	REPORT NO.	UES/TR/23-24/06572	
	LAB REF NO.	UES/23-24/ST/012397	
	DATE OF SAMPLING	24/11/2023	
	DATE OF RECEIPT	27/11/2023	
	DATE OF REPORT	30/11/2023	
	DATE OF ANALYSIS	Start: 27/11/2023	End: 30/11/2023
<b>SAMPLE DETAILS</b>			
Monitoring For	BAG HOUSE INLET EMISSION MONITORING		
Customer Ref. No. & Date	P.O. NO. 3000016207, DATED: 06/11/2023		
Sampling Location	FERRO PLANT SEAF NO. 4 (9.0 MVA) INLET		
Sample Collected By	LABORATORY CHEMIST		
Sampling Procedure	IS 11255 Part 1,2-1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.		

## TEST REPORT

<b>Stack details</b>			
Stack Identity	FERRO PLANT SEAF NO. 4 (9.0 MVA) INLET		
Stack Attached To	AIR COOLED HEAT EXCHANGER & BAG FILTER		
Material of Construction	M.S.		
Height of the stack from ground level (Meter)	32.0 MTR		
Stack Diameter	1.4 MTR		
Stack Shape At Top	CIRCULAR		
Type of Fuel	ELECTRICITY		
<b>Parameter</b>	<b>Unit</b>	<b>Method Reference</b>	<b>Result</b>
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	103.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	15.75
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	69141.2
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985, RA 2003	2581.0

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*S. Bell*

AUTHORIZED SIGNATORY

-----End of the test report-----



HDD-272, Phase III - Near JP Chowk  
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

<b>Name &amp; Address Of The Customer</b> <b>To,</b> <b>M/s SHYAM SEL &amp; POWER LIMITED</b> <b>DHASNA, BAHADURPUR, JAMURIA,</b> <b>DIST. - PASCHIM BARDHAMAN</b> <b>PIN - 713 362</b>	REPORT NO.	UES/TR/23-24/06573	
	LAB REF NO.	UES/23-24/ST/012398	
	DATE OF SAMPLING	24/11/2023	
	DATE OF RECEIPT	27/11/2023	
	DATE OF REPORT	30/11/2023	
	DATE OF ANALYSIS	Start: 27/11/2023	End: 30/11/2023
<b>SAMPLE DETAILS</b>			
Monitoring for	BAG HOUSE OUTLET EMISSION MONITORING		
Customer Ref. No. & Date	P.O. NO. 3000016207, DATED: 06/11/2023		
Sampling Location	FERRO PLANT SEAF NO. 4 (9.0 MVA) OUTLET		
Sample Collected By	LABORATORY CHEMIST		
Sampling Procedure	IS 11255 Part 1,2-1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.		

## TEST REPORT

<b>Stack details</b>			
Stack Identity	FERRO PLANT SEAF NO. 4 (9.0 MVA) OUTLET		
Stack Attached To	AIR COOLED HEAT EXCHANGER & BAG FILTER		
Material of Construction	M.S.		
Height of the stack from ground level (Meter)	32.0 MTR		
Stack Diameter	1.4 MTR		
Stack Shape At Top	CIRCULAR		
Type of Fuel	ELECTRICITY		
<b>Parameter</b>	<b>Unit</b>	<b>Method Reference</b>	<b>Result</b>
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	89.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	14.96
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	68213.1
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985, RA 2003	23.5

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*Bill*

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HDD-272, Phase III - Near JP Chowk  
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

<b>Name &amp; Address Of The Customer</b> <b>To,</b> <b>M/s SHYAM SEL &amp; POWER LIMITED</b> <b>DHASNA, BAHADURPUR, JAMURIA,</b> <b>DIST. - PASCHIM BARDHAMAN</b> <b>PIN - 713 362</b>	REPORT NO.	UES/TR/23-24/06574	
	LAB REF NO.	UES/23-24/ST/012399	
	DATE OF SAMPLING	24/11/2023	
	DATE OF RECEIPT	27/11/2023	
	DATE OF REPORT	30/11/2023	
	DATE OF ANALYSIS	Start: 27/11/2023	End: 30/11/2023
<b>SAMPLE DETAILS</b>			
Monitoring For	ESP INLET EMISSION MONITORING		
Customer Ref. No. & Date	P.O. NO. 3000016207, DATED: 06/11/2023		
Sampling Location	TRAVEL GREAT & ROTARY KILN NO. - 2 (PELLET PLANT) INLET		
Sample Collected By	LABORATORY CHEMIST		
Sampling Procedure	IS 11255 Part 1,2-1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.		

## TEST REPORT

<b>Stack details</b>			
Stack Identity	TRAVEL GREAT & ROTARY KILN NO. - 2 (PELLET PLANT) INLET		
Stack Attached To	ESP		
Material of Construction	CONCRETE		
Height of the stack from ground level (Meter)	53.0 MTR		
Stack Diameter	4.5 MTR		
Stack Shape At Top	CIRCULAR		
Type of Fuel	PULVERISED COAL & PGP		
<b>Parameter</b>	<b>Unit</b>	<b>Method Reference</b>	<b>Result</b>
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	153.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	15.94
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	638105.0
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985, RA 2003	2493.0

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HDD-272, Phase III - Near JP Chowk  
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

<b>Name &amp; Address Of The Customer</b> <b>To,</b> <b>M/s SHYAM SEL &amp; POWER LIMITED</b> <b>DHASNA, BAHADURPUR, JAMURIA,</b> <b>DIST. - PASCHIM BARDHAMAN</b> <b>PIN - 713 362</b>	REPORT NO.	UES/TR/23-24/06575	
	LAB REF NO.	UES/23-24/ST/012400	
	DATE OF SAMPLING	24/11/2023	
	DATE OF RECEIPT	27/11/2023	
	DATE OF REPORT	30/11/2023	
	DATE OF ANALYSIS	Start: 27/11/2023	End: 30/11/2023
<b>SAMPLE DETAILS</b>			
Monitoring For	ESP OUTLET EMISSION MONITORING		
Customer Ref. No. & Date	P.O. NO. 3000016207, DATED: 06/11/2023		
Sampling Location	TRAVEL GREAT & ROTARY KILN NO. - 2 (PELLET PLANT) OUTLET		
Sample Collected By	LABORATORY CHEMIST		
Sampling Procedure	IS 11255 Part 1,2-1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.		

## TEST REPORT

<b>Stack details</b>			
Stack Identity	TRAVEL GREAT & ROTARY KILN NO. - 2 (PELLET PLANT) OUTLET		
Stack Attached To	ESP		
Material of Construction	CONCRETE		
Height of the stack from ground level (Meter)	53.0 MTR		
Stack Diameter	4.5 MTR		
Stack Shape At Top	CIRCULAR		
Type of Fuel	PULVERISED COAL & PGP		
<b>Parameter</b>	<b>Unit</b>	<b>Method Reference</b>	<b>Result</b>
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	87.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	15.14
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	717194.3
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985, RA 2003	21.3

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HDD-272, Phase III - Near JP Chowk  
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

<b>Name &amp; Address Of The Customer</b> <b>To,</b> <b>M/s SHYAM SEL &amp; POWER LIMITED</b> <b>DHASNA, BAHADURPUR, JAMURIA,</b> <b>DIST. - PASCHIM BARDHAMAN</b> <b>PIN - 713 362</b>	REPORT NO.	UES/TR/23-24/06576	
	LAB REF NO.	UES/23-24/ST/012401	
	DATE OF SAMPLING	24/11/2023	
	DATE OF RECEIPT	27/11/2023	
	DATE OF REPORT	30/11/2023	
	DATE OF ANALYSIS	Start: 27/11/2023	End: 30/11/2023
<b>SAMPLE DETAILS</b>			
Monitoring For	BAG HOUSE INLET EMISSION MONITORING		
Customer Ref. No. & Date	P.O. NO. 3000016207, DATED: 06/11/2023		
Sampling Location	COOLER DISCHARGE FOR KILN NO. - 11 & 12 INLET		
Sample Collected By	LABORATORY CHEMIST		
Sampling Procedure	IS 11255 Part 1,2-1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.		

## TEST REPORT

<b>Stack details</b>			
Stack Identity	COOLER DISCHARGE FOR KILN NO. - 11 & 12 INLET		
Stack Attached To	M.S.		
Material of Construction	M.S.		
Height of the stack from ground level (Meter)	30.0 MTR		
Stack Diameter	1.0 MTR		
Stack Shape At Top	CIRCULAR		
Type of Fuel	-		
<b>Parameter</b>	<b>Unit</b>	<b>Method Reference</b>	<b>Result</b>
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	48.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	9.12
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	23926.4
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985, RA 2003	2287.0

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HDD-272, Phase III - Near JP Chowk  
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

<i>Name &amp; Address Of The Customer</i>		REPORT NO.	UES/TR/23-24/06577	
<b>To, M/s SHYAM SEL &amp; POWER LIMITED DHASNA, BAHADURPUR, JAMURIA, DIST. - PASCHIM BARDHAMAN PIN - 713 362</b>		LAB REF NO.	UES/23-24/ST/012402	
		DATE OF SAMPLING	24/11/2023	
		DATE OF RECEIPT	27/11/2023	
		DATE OF REPORT	30/11/2023	
		DATE OF ANALYSIS	Start: 27/11/2023	End: 30/11/2023
<b>SAMPLE DETAILS</b>				
Monitoring For	BAG HOUSE OUTLET EMISSION MONITORING			
Customer Ref. No. & Date	P.O. NO. 3000016207, DATED: 06/11/2023			
Sampling Location	COOLER DISCHARGE FOR KILN NO. - 11 & 12 OUTLET			
Sample Collected By	LABORATORY CHEMIST			
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003			
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.			

## TEST REPORT

<b>Stack details</b>			
Stack Identity	COOLER DISCHARGE FOR KILN NO. - 11 & 12 OUTLET		
Stack Attached To	M.S.		
Material of Construction	M.S.		
Height of the stack from ground level (Meter)	30.0 MTR		
Stack Diameter	1.0 MTR		
Stack Shape At Top	CIRCULAR		
Type of Fuel	--		
<b>Parameter</b>	<b>Unit</b>	<b>Method Reference</b>	<b>Result</b>
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	39.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	8.65
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	23348.0
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985, RA 2003	19.0

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HDD-272, Phase III - Near JP Chowk  
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

<i>Name &amp; Address Of The Customer</i>		REPORT NO.	UES/TR/23-24/06578
<b>To,</b>		LAB REF NO.	UES/23-24/ST/012403
<b>M/s SHYAM SEL &amp; POWER LIMITED</b>		DATE OF SAMPLING	24/11/2023
<b>DHASNA, BAHADURPUR, JAMURIA,</b>		DATE OF RECEIPT	27/11/2023
<b>DIST. - PASCHIM BARDHAMAN</b>		DATE OF REPORT	30/11/2023
<b>PIN - 713 362</b>		DATE OF ANALYSIS	Start: 27/11/2023   End: 30/11/2023
<b>SAMPLE DETAILS</b>			
Monitoring For	ESP INLET EMISSION MONITORING		
Customer Ref. No. & Date	P.O. NO. 3000016207, DATED: 06/11/2023		
Sampling Location	ROTARY KILN NO. - 11 & 12 (700 TPD) THROUGH WHRB (COMMON STACK) INLET		
Sample Collected By	LABORATORY CHEMIST		
Sampling Procedure	IS 11255 Part 1,2-1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.		

## TEST REPORT

<b>Stack details</b>			
Stack Identity		ROTARY KILN NO. - 11 & 12 (700 TPD) THROUGH WHRB (COMMON STACK) INLET	
Stack Attached To		ESP	
Material of Construction		CONCRETE	
Height of the stack from ground level (Meter)		80.0 MTR	
Stack Diameter		4.83 MTR	
Stack Shape At Top		CIRCULAR	
Type of Fuel		-	
Parameter	Unit	Method Reference	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	195.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	8.27
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	347170.1
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985, RA 2003	2465.0

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*Stell*

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-----End of the test report-----



HDD-272, Phase III - Near JP Chowk  
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

<i>Name &amp; Address Of The Customer</i>		REPORT NO.	UES/TR/23-24/06579	
<b>To, M/s SHYAM SEL &amp; POWER LIMITED DHASNA, BAHADURPUR, JAMURIA, DIST. - PASCHIM BARDHAMAN PIN - 713 362</b>		LAB REF NO.	UES/23-24/ST/012404	
		DATE OF SAMPLING	24/11/2023	
		DATE OF RECEIPT	27/11/2023	
		DATE OF REPORT	30/11/2023	
		DATE OF ANALYSIS	Start: 27/11/2023	End: 30/11/2023
		<b>SAMPLE DETAILS</b>		
Monitoring For	ESP OUTLET EMISSION MONITORING			
Customer Ref. No. & Date	P.O. NO. 3000016207, DATED: 06/11/2023			
Sampling Location	ROTARY KILN NO. - 11 & 12 (700 TPD) THROUGH WHRB (COMMON STACK) OUTLET			
Sample Collected By	LABORATORY CHEMIST			
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003			
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.			

## TEST REPORT

<b>Stack details</b>			
Stack Identity		ROTARY KILN NO. - 11 & 12 (700 TPD) THROUGH WHRB (COMMON STACK) OUTLET	
Stack Attached To		ESP	
Material of Construction		CONCRETE	
Height of the stack from ground level (Meter)		80.0 MTR	
Stack Diameter		4.83 MTR	
Stack Shape At Top		CIRCULAR	
Type of Fuel		-	
Parameter	Unit	Method Reference	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	128.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	7.76
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	380189.0
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985, RA 2003	21.0

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*Ball*

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HDD-272, Phase III - Near JP Chowk  
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

<b>Name &amp; Address Of The Customer</b> <b>To,</b> <b>M/s SHYAM SEL &amp; POWER LIMITED</b> <b>DHASNA, BAHADURPUR, JAMURIA,</b> <b>DIST. - PASCHIM BARDHAMAN</b> <b>PIN - 713 362</b>	REPORT NO.	UES/TR/23-24/06580	
	LAB REF NO.	UES/23-24/ST/012405	
	DATE OF SAMPLING	25/11/2023	
	DATE OF RECEIPT	27/11/2023	
	DATE OF REPORT	30/11/2023	
	DATE OF ANALYSIS	Start: 27/11/2023	End: 30/11/2023
<b>SAMPLE DETAILS</b>			
Monitoring For	BAG HOUSE INLET EMISSION MONITORING		
Customer Ref. No. & Date	P.O. NO. 3000016207, DATED: 06/11/2023		
Sampling Location	CD BAG FILTER - INLET (STACK - 22)		
Sample Collected By	LABORATORY CHEMIST		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.		

## TEST REPORT

<b>Stack details</b>			
Stack Identity	CD BAG FILTER - INLET (STACK - 22)		
Stack Attached To	BAG FILTER		
Material of Construction	M. S.		
Height of the stack from ground level (Meter)	32.0 MTR		
Stack Diameter	1.0 MTR		
Stack Shape At Top	CIRCULAR		
Type of Fuel	--		
Parameter	Unit	Method Reference	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	40.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	22.11
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	59488.5
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985	1490.1

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-----End of the test report-----



HDD-272, Phase III - Near JP Chowk  
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

<i>Name &amp; Address Of The Customer</i> <b>To,</b> <b>M/s SHYAM SEL &amp; POWER LIMITED</b> <b>DHASNA, BAHADURPUR, JAMURIA,</b> <b>DIST. - PASCHIM BARDHAMAN</b> <b>PIN - 713 362</b>	REPORT NO.	UES/TR/23-24/06581	
	LAB REF NO.	UES/23-24/ST/012406	
	DATE OF SAMPLING	25/11/2023	
	DATE OF RECEIPT	27/11/2023	
	DATE OF REPORT	30/11/2023	
	DATE OF ANALYSIS	Start: 27/11/2023	End: 30/11/2023
<b>SAMPLE DETAILS</b>			
Monitoring For	BAG HOUSE OUTLET EMISSION MONITORING		
Customer Ref. No. & Date	P.O. NO. 3000016207, DATED: 06/11/2023		
Sampling Location	CD BAG FILTER - OUTLET (STACK - 22)		
Sample Collected By	LABORATORY CHEMIST		
Sampling Procedure	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.		

## TEST REPORT

<b>Stack details</b>			
Stack Identity	CD BAG FILTER - OUTLET (STACK - 22)		
Stack Attached To	BAG FILTER		
Material of Construction	M. S.		
Height of the stack from ground level (Meter)	32.0 MTR		
Stack Diameter	1.0 MTR		
Stack Shape At Top	CIRCULAR		
Type of Fuel	--		
<b>Parameter</b>	<b>Unit</b>	<b>Method Reference</b>	<b>Result</b>
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	31.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	25.76
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	71361.0
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985	14.1

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HDD-272, Phase III - Near JP Chowk  
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

<b>Name &amp; Address Of The Customer</b> <b>To,</b> <b>M/s SHYAM SEL &amp; POWER LIMITED</b> <b>DHASNA, BAHADURPUR, JAMURIA,</b> <b>DIST. - PASCHIM BARDHAMAN</b> <b>PIN - 713 362</b>	<b>REPORT NO.</b>	UES/TR/23-24/06582	
	<b>LAB REF NO.</b>	UES/23-24/ST/012407	
	<b>DATE OF SAMPLING</b>	25/11/2023	
	<b>DATE OF RECEIPT</b>	27/11/2023	
	<b>DATE OF REPORT</b>	30/11/2023	
	<b>DATE OF ANALYSIS</b>	Start: 27/11/2023	End: 30/11/2023
<b>SAMPLE DETAILS</b>			
<b>Monitoring For</b>	BAG HOUSE INLET EMISSION MONITORING		
<b>Customer Ref. No. &amp; Date</b>	P.O. NO. 3000016207, DATED: 06/11/2023		
<b>Sampling Location</b>	PSB BAG FILTER - INLET (STACK - 23)		
<b>Sample Collected By</b>	LABORATORY CHEMIST		
<b>Sampling Procedure</b>	IS 11255 Part 1,2-1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
<b>Sample Quantity/Packing</b>	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.		

## TEST REPORT

<b>Stack details</b>			
<b>Stack Identity</b>		PSB BAG FILTER - INLET (STACK - 23)	
<b>Stack Attached To</b>		BAG FILTER	
<b>Material of Construction</b>		M. S.	
<b>Height of the stack from ground level (Meter)</b>		30.0 MTR	
<b>Stack Diameter</b>		1.5 MTR	
<b>Stack Shape At Top</b>		CIRCULAR	
<b>Type of Fuel</b>		-	
<b>Parameter</b>	<b>Unit</b>	<b>Method Reference</b>	<b>Result</b>
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	39.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	29.44
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	178794.5
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985	1640.5

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HDD-272, Phase III - Near JP Chowk  
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

<i>Name &amp; Address Of The Customer</i> <b>To,</b> <b>M/s SHYAM SEL &amp; POWER LIMITED</b> <b>DHASNA, BAHADURPUR, JAMURIA,</b> <b>DIST. - PASCHIM BARDHAMAN</b> <b>PIN - 713 362</b>	REPORT NO.	UES/TR/23-24/06583	
	LAB REF NO.	UES/23-24/ST/012408	
	DATE OF SAMPLING	25/11/2023	
	DATE OF RECEIPT	27/11/2023	
	DATE OF REPORT	30/11/2023	
	DATE OF ANALYSIS	Start: 27/11/2023	End: 30/11/2023
<b>SAMPLE DETAILS</b>			
Monitoring For	BAG HOUSE OUTLET EMISSION MONITORING		
Customer Ref. No. & Date	P.O. NO. 3000016207, DATED: 06/11/2023		
Sampling Location	PSB BAG FILTER - OUTLET (STACK - 23)		
Sample Collected By	LABORATORY CHEMIST		
Sampling Procedure	IS 11255 Part 1,2-1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.		

## TEST REPORT

<b>Stack details</b>			
Stack Identity	PSB BAG FILTER - OUTLET (STACK - 23)		
Stack Attached To	BAG FILTER		
Material of Construction	M. S.		
Height of the stack from ground level (Meter)	30.0 MTR		
Stack Diameter	1.5 MTR		
Stack Shape At Top	CIRCULAR		
Type of Fuel	--		
Parameter	Unit	Method Reference	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	32.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	17.35
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	107788.0
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985	11.8

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Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

<i>Name &amp; Address Of The Customer</i>		REPORT NO.	UES/TR/23-24/06584	
<b>To,</b> <b>M/s SHYAM SEL &amp; POWER LIMITED</b> <b>DHASNA, BAHADURPUR, JAMURIA,</b> <b>DIST. - PASCHIM BARDHAMAN</b> <b>PIN - 713 362</b>		LAB REF NO.	UES/23-24/ST/012409	
		DATE OF SAMPLING	25/11/2023	
		DATE OF RECEIPT	27/11/2023	
		DATE OF REPORT	30/11/2023	
		DATE OF ANALYSIS	Start: 27/11/2023	End: 30/11/2023
<b>SAMPLE DETAILS</b>				
Monitoring For	ESP INLET EMISSION MONITORING			
Customer Ref. No. & Date	P.O. NO. 3000016207, DATED: 06/11/2023			
Sampling Location	PALLET PLANT - 3, ESP - INLET			
Sample Collected By	LABORATORY CHEMIST			
Sampling Procedure	IS 11255 Part 1,2-1985 Reaffirmed 2009; Part 3:2008, Part 7:2009 Reaffirmed 2012, IS 5182 (Part 10) :2001			
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.			

## TEST REPORT

<b>Stack details</b>			
Stack Identity	PALLET PLANT - 3, ESP - INLET		
Stack Attached To	ESP		
Material of Construction	M. S.		
Height of the stack from ground level (Meter)	60.0 MTR		
Stack Diameter	4.5 MTR		
Stack Shape At Top	CIRCULAR		
Type of Fuel	-		
<b>Parameter</b>	<b>Unit</b>	<b>Method Reference</b>	<b>Result</b>
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	14.01
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	409810.5
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985	1043.5

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HDD-272, Phase III - Near JP Chowk  
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
Ph : 0771 - 4027777 | Email : ultimatenenviro@gmail.com

<b>Name &amp; Address Of The Customer</b> <b>To,</b> <b>M/s SHYAM SEL &amp; POWER LIMITED</b> <b>DHASNA, BAHADURPUR, JAMURIA,</b> <b>DIST. - PASCHIM BARDHAMAN</b> <b>PIN - 713 362</b>	<b>REPORT NO.</b>	UES/TR/23-24/06585	
	<b>LAB REF NO.</b>	UES/23-24/BH/012410	
	<b>DATE OF SAMPLING</b>	25/11/2023	
	<b>DATE OF RECEIPT</b>	27/11/2023	
	<b>DATE OF REPORT</b>	30/11/2023	
	<b>DATE OF ANALYSIS</b>	Start: 27/11/2023	End: 30/11/2023
<b>SAMPLE DETAILS</b>			
<b>Monitoring For</b>	ESP OUTLET EMISSION MONITORING		
<b>Customer Ref. No. &amp; Date</b>	P.O. NO. 3000016207, DATED: 06/11/2023		
<b>Sampling Location</b>	PALLET PLANT - 3, ESP - OUTLET		
<b>Sample Collected By</b>	LABORATORY CHEMIST		
<b>Sampling Procedure</b>	IS 11255 Part 1,2:1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
<b>Sample Quantity/Packing</b>	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.		

## TEST REPORT

<b>Stack details</b>			
<b>Stack Identity</b>	PALLET PLANT - 3, ESP - OUTLET		
<b>Stack Attached To</b>	ESP		
<b>Material of Construction</b>	M. S.		
<b>Height of the stack from ground level (Meter)</b>	60.0 MTR		
<b>Stack Diameter</b>	4.5 MTR		
<b>Stack Shape At Top</b>	CIRCULAR		
<b>Type of Fuel</b>	--		
<b>Parameter</b>	<b>Unit</b>	<b>Method Reference</b>	<b>Result</b>
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	134.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	13.91
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	582835.7
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985	9.3

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HDD-272, Phase III - Near JP Chowk  
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

<b>Name &amp; Address Of The Customer</b> <b>To,</b> <b>M/s SHYAM SEL &amp; POWER LIMITED</b> <b>DHASNA, BAHADURPUR, JAMURIA,</b> <b>DIST. - PASCHIM BARDHAMAN</b> <b>PIN - 713 362</b>	REPORT NO.	UES/TR/23-24/07465	
	LAB REF NO.	UES/23-24/ST/012472	
	DATE OF SAMPLING	24/01/2024	
	DATE OF RECEIPT	27/01/2024	
	DATE OF REPORT	31/01/2024	
	DATE OF ANALYSIS	Start: 27/01/2024	End: 31/01/2024
<b>SAMPLE DETAILS</b>			
Monitoring For	ESP INLET EMISSION MONITORING		
Customer Ref. No. & Date	P.O. NO. 3000016207, DATED: 06/11/2023		
Sampling Location	TRAVEL GREAT & ROTARY KILN NO. - 1 (PELLET PLANT) INLET		
Sample Collected By	LABORATORY CHEMIST		
Sampling Procedure	IS 11255 Part 1,2-1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.		

## TEST REPORT

<b>Stack details</b>			
Stack Identity	TRAVEL GREAT & ROTARY KILN NO. - 1 (PELLET PLANT) INLET		
Stack Attached To	ESP		
Material of Construction	CONCRETE		
Height of the stack from ground level (Meter)	53.0 MTR		
Stack Diameter	4.5 MTR		
Stack Shape At Top	CIRCULAR		
Type of Fuel	PULVERISED COAL & PGP		
<b>Parameter</b>	<b>Unit</b>	<b>Method Reference</b>	<b>Result</b>
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	143.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	15.54
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	624105.0
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985, RA 2003	2262.0

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HDD-272, Phase III - Near JP Chowk  
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099  
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

Name & Address Of The Customer		REPORT NO.	UES/TR/23-24/07466
<b>To,</b> <b>M/s SHYAM SEL &amp; POWER LIMITED</b> <b>DHASNA, BAHADURPUR, JAMURIA,</b> <b>DIST. - PASCHIM BARDHAMAN</b> <b>PIN - 713 362</b>		LAB REF NO.	UES/23-24/ST/012473
		DATE OF SAMPLING	24/01/2024
		DATE OF RECEIPT	27/01/2024
		DATE OF REPORT	31/01/2024
		DATE OF ANALYSIS	Start: 27/01/2024      End: 31/01/2024
SAMPLE DETAILS			
Monitoring For	ESP OUTLET EMISSION MONITORING		
Customer Ref. No. & Date	P.O. NO. 3000016207, DATED: 06/11/2023		
Sampling Location	TRAVEL GREAT & ROTARY KILN NO. - 1 (PELLET PLANT) OUTLET		
Sample Collected By	LABORATORY CHEMIST		
Sampling Procedure	IS 11255 Part 1,2-1985 Reaffirmed 2009; Part 3:2008, Part 7:2005 Reaffirmed 2012, IS 5182 (Part 10) :2003		
Sample Quantity/Packing	Thimble: 1 X 1 No., SO <sub>2</sub> : 30 ml X 1 No. PVC Bottle, NO <sub>x</sub> : 25 ml X 1 No. PVC Bottle, Rubber Bladder: 1 X 1 No.		

## TEST REPORT

Stack details			
Stack Identity	TRAVEL GREAT & ROTARY KILN NO. - 1 (PELLET PLANT) OUTLET		
Stack Attached To	ESP		
Material of Construction	CONCRETE		
Height of the stack from ground level (Meter)	53.0 MTR		
Stack Diameter	4.5 MTR		
Stack Shape At Top	CIRCULAR		
Type of Fuel	PULVERISED COAL & PGP		
Parameter	Unit	Method Reference	Result
Flue Gas Temperature	°C	IS:11255: (Part -3):2008	84.0
Flue Gas Velocity	M/s	IS :11255 :(Part -3):2008	14.94
Total Gas Quantity	Nm <sup>3</sup> /h	IS :11255: (Part -3):2008	703184.8
Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	IS :11255 :(Part -1):1985, RA 2003	20.7

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-----End of the test report-----

# ANNEXURE - X

# PARKING AREA



# ANNEXURE - XI

## Acknowledgement of submission of compliance information



Central Pollution Control Board,  
Parivesh Bhawan, East Arjun Nagar,  
Delhi 110032, India

Details submitted by **Sumit Chakraborty** for **SHYAM SEL & POWER LTD** falling under 17 categories or GPI units under Ganga Basin of Industries on **23 May 2018 at 04:04 hrs**  
on CPCB Portal [www.cpcb.nic.in/17catindustriesinfo](http://www.cpcb.nic.in/17catindustriesinfo)

<b>Industry Code</b>	08WB331		
<b>Industry Category</b>	Iron & Steel		
<b>Falling under Ganga Basin</b>	No		
<b>Industry Name</b>	SHYAM SEL & POWER LTD		
<b>Address</b>	VILL-DHASNA. P.O- BAHADURPUR, P.S-JAMURIA. PIN-713362, DHASNA, West Bengal-713362		
<b>Name of Regional Office, SPCB</b>			
<b>Online Emission Monitoring System provided</b>	Yes		
<b>Online Effluent Monitoring System provided</b>	Yes		
<b>Online Data submitted to CPCB</b>	Yes		
<b>Online Data submitted to SPCB</b>	No		
<b>Industry Registered By</b>	<b>Name</b>	<b>Email</b>	<b>Mobile</b>
	Sumit Chakraborty	sumitchakraborty@shyamgroup.com	9903911618
<b>Bank Guarantee</b>	No		

Monitoring system attached to	Type of Monitoring System	Processes Attached	Monitoring System Details

ETP	Effluent	ETP_1_OUTLET(RECYCLE IN COLLING PROCESS)	<table border="1"> <thead> <tr> <th>Parameter</th> <th>Device Id</th> <th>Device Make</th> <th>Device Vendor</th> <th>Device Model</th> <th>System Certified</th> <th>Certification</th> <th>CPCB URL</th> </tr> </thead> <tbody> <tr> <td>COD</td> <td>datoms_2312007105517</td> <td>E &amp; E</td> <td>E &amp; E</td> <td>EE-WA404A</td> <td>YES</td> <td>TUV</td> <td><a href="http://rtdms.cpcb.gov.in/industry-login">http://rtdms.cpcb.gov.in/industry-login</a></td> </tr> <tr> <td>OIL &amp; GREASE</td> <td>datoms_2312007105517</td> <td>E &amp; E</td> <td>E &amp; E</td> <td>EE-WA404A</td> <td>YES</td> <td>TUV</td> <td><a href="http://rtdms.cpcb.gov.in/industry-login">http://rtdms.cpcb.gov.in/industry-login</a></td> </tr> <tr> <td>TSS</td> <td>datoms_2312007105517</td> <td>E &amp; E</td> <td>E &amp; E</td> <td>EE-WA404A</td> <td>YES</td> <td>TUV</td> <td><a href="http://rtdms.cpcb.gov.in/industry-login">http://rtdms.cpcb.gov.in/industry-login</a></td> </tr> <tr> <td>pH</td> <td>datoms_2312007105517</td> <td>E &amp; E</td> <td>E &amp; E</td> <td>EE-WA404A</td> <td>YES</td> <td>TUV</td> <td><a href="http://rtdms.cpcb.gov.in/industry-login">http://rtdms.cpcb.gov.in/industry-login</a></td> </tr> <tr> <td>BOD</td> <td>datoms_2312007105517</td> <td>E &amp; E</td> <td>E &amp; E</td> <td>EE-WA404A</td> <td>YES</td> <td>TUV</td> <td><a href="http://rtdms.cpcb.gov.in/industry-login">http://rtdms.cpcb.gov.in/industry-login</a></td> </tr> <tr> <td>TDS</td> <td>datoms_2312007105517</td> <td>E &amp; E</td> <td>E &amp; E</td> <td>EE-WA404A</td> <td>YES</td> <td>TUV</td> <td><a href="http://rtdms.cpcb.gov.in/industry-login">http://rtdms.cpcb.gov.in/industry-login</a></td> </tr> <tr> <td>Flow</td> <td>datoms_2312007105517</td> <td>E &amp; E</td> <td>E &amp; E</td> <td>EE-WA404A</td> <td>YES</td> <td>TUV</td> <td><a href="http://rtdms.cpcb.gov.in/industry-login">http://rtdms.cpcb.gov.in/industry-login</a></td> </tr> </tbody> </table>	Parameter	Device Id	Device Make	Device Vendor	Device Model	System Certified	Certification	CPCB URL	COD	datoms_2312007105517	E & E	E & E	EE-WA404A	YES	TUV	<a href="http://rtdms.cpcb.gov.in/industry-login">http://rtdms.cpcb.gov.in/industry-login</a>	OIL & GREASE	datoms_2312007105517	E & E	E & E	EE-WA404A	YES	TUV	<a href="http://rtdms.cpcb.gov.in/industry-login">http://rtdms.cpcb.gov.in/industry-login</a>	TSS	datoms_2312007105517	E & E	E & E	EE-WA404A	YES	TUV	<a href="http://rtdms.cpcb.gov.in/industry-login">http://rtdms.cpcb.gov.in/industry-login</a>	pH	datoms_2312007105517	E & E	E & E	EE-WA404A	YES	TUV	<a href="http://rtdms.cpcb.gov.in/industry-login">http://rtdms.cpcb.gov.in/industry-login</a>	BOD	datoms_2312007105517	E & E	E & E	EE-WA404A	YES	TUV	<a href="http://rtdms.cpcb.gov.in/industry-login">http://rtdms.cpcb.gov.in/industry-login</a>	TDS	datoms_2312007105517	E & E	E & E	EE-WA404A	YES	TUV	<a href="http://rtdms.cpcb.gov.in/industry-login">http://rtdms.cpcb.gov.in/industry-login</a>	Flow	datoms_2312007105517	E & E	E & E	EE-WA404A	YES	TUV	<a href="http://rtdms.cpcb.gov.in/industry-login">http://rtdms.cpcb.gov.in/industry-login</a>
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Stack_33 90MWCFBC1_180TPH	Emission	90MW CFBC-1 180TPH	<table border="1"> <thead> <tr> <th>Parameter</th> <th>Device Id</th> <th>Device Make</th> <th>Device Vendor</th> <th>Device Model</th> <th>System Certified</th> <th>Certification</th> <th>CPCB URL</th> </tr> </thead> <tbody> <tr> <td>PM</td> <td>28439734</td> <td>AMETEK LAND</td> <td>SARTECH</td> <td>4500MKIII</td> <td>YES</td> <td>TUV</td> <td><a href="http://nksquare.realtimepollution.in/">http://nksquare.realtimepollution.in/</a></td> </tr> </tbody> </table>	Parameter	Device Id	Device Make	Device Vendor	Device Model	System Certified	Certification	CPCB URL	PM	28439734	AMETEK LAND	SARTECH	4500MKIII	YES	TUV	<a href="http://nksquare.realtimepollution.in/">http://nksquare.realtimepollution.in/</a>																																																
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Stack9_AFBC Boiler (1 x 54T/hr)	Emission	AFBC Boiler (1 x 54T/hr)	<table border="1"> <thead> <tr> <th>Parameter</th> <th>Device Id</th> <th>Device Make</th> <th>Device Vendor</th> <th>Device Model</th> <th>System Certified</th> <th>Certification</th> <th>CPCB URL</th> </tr> </thead> <tbody> <tr> <td>PM</td> <td>DCEM2100-10116</td> <td>M/S. FORBES MARSHALL</td> <td>M/S. FORBES MARSHALL</td> <td>DCEM2100</td> <td>NO</td> <td>-</td> <td><a href="http://cpdms.forbesmarshall.in:8080/enviroconnect/">http://cpdms.forbesmarshall.in:8080/enviroconnect/</a></td> </tr> </tbody> </table>	Parameter	Device Id	Device Make	Device Vendor	Device Model	System Certified	Certification	CPCB URL	PM	DCEM2100-10116	M/S. FORBES MARSHALL	M/S. FORBES MARSHALL	DCEM2100	NO	-	<a href="http://cpdms.forbesmarshall.in:8080/enviroconnect/">http://cpdms.forbesmarshall.in:8080/enviroconnect/</a>																																																
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Stack2_WHRB 1 x 10 T/hr	Emission	WHRB 1 x 10 T/hr	<table border="1"> <thead> <tr> <th>Parameter</th> <th>Device Id</th> <th>Device Make</th> <th>Device Vendor</th> <th>Device Model</th> <th>System Certified</th> <th>Certification</th> <th>CPCB URL</th> </tr> </thead> <tbody> <tr> <td>PM</td> <td>DCEM2100-14171</td> <td>M/S. FORBES MARSHALL</td> <td>M/S. FORBES MARSHALL</td> <td>DCEM2100</td> <td>NO</td> <td>-</td> <td><a href="http://cpdms.forbesmarshall.in:8080/enviroconnect/">http://cpdms.forbesmarshall.in:8080/enviroconnect/</a></td> </tr> </tbody> </table>	Parameter	Device Id	Device Make	Device Vendor	Device Model	System Certified	Certification	CPCB URL	PM	DCEM2100-14171	M/S. FORBES MARSHALL	M/S. FORBES MARSHALL	DCEM2100	NO	-	<a href="http://cpdms.forbesmarshall.in:8080/enviroconnect/">http://cpdms.forbesmarshall.in:8080/enviroconnect/</a>																																																
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Stack1_WHRB 2 x 10 T/hr	Emission	WHRB 2 x 10 T/hr	<b>Parameter</b>	<b>Device Id</b>	<b>Device Make</b>	<b>Device Vendor</b>	<b>Device Model</b>	<b>System Certified</b>	<b>Certification</b>	<b>CPCB URL</b>
			PM	DCEM2100-14133	M/S. FORBES MARSHALL	M/S. FORBES MARSHALL	DCEM2100	NO	-	http://cpdms.forbesmarshall.in:8080/enviroconnect/
Stack_21 WHRB 34 t/hr 9&10	Emission	Boiler	<b>Parameter</b>	<b>Device Id</b>	<b>Device Make</b>	<b>Device Vendor</b>	<b>Device Model</b>	<b>System Certified</b>	<b>Certification</b>	<b>CPCB URL</b>
			PM	26660921	LAND	SARTECH INTL	4500MK111	YES	TUV	http://nksquare.realtimerepollution.in/Account/Login
STACK3 WHRB-38	Emission	WHRB -38 T/hr	<b>Parameter</b>	<b>Device Id</b>	<b>Device Make</b>	<b>Device Vendor</b>	<b>Device Model</b>	<b>System Certified</b>	<b>Certification</b>	<b>CPCB URL</b>
			PM	DCEM2100-14223	M/S. FORBES MARSHALL	M/S. FORBES MARSHALL	DCEM 2100	NO	-	http://cpdms.forbesmarshall.in:8080/enviroconnect/
Stack_28 WHRB11_65TPH	Emission	KILN700 WHRB-11 65TPH	<b>Parameter</b>	<b>Device Id</b>	<b>Device Make</b>	<b>Device Vendor</b>	<b>Device Model</b>	<b>System Certified</b>	<b>Certification</b>	<b>CPCB URL</b>
			PM	27642431	AMETEK LAND	SARTECH	4500MK111	YES	TUV	http://nksquare.realtimerepollution.in/
Stack15 Ferro -2	Emission	Ferro -2	<b>Parameter</b>	<b>Device Id</b>	<b>Device Make</b>	<b>Device Vendor</b>	<b>Device Model</b>	<b>System Certified</b>	<b>Certification</b>	<b>CPCB URL</b>
			PM	DCEM 21xx 20154	M/S. FORBES MARSHALL	M/S. FORBES MARSHALL	DCEM 21xx	NO	-	http://cpdms.forbesmarshall.in:8080/enviroconnect/
Stack11 M.S BILLET-2	Emission	M.S BILLET-2	<b>Parameter</b>	<b>Device Id</b>	<b>Device Make</b>	<b>Device Vendor</b>	<b>Device Model</b>	<b>System Certified</b>	<b>Certification</b>	<b>CPCB URL</b>
			PM	DCEM 21xx 20198	M/S. FORBES MARSHALL	M/S. FORBES MARSHALL	DCEM 21xx	NO	-	http://cpdms.forbesmarshall.in:8080/enviroconnect/

Stack20 WHRB 34 T/hr-7&8	Emission	WHRB 34 T/hr-7&8	<b>Parameter</b>	<b>Device Id</b>	<b>Device Make</b>	<b>Device Vendor</b>	<b>Device Model</b>	<b>System Certified</b>	<b>Certification</b>	<b>CPCB URL</b>
			PM	DCEM 21xx 20159	M/S. FORBES MARSHALL	M/S. FORBES MARSHALL	DCEM 21xx	NO	-	http:// cpdms.forbesmarshall.in:8080/ enviroconnect/
Stack13 Ferro -1	Emission	Ferro -1	<b>Parameter</b>	<b>Device Id</b>	<b>Device Make</b>	<b>Device Vendor</b>	<b>Device Model</b>	<b>System Certified</b>	<b>Certification</b>	<b>CPCB URL</b>
			PM	DCEM 21xx 20151	M/S. FORBES MARSHALL	M/S. FORBES MARSHALL	DCEM 21xx	NO	-	http:// cpdms.forbesmarshall.in:8080/ enviroconnect/
Stack16 Ferro -3	Emission	Ferro -3	<b>Parameter</b>	<b>Device Id</b>	<b>Device Make</b>	<b>Device Vendor</b>	<b>Device Model</b>	<b>System Certified</b>	<b>Certification</b>	<b>CPCB URL</b>
			PM	DCEM 21xx 20153	M/S. FORBES MARSHALL	M/S. FORBES MARSHALL	DCEM 21xx	NO	-	http:// cpdms.forbesmarshall.in:8080/ enviroconnect/
Stack10 M.S BILLET-1	Emission	M.S BILLET-1	<b>Parameter</b>	<b>Device Id</b>	<b>Device Make</b>	<b>Device Vendor</b>	<b>Device Model</b>	<b>System Certified</b>	<b>Certification</b>	<b>CPCB URL</b>
			PM	DCEM 21xx 20156	M/S. FORBES MARSHALL	M/S. FORBES MARSHALL	DCEM 21xx	NO	-	http:// cpdms.forbesmarshall.in:8080/ enviroconnect/
Stack17 Ferro -4	Emission	Ferro -4	<b>Parameter</b>	<b>Device Id</b>	<b>Device Make</b>	<b>Device Vendor</b>	<b>Device Model</b>	<b>System Certified</b>	<b>Certification</b>	<b>CPCB URL</b>
			PM	DCEM 21xx 20155	M/S. FORBES MARSHALL	M/S. FORBES MARSHALL	DCEM 21xx	NO	-	http:// cpdms.forbesmarshall.in:8080/ enviroconnect/
STACK32 CFBC-135	Emission	CFBC -135 T/hr	<b>Parameter</b>	<b>Device Id</b>	<b>Device Make</b>	<b>Device Vendor</b>	<b>Device Model</b>	<b>System Certified</b>	<b>Certification</b>	<b>CPCB URL</b>
			PM	DCEM2100-16289	M/S. FORBES MARSHALL	M/S. FORBES MARSHALL	DCEM 2100	NO	-	http:// cpdms.forbesmarshall.in:8080/ enviroconnect/

STACK18 PELLETT 1	Emission	PELLET 1	<b>Parameter</b>	<b>Device Id</b>	<b>Device Make</b>	<b>Device Vendor</b>	<b>Device Model</b>	<b>System Certified</b>	<b>Certification</b>	<b>CPCB URL</b>
			PM	DCEM2100-18120	M/S. FORBES MARSHALL	M/S. FORBES MARSHALL	DCEM 2100	NO	-	http://cpdms.forbesmarshall.in:8080/enviroconnect/
STACK19 PELLETT 2	Emission	PELLET 2	<b>Parameter</b>	<b>Device Id</b>	<b>Device Make</b>	<b>Device Vendor</b>	<b>Device Model</b>	<b>System Certified</b>	<b>Certification</b>	<b>CPCB URL</b>
			PM	DCEM2100-18118	M/S. FORBES MARSHALL	M/S. FORBES MARSHALL	DCEM 2100	NO	-	http://cpdms.forbesmarshall.in:8080/enviroconnect/
STACK32 PELLETT 3	Emission	PELLET 3	<b>Parameter</b>	<b>Device Id</b>	<b>Device Make</b>	<b>Device Vendor</b>	<b>Device Model</b>	<b>System Certified</b>	<b>Certification</b>	<b>CPCB URL</b>
			PM	27621931	AMETEK LAND	SARTECH	4500MKIII	YES	TUV	http://nksquare.realtimepollution.in/
Stack12 M.SBILLET-3	Emission	M.SBILLET-3	<b>Parameter</b>	<b>Device Id</b>	<b>Device Make</b>	<b>Device Vendor</b>	<b>Device Model</b>	<b>System Certified</b>	<b>Certification</b>	<b>CPCB URL</b>
			PM	27622031	AMETEK LAND	SARTECH	4500MKIII	YES	TUV	http://nksquare.realtimepollution.in/

## Declaration:

I **Sumit Chakraborty** hereby declare that I am the representative of **SHYAM SEL & POWER LTD** and I have registered my email id for any communication with CPCB with respect to any pollution control measures or administrative issues. I shall withdraw this registration if I do not represent this industry any more. I will furnish the correct information to the best of my knowledge.

**Sumit Chakraborty**  
For SHYAM SEL & POWER LTD

Kindly send this acknowledgement along with other relevant documents to CPCB.

# ANNEXURE - XII



# INDICATIVE CONSULTANT INDIA

(GOVT. REGISTERED TEST HOUSE)



EMAIL : indicativeconsultantindia@gmail.com / indicativeconsultantindia.kol@gmail.com

## TEST REPORT

Date: 23.07.2024	Report No: ICUHL/A/RN-452/2024	Format No: ICI/PM/11/61
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/AC-452
Address	Dhama, Bahadurpur, Jamaris, Dist - Paschim Bardhaman, PIN -713 352	Sampling Date : 10.07.2024
#Customer Representative Name & Contact Number	Sr. Executive	Analysis Start Date : 16.07.2024 Analysis complete Date : 17.07.2024
#Work Order No.	3000019828, Dtd. 01.04.2024	
#Sample Description	FUGITIVE AIR	
#Location	CHP AREA (CPP - 90 MW)	
Sample Condition	In Glass Microfiber Filter Paper & Plastic Bottle	
Sampling Method	CPCB, Emission Regulation (Part III)	
Material/ Test Specification	Factories (Amendment) Act 1987, Sec. 45 (2 <sup>nd</sup> Schedule)	

Sl. No.	Parameters	Unit	SAMPLING TIME	Test Method
			09:00 AM to 05:00 PM	
			RESULT	
1.	Suspended Particulate Matter (SPM)	mg /m <sup>3</sup>	1.944	IS 5182 (Part - 4):1999 (RA 2019)
2.	Respirable Particulate Matter (RPM/PM <sub>10</sub> )	mg /m <sup>3</sup>	0.969	IS 5182 (Part - 23):2006 (RA 2022)
3.	Sulphur Dioxide (SO <sub>2</sub> )	mg /m <sup>3</sup>	0.020	IS 5182 (Part - 2):2001 (RA 2022)
4.	Oxides of Nitrogen (NO <sub>x</sub> )	mg /m <sup>3</sup>	0.046	IS 5182 (Part - 6):2006 (RA 2022)
5.	Ambient Temperature (Average)	°C	35.0	Hygrometer
Limit: (mg / m <sup>3</sup> ) : SPM - 10, RPM - 5, SO <sub>2</sub> - 3, NO <sub>2</sub> - 6				
Ref : Factories (Amendment) Act 1987, Sec. 45 (2 <sup>nd</sup> Schedule)				

For, INDICATIVE CONSULTANT INDIA

Prepared By: P. Das

Checked By: N. Pramanik

Parbati Gohri  
(Quality Manager)  
Signatory Authority

Parbati Gohri  
Quality Manager  
INDICATIVE CONSULTANT INDIA

Test Witnessed By: Nil (Sampling was done in front of customer representatives)  
Estimated Uncertainty: Not Required

- Note:
- Information provided by customer
  - Sample is drawn by M/s. Indicative Consultant India
  - Sample submitted and identified by customer as: NA
  - Test results shown in this test report relate only to the sample (s) only.
  - The test results referred in test report are based on observations & measurements under the stated environmental conditions.
  - The reproduction of the report except in full is invalid without written approval of the laboratory.
  - Once issued, the test report/certificate is in public domain and laboratory is not responsible for the authenticity of photocopied test report
  - Retention period of tested samples (Filter Paper) is 180 Days from the date of issue of test report unless otherwise specified.
  - Location of Testing: Haldia Laboratory

End of Report

Page 1 of 1

Reviewed by: QM/TM



# INDICATIVE CONSULTANT INDIA

(GOVT. REGISTERED TEST HOUSE)



EMAIL : indicativeconsultantindia@gmail.com / indicativeconsultantindia.kol@gmail.com

## TEST REPORT

Date: 23.07.2024	Report No: ICI/HLA/RN-453/2024	Format No: ICI/FM/HL/61
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/AC-453
Address	Dhasna, Bahadurpur, Jamuria, Dist.- Paschim Bardhaman, PIN -713 362	Sampling Date : 10.07.2024
#Customer Representative Name & Contact Number	Sr. Executive	Analysis Start Date : 16.07.2024 Analysis complete Date : 17.07.2024
#Work Order No.	3000019828, Dtd. 01.04.2024	
#Sample Description	FUGITIVE AIR	
#Location	FURNACE FRONT AREA (SMS - 1 EXT)	
Sample Condition	In Glass Microfibre Filter Paper & Plastic Bottle	
Sampling Method	CPCB, Emission Regulation (Part III)	
Material/ Test Specification	Factories (Amendment) Act 1987, Sec. 45 (2 <sup>nd</sup> Schedule)	

Sl No.	Parameters	Unit	SAMPLING TIME	Test Method
			08:30 AM to 04:30 PM RESULT	
1	Suspended Particulate Matter (SPM)	mg /m <sup>3</sup>	1.624	IS 5182 (Part - 4):1999 (RA 2019)
2	Respirable Particulate Matter (RPM/PM <sub>10</sub> )	mg /m <sup>3</sup>	0.758	IS 5182 (Part - 23):2006 (RA 2022)
3	Sulphur Dioxide (SO <sub>2</sub> )	mg /m <sup>3</sup>	0.019	IS 5182 (Part - 2):2001 (RA 2022)
4	Oxides of Nitrogen (NO <sub>x</sub> )	mg /m <sup>3</sup>	0.045	IS 5182 (Part - 6):2006 (RA 2022)
5	Ambient Temperature (Average)	°C	38.0	Hygrometer
<i>Limit: (mg / m<sup>3</sup>) : SPM - 10, RPM - 5, SO<sub>2</sub> - 5, NO<sub>2</sub> - 6</i>				
<i>Ref : Factories (Amendment) Act 1987, Sec. 45 (2nd Schedule)</i>				

For, INDICATIVE CONSULTANT INDIA

Prepared By: P. Das

Checked By: N. Pramanik

Parbati Gohui  
(Quality Manager)  
Signatory Authority

Parbati Gohui  
Quality Manager  
INDICATIVE CONSULTANT INDIA

Test Witnessed By: Nil (Sampling was done in front of customer representatives)  
Estimated Uncertainty: Not Required

- Note:
- Information provided by customer
  - Sample is drawn by M/s. Indicative Consultant India
  - Sample submitted and identified by customer as: NA
  - Test results shown in this test report relate only to the sample (s) only.
  - The test results referred in test report are based on observations & measurements under the stated environmental conditions.
  - The reproduction of the report except in full is invalid without written approval of the laboratory.
  - Once issued, the test report/certificate is in public domain and laboratory is not responsible for the authenticity of photocopied test report
  - Retention period of tested samples (Filter Paper) is 180 Days from the date of issue of test report unless otherwise specified.
  - Location of Testing: Haldia Laboratory

End of Report

Page 1 of 1

Reviewed By: QM/TM



# INDICATIVE CONSULTANT INDIA

(GOVT. REGISTERED TEST HOUSE)



EMAIL : indicativeconsultantindia@gmail.com / indicativeconsultantindia.kol@gmail.com

## TEST REPORT

Date: 23.07.2024	Report No: ICI/HL/A/RN-454/2024	Format No: ICI/FM/IL/61
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID, No : 2024/AC-454
Address	Dhasna, Bahadurpur, Jamuria, Dist - Paschim Bardhaman, PIN -713 362	Sampling Date : 10.07.2024
#Customer Representative Name & Contact Number	Sr. Executive	Analysis Start Date : 16.07.2024
#Work Order No.	3000019828, Dtd. 01.04.2024	Analysis complete Date : 17.07.2024
#Sample Description	FUGITIVE AIR	
#Location	INBETWEEN TG BUILDING & BALLING DISK AREA (PELLET PLANT - 3)	
Sample Condition	In Glass Microfibre Filter Paper & Plastic Bottle	
Sampling Method	CPCB, Emission Regulation (Part III)	
Material/ Test Specification	Factories (Amendment) Act 1987, Sec. 45 (2 <sup>nd</sup> Schedule)	

Sl. No.	Parameters	Unit	SAMPLING TIME		Test Method
			11:40 AM to 07:40 PM	RESULT	
1	Suspended Particulate Matter (SPM)	mg/m <sup>3</sup>	11:40 AM to 07:40 PM	1.543	IS 5182 (Part - 4):1999 (RA 2019)
2	Respirable Particulate Matter (RPM/PM <sub>10</sub> )	mg/m <sup>3</sup>	11:40 AM to 07:40 PM	0.712	IS 5182 (Part - 23):2006 (RA 2022)
3	Sulphur Dioxide (SO <sub>2</sub> )	mg/m <sup>3</sup>	11:40 AM to 07:40 PM	0.017	IS 5182 (Part - 2):2001 (RA 2022)
4	Oxides of Nitrogen (NO <sub>2</sub> )	mg/m <sup>3</sup>	11:40 AM to 07:40 PM	0.043	IS 5182 (Part - 6):2006 (RA 2022)
5	Ambient Temperature (Average)	°C	11:40 AM to 07:40 PM	36.0	Hygrometer

Limit: (mg/m<sup>3</sup>) : SPM - 10, RPM - 5, SO<sub>2</sub> - 5, NO<sub>2</sub> - 6  
Ref : Factories (Amendment) Act 1987, Sec. 45 (2<sup>nd</sup> Schedule)

For, INDICATIVE CONSULTANT INDIA

Prepared By: P. Das

Checked By: N. Pramanik

Parbati Gohli  
(Quality Manager)  
Signatory Authority

Parbati Gohli  
Quality Manager  
INDICATIVE CONSULTANT INDIA

Test Witnessed By: Nil (Sampling was done in front of customer representatives)  
Estimated Uncertainty: Not Required

- Note
- \* Information provided by customer
  - Sample is drawn by M/s. Indicative Consultant India
  - Sample submitted and identified by customer as: NA
  - Test results shown in this test report relate only to the sample (s) only.
  - The test results referred in test report are based on observations & measurements under the stated environmental conditions.
  - The reproduction of the report except in full is invalid without written approval of the laboratory.
  - Once issued, the test report/certificate is in public domain and laboratory is not responsible for the authenticity of photocopied test report
  - Retention period of tested samples (Filter Paper) is 180 Days from the date of issue of test report unless otherwise specified.
  - Location of Testing: Haldia Laboratory

End of Report

Page 1 of 1

Reviewed By: QM/TM



# INDICATIVE CONSULTANT INDIA

(GOVT. REGISTERED TEST HOUSE)



EMAIL : indicativeconsultantindia@gmail.com / indicativeconsultantindia.kol@gmail.com

## TEST REPORT

Date: 23.07.2024	Report No: ICI/HLA/RN-455/2024	Format No: ICI/FM/HL/61
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/AC-455
Address	Dhasna, Behadurpur, Jamuria, Dist - Paschim Bardhaman, PIN -713 362	Sampling Date : 10.07.2024
#Customer Representative Name & Contact Number	Sr. Executive	Analysis Start Date : 16.07.2024 Analysis complete Date : 17.07.2024
#Work Order No.	3000019828, Dtd. 01.04.2024	
#Sample Description	FUGITIVE AIR	
#Location	ANNULAR COOLER AREA (PELLET PLANT - 3)	
Sample Condition	In Glass Microfibre Filter Paper & Plastic Bottle	
Sampling Method	CPCB, Emission Regulation (Part III)	
Material/ Test Specification	Factories (Amendment) Act 1987, Sec. 45 (2 <sup>nd</sup> Schedule)	

Sl. No.	Parameters	Unit	SAMPLING TIME	Test Method
			10:40 AM to 06:40 PM	
			RESULT	
1.	Suspended Particulate Matter (SPM)	mg/m <sup>3</sup>	1.888	IS 5182 (Part - 4):1999 (RA 2019)
2.	Respirable Particulate Matter (RPM/PM <sub>10</sub> )	mg/m <sup>3</sup>	0.934	IS 5182 (Part - 23):2006 (RA 2022)
3.	Sulphur Dioxide (SO <sub>2</sub> )	mg/m <sup>3</sup>	0.021	IS 5182 (Part - 2):2001 (RA 2022)
4.	Oxides of Nitrogen (NO <sub>2</sub> )	mg/m <sup>3</sup>	0.047	IS 5182 (Part - 6):2006 (RA 2022)
5.	Ambient Temperature (Average)	°C	36.0	Hygrometer
<i>Limit: (mg/m<sup>3</sup>) : SPM - 10, RPM - 5, SO<sub>2</sub> - 5, NO<sub>2</sub> - 6</i>				
<i>Ref : Factories (Amendment) Act 1987, Sec. 45 (2nd Schedule)</i>				

For, INDICATIVE CONSULTANT INDIA

Prepared By: P. Das

Checked By: N. Pramanik

Parbati Golui  
(Quality Manager)  
Signatory Authority

Parbati Golui  
Quality Manager  
INDICATIVE CONSULTANT INDIA

Test Witnessed By: Nil (Sampling was done in front of customer representatives)  
Estimated Uncertainty: Not Required

- Note
1. Information provided by customer.
  2. Sample is drawn by M/s. Indicative Consultant India.
  3. Sample submitted and identified by customer as: NA
  4. Test results shown in this test report relate only to the sample (s) only.
  5. The test results referred in test report are based on observations & measurements under the stated environmental conditions.
  6. The reproduction of the report except in full is invalid without written approval of the laboratory.
  7. Once issued, the test report/certificate is in public domain and laboratory is not responsible for the authenticity of photocopied test report.
  8. Retention period of tested samples (Filter Paper) is 180 Days from the date of issue of test report unless otherwise specified.
  9. Location of Testing: Haldia Laboratory

End of Report

Page 1 of 1

Reviewed By: QM/TM



## TEST REPORT

Date: 23.07.2024	Report No: ICI/HL/A/RN-456/2024	Format No: ICI/FM/HL/61
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/AC-456
Address	Dhessa, Bahadurpur, Jamuria, Dist - Paschim Bardhaman, PIN - 713 362	Sampling Date : 09.07.2024
#Customer Representative Name & Contact Number	Sr. Executive	Analysis Start Date : 16.07.2024 Analysis complete Date : 17.07.2024
#Work Order No.	3000019828, Dtd. 01.04.2024	
#Sample Description	FUGITIVE AIR	
#Location	CHP (DRI # 4/700 TPD)	
Sample Condition	In Glass Microfibre Filter Paper & Plastic Bottle	
Sampling Method	CPCB, Emission Regulation (Part III)	
Material/ Test Specification	Factories (Amendment) Act 1987, Sec. 45 (2 <sup>nd</sup> Schedule)	

Sl. No.	Parameters	Unit	SAMPLING TIME	Test Method
			10:10 AM to 06:10 PM	
			RESULT	
1	Suspended Particulate Matter (SPM)	mg /m <sup>3</sup>	1.914	IS 5182 (Part - 4) 1999 (RA 2019)
2	Respirable Particulate Matter (RPM/PM <sub>10</sub> )	mg /m <sup>3</sup>	0.961	IS 5182 (Part - 23) 2006 (RA 2022)
3	Sulphur Dioxide (SO <sub>2</sub> )	mg /m <sup>3</sup>	0.022	IS 5182 (Part - 2) 2001 (RA 2022)
4	Oxides of Nitrogen (NO <sub>x</sub> )	mg /m <sup>3</sup>	0.046	IS 5182 (Part - 6) 2006 (RA 2022)
5	Ambient Temperature (Average)	°C	35.0	Hygrometer
Limit: (mg / m <sup>3</sup> ) : SPM - 10, RPM - 5, SO <sub>2</sub> - 5, NO <sub>2</sub> - 6				
Ref : Factories (Amendment) Act 1987, Sec. 45 (2 <sup>nd</sup> Schedule)				

For, INDICATIVE CONSULTANT INDIA

Prepared By: P. Das

Checked By: N. Pramanik

Parbati Gohri  
(Quality Manager)  
Signatory Authority

Parbati Golui  
Quality Manager  
INDICATIVE CONSULTANT INDIA

Test Witnessed By: Nil (Sampling was done in front of customer representatives)  
Estimated Uncertainty: Not Required

- Note:
- Information provided by customer
  - Sample is drawn by M/s. Indicative Consultant India
  - Sample submitted and identified by customer as: NA
  - Test results shown in this test report relate only to the sample (s) only.
  - The test results referred in test report are based on observations & measurements under the stated environmental conditions.
  - The reproduction of the report except in full is invalid without written approval of the laboratory.
  - Once issued, the test report/certificate is in public domain and laboratory is not responsible for the authenticity of photocopied test report
  - Retention period of tested samples (Filter Paper) is 180 Days from the date of issue of test report unless otherwise specified.
  - Location of Testing: Haldia Laboratory

End of Report

Page 1 of 1

Reviewed by: QM/TM



# INDICATIVE CONSULTANT INDIA

(GOVT. REGISTERED TEST HOUSE)



EMAIL : indicativeconsultantindia@gmail.com / indicativeconsultantindia.kol@gmail.com

## TEST REPORT

Date: 23.07.2024	Report No: ICI/HL/A/RN-457/2024	Format No: ICI/FM/H/61
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/AC-457
Address	Dhasna, Bahadurpur, Jamuria, Dist - Paschim Bardhaman, PIN -713 362	Sampling Date : 09.07.2024
#Customer Representative Name & Contact Number	Sr. Executive	Analysis Start Date : 16.07.2024
#Work Order No.	3000019828, Dtd. 01.04.2024	Analysis complete Date : 17.07.2024
#Sample Description	FUGITIVE AIR	
#Location	TRANSFER POINT (DRI # 4/700 TPD)	
Sample Condition	In Glass Microfibre Filter Paper & Plastic Bottle	
Sampling Method	CPCB, Emission Regulation (Part III)	
Material/ Test Specification	Factories (Amendment) Act 1987, Sec. 45 (2 <sup>nd</sup> Schedule)	

Sl. No.	Parameters	Unit	SAMPLING TIME	Test Method
			09:40 AM to 05:40 PM RESULT	
1	Suspended Particulate Matter (SPM)	mg /m <sup>3</sup>	1.825	IS 5182 (Part - 4): 1999 (RA 2019)
2	Respirable Particulate Matter (RPM/PM <sub>10</sub> )	mg /m <sup>3</sup>	0.901	IS 5182 (Part - 23):2006 (RA 2022)
3	Sulphur Dioxide (SO <sub>2</sub> )	mg /m <sup>3</sup>	0.020	IS 5182 (Part - 2):2001 (RA 2022)
4	Oxides of Nitrogen (NO <sub>x</sub> )	mg /m <sup>3</sup>	0.047	IS 5182 (Part - 6):2006 (RA 2022)
5	Ambient Temperature (Average)	°C	38.0	Hygrometer
Limit: (mg / m <sup>3</sup> ) : SPM - 10, RPM - 5, SO <sub>2</sub> -5, NO <sub>2</sub> - 6				
Ref : Factories (Amendment) Act 1987, Sec. 45 (2 <sup>nd</sup> Schedule)				

For, INDICATIVE CONSULTANT INDIA

Prepared By: P. Das

Checked By: N. Pramanik

Parbati Golui  
(Quality Manager)  
Signatory Authority

Parbati Golui  
Quality Manager  
INDICATIVE CONSULTANT INDIA

Test Witnessed By: Nil (Sampling was done in front of customer representatives)  
Estimated Uncertainty: Not Required

- Note
1. Information provided by customer
  2. Sample is drawn by M/s. Indicative Consultant India.
  3. Sample submitted and identified by customer as: NA
  4. Test results shown in this test report relate only to the sample (s) only.
  5. The test results referred in test report are based on observations & measurements under the stated environmental conditions.
  6. The reproduction of the report except in full is invalid without written approval of the laboratory.
  7. Once issued, the test report/certificate is in public domain and laboratory is not responsible for the authenticity of photocopied test report.
  8. Retention period of tested samples (Filter Paper) is 180 Days from the date of issue of test report unless otherwise specified.
  9. Location of Testing: Haldia Laboratory

End of Report

Page 1 of 1

Reviewed By: OM/TM



# INDICATIVE CONSULTANT INDIA

(GOVT. REGISTERED TEST HOUSE)



EMAIL : indicativeconsultantindia@gmail.com / indicativeconsultantindia.kol@gmail.com

## TEST REPORT

Date: 23.07.2024	Report No: ICI/HLA/RN-458/2024	Format No: ICI/FM/HL/61
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID.No : 2024/AC-458
Address	Dhasna, Bahadurpur, Jamarua, Dist - Paschim Bardhaman, PIN -713 362	Sampling Date : 09.07.2024
#Customer Representative Name & Contact Number	Sr. Executive	Analysis Start Date : 16.07.2024
#Work Order No.	3000019R28, Dtd. 01.04.2024	Analysis complete Date : 17.07.2024
#Sample Description	FUGITIVE AIR	
#Location	PRODUCT SEPARATION HOUSE AREA (DRI # 4/700 TPD)	
Sample Condition	In Glass Macrofibre Filter Paper & Plastic Bottle	
Sampling Method	CPCB, Emission Regulation (Part III)	
Material/ Test Specification	Factories (Amendment) Act 1987, Sec. 45 (2 <sup>nd</sup> Schedule)	

Sl. No.	Parameters	Unit	SAMPLING TIME		Test Method
			09:10 AM to 05:10 PM	RESULT	
1	Suspended Particulate Matter (SPM)	mg/m <sup>3</sup>	1.878	IS 5182 (Part - 4):1999 (RA 2019)	
2	Respirable Particulate Matter (RPM/PM <sub>10</sub> )	mg/m <sup>3</sup>	0.945	IS 5182 (Part - 23):2006 (RA 2022)	
3	Sulphur Dioxide (SO <sub>2</sub> )	mg/m <sup>3</sup>	0.021	IS 5182 (Part - 2):2001 (RA 2022)	
4	Oxides of Nitrogen (NO <sub>2</sub> )	mg/m <sup>3</sup>	0.051	IS 5182 (Part - 6):2006 (RA 2022)	
5	Ambient Temperature (Average)	°C	36.0	Hygrometer	

Limit: (mg / m<sup>3</sup>) : SPM - 10, RPM - 5, SO<sub>2</sub> - 5, NO<sub>2</sub> - 6  
Ref : Factories (Amendment) Act 1987, Sec. 45 (2nd Schedule)

For, INDICATIVE CONSULTANT INDIA

Prepared By: P. Das

Checked By: N. Pramanik

Parbati Gouli  
(Quality Manager)  
Signatory Authority

Parbati Gouli  
Quality Manager  
INDICATIVE CONSULTANT INDIA

Test Witnessed By: Nil (Sampling was done in front of customer representatives)  
Estimated Uncertainty: Not Required

- Note:
- Information provided by customer
  - Sample is drawn by M/s. Indicative Consultant India.
  - Sample submitted and identified by customer as: NA
  - Test results shown in this test report relate only to the sample (s) only.
  - The test results referred in test report are based on observations & measurements under the stated environmental conditions.
  - The reproduction of the report except in full is invalid without written approval of the laboratory.
  - Once issued, the test report/certificate is in public domain and laboratory is not responsible for the authenticity of photocopied test report
  - Retention period of tested samples (Filter Paper) is 180 Days from the date of issue of test report unless otherwise specified.
  - Location of Testing: Haldia Laboratory

End of Report

Page 1 of 1

Reviewed By: QM/TM



## TEST REPORT

Date: 23.07.2024	Report No: ICI/HL/A/RN-459/2024	Format No: ICI/FM/H/61
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/AC-489
Address	Dhama, Bahadurpur, Jamuria, Dist.- Paschim Bardhaman, PIN -713 362	Sampling Date : 09.07.2024
#Customer Representative Name & Contact Number	Sr. Executive	Analysis Start Date : 16.07.2024
#Work Order No.	3000019828, Dtd. 01.04.2024	Analysis complete Date : 17.07.2024
#Sample Description	FUGITIVE AIR	
#Location	COOLER DISCHARGE AREA & TRH (DRI # 4/700 TPD)	
Sample Condition	In Glass Microfibre Filter Paper & Plastic Bottle	
Sampling Method	CPCB, Emission Regulation (Part III)	
Material/ Test Specification	Factories (Amendment) Act 1987, Sec. 45 (2 <sup>nd</sup> Schedule)	

Sl. No.	Parameters	Unit	SAMPLING TIME	Test Method
			08:40 AM to 04:40 PM	
			RESULT	
1.	Suspended Particulate Matter (SPM)	mg /m <sup>3</sup>	0.904	IS 5182 (Part - 4) 1999 (RA 2019)
2.	Respirable Particulate Matter (RPM/PM <sub>10</sub> )	mg /m <sup>3</sup>	0.782	IS 5182 (Part - 23) 2006 (RA 2022)
3.	Sulphur Dioxide (SO <sub>2</sub> )	mg /m <sup>3</sup>	0.022	IS 5182 (Part - 2) 2001 (RA 2022)
4.	Oxides of Nitrogen (NO <sub>x</sub> )	mg /m <sup>3</sup>	0.050	IS 5182 (Part - 6) 2006 (RA 2022)
5.	Ambient Temperature (Average)	°C	38.0	Hygrometer
Limit: (mg / m <sup>3</sup> ) : SPM - 10, RPM - 5, SO <sub>2</sub> - 5, NO <sub>2</sub> - 6				
Ref : Factories (Amendment) Act 1987, Sec. 45 (2nd Schedule)				

For, INDICATIVE CONSULTANT INDIA

Prepared By: P. Das

Checked By: N. Pramanik

Parbati Golui  
(Quality Manager)  
Signatory Authority

Parbati Golui  
Quality Manager  
INDICATIVE CONSULTANT INDIA

Test Witnessed By: Nil (Sampling was done in front of customer representatives)

Estimated Uncertainty: Not Required

- Note:
1. Information provided by customer
  2. Sample is drawn by M/s. Indicative Consultant India.
  3. Sample submitted and identified by customer as: NA
  4. Test results shown in this test report relate only to the sample (s) only.
  5. The test results referred in test report are based on observations & measurements under the stated environmental conditions.
  6. The reproduction of the report except in full is invalid without written approval of the laboratory.
  7. Once issued, the test report/certificate is in public domain and laboratory is not responsible for the authenticity of photocopied test report
  8. Retention period of tested samples (Filter Paper) is 180 Days from the date of issue of test report unless otherwise specified.
  9. Location of Testing: Haldia Laboratory

-----End of Report-----

Page 1 of 1

Reviewed By: QM/TM



# INDICATIVE CONSULTANT INDIA

(GOVT. REGISTERED TEST HOUSE)



EMAIL : indicativeconsultantindia@gmail.com / indicativeconsultantindia.kol@gmail.com

## TEST REPORT

Date: 23.07.2024	Report No: ICI/HLA/RN-460/2024	Format No: ICI/FM/HL/61
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID-No : 2024/AC-460
Address	Dhasna, Bahadurpur, Jamuria, Dist - Paschim Bardhaman, PIN -713 362	Sampling Date : 09.07.2024
#Customer Representative Name & Contact Number	Sr. Executive	Analysis Start Date : 16.07.2024 Analysis complete Date : 17.07.2024
#Work Order No.	3000019828, Dtd. 01.04.2024	
#Sample Description	FUGITIVE AIR	
#Location	AREA INBETWEEN KILN - 11 & 12 (DRI # 4/700 TPD)	
Sample Condition	In Glass Microfibre Filter Paper & Plastic Bottle	
Sampling Method	CPCB, Emission Regulation (Part III)	
Material/ Test Specification	Factories (Amendment) Act 1987, Sec. 45 (2 <sup>nd</sup> Schedule)	

Sl. No.	Parameters	Unit	SAMPLING TIME	Test Method
			08:20 AM to 04:20 PM	
			RESULT	
1	Suspended Particulate Matter (SPM)	mg/m <sup>3</sup>	1.877	IS 5182 (Part - 4):1999 (RA 2019)
2	Respirable Particulate Matter (RPM/PM <sub>10</sub> )	mg/m <sup>3</sup>	0.964	IS 5182 (Part - 23):2006 (RA 2022)
3	Sulphur Dioxide (SO <sub>2</sub> )	mg/m <sup>3</sup>	0.023	IS 5182 (Part - 2):2001 (RA 2022)
4	Oxides of Nitrogen (NO <sub>x</sub> )	mg/m <sup>3</sup>	0.051	IS 5182 (Part - 6):2006 (RA 2022)
5	Ambient Temperature (Average)	°C	38.0	Hygrometer

*Limit: (mg/m<sup>3</sup>) : SPM - 10, RPM - 5, SO<sub>2</sub> - 5, NO<sub>2</sub> - 6*  
*Ref : Factories (Amendment) Act 1987, Sec. 45 (2nd Schedule)*

For, INDICATIVE CONSULTANT INDIA

Prepared By: P. Das

Checked By: N. Pramanik

Parbati Gouli  
(Quality Manager)  
Signatory Authority

Parbati Gouli  
Quality Manager  
INDICATIVE CONSULTANT INDIA

Test Witnessed By: Nil (Sampling was done in front of customer representatives)  
Estimated Uncertainty: Not Required

- Note:
- Information provided by customer.
  - Sample is drawn by M/s. Indicative Consultant India.
  - Sample submitted and identified by customer as: NA
  - Test results shown in this test report relate only to the sample (s) only.
  - The test results referred in test report are based on observations & measurements under the stated environmental conditions.
  - The reproduction of the report except in full is invalid without written approval of the laboratory.
  - Once issued, the test report/certificate is in public domain and laboratory is not responsible for the authenticity of photocopied test report.
  - Retention period of tested samples (Filter Paper) is 180 Days from the date of issue of test report unless otherwise specified.
  - Location of Testing: Haldia Laboratory

End of Report

Page 1 of 1

Reviewed By: QM/TM



# INDICATIVE CONSULTANT INDIA

(GOVT. REGISTERED TEST HOUSE)



EMAIL : indicativeconsultantindia@gmail.com / indicativeconsultantindia.kol@gmail.com

## TEST REPORT

Date: 23.07.2024	Report No: ICI/HL/A/RN-461/2024	Format No: ICI/FM/H/61
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/AC-461
Address	Dhasna, Bahadurpur, Jamuria, Dist.- Paschim Bardhaman, PIN -713 362	Sampling Date : 08.07.2024
#Customer Representative Name & Contact Number	Sr. Executive	Analysis Start Date : 16.07.2024
#Work Order No.	3000019828, Dtd. 01.04.2024	Analysis complete Date : 17.07.2024
#Sample Description	FUGITIVE AIR	
#Location	FURNACE FRONT AREA (SMS #3)	
Sample Condition	In Glass Microfibre Filter Paper & Plastic Bottle	
Sampling Method	CPCB, Emission Regulation (Part III)	
Material/ Test Specification	Factories (Amendment) Act 1987, Sec. 45 (2 <sup>nd</sup> Schedule)	

Sl. No.	Parameters	Unit	SAMPLING TIME	Test Method
			09:30 AM to 05:30 PM	
			RESULT	
1.	Suspended Particulate Matter (SPM)	mg /m <sup>3</sup>	1.834	IS 5182 (Part - 4):1999 (RA 2019)
2.	Respirable Particulate Matter (RPM/PM <sub>10</sub> )	mg /m <sup>3</sup>	0.839	IS 5182 (Part - 23):2006 (RA 2022)
3.	Sulphur Dioxide (SO <sub>2</sub> )	mg /m <sup>3</sup>	0.021	IS 5182 (Part - 2):2001 (RA 2022)
4.	Oxides of Nitrogen (NO <sub>x</sub> )	mg /m <sup>3</sup>	0.051	IS 5182 (Part - 6):2006 (RA 2022)
5.	Ambient Temperature (Average)	°C	36.0	Hygrometer
<b>Limit: (mg / m<sup>3</sup>) : SPM - 10, RPM - 5, SO<sub>2</sub> - 5, NO<sub>2</sub> - 6</b>				
<b>Ref : Factories (Amendment) Act 1987, Sec. 45 (2<sup>nd</sup> Schedule)</b>				

For, INDICATIVE CONSULTANT INDIA

Prepared By: P. Das

Checked By: N. Pramanik

Parbati Golui  
(Quality Manager)  
Signatory Authority

Parbati Golui  
Quality Manager  
INDICATIVE CONSULTANT INDIA

Test Witnessed By: Nil (Sampling was done in front of customer representatives)  
Estimated Uncertainty: Not Required

- Note:
1. Information provided by customer
  2. Sample is drawn by M/s. Indicative Consultant India.
  3. Sample submitted and identified by customer as: NA
  4. Test results shown in this test report relate only to the sample (s) only.
  5. The test results referred in test report are based on observations & measurements under the stated environmental conditions.
  6. The reproduction of the report except in full is invalid without written approval of the laboratory.
  7. Once issued, the test report/certificate is in public domain and laboratory is not responsible for the authenticity of photocopied test report
  8. Retention period of tested samples (Filter Paper) is 180 Days from the date of issue of test report unless otherwise specified.
  9. Location of Testing: Haldia Laboratory

End of Report

Page 1 of 1

Reviewed By: QM/TM



## TEST REPORT

Date: 23.07.2024	: Report No: ICI/HL/A/RN-462/2024	Format No: ICI/PM/HL/61
Customer Name	: M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/AC-462
Address	: Dhasna, Behadurpur, Jamuria, Dist - Paschim Bardhaman, PIN -713 362	Sampling Date : 08.07.2024
#Customer Representative Name & Contact Number	: Sr. Executive	Analysis Start Date : 16.07.2024
#Work Order No.	: 3000019828, Dtd. 01.04.2024	Analysis complete Date : 17.07.2024
#Sample Description	: FUGITIVE AIR	
#Location	: FURNACE FRONT AREA (SMS #2)	
Sample Condition	: In Glass Microfibre Filter Paper & Plastic Bottle	
Sampling Method	: CPCB, Emission Regulation (Part III)	
Material/ Test Specification	: Factories (Amendment) Act 1987, Sec. 45 (2 <sup>nd</sup> Schedule)	

Sl. No.	Parameters	Unit	SAMPLING TIME	Test Method
			09:00 AM to 05:00 PM	
1.	Suspended Particulate Matter (SPM)	mg /m <sup>3</sup>	1.911	IS 5182 (Part - 4):1999 (RA 2019)
2.	Respirable Particulate Matter (RPM/PM <sub>10</sub> )	mg /m <sup>3</sup>	0.804	IS 5182 (Part - 23):2006 (RA 2022)
3.	Sulphur Dioxide (SO <sub>2</sub> )	mg /m <sup>3</sup>	0.021	IS 5182 (Part - 2):2001 (RA 2022)
4.	Oxides of Nitrogen (NO <sub>x</sub> )	mg /m <sup>3</sup>	0.049	IS 5182 (Part - 6):2006 (RA 2022)
5.	Ambient Temperature (Average)	°C	36.0	Hygrometer

Limit: (mg / m<sup>3</sup>) : SPM - 10, RPM - 5, SO<sub>2</sub> - 5, NO<sub>2</sub> - 6  
Ref : Factories (Amendment) Act 1987, Sec. 45 (2nd Schedule)

For, INDICATIVE CONSULTANT INDIA

Prepared By: P. Das

Checked By: N. Pramanik

Parbati Golui  
(Quality Manager)  
Signatory Authority

Parbati Golui  
Quality Manager  
INDICATIVE CONSULTANT INDIA

Test Witnessed By: Nil (Sampling was done in front of customer representatives)  
Estimated Uncertainty: Not Required

- Note:
1. Information provided by customer
  2. Sample is drawn by M/s. Indicative Consultant India.
  3. Sample submitted and identified by customer as: NA
  4. Test results shown in this test report relate only to the sample (s) only.
  5. The test results referred in test report are based on observations & measurements under the stated environmental conditions.
  6. The reproduction of the report except in full is invalid without written approval of the laboratory.
  7. Once issued, the test report/certificate is in public domain and laboratory is not responsible for the authenticity of photocopied test report
  8. Retention period of tested samples (Filter Paper) is 180 Days from the date of issue of test report unless otherwise specified.
  9. Location of Testing: Haldia Laboratory

End of Report

Page 1 of 1

Reviewed By: QM/TM



## TEST REPORT

Date: 23.07.2024	Report No: ICI/HL/A/RN-463/2024	Format No: ICI/FM/H/61
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/AC-463
Address	Dhasna, Bahadurpur, Jamuria, Dist.- Paschim Bardhaman, PIN -713 362	Sampling Date : 08.07.2024
#Customer Representative Name & Contact Number	Sr. Executive	Analysis Start Date : 16.07.2024 Analysis complete Date : 17.07.2024
#Work Order No.	3000019828, Dtd. 01.04.2024	
#Sample Description	FUGITIVE AIR	
#Location	FURNACE FRONT AREA (SMS #1)	
Sample Condition	In Glass Microfibre Filter Paper & Plastic Bottle	
Sampling Method	CPCB, Emission Regulation (Part III)	
Material/ Test Specification	Factories (Amendment) Act 1987, Sec. 45 (2 <sup>nd</sup> Schedule)	

Sl. No.	Parameters	Unit	SAMPLING TIME		Test Method
			08:30 AM to 04:30 PM	RESULT	
1.	Suspended Particulate Matter (SPM)	mg /m <sup>3</sup>	1.744	IS 5182 (Part - 4):1999 (RA 2019)	
2.	Respirable Particulate Matter (RPM/PM <sub>10</sub> )	mg /m <sup>3</sup>	0.767	IS 5182 (Part - 23):2006 (RA 2022)	
3.	Sulphur Dioxide (SO <sub>2</sub> )	mg /m <sup>3</sup>	0.020	IS 5182 (Part - 2):2001 (RA 2022)	
4.	Oxides of Nitrogen (NO <sub>x</sub> )	mg /m <sup>3</sup>	0.046	IS 5182 (Part - 6):2006 (RA 2022)	
5.	Ambient Temperature (Average)	°C	36.0	Hygrometer	

*Limit: (mg / m<sup>3</sup>) : SPM - 10, RPM - 5, SO<sub>2</sub> - 5, NO<sub>2</sub> - 6*  
*Ref : Factories (Amendment) Act 1987, Sec. 45 (2nd Schedule)*

For, INDICATIVE CONSULTANT INDIA

Prepared By: P. Das

Checked by: N. Pramanik

Parbati Gohui  
(Quality Manager)  
Signatory Authority

Parbati Gohui  
Quality Manager  
INDICATIVE CONSULTANT INDIA

Test Witnessed By: Nil (Sampling was done in front of customer representatives)  
Estimated Uncertainty: Not Required

- Note:
- Information provided by customer
  - Sample is drawn by M/s. Indicative Consultant India.
  - Sample submitted and identified by customer as: NA
  - Test results shown in this test report relate only to the sample (s) only.
  - The test results referred in test report are based on observations & measurements under the stated environmental conditions.
  - The reproduction of the report except in full is invalid without written approval of the laboratory.
  - Once issued, the test report/certificate is in public domain and laboratory is not responsible for the authenticity of photocopied test report.
  - Retention period of tested samples (Filter Paper) is 180 Days from the date of issue of test report unless otherwise specified.
  - Location of Testing: Haldia Laboratory

End of Report

Page 1 of 1

Reviewed by: QM/TM



# INDICATIVE CONSULTANT INDIA

(GOVT. REGISTERED TEST HOUSE)



9001:2015



45001:2018

EMAIL : indicativeconsultantindia@gmail.com / indicativeconsultantindia.kol@gmail.com

## TEST REPORT

Date: 23.07.2024	Report No: ICI/HLA/RN-464/2024	Format No: ICI/FM/H/61
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/AC-464
Address	Dhama, Bahadurpur, Jarnuria, Dist - Paschim Bardhaman, PIN -713 362	Sampling Date : 08.07.2024
#Customer Representative Name & Contact Number	Sr. Executive	Analysis Start Date : 16.07.2024
#Work Order No.	3000019828, Dtd 01.04.2024	Analysis complete Date : 17.07.2024
#Sample Description	FUGITIVE AIR	
#Location	BOILER AREA (CPP)	
Sample Condition	In Glass Microfibre Filter Paper & Plastic Bottle	
Sampling Method	CPCB, Emission Regulation (Part III)	
Material/ Test Specification	Factories (Amendment) Act 1987, Sec. 45 (2 <sup>nd</sup> Schedule)	

Sl. No.	Parameters	Unit	SAMPLING TIME		Test Method
			08:00 AM to 04:00 PM	RESULT	
1.	Suspended Particulate Matter (SPM)	mg /m <sup>3</sup>	1.814	IS 5182 (Part - 4):1999 (RA 2019)	
2.	Respirable Particulate Matter (RPM/PM <sub>10</sub> )	mg /m <sup>3</sup>	0.895	IS 5182 (Part - 23):2006 (RA 2022)	
3.	Sulphur Dioxide (SO <sub>2</sub> )	mg /m <sup>3</sup>	0.022	IS 5182 (Part - 2):2001 (RA 2022)	
4.	Oxides of Nitrogen (NO <sub>x</sub> )	mg /m <sup>3</sup>	0.052	IS 5182 (Part - 6):2006 (RA 2022)	
5.	Ambient Temperature (Average)	°C	38.0	Hygrometer	

Limit: (mg / m<sup>3</sup>) : SPM - 10, RPM - 5, SO<sub>2</sub> - 5, NO<sub>2</sub> - 6  
Ref : Factories (Amendment) Act 1987, Sec. 45 (2<sup>nd</sup> Schedule)

For, INDICATIVE CONSULTANT INDIA

Prepared By: P. Das

Checked By: N. Pramanik

Parbati Golui  
(Quality Manager)  
Signatory Authority

Parbati Golui  
Quality Manager  
INDICATIVE CONSULTANT INDIA

Test Witnessed By: Nil (Sampling was done in front of customer representatives)  
Estimated Uncertainty: Not Required

- Note:
- Information provided by customer
  - Sample is drawn by M/s. Indicative Consultant India
  - Sample submitted and identified by customer as: NA
  - Test results shown in this test report relate only to the sample (s) only.
  - The test results referred in test report are based on observations & measurements under the stated environmental conditions.
  - The reproduction of the report except in full is invalid without written approval of the laboratory.
  - Once issued, the test report/certificate is in public domain and laboratory is not responsible for the authenticity of photocopied test report
  - Retention period of tested samples (Filter Paper) is 180 Days from the date of issue of test report unless otherwise specified.
  - Location of Testing: Haldia Laboratory

End of Report

Page 1 of 1

Reviewed By: QM/TM



# INDICATIVE CONSULTANT INDIA

(GOVT. REGISTERED TEST HOUSE)



EMAIL : indicativeconsultantindia@gmail.com / indicativeconsultantindia.kol@gmail.com

## TEST REPORT

Date: 23.07.2024	Report No: ICI/HLA/RN-465/2024	Format No: ICI/PM/H/61
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/AC-465
Address	Dhasna, Behadurpur, Jamuria, Dist - Paschim Bardhaman, PIN -713 362	Sampling Date : 06.07.2024
#Customer Representative Name & Contact Number	Se. Executive	Analysis Start Date : 16.07.2024
#Work Order No.	3000019828, Dtd: 01.04.2024	Analysis complete Date : 17.07.2024
#Sample Description	FUGITIVE AIR	
#Location	CHP AREA (CPP)	
Sample Condition	In Glass Microfibre Filter Paper & Plastic Bottle	
Sampling Method	CPCB, Emission Regulation (Part III)	
Material/ Test Specification	Factories (Amendment) Act 1987, Sec. 45 (2 <sup>nd</sup> Schedule)	

Sl. No.	Parameters	Unit	SAMPLING TIME		Test Method
			09:30 AM to 05:30 PM	RESULT	
1.	Suspended Particulate Matter (SPM)	mg /m <sup>3</sup>	1.921	IS 5182 (Part - 4):1999 (RA 2019)	
2.	Respirable Particulate Matter (RPM/PM <sub>10</sub> )	mg /m <sup>3</sup>	0.877	IS 5182 (Part - 23):2006 (RA 2022)	
3.	Sulphur Dioxide (SO <sub>2</sub> )	mg /m <sup>3</sup>	0.021	IS 5182 (Part - 2):2001 (RA 2022)	
4.	Oxides of Nitrogen (NO <sub>x</sub> )	mg /m <sup>3</sup>	0.046	IS 5182 (Part - 6):2006 (RA 2022)	
5.	Ambient Temperature (Average)	°C	35.0	Hygrometer	
Limit: (mg / m <sup>3</sup> ) : SPM - 10, RPM - 5, SO <sub>2</sub> - 5, NO <sub>2</sub> - 6					
Ref : Factories (Amendment) Act 1987, Sec. 45 (2nd Schedule)					

For, INDICATIVE CONSULTANT INDIA

Prepared By: P. Das

Checked By: N. Pramanik

Parbati Gohul  
(Quality Manager)  
Signatory Authority

Parbati Gohul  
Quality Manager  
INDICATIVE CONSULTANT INDIA

Test Witnessed By: Nil (Sampling was done in front of customer representatives)

Estimated Uncertainty: Not Required

- Note:
- \* Information provided by customer
  - Sample is drawn by M/s. Indicative Consultant India
  - Sample submitted and identified by customer as: NA
  - Test results shown in this test report relate only to the sample (s) only.
  - The test results referred in test report are based on observations & measurements under the stated environmental conditions.
  - The reproduction of the report except in full is invalid without written approval of the laboratory.
  - Once issued, the test report/certificate is in public domain and laboratory is not responsible for the authenticity of photocopied test report
  - Retention period of tested samples (Filter Paper) is 180 Days from the date of issue of test report unless otherwise specified.
  - Location of Testing: Haldia Laboratory

End of Report

Page 1 of 1

Reviewed By: QM/TM



# INDICATIVE CONSULTANT INDIA

(GOVT. REGISTERED TEST HOUSE)



EMAIL : indicativeconsultantindia@gmail.com / indicativeconsultantindia.kol@gmail.com

## TEST REPORT

Date: 23.07.2024	Report No: ICI/HL/A/RN-466/2024	Format No: ICI/PM/H/61
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/AC-466
Address	Dhason, Bahadurpur, Jamuria, Dist. - Paschim Bardhaman, PIN -713 362	Sampling Date : 06.07.2024
#Customer Representative Name & Contact Number	Sr. Executive	Analysis Start Date : 16.07.2024 Analysis complete Date : 17.07.2024
#Work Order No.	3000019828, Dtd. 01.04.2024	
#Sample Description	FUGITIVE AIR	
#Location	RAW MATERIAL AREA OF PGP (PELLET PLANT)	
Sample Condition	In Glass Microfibre Filter Paper & Plastic Bottle	
Sampling Method	CPCB, Emission Regulation (Part III)	
Material/ Test Specification	Factories (Amendment) Act 1987, Sec. 45 (2 <sup>nd</sup> Schedule)	

Sl. No.	Parameters	Unit	SAMPLING TIME	Test Method
			09:00 AM to 05:00 PM	
			RESULT	
1	Suspended Particulate Matter (SPM)	mg /m <sup>3</sup>	1.792	IS 5182 (Part - 4):1999 (RA 2019)
2	Respirable Particulate Matter (RPM/PM <sub>10</sub> )	mg /m <sup>3</sup>	0.941	IS 5182 (Part - 23):2006 (RA 2022)
3	Sulphur Dioxide (SO <sub>2</sub> )	mg /m <sup>3</sup>	0.019	IS 5182 (Part - 2):2001 (RA 2022)
4	Oxides of Nitrogen (NO <sub>2</sub> )	mg /m <sup>3</sup>	0.047	IS 5182 (Part - 6):2006 (RA 2022)
5	Ambient Temperature (Average)	°C	36.0	Hygrometer
<i>Limit: (mg / m<sup>3</sup>) : SPM - 10, RPM - 5, SO<sub>2</sub> - 5, NO<sub>2</sub> - 6</i>				
<i>Ref : Factories (Amendment) Act 1987, Sec. 45 (2nd Schedule)</i>				

For, INDICATIVE CONSULTANT INDIA

Prepared By: P. Das

Checked by: N. Pramanik

Parbati Golu  
(Quality Manager)  
Signatory Authority

Parbati Golu  
Quality Manager  
INDICATIVE CONSULTANT INDIA

Test Witnessed By: Nil (Sampling was done in front of customer representatives)  
Estimated Uncertainty: Not Required

- Note:
- Information provided by customer
  - Sample is drawn by M/s. Indicative Consultant India.
  - Sample submitted and identified by customer as: NA
  - Test results shown in this test report relate only to the sample (s) only.
  - The test results referred in test report are based on observations & measurements under the stated environmental conditions.
  - The reproduction of the report except in full is invalid without written approval of the laboratory.
  - Once issued, the test report/certificate is in public domain and laboratory is not responsible for the authenticity of photocopied test report
  - Retention period of tested samples (Filter Paper) is 180 Days from the date of issue of test report unless otherwise specified.
  - Location of Testing: Haldia Laboratory

End of Report

Page 1 of 1

Reviewed By: QM/TM



# INDICATIVE CONSULTANT INDIA

(GOVT. REGISTERED TEST HOUSE)



EMAIL : indicativeconsultantindia@gmail.com / indicativeconsultantindia.kol@gmail.com

## TEST REPORT

Date: 23.07.2024	Report No: ICI/HL/A/RN-467/2024	Format No: ICI/FM/H/61
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/AC-467
Address	Dhasna, Bahadurpur, Jamuria, Dist - Paschim Bardhaman, PIN -713 362	Sampling Date : 06.07.2024
#Customer Representative Name & Contact Number	Sr. Executive	Analysis Start Date : 16.07.2024
#Work Order No.	3000019828, Dtd. 01.04.2024	Analysis complete Date : 17.07.2024
#Sample Description	FUGITIVE AIR	
#Location	INBETWEEN PELLET - 1 & 2 (PELLET PLANT)	
Sample Condition	In Glass Microfiber Filter Paper & Plastic Bottle	
Sampling Method	CPCB, Emission Regulation (Part III)	
Material/ Test Specification	Factories (Amendment) Act 1987, Sec. 45 (2 <sup>nd</sup> Schedule)	

Sl. No.	Parameters	Unit	SAMPLING TIME		Test Method
			08:30 AM to 04:30 PM	RESULT	
1	Suspended Particulate Matter (SPM)	mg /m <sup>3</sup>	1.847	IS 5182 (Part - 4):1999 (RA 2019)	
2	Respirable Particulate Matter (RPM/PM <sub>10</sub> )	mg /m <sup>3</sup>	0.785	IS 5182 (Part - 23):2006 (RA 2022)	
3	Sulphur Dioxide (SO <sub>2</sub> )	mg /m <sup>3</sup>	0.020	IS 5182 (Part - 2):2001 (RA 2022)	
4	Oxides of Nitrogen (NO <sub>x</sub> )	mg /m <sup>3</sup>	0.045	IS 5182 (Part - 6):2006 (RA 2022)	
5	Ambient Temperature (Average)	°C	36.0	Hygrometer	

Limit: (mg / m<sup>3</sup>) : SPM - 10, RPM - 5, SO<sub>2</sub> - 5, NO<sub>2</sub> - 6  
Ref : Factories (Amendment) Act 1987, Sec. 45 (2nd Schedule)

For, INDICATIVE CONSULTANT INDIA

Prepared By: P. Das

Checked By: N. Pramanik

Parbati Gokul  
(Quality Manager)  
Signatory Authority

Parbati Gokul  
Quality Manager  
INDICATIVE CONSULTANT INDIA

Test Witnessed By: Nil (Sampling was done in front of customer representatives)  
Estimated Uncertainty: Not Required

- Note:
- Information provided by customer
  - Sample is drawn by M/s. Indicative Consultant India
  - Sample submitted and identified by customer as: NA
  - Test results shown in this test report relate only to the sample (s) only.
  - The test results referred in test report are based on observations & measurements under the stated environmental conditions.
  - The reproduction of the report except in full is invalid without written approval of the laboratory.
  - Once issued, the test reports/certificate is in public domain and laboratory is not responsible for the authenticity of photocopied test report.
  - Retention period of tested samples (Filter Paper) is 180 Days from the date of issue of test report unless otherwise specified.
  - Location of Testing: Haldia Laboratory

End of Report

Page 1 of 1

Reviewed By: QM/TM



# INDICATIVE CONSULTANT INDIA

(GOVT. REGISTERED TEST HOUSE)



EMAIL : indicativeconsultantindia@gmail.com / indicativeconsultantindia.kol@gmail.com

## TEST REPORT

Date: 23.07.2024	Report No: ICI/HL/A/RN-468/2024	Format No: ICI/FM/H/61
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/AC-468
Address	Dhasna, Bahadurpur, Jamuria, Dist - Paschim Bardhaman, PIN -713 362	Sampling Date : 06.07.2024
#Customer Representative Name & Contact Number	Sr. Executive	Analysis Start Date : 16.07.2024
#Work Order No.	3000019828, Dtd. 01.04.2024	Analysis complete Date : 17.07.2024
#Sample Description	FUGITIVE AIR	
#Location	FURNACE 9 MVA (FERRO ALLOYS)	
Sample Condition	In Glass Microfibre Filter Paper & Plastic Bottle	
Sampling Method	CPCB, Emission Regulation (Part III)	
Material/ Test Specification	Factories (Amendment) Act 1987, Sec. 45 (2 <sup>nd</sup> Schedule)	

Sl. No.	Parameters	Unit	SAMPLING TIME		Test Method
			08:00 AM to 04:00 PM	RESULT	
1	Suspended Particulate Matter (SPM)	mg /m <sup>3</sup>	1.634	ES 5182 (Part - 4):1999 (RA 2019)	
2	Respirable Particulate Matter (RPM/PM <sub>10</sub> )	mg /m <sup>3</sup>	0.756	ES 5182 (Part - 23):2006 (RA 2022)	
3	Sulphur Dioxide (SO <sub>2</sub> )	mg /m <sup>3</sup>	0.019	ES 5182 (Part - 2):2001 (RA 2022)	
4	Oxides of Nitrogen (NO <sub>2</sub> )	mg /m <sup>3</sup>	0.051	ES 5182 (Part - 6):2006 (RA 2022)	
5	Ambient Temperature (Average)	°C	39.0	Hygrometer	

Limit: (mg / m<sup>3</sup>) : SPM-10, RPM-5, SO<sub>2</sub>-5, NO<sub>2</sub>-6  
Ref : Factories (Amendment) Act 1987, Sec. 45 (2nd Schedule)

For, INDICATIVE CONSULTANT INDIA

Prepared By: P. Das

Checked By: N. Pramanik

Parbati Gollu  
(Quality Manager)  
Signatory Authority

Parbati Gollu  
Quality Manager  
INDICATIVE CONSULTANT INDIA

Test Witnessed By: Nil (Sampling was done in front of customer representatives)  
Estimated Uncertainty: Not Required

- Note:
- Information provided by customer
  - Sample is drawn by M/s. Indicative Consultant India
  - Sample submitted and identified by customer as: NA
  - Test results shown in this test report relate only to the sample (s) only.
  - The test results referred in test report are based on observations & measurements under the stated environmental conditions.
  - The reproduction of the report except in full is invalid without written approval of the laboratory.
  - Once issued, the test reports/certificate is in public domain and laboratory is not responsible for the authenticity of photocopied test report
  - Retention period of tested samples (Filter Paper) is 180 Days from the date of issue of test report unless otherwise specified.
  - Location of Testing: Haldia Laboratory

End of Report

Page 1 of 1

Reviewed By: QM/TM



# INDICATIVE CONSULTANT INDIA

(GOVT. REGISTERED TEST HOUSE)



EMAIL : indicativeconsultantindia@gmail.com / indicativeconsultantindia.kol@gmail.com

## TEST REPORT

Date: 23.07.2024	Report No: ICIHL/A/RN-469/2024	Format No: ICI/FM/H/61
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/AC-469
Address	Dhasna, Bahadurpur, Jamuna, Dist. - Paschim Bardhaman, PIN -713 362	Sampling Date : 05.07.2024
#Customer Representative Name & Contact Number	Sr. Executive	Analysis Start Date : 16.07.2024
#Work Order No.	3000019828, Dtd. 01.04.2024	Analysis complete Date : 17.07.2024
#Sample Description	FUGITIVE AIR	
#Location	FURNACE 4.5 MVA (FERRO ALLOYS)	
Sample Condition	In Glass Microfibre Filter Paper & Plastic Bottle	
Sampling Method	CPCB, Emission Regulation (Part III)	
Material/ Test Specification	Factories (Amendment) Act 1987, Sec. 45 (2 <sup>nd</sup> Schedule)	

Sl. No.	Parameters	Unit	SAMPLING TIME		Test Method
			09:30 AM to 05:30 PM	RESULT	
1	Suspended Particulate Matter (SPM)	mg /m <sup>3</sup>	1.638	IS 5182 (Part - 4):1999 (RA 2019)	
2	Respirable Particulate Matter (RPM/PM <sub>10</sub> )	mg /m <sup>3</sup>	0.802	IS 5182 (Part - 23):2006 (RA 2022)	
3	Sulphur Dioxide (SO <sub>2</sub> )	mg /m <sup>3</sup>	0.023	IS 5182 (Part - 2):2001 (RA 2022)	
4	Oxides of Nitrogen (NO <sub>x</sub> )	mg /m <sup>3</sup>	0.050	IS 5182 (Part - 6):2006 (RA 2022)	
5	Ambient Temperature (Average)	°C	39.0	Hygrometer	

Limit: (mg / m<sup>3</sup>) : SPM - 10, RPM - 5, SO<sub>2</sub> - 5, NO<sub>2</sub> - 6  
Ref : Factories (Amendment) Act 1987, Sec. 45 (2<sup>nd</sup> Schedule)

For, INDICATIVE CONSULTANT INDIA

Prepared By: P. Das

Checked By: N. Pramanik

Parbati Gokul  
(Quality Manager)  
Signatory Authority

Parbati Gokul  
Quality Manager  
INDICATIVE CONSULTANT INDIA

Test Witnessed By: Nil (Sampling was done in front of customer representatives)

Estimated Uncertainty: Not Required

- Note:
- Information provided by customer
  - Sample is drawn by M/s. Indicative Consultant India
  - Sample submitted and identified by customer as: NA
  - Test results shown in this test report relate only to the sample (s) only.
  - The test results referred in test report are based on observations & measurements under the stated environmental conditions.
  - The reproduction of the report except in full is invalid without written approval of the laboratory.
  - Once issued, the test report/certificate is in public domain and laboratory is not responsible for the authenticity of photocopied test report
  - Retention period of tested samples (Filter Paper) is 180 Days from the date of issue of test report unless otherwise specified.
  - Location of Testing: Haldia Laboratory

End of Report

Page 1 of 1

Reviewed By: QM/TM



## TEST REPORT

Date: 23.07.2024	Report No: ICI/HL/A/RN-470/2024	Format No: ICI/FM/II/61
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/AC-470
Address	Dhasna, Bahadurpur, Jamuria, Dist - Paschim Bardhaman, PIN -713 362	Sampling Date : 05.07.2024
#Customer Representative Name & Contact Number	Sr. Executive	Analysis Start Date : 16.07.2024
#Work Order No.	3000019828, Dtd. 01.04.2024	Analysis complete Date : 17.07.2024
#Sample Description	FUGITIVE AIR	
#Location	RAW MATERIAL CHARGING AREA (FERRO ALLOYS)	
Sample Condition	In Glass Microfibre Filter Paper & Plastic Bottle	
Sampling Method	CPCB, Emission Regulation (Part III)	
Material/ Test Specification	Factories (Amendment) Act 1987, Sec. 45 (2 <sup>nd</sup> Schedule)	

Sl. No.	Parameters	Unit	SAMPLING TIME		Test Method
			09:10 AM to 05:10 PM	RESULT	
1	Suspended Particulate Matter (SPM)	mg/m <sup>3</sup>	1.852	IS 5182 (Part - 4):1999 (RA 2019)	
2	Respirable Particulate Matter (RPM/PM <sub>10</sub> )	mg/m <sup>3</sup>	0.833	IS 5182 (Part - 23):2006 (RA 2022)	
3	Sulphur Dioxide (SO <sub>2</sub> )	mg/m <sup>3</sup>	0.020	IS 5182 (Part - 2):2001 (RA 2022)	
4	Oxides of Nitrogen (NO <sub>2</sub> )	mg/m <sup>3</sup>	0.043	IS 5182 (Part - 6):2006 (RA 2022)	
5	Ambient Temperature (Average)	°C	38.0	Hygrometer	
Limit: (mg / m <sup>3</sup> ) : SPM - 10, RPM - 5, SO <sub>2</sub> - 5, NO <sub>2</sub> - 6					
Ref : Factories (Amendment) Act 1987, Sec. 45 (2 <sup>nd</sup> Schedule)					

For, INDICATIVE CONSULTANT INDIA

Prepared By: P. Das

Checked By: N. Pramanik

Parbati Golu  
(Quality Manager)  
Signatory Authority

Parbati Golu  
Quality Manager  
INDICATIVE CONSULTANT INDIA

Test Witnessed By: Nil (Sampling was done in front of customer representatives)  
Estimated Uncertainty: Not Required

- Note:
- Information provided by customer
  - Sample is drawn by M/s. Indicative Consultant India.
  - Sample submitted and identified by customer as: NA
  - Test results shown in this test report relate only to the sample (s) only.
  - The test results referred in test report are based on observations & measurements under the stated environmental conditions.
  - The reproduction of the report except in full is invalid without written approval of the laboratory.
  - Once issued, the test report/certificate is in public domain and laboratory is not responsible for the authenticity of photocopied test report
  - Retention period of tested samples (Filter Paper) is 180 Days from the date of issue of test report unless otherwise specified.
  - Location of Testing: Haldia Laboratory

End of Report

Page 1 of 1

Reviewed By: QM/TL



# INDICATIVE CONSULTANT INDIA

(GOVT. REGISTERED TEST HOUSE)



EMAIL : [indicativeconsultantindia@gmail.com](mailto:indicativeconsultantindia@gmail.com) / [indicativeconsultantindia.kol@gmail.com](mailto:indicativeconsultantindia.kol@gmail.com)

## TEST REPORT

Date: 23.07.2024	Report No: ICL/HL/A/RN-471/2024	Format No: ICLFM/HL/61
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/AC-471
Address	Dhasna, Bahadarpur, Jamuria, Dist - Paschim Bardhaman, PIN -713 362	Sampling Date : 05.07.2024
#Customer Representative Name & Contact Number	Sr. Executive	Analysis Start Date : 16.07.2024
#Work Order No.	3000019828, Dtd 01.04.2024	Analysis complete Date : 17.07.2024
#Sample Description	FUGITIVE AIR	
#Location	CHP (DRI # III)	
Sample Condition	In Glass Microfibre Filter Paper & Plastic Bottle	
Sampling Method	CPCB, Emission Regulation (Part III)	
Material/ Test Specification	Factories (Amendment) Act 1987, Sec. 45 (2 <sup>nd</sup> Schedule)	

Sl. No.	Parameters	Unit	SAMPLING TIME		Test Method
			08:40 AM to 05:40 PM	RESULT	
1.	Suspended Particulate Matter (SPM)	mg/m <sup>3</sup>	1.986	IS 5182 (Part - 4) 1999 (RA 2019)	
2.	Respirable Particulate Matter (RPM/PM <sub>10</sub> )	mg/m <sup>3</sup>	1.062	IS 5182 (Part - 23) 2006 (RA 2022)	
3.	Sulphur Dioxide (SO <sub>2</sub> )	mg/m <sup>3</sup>	0.021	IS 5182 (Part - 2) 2001 (RA 2022)	
4.	Oxides of Nitrogen (NO <sub>2</sub> )	mg/m <sup>3</sup>	0.045	IS 5182 (Part - 6) 2006 (RA 2022)	
5.	Ambient Temperature (Average)	°C	36.0	Hygrometer	

Limits (mg/m<sup>3</sup>) : SPM - 10, RPM - 5, SO<sub>2</sub> - 5, NO<sub>2</sub> - 6  
Ref : Factories (Amendment) Act 1987, Sec. 45 (2<sup>nd</sup> Schedule)

For, INDICATIVE CONSULTANT INDIA

Prepared By: P. Das

Checked By: N. Pramanik

Parbati Golui  
(Quality Manager)  
Signatory Authority

Parbati Golui  
Quality Manager  
INDICATIVE CONSULTANT INDIA

Test Witnessed By: Nil (Sampling was done in front of customer representatives)

Estimated Uncertainty: Not Required

- Note:
- Information provided by customer
  - Sample is drawn by M/s. Indicative Consultant India
  - Sample submitted and identified by customer as: NA
  - Test results shown in this test report relate only to the sample (s) only.
  - The test results referred in test report are based on observations & measurements under the stated environmental conditions.
  - The reproduction of the report except in full is invalid without written approval of the laboratory.
  - Once issued, the test report/certificate is in public domain and laboratory is not responsible for the authenticity of photocopied test report
  - Retention period of tested samples (Filter Paper) is 180 Days from the date of issue of test report unless otherwise specified.
  - Location of Testing: Haldia Laboratory

End of Report

Page 1 of 1

Reviewed by: QM/TM



# INDICATIVE CONSULTANT INDIA

(GOVT. REGISTERED TEST HOUSE)



EMAIL : indicativeconsultantindia@gmail.com / indicativeconsultantindia.kol@gmail.com

## TEST REPORT

Date: 23.07.2024	Report No: ICI/HL/A/RN-472/2024	Format No: ICI/FM/II/61
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/AC-472
Address	Dhama, Bahadurpur, Jamuria, Dist. - Paschim Bardhaman, PIN -713 362	Sampling Date : 04.07.2024
#Customer Representative Name & Contact Number	Sr. Executive	Analysis Start Date : 16.07.2024
#Work Order No.	3000019828, Dtd. 01.04.2024	Analysis complete Date : 17.07.2024
#Sample Description	FUGITIVE AIR	
#Location	PRODUCT SEPARATION HOUSE AREA (DRI # III)	
Sample Condition	In Glass Microfibre Filter Paper & Plastic Bottle	
Sampling Method	CPCB, Emission Regulation (Part III)	
Material/ Test Specification	Factories (Amendment) Act 1987, Sec. 45 (2 <sup>nd</sup> Schedule)	

Sl. No.	Parameters	Unit	SAMPLING TIME		Test Method
			08:10 AM to 04:10 PM	RESULT	
1	Suspended Particulate Matter (SPM)	mg./m <sup>3</sup>	1.967	IS 5182 (Part - 4) 1999 (RA 2019)	
2	Respirable Particulate Matter (RPM/PM <sub>10</sub> )	mg./m <sup>3</sup>	0.992	IS 5182 (Part - 23) 2006 (RA 2022)	
3	Sulphur Dioxide (SO <sub>2</sub> )	mg./m <sup>3</sup>	0.022	IS 5182 (Part - 2) 2001 (RA 2022)	
4	Oxides of Nitrogen (NO <sub>x</sub> )	mg./m <sup>3</sup>	0.044	IS 5182 (Part - 6) 2006 (RA 2022)	
5	Ambient Temperature (Average)	°C	36.0	Hygrometer	

Limit: (mg / m<sup>3</sup>) : SPM - 10, RPM - 5, SO<sub>2</sub> - 5, NO<sub>2</sub> - 6  
Ref : Factories (Amendment) Act 1987, Sec. 45 (2nd Schedule)

For, INDICATIVE CONSULTANT INDIA

Prepared By: P. Das

Checked By: N. Pramanik

Parbati Golu  
(Quality Manager)  
Signatory Authority

Parbati Golu  
Quality Manager  
INDICATIVE CONSULTANT INDIA

Test Witnessed By: Nil (Sampling was done in front of customer representatives)  
Estimated Uncertainty: Not Required

- Note:
- Information provided by customer
  - Sample is drawn by M/s. Indicative Consultant India.
  - Sample submitted and identified by customer as: NA
  - Test results shown in this test report relate only to the sample (s) only.
  - The test results referred in test report are based on observations & measurements under the stated environmental conditions.
  - The reproduction of the report except in full is invalid without written approval of the laboratory.
  - Once issued, the test report/certificate is in public domain and laboratory is not responsible for the authenticity of photocopied test report
  - Retention period of tested samples (Filter Paper) is 180 Days from the date of issue of test report unless otherwise specified.
  - Location of Testing: Haldia Laboratory

End of Report

Page 1 of 1

Reviewed By: QM/TM



## TEST REPORT

Date: 23.07.2024	Report No: ICI/HL/A/RN-473/2024	Format No: ICI/FM/H/61
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/AC-473
Address	Dhasna, Bahadurpur, Jamuria, Dist - Paschim Bardhaman, PIN -713 362	Sampling Date : 04.07.2024
#Customer Representative Name & Contact Number	Sr. Executive	Analysis Start Date : 16.07.2024 Analysis complete Date : 17.07.2024
#Work Order No.	3000019828, Dtd 01.04.2024	
#Sample Description	FUGITIVE AIR	
#Location	COOLER DISCHARGE AREA (DRI # III)	
Sample Condition	In Glass Microfibre Filter Paper & Plastic Bottle	
Sampling Method	CPCB, Emission Regulation (Part III)	
Material/ Test Specification	Factories (Amendment) Act 1987, Sec. 45 (2 <sup>nd</sup> Schedule)	

Sl. No.	Parameters	Unit	SAMPLING TIME	Test Method
			09:30 AM to 05:30 PM	
			RESULT	
1	Suspended Particulate Matter (SPM)	mg/m <sup>3</sup>	1.906	IS 5182 (Part - 4):1999 (RA 2019)
2	Respirable Particulate Matter (RPM/PM <sub>10</sub> )	mg/m <sup>3</sup>	0.822	IS 5182 (Part - 23):2006 (RA 2022)
3	Sulphur Dioxide (SO <sub>2</sub> )	mg/m <sup>3</sup>	0.020	IS 5182 (Part - 2):2001 (RA 2022)
4	Oxides of Nitrogen (NO <sub>2</sub> )	mg/m <sup>3</sup>	0.045	IS 5182 (Part - 6):2006 (RA 2022)
5	Ambient Temperature (Average)	°C	36.0	Hygrometer
Limit: (mg / m <sup>3</sup> ) : SPM - 10, RPM - 5, SO <sub>2</sub> - 5, NO <sub>2</sub> - 6				
Ref : Factories (Amendment) Act 1987, Sec. 45 (2 <sup>nd</sup> Schedule)				

For, INDICATIVE CONSULTANT INDIA

Prepared By: P. Das

Checked By: N. Pramanik

Parbati Golui  
(Quality Manager)  
Signatory Authority

Parbati Golui  
Quality Manager  
INDICATIVE CONSULTANT INDIA

Test Witnessed By: Nil (Sampling was done in front of customer representatives)  
Estimated Uncertainty: Not Required

- Note:
- Information provided by customer
  - Sample is drawn by M/s. Indicative Consultant India.
  - Sample submitted and identified by customer as: NA
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  - The test results referred in test report are based on observations & measurements under the stated environmental conditions.
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  - Retention period of tested samples (Filter Paper) is 180 Days from the date of issue of test report unless otherwise specified.
  - Location of Testing: Haldia Laboratory

End of Report

Page 1 of 1

Reviewed By: QM/TM



# INDICATIVE CONSULTANT INDIA

(GOVT. REGISTERED TEST HOUSE)



EMAIL : indicativeconsultantindia@gmail.com / indicativeconsultantindia.kol@gmail.com

## TEST REPORT

Date: 23.07.2024	Report No: ICI/HL/A/RN-474/2024	Format No: ICI/PM/HL/61
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/AC-474
Address	Dhasna, Bahadurpur, Jamuria, Dist - Paschim Bardhaman, PIN -713 362	Sampling Date : 04.07.2024
#Customer Representative Name & Contact Number	Sr. Executive	Analysis Start Date : 16.07.2024
#Work Order No.	3000019828, Dtd. 01.04.2024	Analysis complete Date : 17.07.2024
#Sample Description	FUGITIVE AIR	
#Location	INBETWEEN KILN - 9 & 10 (DRI # III)	
Sample Condition	In Glass Microfibre Filter Paper & Plastic Bottle	
Sampling Method	CPCB, Emission Regulation (Part III)	
Material/ Test Specification	Factories (Amendment) Act 1987, Sec. 45 (2 <sup>nd</sup> Schedule)	

Sl. No.	Parameters	Unit	SAMPLING TIME		Test Method
			09:00 AM to 05:00 PM	RESULT	
1.	Suspended Particulate Matter (SPM)	mg /m <sup>3</sup>	1,869	IS 5182 (Part - 4):1999 (RA 2019)	
2.	Respirable Particulate Matter (RPM/PM <sub>10</sub> )	mg /m <sup>3</sup>	0,811	IS 5182 (Part - 23):2006 (RA 2022)	
3.	Sulphur Dioxide (SO <sub>2</sub> )	mg /m <sup>3</sup>	0,021	IS 5182 (Part - 2):2001 (RA 2022)	
4.	Oxides of Nitrogen (NO <sub>2</sub> )	mg /m <sup>3</sup>	0,046	IS 5182 (Part - 6):2006 (RA 2022)	
5.	Ambient Temperature (Average)	°C	37.0	Hygrometer	

Limit: (mg / m<sup>3</sup>) : SPM - 10, RPM - 5, SO<sub>2</sub> - 5, NO<sub>2</sub> - 6  
Ref : Factories (Amendment) Act 1987, Sec. 45 (2<sup>nd</sup> Schedule)

For, INDICATIVE CONSULTANT INDIA

Prepared By: P. Das

Checked By: N. Pramanik

Parbati Gokul  
(Quality Manager)  
Signatory Authority

Parbati Gokul  
Quality Manager  
INDICATIVE CONSULTANT INDIA

Test Witnessed By: Nil (Sampling was done in front of customer representatives)  
Estimated Uncertainty: Not Required

- Note:
- Information provided by customer
  - Sample is drawn by M/s. Indicative Consultant India.
  - Sample submitted and identified by customer as: NA
  - Test results shown in this test report relate only to the sample (s) only.
  - The test results referred in test report are based on observations & measurements under the stated environmental conditions.
  - The reproduction of the report except in full is invalid without written approval of the laboratory.
  - Once issued, the test report/certificate is in public domain and laboratory is not responsible for the authenticity of photocopied test report
  - Retention period of tested samples (Filter Paper) is 180 Days from the date of issue of test report unless otherwise specified.
  - Location of Testing: Haldia Laboratory

End of Report

Page 1 of 1

Reviewed By: QM/TM



# INDICATIVE CONSULTANT INDIA

(GOVT. REGISTERED TEST HOUSE)



EMAIL : indicativeconsultantindia@gmail.com / indicativeconsultantindia.kol@gmail.com

## TEST REPORT

Date: 23.07.2024	Report No: ICI/HL/A/RN-475/2024	Format No: ICI/CM/H/61
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/AC-475
Address	Dhasna, Bahadurpur, Jamaria, Dist - Paschim Bardhaman, PIN -713 362	Sampling Date : 03.07.2024
#Customer Representative Name & Contact Number	Sr. Executive	Analysis Start Date : 16.07.2024 Analysis complete Date : 17.07.2024
#Work Order No.	3000019828, Dtd. 01.04.2024	
#Sample Description	FUGITIVE AIR	
#Location	INBETWEEN KILN - 7 & 8 (DRI # III)	
Sample Condition	In Glass Microfibre Filter Paper & Plastic Bottle	
Sampling Method	CPCB, Emission Regulation (Part III)	
Material/ Test Specification	Factories (Amendment) Act 1987, Sec. 45 (2 <sup>nd</sup> Schedule)	

Sl. No.	Parameters	Unit	SAMPLING TIME	Test Method
			08:30 AM to 04:30 PM	
			RESULT	
1	Suspended Particulate Matter (SPM)	mg/m <sup>3</sup>	1.961	IS 5182 (Part - 4):1999 (RA 2019)
2	Respirable Particulate Matter (RPM/PM <sub>10</sub> )	mg/m <sup>3</sup>	0.935	IS 5182 (Part - 23):2006 (RA 2022)
3	Sulphur Dioxide (SO <sub>2</sub> )	mg/m <sup>3</sup>	0.021	IS 5182 (Part - 2):2001 (RA 2022)
4	Oxides of Nitrogen (NO <sub>x</sub> )	mg/m <sup>3</sup>	0.049	IS 5182 (Part - 6):2006 (RA 2022)
5	Ambient Temperature (Average)	°C	38.0	Hygrometer
Limit: (mg / m <sup>3</sup> ) : SPM - 10, RPM - 5, SO <sub>2</sub> - 5, NO <sub>2</sub> - 6				
Ref : Factories (Amendment) Act 1987, Sec. 45 (2 <sup>nd</sup> Schedule)				

For, INDICATIVE CONSULTANT INDIA

Prepared By: P. Das

Checked By: N. Pramanik

Parbati Golui  
(Quality Manager)  
Signatory Authority

Parbati Golui  
Quality Manager  
INDICATIVE CONSULTANT INDIA

Test Witnessed By: Nil (Sampling was done in front of customer representatives)  
Estimated Uncertainty: Not Required

- Note:
- Information provided by customer
  - Sample is drawn by M/s. Indicative Consultant India
  - Sample submitted and identified by customer as: NA
  - Test results shown in this test report relate only to the sample (s) only.
  - The test results referred in test report are based on observations & measurements under the stated environmental conditions.
  - The reproduction of the report except in full is invalid without written approval of the laboratory.
  - Once issued, the test report/certificate is in public domain and laboratory is not responsible for the authenticity of photocopied test report
  - Retention period of tested samples (Filter Paper) is 180 Days from the date of issue of test report unless otherwise specified.
  - Location of Testing: Haldia Laboratory

End of Report

Page 1 of 1

Reviewed By: QM/TM



# INDICATIVE CONSULTANT INDIA

(GOVT. REGISTERED TEST HOUSE)



EMAIL : indicativeconsultantindia@gmail.com / indicativeconsultantindia.kol@gmail.com

## TEST REPORT

Date: 23.07.2024	Report No: ICI/HL/A/RN-476/2024	Format No: ICI/CM/HL/61
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/AC-476
Address	Dhasna, Bahadarpur, Jamuria, Dist - Paschim Bardhaman, PIN -713 362	Sampling Date : 03.07.2024
#Customer Representative Name & Contact Number	Sr. Executive	Analysis Start Date : 16.07.2024
#Work Order No.	3000019828, Dtd 01.04.2024	Analysis complete Date : 17.07.2024
#Sample Description	FUGITIVE AIR	
#Location	INBETWEEN KILN - 5 & 6 (DRI # II)	
Sample Condition	In Glass Microfibre Filter Paper & Plastic Bottle	
Sampling Method	CPCB, Emission Regulation (Part III)	
Material/ Test Specification	Factories (Amendment) Act 1987, Sec. 45 (2 <sup>nd</sup> Schedule)	

Sl. No.	Parameters	Unit	SAMPLING TIME		Test Method
			08:00 AM to 04:00 PM	RESULT	
1	Suspended Particulate Matter (SPM)	mg /m <sup>3</sup>	1.974	IS 5182 (Part - 4):1999 (RA 2019)	
2	Respirable Particulate Matter (RPM/PM <sub>10</sub> )	mg /m <sup>3</sup>	0.989	IS 5182 (Part - 23):2006 (RA 2022)	
3	Sulphur Dioxide (SO <sub>2</sub> )	mg /m <sup>3</sup>	0.023	IS 5182 (Part - 2):2001 (RA 2022)	
4	Oxides of Nitrogen (NO <sub>2</sub> )	mg /m <sup>3</sup>	0.046	IS 5182 (Part - 6):2006 (RA 2022)	
5	Ambient Temperature (Average)	°C	38.0	Hygrometer	

Limit: (mg / m<sup>3</sup>) : SPM - 10, RPM - 5, SO<sub>2</sub> - 5, NO<sub>2</sub> - 6  
Ref : Factories (Amendment) Act 1987, Sec. 45 (2<sup>nd</sup> Schedule)

For, INDICATIVE CONSULTANT INDIA

Prepared By: P. Das

Checked By: N. Pramanik

Parbati Gollu  
(Quality Manager)  
Signatory Authority

Parbati Gollu  
Quality Manager  
INDICATIVE CONSULTANT INDIA

Test Witnessed By: Nil (Sampling was done in front of customer representatives)

Estimated Uncertainty: Not Required

- Note:
1. Information provided by customer
  2. Sample is drawn by M/s. Indicative Consultant India.
  3. Sample submitted and identified by customer as: NA
  4. Test results shown in this test report relate only to the sample (s) only.
  5. The test results referred in test report are based on observations & measurements under the stated environmental conditions.
  6. The reproduction of the report except in full is invalid without written approval of the laboratory.
  7. Once issued, the test report/certificate is in public domain and laboratory is not responsible for the authenticity of photocopied test report.
  8. Retention period of tested samples (Filter Paper) is 180 Days from the date of issue of test report unless otherwise specified.
  9. Location of Testing: Haldia Laboratory

End of Report

Page 1 of 1

Reviewed By: QM/TM



# INDICATIVE CONSULTANT INDIA

(GOVT. REGISTERED TEST HOUSE)



EMAIL : indicativeconsultantindia@gmail.com / indicativeconsultantindia.kol@gmail.com

## TEST REPORT

Date: 23.07.2024	Report No: ICI/HL/A/RN-477/2024	Format No: ICI/FM/H/61
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/AC-477
Address	Dhansa, Bahadurpur, Jamuria, Dist. - Paschim Bardhaman, PIN -713 362	Sampling Date : 03.07.2024
#Customer Representative Name & Contact Number	Sr. Executive	Analysis Start Date : 16.07.2024 Analysis complete Date : 17.07.2024
#Work Order No.	3000019828, Dtd. 01.04.2024	
#Sample Description	FUGITIVE AIR	
#Location	PRODUCT SEPARATION HOUSE AREA (DRI # 1)	
Sample Condition	In Glass Microfibre Filter Paper & Plastic Bottle	
Sampling Method	CPCB, Emission Regulation (Part III)	
Material/ Test Specification	Factories (Amendment) Act 1987, Sec. 45 (2 <sup>nd</sup> Schedule)	

Sl. No.	Parameters	Unit	SAMPLING TIME	Test Method
			10:00 AM to 06:00 PM	
			RESULT	
1	Suspended Particulate Matter (SPM)	mg /m <sup>3</sup>	1.951	IS 5182 (Part - 4):1999 (RA 2019)
2	Respirable Particulate Matter (RPM/PM <sub>10</sub> )	mg /m <sup>3</sup>	0.927	IS 5182 (Part - 23):2006 (RA 2022)
3	Sulphur Dioxide (SO <sub>2</sub> )	mg /m <sup>3</sup>	0.022	IS 5182 (Part - 2):2001 (RA 2022)
4	Oxides of Nitrogen (NO <sub>2</sub> )	mg /m <sup>3</sup>	0.048	IS 5182 (Part - 6):2006 (RA 2022)
5	Ambient Temperature (Average)	°C	35.0	Hygrometer
Limit: (mg / m <sup>3</sup> ) : SPM - 10, RPM - 5, SO <sub>2</sub> - 5, NO <sub>2</sub> - 6				
Ref : Factories (Amendment) Act 1987, Sec. 45 (2nd Schedule)				

For, INDICATIVE CONSULTANT INDIA

Prepared By: P. Das

Checked By: N. Pramanik

Parbati Golui  
(Quality Manager)  
Signatory Authority

Parbati Golui  
Quality Manager  
INDICATIVE CONSULTANT INDIA

Test Witnessed By: Nil (Sampling was done in front of customer representatives)  
Estimated Uncertainty: Not Required

- Note:
- Information provided by customer
  - Sample is drawn by M/s. Indicative Consultant India.
  - Sample submitted and identified by customer as: NA
  - Test results shown in this test report relate only to the sample (s) only.
  - The test results referred in test report are based on observations & measurements under the stated environmental conditions.
  - The reproduction of the report except in full is invalid without written approval of the laboratory.
  - Once issued, the test report/certificate is in public domain and laboratory is not responsible for the authenticity of photocopied test report.
  - Retention period of tested samples (Filter Paper) is 180 Days from the date of issue of test report unless otherwise specified.
  - Location of Testing: Haldia Laboratory

End of Report

Page 1 of 1

Reviewed By: QM/ITM



# INDICATIVE CONSULTANT INDIA



(GOVT. REGISTERED TEST HOUSE)



EMAIL : indicativeconsultantindia@gmail.com / indicativeconsultantindia.kol@gmail.com

## TEST REPORT

Date: 23.07.2024	Report No: ICI/HLA/RN-478/2024	Format No: ICI/FM/HL/61
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/AC-478
Address	Dhasna, Bahadurpur, Jamuria, Dist - Paschim Bardhaman, PIN -713 362	Sampling Date : 02.07.2024
#Customer Representative Name & Contact Number	Sr. Executive	Analysis Start Date : 16.07.2024 Analysis complete Date : 17.07.2024
#Work Order No.	3000019828, Dtd. 01.04.2024	
#Sample Description	FUGITIVE AIR	
#Location	COOLER DISCHARGE AREA & TRH (DRI # 1)	
Sample Condition	In Glass Microfibre Filter Paper & Plastic Bottle	
Sampling Method	CPCB, Emission Regulation (Part III)	
Material/ Test Specification	Factories (Amendment) Act 1987, Sec. 45 (2 <sup>nd</sup> Schedule)	

Sl. No.	Parameters	Unit	SAMPLING TIME		Test Method
			09:30 AM to 05:30 PM	RESULT	
1	Suspended Particulate Matter (SPM)	mg /m <sup>3</sup>	1.741	IS 5182 (Part - 4):1999 (RA 2019)	
2	Respirable Particulate Matter (RPM/PM <sub>10</sub> )	mg /m <sup>3</sup>	0.788	IS 5182 (Part - 23):2006 (RA 2022)	
3	Sulphur Dioxide (SO <sub>2</sub> )	mg /m <sup>3</sup>	0.020	IS 5182 (Part - 2):2001 (RA 2022)	
4	Oxides of Nitrogen (NO <sub>2</sub> )	mg /m <sup>3</sup>	0.043	IS 5182 (Part - 6):2006 (RA 2022)	
5	Ambient Temperature (Average)	°C	36.0	Hygrometer	

Limit: (mg / m<sup>3</sup>) : SPM - 10, RPM - 5, SO<sub>2</sub> - 5, NO<sub>2</sub> - 6  
Ref : Factories (Amendment) Act 1987, Sec. 45 (2<sup>nd</sup> Schedule)

For, INDICATIVE CONSULTANT INDIA

Prepared By: P. Das

Checked By: N. Pramanik

Parbati Gouli  
(Quality Manager)  
Signatory Authority

Parbati Gouli  
Quality Manager  
INDICATIVE CONSULTANT INDIA

Test Witnessed By: Nil (Sampling was done in front of customer representatives)  
Estimated Uncertainty: Not Required

- Note:
- Information provided by customer
  - Sample is drawn by M/s. Indicative Consultant India.
  - Sample submitted and identified by customer as: NA
  - Test results shown in this test report relate only to the sample (s) only.
  - The test results referred in test report are based on observations & measurements under the stated environmental conditions.
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  - Retention period of tested samples (Filter Paper) is 180 Days from the date of issue of test report unless otherwise specified.
  - Location of Testing: Haldia Laboratory

End of Report

Reviewed By: QM/TM

Towards Sustainable Growth



# INDICATIVE CONSULTANT INDIA



(GOVT. REGISTERED TEST HOUSE)



EMAIL : indicativeconsultantindia@gmail.com / indicativeconsultantindia.kol@gmail.com

## TEST REPORT

Date: 23.07.2024	Report No: ICI/HLA/RN-479/2024	Format No: ICI/PM/HL/61
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/AC-479
Address	Dhasna, Bahadurpur, Jamuria, Dist - Paschim Bardhaman, PIN - 713 362	Sampling Date : 02.07.2024
#Customer Representative Name & Contact Number	Sr. Executive	Analysis Start Date : 16.07.2024 Analysis complete Date : 17.07.2024
#Work Order No.	3000019828, Dtd. 01.04.2024	
#Sample Description	FUGITIVE AIR	
#Location	INBETWEEN KILN - 1, 2, 3 & 4 (DRI # 1)	
Sample Condition	In Glass Microfibre Filter Paper & Plastic Bottle	
Sampling Method	CPCB, Emission Regulation (Part III)	
Material/ Test Specification	Factories (Amendment) Act 1987, Sec. 45 (2 <sup>nd</sup> Schedule)	

Sl. No.	Parameters	Unit	SAMPLING TIME	Test Method
			09:00 AM to 05:00 PM RESULT	
1.	Suspended Particulate Matter (SPM)	mg/m <sup>3</sup>	1.896	IS 5182 (Part - 4):1999 (RA 2019)
2.	Respirable Particulate Matter (RPM/PM <sub>10</sub> )	mg/m <sup>3</sup>	0.902	IS 5182 (Part - 23):2006 (RA 2022)
3.	Sulphur Dioxide (SO <sub>2</sub> )	mg/m <sup>3</sup>	0.022	IS 5182 (Part - 2):2001 (RA 2022)
4.	Oxides of Nitrogen (NO <sub>2</sub> )	mg/m <sup>3</sup>	0.046	IS 5182 (Part - 6):2006 (RA 2022)
5.	Ambient Temperature (Average)	°C	38.0	Hygrometer

Limit: (mg/m<sup>3</sup>) : SPM - 10, RPM - 5, SO<sub>2</sub>-5, NO<sub>2</sub> - 6  
Ref : Factories (Amendment) Act 1987, Sec. 45 (2<sup>nd</sup> Schedule)

For, INDICATIVE CONSULTANT INDIA

Prepared By: P. Das

Checked By: N. Pramanik

Parbati Gouli  
(Quality Manager)  
Signatory Authority

Parbati Gouli  
Quality Manager  
INDICATIVE CONSULTANT INDIA

Test Witnessed By: Nil (Sampling was done in front of customer representatives)  
Estimated Uncertainty: Not Required

- Note:
- Information provided by customer
  - Sample is drawn by M/s. Indicative Consultant India
  - Sample submitted and identified by customer as: NA
  - Test results shown in this test report relate only to the sample (s) only.
  - The test results referred in test report are based on observations & measurements under the stated environmental conditions.
  - The reproduction of the report except in full is invalid without written approval of the laboratory.
  - Once issued, the test report/certificate is in public domain and laboratory is not responsible for the authenticity of photocopied test report
  - Retention period of tested samples (Filter Paper) is 180 Days from the date of issue of test report unless otherwise specified.
  - Location of Testing: Haldia Laboratory

End of Report

Page 1 of 1

Reviewed By: QM/TM



# INDICATIVE CONSULTANT INDIA



(GOVT. REGISTERED TEST HOUSE)



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## TEST REPORT

Date: 23.07.2024	Report No: ICI/HLA/RN-480/2024	Format No: ICI/FM/H/61
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/AC-480
Address	Dhasna, Bahadurpur, Jamuria, Dist.- Paschim Bardhaman, PIN -713 362	Sampling Date : 02.07.2024
#Customer Representative Name & Contact Number	Sr. Executive	Analysis Start Date : 16.07.2024
#Work Order No.	3000019828, Dtd. 01.04.2024	Analysis complete Date : 17.07.2024
#Sample Description	FUGITIVE AIR	
#Location	CHP (DRI # 1)	
Sample Condition	In Glass Microfibre Filter Paper & Plastic Bottle	
Sampling Method	CPCB, Emission Regulation (Part III)	
Material/ Test Specification	Factories (Amendment) Act 1987, Sec. 45 (2 <sup>nd</sup> Schedule)	

Sl. No.	Parameters	Unit	SAMPLING TIME	Test Method
			08:30 AM to 04:30 PM	
			RESULT	
1	Suspended Particulate Matter (SPM)	mg/m <sup>3</sup>	1.826	IS 5182 (Part - 4) 1999 (RA 2019)
2	Respirable Particulate Matter (RPM/PM <sub>10</sub> )	mg/m <sup>3</sup>	0.874	IS 5182 (Part - 23) 2006 (RA 2022)
3	Sulphur Dioxide (SO <sub>2</sub> )	mg/m <sup>3</sup>	0.025	IS 5182 (Part - 2) 2001 (RA 2022)
4	Oxides of Nitrogen (NO <sub>2</sub> )	mg/m <sup>3</sup>	0.045	IS 5182 (Part - 6) 2006 (RA 2022)
5	Ambient Temperature (Average)	°C	34.0	Hygrometer
Limit: (mg/m <sup>3</sup> ) : SPM - 10, RPM - 5, SO <sub>2</sub> - 5, NO <sub>2</sub> - 6				
Ref : Factories (Amendment) Act 1987, Sec. 45 (2nd Schedule)				

For, INDICATIVE CONSULTANT INDIA

Prepared By: P. Das

Checked By: N. Pramanik

Parbati Gohli  
(Quality Manager)  
Signatory Authority

Parbati Gohli  
Quality Manager  
INDICATIVE CONSULTANT INDIA

Test Witnessed By: Nil (Sampling was done in front of customer representatives)  
Estimated Uncertainty: Not Required

- Note:
- Information provided by customer
  - Sample is drawn by M/s. Indicative Consultant India.
  - Sample submitted and identified by customer as: NA
  - Test results shown in this test report relate only to the sample (s) only.
  - The test results referred in test report are based on observations & measurements under the stated environmental conditions.
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  - Once issued, the test report/certificate is in public domain and laboratory is not responsible for the authenticity of photocopied test report
  - Retention period of tested samples (Filter Paper) is 180 Days from the date of issue of test report unless otherwise specified.
  - Location of Testing: Haldia Laboratory

End of Report

Page 1 of 1

Reviewed By: QM/TM



## TEST REPORT

Date: 23.07.2024	Report No: ICI/HL/A/RN-481/2024	Format No: ICI/FM/H/61
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/AC-481
Address	Dhasna, Bahadurpur, Jampuria, Dist- Paschim Bardhaman, PIN-713 362	Sampling Date : 10.07.2024
#Customer Representative Name & Contact Number	Sr. Executive	Analysis Start Date : 16.07.2024
#Work Order No.	3000019828, Dtd. 01.04.2024	Analysis complete Date : 17.07.2024
#Sample Description	FUGITIVE AIR	
#Location	BOILER AREA (CPP 90 MW)	
Sample Condition	In Glass Microfibre Filter Paper & Plastic Bottle	
Sampling Method	CPCB, Emission Regulation (Part III)	
Material/ Test Specification	Factories (Amendment) Act 1987, Sec. 45 (2 <sup>nd</sup> Schedule)	

Sl. No.	Parameters	Unit	SAMPLING TIME	Test Method
			09:30 AM to 05:30 PM	
			RESULT	
1	Suspended Particulate Matter (SPM)	mg/m <sup>3</sup>	1.897	IS 5182 (Part - 4): 1999 (RA 2019)
2	Respirable Particulate Matter (RPM/PM <sub>10</sub> )	mg/m <sup>3</sup>	0.963	IS 5182 (Part - 23): 2006 (RA 2022)
3	Sulphur Dioxide (SO <sub>2</sub> )	mg/m <sup>3</sup>	0.024	IS 5182 (Part - 2): 2001 (RA 2022)
4	Oxides of Nitrogen (NO <sub>2</sub> )	mg/m <sup>3</sup>	0.048	IS 5182 (Part - 6): 2006 (RA 2022)
5	Ambient Temperature (Average)	°C	39.0	Hygrometer
<i>Limit: (mg/m<sup>3</sup>) : SPM - 10, RPM - 5, SO<sub>2</sub> - 5, NO<sub>2</sub> - 6</i>				
<i>Ref : Factories (Amendment) Act 1987, Sec. 45 (2nd Schedule)</i>				

For, INDICATIVE CONSULTANT INDIA

Prepared By: P. Das

Checked By: P. Pramanik

Parbati Golui  
(Quality Manager)  
Signatory Authority

Parbati Golui  
Quality Manager  
INDICATIVE CONSULTANT INDIA

Test Witnessed By: Nil (Sampling was done in front of customer representatives)  
Estimated Uncertainty: Not Required

- Note:
- Information provided by customer
  - Sample is drawn by M/s. Indicative Consultant India.
  - Sample submitted and identified by customer as: NA
  - Test results shown in this test report relate only to the sample (s) only.
  - The test results referred in test report are based on observations & measurements under the stated environmental conditions.
  - The reproduction of the report except in full is invalid without written approval of the laboratory.
  - Once issued, the test report/certificate is in public domain and laboratory is not responsible for the authenticity of photocopied test report
  - Retention period of tested samples (Filter Paper) is 180 Days from the date of issue of test report unless otherwise specified.
  - Location of Testing: Haldia Laboratory

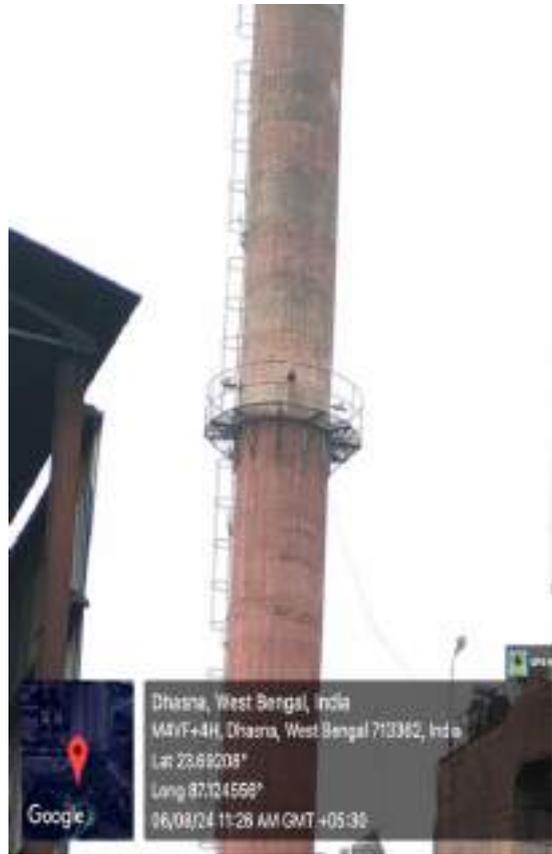
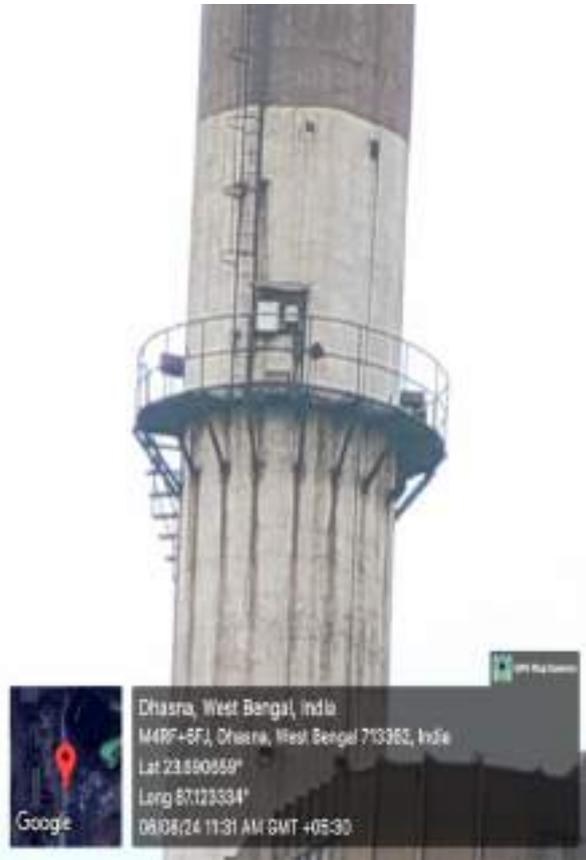
End of Report

Page 1 of 1

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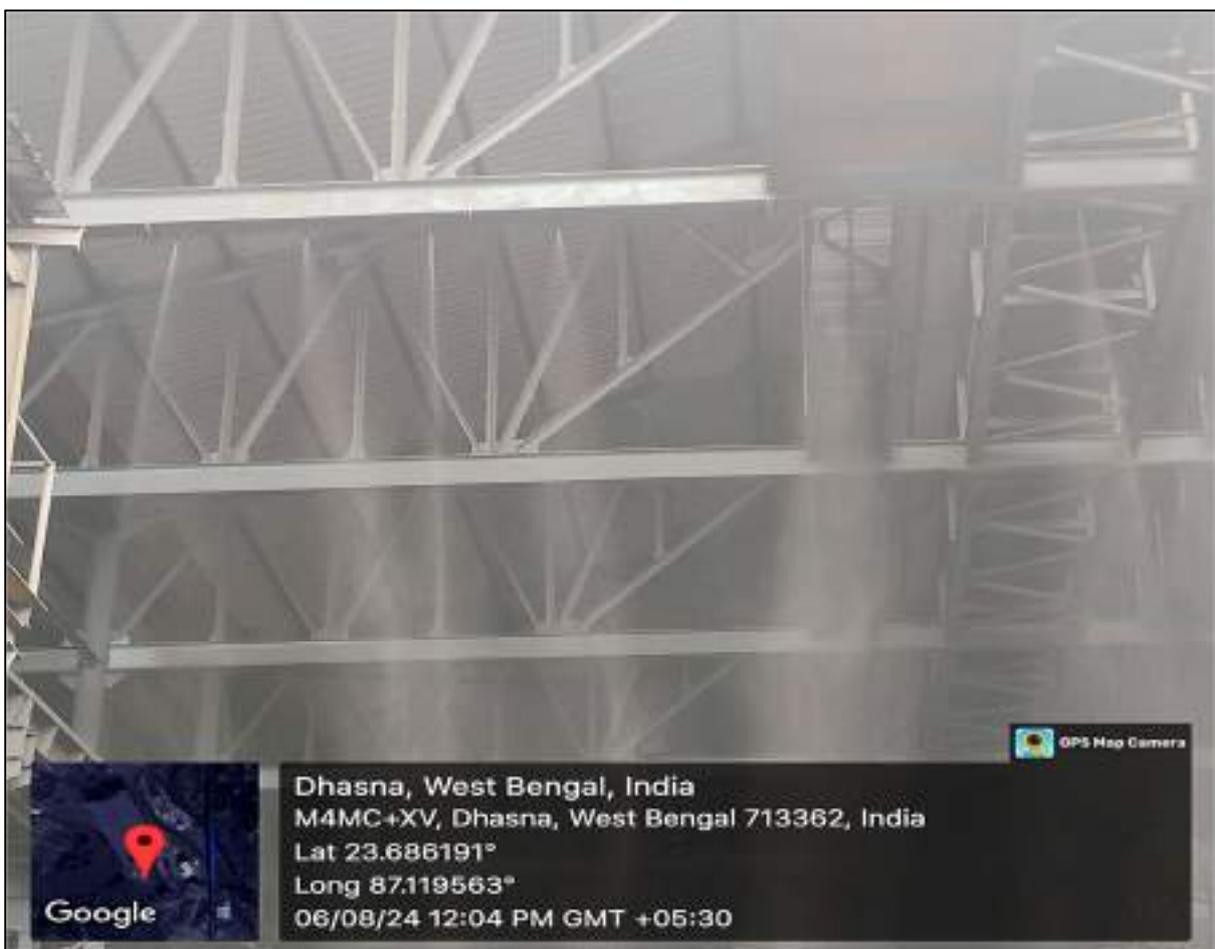
# ANNEXURE - XIII

## STACK MONITORING FACILITY AT PROCESS STACK



# ANNEXURE - XIV

**PHOTOGRAPHS OF DRY FOG SYSTEM**



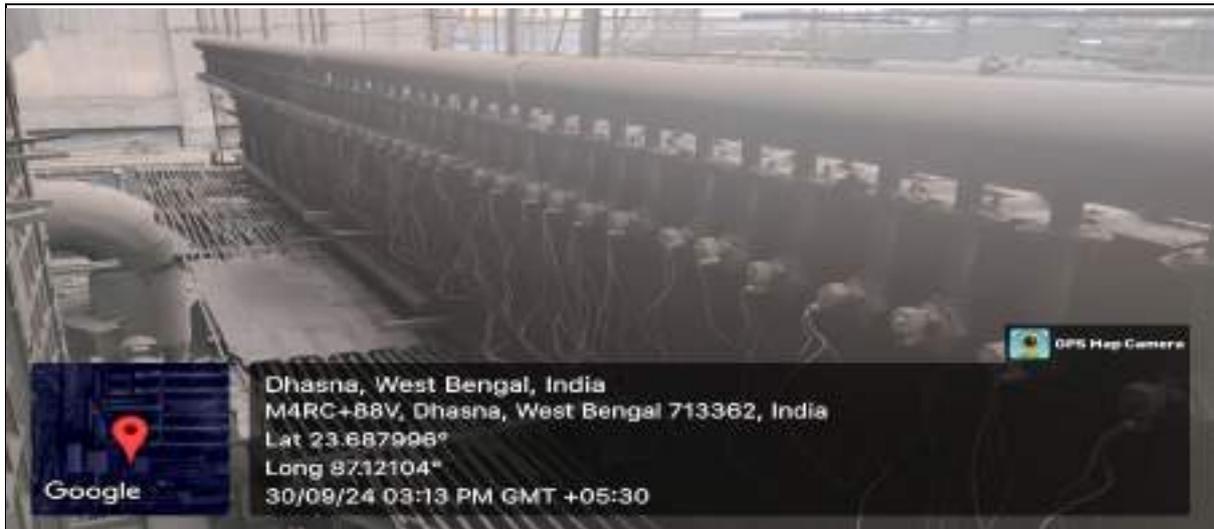
**Photograph of Mist Canon**



ANNEXURE - XV

## MANOMETER & AIR PURGING SYSTEM





# ANNEXURE - XVI

# SWEEPING MACHINE



ANNEXURE - XVII

**TARPULIN COVERED HYVE & TRUCKS HANDLING RAW MATERIALS & WASTE**



ANNEXURE - XVIII

**COKE OVEN: INDUSTRIAL VACCUM CLEANING FACILITY**



## COKE OVEN PLANT: GUIDE CAR



ANNEXURE - XIX

## WIND SHELTER FENCE





Dhasna, West Bengal, India  
Unnamed Road, Dhasna, West Bengal 713362, India  
Lat 23.687584°  
Long 87.123633°  
06/08/24 12:36 PM GMT +05:30



Dhasna, West Bengal, India  
M4MC+XV, Dhasna, West Bengal 713362, India  
Lat 23.687393°  
Long 87.123664°  
06/08/24 12:36 PM GMT +05:30



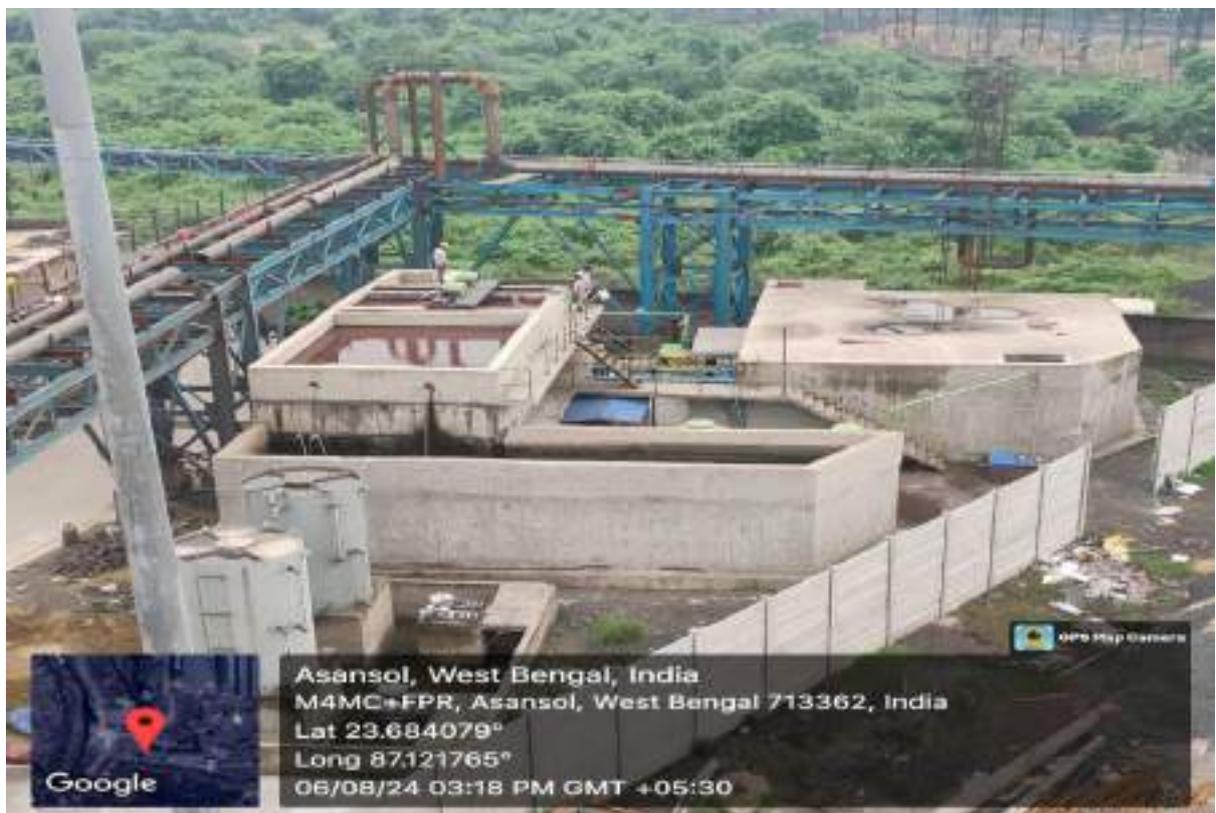
Dhasna, West Bengal, India  
Unnamed Road, Dhasna, West Bengal 713362, India  
Lat 23.687542°  
Long 87.123595°  
06/08/24 12:35 PM GMT +05:30



# ANNEXURE - XX

## ETP PHOTOGRAPHS





# ANNEXURE - XXI



# INDICATIVE CONSULTANT INDIA

(GOVT. REGISTERED TEST HOUSE)



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## TEST REPORT

Date: 04.04.2024	: Report No: ICI/HL/W/RN-362/2024	Format No: ICI/FM/H/67
Customer Name	: <b>M/s. SHYAM SEL &amp; POWER LIMITED</b>	Sample ID No : 2024/W-362
Address	: Vill- Dhasna, P.O.- Bahadurpur, Jamuria, Dist-Paschim Bardhaman, West Bengal, Pin -713362	Sampling Date : 23.03.2024
#Customer Representative Name & Contact Number	: Mr. Mayank Tiwari Mob. No. +91 91798 67607	Sampling Time : 11:05 AM
		Analysis Start Date : 26.03.2024
		Analysis complete Date : 03.04.2024
#Work Order No.	: 3000001055, Dtd. 01.10.2021 Amend No. 2, Dtd. 29.06.2023	
#Sample Description	: <b>DRINKING WATER (GROUND WATER)</b>	
Sample Condition	: In Plastic Bottle & Glass Bottle	
Sampling Method	: IS:3025 (Part 1): 1987 (RA 2019), APHA 24 <sup>th</sup> Edition, 2023	
# Location	: <b>DHASAL VILLAGE</b>	
Material Specification	: <b>IS 10500: 2012</b>	

Sl. No.	Parameters	Unit	Result	As Per IS:10500:2012		Method Followed
				Desirable Limit	Permissible limit in the absence of alternate source	
<b>ORGANOLEPTIC AND PHYSICAL PARAMETERS</b>						
1.	Odour	-	<b>Agreeable</b>	<i>Agreeable</i>	<i>Agreeable</i>	IS:3025(Part-5):2018 APHA 24 <sup>th</sup> Edition 2150 B
2.	pH (at 31°C)	-	<b>6.99</b>	<i>6.5 to 8.5</i>	<i>No Relaxation</i>	IS:3025(Part-11):2022 APHA 24 <sup>th</sup> Edition 4500-H' B
3.	Colour	Hazen Unit	<b>&lt;5.0</b>	<i>5</i>	<i>15</i>	IS:3025(Part-4): 2021
4.	Conductivity	µS/cm	<b>1378.0</b>	-	-	IS:3025(Part-10):2023 APHA 24 <sup>th</sup> Edition 2130 B
5.	Turbidity	N.T.U.	<b>4.9</b>	<i>1 (Max)</i>	<i>5 (Max)</i>	IS:3025(Part-16):2023 APHA 24 <sup>th</sup> Edition 2540 C
6.	Total Dissolved Solid (TDS)	mg/L	<b>798.0</b>	<i>500 (Max)</i>	<i>2000 (Max)</i>	IS:3025(Part-5):2018 APHA 24 <sup>th</sup> Edition 2150 B
<b>GENERAL PARAMETERS CONCERNING SUBSTANCES UNDESIRABLE IN EXCESSIVE AMOUNTS</b>						
7.	Total Hardness (as CaCO <sub>3</sub> )	mg/L	<b>516.27</b>	<i>200 (Max)</i>	<i>600 (Max)</i>	IS:3025(Part-21):2009; RA 2019 APHA 24 <sup>th</sup> Edition 2340 C
8.	Ca Hardness (as CaCO <sub>3</sub> )	mg/L	<b>222.71</b>	-	-	APHA 24 <sup>th</sup> Edition 2340 C
9.	Mg Hardness (as CaCO <sub>3</sub> )	mg/L	<b>293.56</b>	-	-	APHA 24 <sup>th</sup> Edition 2340 C
10.	Calcium (as Ca)	mg/L	<b>89.26</b>	<i>75 (Max)</i>	<i>200 (Max)</i>	IS:3025(Part-40):1991; RA 2019 APHA 24 <sup>th</sup> Edition 3500Ca B
11.	Magnesium (as Mg)	mg/L	<b>71.33</b>	<i>30 (Max)</i>	<i>100 (Max)</i>	IS:3025(Part-46):2023 APHA 24 <sup>th</sup> Edition 3500Mg B
12.	Chloride (as Cl)	mg/L	<b>114.15</b>	<i>250 (Max)</i>	<i>1000 (Max)</i>	IS:3025(Part-32):1988; RA 2019 APHA 24 <sup>th</sup> Edition 4500Cl B
13.	Total Alkalinity (as CaCO <sub>3</sub> )	mg/L	<b>476.0</b>	<i>200 (Max)</i>	<i>600 (Max)</i>	IS:3025(Part-23):2023 APHA 24 <sup>th</sup> Edition 2320 B
14.	P-Alkalinity (as CaCO <sub>3</sub> )	mg/L	<b>Nil</b>	-	-	APHA 24 <sup>th</sup> Edition 2320B
15.	M-Alkalinity (as CaCO <sub>3</sub> )	mg/L	<b>476.0</b>	-	-	APHA 24 <sup>th</sup> Edition 2320B
16.	Iron (as Fe)	mg/L	<b>0.29</b>	<i>0.3 (Max)</i>	<i>No Relaxation</i>	IS:3025(Part-53):2024 APHA 24 <sup>th</sup> Edition 3500-Fe B
17.	Phosphate (as P)	mg/L	<b>&lt;0.02</b>	-	-	APHA 24 <sup>th</sup> Edition 4500P D
18.	Fluoride (as F)	mg/L	<b>&lt;0.04</b>	<i>1 (Max)</i>	<i>1.5 (Max)</i>	IS:3025(Part-60):2008; RA 2019 APHA 24 <sup>th</sup> Edition 4500 FD

Reviewed By: M/TM

Parbat Sotui Page: 1 of 2  
Quality Manager  
INDICATIVE CONSULTANT INDIA



# INDICATIVE CONSULTANT INDIA



(GOVT. REGISTERED TEST HOUSE)



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## TEST REPORT

Date: 04.04.2024	Report No: ICI/HL/W/RN-362/2024	Format No: ICI/FM/H/67
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/W-362
Address	Vill- Dhasna, P.O.- Bahadurpur, Jamuria, Dist-Paschim Bardhaman, West Bengal, Pin -713362	Sampling Date : 23.03.2024
#Customer Representative Name & Contact Number	Mr. Mayank Tiwari	Sampling Time : 11:05 AM
	Mob. No. +91 91798 67607	Analysis Start Date : 26.03.2024
		Analysis complete Date : 03.04.2024
#Work Order No.	3000001055, Dtd. 01.10.2021 Amend No. 2, Dtd. 29.06.2023	
#Sample Description	DRINKING WATER (GROUND WATER)	
Sample Condition	In Plastic Bottle & Glass Bottle	
Sampling Method	IS:3025 (Part I): 1987 (RA 2019), APHA 24 <sup>th</sup> Edition, 2023	
# Location	DHASAL VILLAGE	
Material Specification	IS 10500: 2012	

Sl. No.	Parameters	Unit	Result	As Per IS:10500:2012		Method Followed
				Desirable Limit	Permissible limit in the absence of alternate source	
<b>ORGANOLEPTIC AND PHYSICAL PARAMETERS</b>						
19.	Appearance	-	Clear	-	-	Visual
<b>GENERAL PARAMETERS CONCERNING SUBSTANCES UNDESIRABLE IN EXCESSIVE AMOUNTS</b>						
20.	Sulfate (as SO <sub>4</sub> )	mg/L	64.5	200 (Max)	400 (Max)	IS:3025(Part-24):1986: RA 2019 APHA 24 <sup>th</sup> Edition 4500 SO <sub>4</sub> <sup>2-</sup> E
21.	Silica (as SiO <sub>2</sub> )	mg/L	27.3	-	-	IS:3025(Part-35):1988, RA 2023 APHA 24 <sup>th</sup> Edition 4500 SiO <sub>2</sub> C
22.	Manganese (as Mn)	mg/L	<0.1	0.1 (Max)	0.3 (Max)	APHA 24 <sup>th</sup> Edition 3111 B
<b>PARAMETERS CONCERNING TOXIC SUBSTANCES</b>						
23.	Arsenic (as As)	mg/L	<0.01	0.01 (Max)	0.05 (Max)	APHA 24 <sup>th</sup> Edition 3500As B
<b>BACTERIOLOGICAL PARAMETERS</b>						
24.	Total Coliform	MPN/100 ml	BLQ	Shall not be detectable in any 100 ml of sample	-	IS: 1622:1981 (RA 2019)
25.	E. Coli	CFU/100ml	Absent	Shall not be detectable in any 100 ml of sample	-	IS: 1622:1981 (RA 2019)
<b>LOQ= Limits of Quantification; BLQ= Below Limit of Quantification (LOQ- 1.8 MPN/100 ml)</b>						
<b>Remarks:</b>						
1) Chemical test Parameters: <b>Compliance</b> – The test parameters except Turbidity, Total Dissolved Solid, Total Hardness, Calcium, Magnesium & Total Alkalinity are within desirable limit as per specification IS 10500:2012, however the values of Turbidity, Total Dissolved Solid, Total Hardness, Calcium, Magnesium & Total Alkalinity are within permissible limit (in the absence of alternate source as per specification IS 10500:2012)						
2) Bacteriological test parameters: <b>Compliance</b> – The above-mentioned test parameters are within desirable limit as per specification IS 10500:2012						

Prepared By: N. Pramanik

Checked By: N. Pramanik

For, INDICATIVE CONSULTANT INDIA

Parbati Golui  
(Quality Manager)  
Signatory Authority  
Parbati Golui  
Quality Manager  
INDICATIVE CONSULTANT INDIA

Test Witnessed By: Nil (Sampling was done in front of customer representatives)  
Estimated Uncertainty: Not Required

- Note:
- Information provided by customer
  - Sample is drawn by M/s. Indicative Consultant India
  - Sample submitted and identified by customer as: N.A.
  - Test results shown in this test report relate only to the sample (s) only
  - The test results referred in test report are based on observations & measurements under the stated environmental conditions.
  - The reproduction of the report except in full is invalid without written approval of the laboratory.
  - Once issued, the test report/certificate is in public domain and laboratory is not responsible for the authenticity of photocopied test report
  - Retention period of tested samples (Water) is 10 days from the date of issue of test report unless otherwise specified.
  - Location of Testing: Haldia Laboratory

End of Report

Page 2 of 2

Reviewed By: GM/TM

CENTRAL LABORATORY : HPL Link Road, Basudevpur, Khanjanchak, Haldia, Purba Medinipur, Pin- 721602  
Phone No. : 03224-275765 9434017584 9229045800 7707408079

Towards Sustainable Growth



# INDICATIVE CONSULTANT INDIA

(GOVT. REGISTERED TEST HOUSE)



EMAIL : indicativeconsultantindia@gmail.com / indicativeconsultantindia.kol@gmail.com

## TEST REPORT

Date: 04.04.2024	: Report No: ICI/HL/W/RN-363/2024	Format No: ICI/FM/H/67
Customer Name	: M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/W-363
Address	: Vill- Dhasna, P.O.- Bahadurpur, Jamuria, Dist-Paschim Bardhaman, West Bengal, Pin -713362	Sampling Date : 23.03.2024
#Customer Representative Name & Contact Number	: Mr. Mayank Tiwari Mob. No. +91 91798 67607	Sampling Time : 11:50 AM
		Analysis Start Date : 26.03.2024
		Analysis complete Date : 03.04.2024
#Work Order No.	: 3000001055, Dtd. 01.10.2021 Amend No. 2, Dtd. 29.06.2023	
#Sample Description	: DRINKING WATER (GROUND WATER)	
Sample Condition	: In Plastic Bottle & Glass Bottle	
Sampling Method	: IS:3025 (Part 1): 1987 (RA 2019), APHA 24 <sup>th</sup> Edition, 2023	
# Location	: IKRA VILLAGE	
Material Specification	: IS 10500: 2012	

Sl. No.	Parameters	Unit	Result	As Per IS:10500:2012		Method Followed
				Desirable Limit	Permissible limit in the absence of alternate source	
<b>ORGANOLEPTIC AND PHYSICAL PARAMETERS</b>						
1.	Odour	-	Agreeable	Agreeable	Agreeable	IS:3025(Part-5):2018 APHA 24 <sup>th</sup> Edition 2150 B
2.	pH (at 31°C)	-	7.05	6.5 to 8.5	No Relaxation	IS:3025(Part-11):2022 APHA 24 <sup>th</sup> Edition 4500-H <sup>+</sup> B
3.	Colour	Hazen Unit	<5.0	5	15	IS:3025(Part-4): 2021
4.	Conductivity	µS/cm	1416.0	-	-	IS:3025(Part-10):2023 APHA 24 <sup>th</sup> Edition 2130 B
5.	Turbidity	N.T.U.	5.0	1 (Max)	5 (Max)	IS:3025(Part-16):2023 APHA 24 <sup>th</sup> Edition 2540 C
6.	Total Dissolved Solid (TDS)	mg/L	820.0	500 (Max)	2000 (Max)	IS:3025(Part-5):2018 APHA 24 <sup>th</sup> Edition 2150 B
<b>GENERAL PARAMETERS CONCERNING SUBSTANCES UNDESIRABLE IN EXCESSIVE AMOUNTS</b>						
7.	Total Hardness (as CaCO <sub>3</sub> )	mg/L	536.52	200 (Max)	600 (Max)	IS:3025(Part-21):2009: RA 2019 APHA 24 <sup>th</sup> Edition 2340 C
8.	Ca Hardness (as CaCO <sub>3</sub> )	mg/L	212.58	-	-	APHA 24 <sup>th</sup> Edition 2340 C
9.	Mg Hardness (as CaCO <sub>3</sub> )	mg/L	323.94	-	-	APHA 24 <sup>th</sup> Edition 2340 C
10.	Calcium (as Ca)	mg/L	85.2	75 (Max)	200 (Max)	IS:3025(Part-40):1991: RA 2019 APHA 24 <sup>th</sup> Edition 3500Ca B
11.	Magnesium (as Mg)	mg/L	78.72	30 (Max)	100 (Max)	IS:3025(Part-46):2023 APHA 24 <sup>th</sup> Edition 3500Mg B
12.	Chloride (as Cl)	mg/L	124.1	250 (Max)	1000 (Max)	IS:3025(Part-32):1988: RA 2019 APHA 24 <sup>th</sup> Edition 4500Cl B
13.	Total Alkalinity (as CaCO <sub>3</sub> )	mg/L	462.4	200 (Max)	600 (Max)	IS:3025(Part-23):2023 APHA 24 <sup>th</sup> Edition 2320 B
14.	P-Alkalinity (as CaCO <sub>3</sub> )	mg/L	Nil	-	-	APHA 24 <sup>th</sup> Edition 2320B
15.	M-Alkalinity (as CaCO <sub>3</sub> )	mg/L	462.4	-	-	APHA 24 <sup>th</sup> Edition 2320B
16.	Iron (as Fe)	mg/L	0.26	0.3 (Max)	No Relaxation	IS:3025(Part-53):2024 APHA 24 <sup>th</sup> Edition 3500-Fe B
17.	Phosphate (as P)	mg/L	<0.02	-	-	APHA 24 <sup>th</sup> Edition 4500P D
18.	Fluoride (as F)	mg/L	<0.04	1 (Max)	1.5 (Max)	IS:3025(Part-60):2008: RA 2019 APHA 24 <sup>th</sup> Edition 4500 FD

Reviewed By: QM/IM

Parbat Khatun  
Quality Manager  
INDICATIVE CONSULTANT INDIA  
Page: 1 of 2



# INDICATIVE CONSULTANT INDIA



(GOVT. REGISTERED TEST HOUSE)



EMAIL : indicativeconsultantindia@gmail.com / indicativeconsultantindia.kol@gmail.com

## TEST REPORT

Date: 04.04.2024	: Report No: ICI/HL/W/RN-363/2024	Format No: ICI/FM/H/67
Customer Name	: M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/W-363
Address	: Vill- Dhasna, P.O.- Bahadarpur, Jamuria, Dist-Paschim Bardhaman, West Bengal, Pin -713362	Sampling Date : 23.03.2024
#Customer Representative Name & Contact Number	: Mr. Mayank Tiwari	Sampling Time : 11:50 AM
	: Mob. No. +91 91798 67607	Analysis Start Date : 26.03.2024
		Analysis complete Date : 03.04.2024
#Work Order No.	: 3000001055, Dtd. 01.10.2021 Amend No. 2, Dtd. 29.06.2023	
#Sample Description	: DRINKING WATER (GROUND WATER)	
Sample Condition	: In Plastic Bottle & Glass Bottle	
Sampling Method	: IS:3025 (Part I): 1987 (RA 2019), APHA 24 <sup>th</sup> Edition, 2023	
# Location	: IKRA VILLAGE	
Material Specification	: IS 10500: 2012	

Sl. No.	Parameters	Unit	Result	As Per IS:10500:2012		Method Followed
				Desirable Limit	Permissible limit in the absence of alternate source	
<b>ORGANOLEPTIC AND PHYSICAL PARAMETERS</b>						
19.	Appearance	-	Clear	-	-	Visual
<b>GENERAL PARAMETERS CONCERNING SUBSTANCES UNDESIRABLE IN EXCESSIVE AMOUNTS</b>						
20.	Sulfate (as SO <sub>4</sub> )	mg/L	271.0	200 (Max)	400 (Max)	IS:3025(Part-24):1986: RA 2019 APHA 24 <sup>th</sup> Edition 4500 SO <sub>4</sub> <sup>2-</sup> E
21.	Silica (as SiO <sub>2</sub> )	mg/L	25.0	-	-	IS:3025(Part-35):1988, RA 2023 APHA 24 <sup>th</sup> Edition 4500 SiO <sub>2</sub> C
22.	Manganese (as Mn)	mg/L	<0.1	0.1 (Max)	0.3 (Max)	APHA 24 <sup>th</sup> Edition 3111 B
<b>PARAMETERS CONCERNING TOXIC SUBSTANCES</b>						
23.	Arsenic (as As)	mg/L	<0.01	0.01 (Max)	0.05 (Max)	APHA 24 <sup>th</sup> Edition 3500As B
<b>BACTERIOLOGICAL PARAMETERS</b>						
24.	Total Coliform	MPN/100 ml	BLQ	Shall not be detectable in any 100 ml of sample	-	IS: 1622:1981 (RA 2019)
25.	E. Coli	CFU/100ml	Absent	Shall not be detectable in any 100 ml of sample	-	IS: 1622:1981 (RA 2019)

LOQ= Limits of Quantification; BLQ= Below Limit of Quantification (LOQ- 1.8 MPN/100 ml)

**Remarks:**

- 1) Chemical test Parameters: **Compliance** – The test parameters except Turbidity, Total Dissolved Solid, Total Hardness, Calcium, Magnesium, Total Alkalinity & Sulfate are within desirable limit as per specification IS 10500:2012, however the values of Turbidity, Total Dissolved Solid, Total Hardness, Calcium, Magnesium, Total Alkalinity & Sulfate are within permissible limit (in the absence of alternate source as per specification IS 10500:2012)
- 2) Bacteriological test parameters: **Compliance** – The above-mentioned test parameters are within desirable limit as per specification IS 10500:2012

Prepared By: N. Pramanik

Checked By: N. Pramanik

For, INDICATIVE CONSULTANT INDIA

Parbati Golui  
(Quality Manager)

Signatory Authority

Parbati Golui  
Quality Manager

INDICATIVE CONSULTANT INDIA

Test Witnessed By: Nil (Sampling was done in front of customer representatives)

Estimated Uncertainty: Not Required

- Note :
1. Information provided by customer
  2. Sample is drawn by M/s. Indicative Consultant India
  3. Sample submitted and identified by customer as: N.A.
  4. Test results shown in this test report relate only to the sample (s) only
  5. The test results referred in test report are based on observations & measurements under the stated environmental conditions.
  6. The reproduction of the report except in full is invalid without written approval of the laboratory
  7. Once issued, the test report/certificate is in public domain and laboratory is not responsible for the authenticity of photocopied test report
  8. Retention period of tested samples (Water) is 10 days from the date of issue of test report unless otherwise specified.
  9. Location of Testing: Haldia Laboratory

Page 2 of 2

Reviewed By: N. Pramanik

End of Report

Towards Sustainable Growth



# INDICATIVE CONSULTANT INDIA

(GOVT. REGISTERED TEST HOUSE)



EMAIL : indicativeconsultantindia@gmail.com / indicativeconsultantindia.koi@gmail.com

## TEST REPORT

Date: 04.04.2024	: Report No: ICI/HL/WRN-364/2024	Format No: ICI/FM/H/67
Customer Name	: M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/W-364
Address	: Vill- Dhasna, P.O.- Bahadurpur, Jamuria, Dist-Paschim Bardhaman, West Bengal, Pin -713362	Sampling Date : 23.03.2024
#Customer Representative Name & Contact Number	: Mr. Mayank Tiwari Mob. No. +91 91798 67607	Sampling Time : 12:30 PM
		Analysis Start Date : 26.03.2024
		Analysis complete Date : 03.04.2024
#Work Order No.	: 3000001055, Dtd. 01.10.2021 Amend No. 2, Dtd. 29.06.2023	
#Sample Description	: DRINKING WATER (GROUND WATER)	
Sample Condition	: In Plastic Bottle & Glass Bottle	
Sampling Method	: IS:3025 (Part 1): 1987 (RA 2019), APHA 24 <sup>th</sup> Edition, 2023	
# Location	: DHASNA VILLAGE	
Material Specification	: IS 10500: 2012	

Sl. No.	Parameters	Unit	Result	As Per IS:10500:2012		Method Followed
				Desirable Limit	Permissible limit in the absence of alternate source	
<b>ORGANOLEPTIC AND PHYSICAL PARAMETERS</b>						
1.	Odour	-	Agreeable	Agreeable	Agreeable	IS:3025(Part-5):2018 APHA 24 <sup>th</sup> Edition 2150 B
2.	pH (at 31°C)	-	7.02	6.5 to 8.5	No Relaxation	IS:3025(Part-11):2022 APHA 24 <sup>th</sup> Edition 4500-H' B
3.	Colour	Hazen Unit	<5.0	5	15	IS:3025(Part-4): 2021
4.	Conductivity	µS/cm	1399.0	-	-	IS:3025(Part-10):2023 APHA 24 <sup>th</sup> Edition 2130 B
5.	Turbidity	N.T.U.	4.0	1 (Max)	5 (Max)	IS:3025(Part-16):2023 APHA 24 <sup>th</sup> Edition 2540 C
6.	Total Dissolved Solid (TDS)	mg/L	806.0	500 (Max)	2000 (Max)	IS:3025(Part-5):2018 APHA 24 <sup>th</sup> Edition 2150 B
<b>GENERAL PARAMETERS CONCERNING SUBSTANCES UNDESIRABLE IN EXCESSIVE AMOUNTS</b>						
7.	Total Hardness (as CaCO <sub>3</sub> )	mg/L	546.64	200 (Max)	600 (Max)	IS:3025(Part-21):2009: RA 2019 APHA 24 <sup>th</sup> Edition 2340 C
8.	Ca Hardness (as CaCO <sub>3</sub> )	mg/L	273.32	-	-	APHA 24 <sup>th</sup> Edition 2340 C
9.	Mg Hardness (as CaCO <sub>3</sub> )	mg/L	273.32	-	-	APHA 24 <sup>th</sup> Edition 2340 C
10.	Calcium (as Ca)	mg/L	109.54	75 (Max)	200 (Max)	IS:3025(Part-40):1991: RA 2019 APHA 24 <sup>th</sup> Edition 3500Ca B
11.	Magnesium (as Mg)	mg/L	66.42	30 (Max)	100 (Max)	IS:3025(Part-46):2023 APHA 24 <sup>th</sup> Edition 3500Mg B
12.	Chloride (as Cl)	mg/L	129.0	250 (Max)	1000 (Max)	IS:3025(Part-32):1988: RA 2019 APHA 24 <sup>th</sup> Edition 4500Cl B
13.	Total Alkalinity (as CaCO <sub>3</sub> )	mg/L	462.4	200 (Max)	600 (Max)	IS:3025(Part-23):2023 APHA 24 <sup>th</sup> Edition 2320 B
14.	P-Alkalinity (as CaCO <sub>3</sub> )	mg/L	Nil	-	-	APHA 24 <sup>th</sup> Edition 2320B
15.	M-Alkalinity (as CaCO <sub>3</sub> )	mg/L	462.4	-	-	APHA 24 <sup>th</sup> Edition 2320B
16.	Iron (as Fe)	mg/L	0.27	0.3 (Max)	No Relaxation	IS:3025(Part-53):2024 APHA 24 <sup>th</sup> Edition 3500-Fe B
17.	Phosphate (as P)	mg/L	<0.02	-	-	APHA 24 <sup>th</sup> Edition 4500P D
18.	Fluoride (as F)	mg/L	<0.04	1 (Max)	1.5 (Max)	IS:3025(Part-60):2008: RA 2019 APHA 24 <sup>th</sup> Edition 4500 FD

Parbati Bhowmik Page: 1 of 2  
 Quality Manager  
 INDICATIVE CONSULTANT INDIA

Reviewed By: QM/TM

Towards Sustainable Growth



# INDICATIVE CONSULTANT INDIA



(GOVT. REGISTERED TEST HOUSE)



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## TEST REPORT

Date: 04.04.2024	Report No: ICI/HL/W/RN-364/2024	Format No: ICI/FM/H/67
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/W-364
Address	Vill- Dhasna, P.O.- Bahadurpur, Jamuria, Dist-Paschim Bardhaman, West Bengal, Pin -713362	Sampling Date : 23.03.2024
#Customer Representative Name & Contact Number	Mr. Mayank Tiwari Mob. No. +91 91798 67607	Sampling Time : 12:30 PM
		Analysis Start Date : 26.03.2024
		Analysis complete Date : 03.04.2024
#Work Order No.	3000001055, Dtd. 01.10.2021 Amend No. 2, Dtd. 29.06.2023	
#Sample Description	DRINKING WATER (GROUND WATER)	
Sample Condition	In Plastic Bottle & Glass Bottle	
Sampling Method	IS:3025 (Part I): 1987 (RA 2019), APHA 24 <sup>th</sup> Edition, 2023	
# Location	DHASNA VILLAGE	
Material Specification	IS 10500: 2012	

Sl. No.	Parameters	Unit	Result	As Per IS:10500:2012		Method Followed
				Desirable Limit	Permissible limit in the absence of alternate source	
<b>ORGANOLEPTIC AND PHYSICAL PARAMETERS</b>						
19.	Appearance	-	Clear	-	-	Visual
<b>GENERAL PARAMETERS CONCERNING SUBSTANCES UNDESIRABLE IN EXCESSIVE AMOUNTS</b>						
20.	Sulfate (as SO <sub>4</sub> )	mg/L	67.0	200 (Max)	400 (Max)	IS:3025(Part-24):1986; RA 2019 APHA 24 <sup>th</sup> Edition 4500 SO <sub>4</sub> <sup>2-</sup> E
21.	Silica (as SiO <sub>2</sub> )	mg/L	28.0	-	-	IS:3025(Part-35):1988, RA 2023 APHA 24 <sup>th</sup> Edition 4500 SiO <sub>2</sub> C
22.	Manganese (as Mn)	mg/L	<0.1	0.1 (Max)	0.3 (Max)	APHA 24 <sup>th</sup> Edition 3111 B
<b>PARAMETERS CONCERNING TOXIC SUBSTANCES</b>						
23.	Arsenic (as As)	mg/L	<0.01	0.01 (Max)	0.05 (Max)	APHA 24 <sup>th</sup> Edition 3500As B
<b>BACTERIOLOGICAL PARAMETERS</b>						
24.	Total Coliform	MPN/100 ml	BLQ	Shall not be detectable in any 100 ml of sample	-	IS: 1622:1981 (RA 2019)
25.	E. Coli	CFU/100ml	Absent	Shall not be detectable in any 100 ml of sample	-	IS: 1622:1981 (RA 2019)

LOQ= Limits of Quantification; BLQ= Below Limit of Quantification (LOQ- 1.8 MPN/100 ml)

### Remarks:

- 1) Chemical test Parameters: **Compliance** - The test parameters except Turbidity, Total Dissolved Solid, Total Hardness, Calcium, Magnesium & Total Alkalinity are within desirable limit as per specification IS 10500:2012, however the values of Turbidity, Total Dissolved Solid, Total Hardness, Calcium, Magnesium & Total Alkalinity are within permissible limit (in the absence of alternate source as per specification IS 10500:2012)
- 2) Bacteriological test parameters: **Compliance** - The above-mentioned test parameters are within desirable limit as per specification IS 10500: 2012

Prepared By: N. Mondal

Checked By: N. Pramanik

For, INDICATIVE CONSULTANT INDIA

Parbati Golui  
(Quality Manager)  
Signatory Authority

Test Witnessed By: Nil (Sampling was done in front of customer representatives)

Estimated Uncertainty: Not Required

Parbati Golui  
Quality Manager  
INDICATIVE CONSULTANT INDIA

- Note :
1. Information provided by customer
  2. Sample is drawn by M/s. Indicative Consultant India
  3. Sample submitted and identified by customer as: N.A.
  4. Test results shown in this test report relate only to the sample (s) only
  5. The test results referred in test report are based on observations & measurements under the stated environmental conditions.
  6. The reproduction of the report except in full is invalid without written approval of the laboratory
  7. Once issued, the test report/certificate is in public domain and laboratory is not responsible for the authenticity of photocopied test report
  8. Retention period of tested samples (Water) is 10 days from the date of issue of test report unless otherwise specified.
  9. Location of Testing: Haldia Laboratory

Reviewed By: CM/TM

End of Report

Page 2 of 2



# INDICATIVE CONSULTANT INDIA

(GOVT. REGISTERED TEST HOUSE)



EMAIL : indicativeconsultantindia@gmail.com / indicativeconsultantindia.kol@gmail.com

## TEST REPORT

Date: 04.04.2024	Report No: ICI/HL/W/RN-365/2024	Format No: ICI/FM/H/67
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/W-365
Address	Vill- Dhasna, P.O.- Bahadurpur, Jamuria, Dist-Paschim Bardhaman, West Bengal, Pin -713362	Sampling Date : 23.03.2024
#Customer Representative Name & Contact Number	Mr. Mayank Tiwari Mob. No. +91 91798 67607	Sampling Time : 01:10 PM
		Analysis Start Date : 26.03.2024
		Analysis complete Date : 03.04.2024
#Work Order No.	3000001055, Dtd. 01.10.2021 Amend No. 2, Dtd. 29.06.2023	
#Sample Description	<b>DRINKING WATER</b>	
Sample Condition	In Plastic Bottle & Glass Bottle	
Sampling Method	IS:3025 (Part 1): 1987 (RA 2019), APHA 24 <sup>th</sup> Edition, 2023	
# Location	<b>NEW ADMIN AQUAGUARD</b>	
Material Specification	IS 10500: 2012	

Sl. No.	Parameters	Unit	Result	As Per IS:10500:2012		Method Followed
				Desirable Limit	Permissible limit in the absence of alternate source	
<b>ORGANOLEPTIC AND PHYSICAL PARAMETERS</b>						
1.	Odour	-	Agreeable	Agreeable	Agreeable	IS:3025(Part-5):2018 APHA 24 <sup>th</sup> Edition 2150 B
2.	pH (at 31°C)	-	7.16	6.5 to 8.5	No Relaxation	IS:3025(Part-11):2022 APHA 24 <sup>th</sup> Edition 4500-H <sup>th</sup> B
3.	Colour	Hazen Unit	<5.0	5	15	IS:3025(Part-4): 2021
4.	Conductivity	µS/cm	544.5	-	-	IS:3025(Part-10):2023 APHA 24 <sup>th</sup> Edition 2130 B
5.	Turbidity	N.T.U.	<1.0	1 (Max)	5 (Max)	IS:3025(Part-16):2023 APHA 24 <sup>th</sup> Edition 2540 C
6.	Total Dissolved Solid (TDS)	mg/L	340.0	500 (Max)	2000 (Max)	IS:3025(Part-5):2018 APHA 24 <sup>th</sup> Edition 2150 B
<b>GENERAL PARAMETERS CONCERNING SUBSTANCES UNDESIRABLE IN EXCESSIVE AMOUNTS</b>						
7.	Total Hardness (as CaCO <sub>3</sub> )	mg/L	222.71	200 (Max)	600 (Max)	IS:3025(Part-21):2009: RA 2019 APHA 24 <sup>th</sup> Edition 2340 C
8.	Ca Hardness (as CaCO <sub>3</sub> )	mg/L	151.84	-	-	APHA 24 <sup>th</sup> Edition 2340 C
9.	Mg Hardness (as CaCO <sub>3</sub> )	mg/L	70.87	-	-	APHA 24 <sup>th</sup> Edition 2340 C
10.	Calcium (as Ca)	mg/L	60.86	75 (Max)	200 (Max)	IS:3025(Part-40):1991: RA 2019 APHA 24 <sup>th</sup> Edition 3500Ca B
11.	Magnesium (as Mg)	mg/L	17.22	30 (Max)	100 (Max)	IS:3025(Part-46):2023 APHA 24 <sup>th</sup> Edition 3500Mg B
12.	Chloride (as Cl)	mg/L	34.74	250 (Max)	1000 (Max)	IS:3025(Part-32):1988: RA 2019 APHA 24 <sup>th</sup> Edition 4500Cl B
13.	Total Alkalinity (as CaCO <sub>3</sub> )	mg/L	231.2	200 (Max)	600 (Max)	IS:3025(Part-23):2023 APHA 24 <sup>th</sup> Edition 2320 B
14.	P-Alkalinity (as CaCO <sub>3</sub> )	mg/L	Nil	-	-	APHA 24 <sup>th</sup> Edition 2320B
15.	M-Alkalinity (as CaCO <sub>3</sub> )	mg/L	231.2	-	-	APHA 24 <sup>th</sup> Edition 2320B
16.	Iron (as Fe)	mg/L	0.3	0.3 (Max)	No Relaxation	IS:3025(Part-53):2024 APHA 24 <sup>th</sup> Edition 3500-Fe B
17.	Phosphate (as P)	mg/L	<0.02	-	-	APHA 24 <sup>th</sup> Edition 4500P D
18.	Fluoride (as F)	mg/L	<0.04	1 (Max)	1.5 (Max)	IS:3025(Part-60):2008: RA 2019 APHA 24 <sup>th</sup> Edition 4500 FD

Reviewed by:

Parbati Gouti  
Quality Manager  
INDICATIVE CONSULTANT INDIA  
Page: 1 of 2

Towards Sustainable Growth



# INDICATIVE CONSULTANT INDIA



(GOVT. REGISTERED TEST HOUSE)



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## TEST REPORT

Date: 04.04.2024	: Report No: ICI/HL/W/RN-365/2024	Format No: ICI/FM/H/67
Customer Name	: M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/W-365
Address	: Vill- Dhasna, P.O.- Bahadurpur, Jamuria, Dist-Paschim Bardhaman, West Bengal, Pin -713362	Sampling Date : 23.03.2024
#Customer Representative Name & Contact Number	Mr. Mayank Tiwari Mob. No. +91 91798 67607	Sampling Time : 01:10 PM
		Analysis Start Date : 26.03.2024
		Analysis complete Date : 03.04.2024
#Work Order No.	: 3000001055, Dtd. 01.10.2021 Amend No. 2, Dtd. 29.06.2023	
#Sample Description	: DRINKING WATER	
Sample Condition	: In Plastic Bottle & Glass Bottle	
Sampling Method	: IS:3025 (Part I): 1987 (RA 2019), APHA 24 <sup>th</sup> Edition, 2023	
# Location	: NEW ADMIN AQUAGUARD	
Material Specification	: IS 10500: 2012	

Sl. No.	Parameters	Unit	Result	As Per IS:10500:2012		Method Followed
				Desirable Limit	Permissible limit in the absence of alternate source	
<b>ORGANOLEPTIC AND PHYSICAL PARAMETERS</b>						
19.	Appearance	-	Clear	-	-	Visual
<b>GENERAL PARAMETERS CONCERNING SUBSTANCES UNDESIRABLE IN EXCESSIVE AMOUNTS</b>						
20.	Sulfate (as SO <sub>4</sub> )	mg/L	31.0	200 (Max)	400 (Max)	IS:3025(Part-24):1986; RA 2019 APHA 24 <sup>th</sup> Edition 4500 SO <sub>4</sub> <sup>2-</sup> E
21.	Silica (as SiO <sub>2</sub> )	mg/L	29.2	-	-	IS:3025(Part-35):1988, RA 2023 APHA 24 <sup>th</sup> Edition 4500 SiO <sub>2</sub> C
22.	Manganese (as Mn)	mg/L	<0.1	0.1 (Max)	0.3 (Max)	APHA 24 <sup>th</sup> Edition 3111 B
<b>PARAMETERS CONCERNING TOXIC SUBSTANCES</b>						
23.	Arsenic (as As)	mg/L	<0.01	0.01 (Max)	0.05 (Max)	APHA 24 <sup>th</sup> Edition 3500As B
<b>BACTERIOLOGICAL PARAMETERS</b>						
24.	Total Coliform	MPN/100 ml	BLQ	Shall not be detectable in any 100 ml of sample	-	IS: 1622:1981 (RA 2019)
25.	E. Coli	CFU/100ml	Absent	Shall not be detectable in any 100 ml of sample	-	IS: 1622:1981 (RA 2019)

LOQ= Limits of Quantification; BLQ= Below Limit of Quantification (LOQ- 1.8 MPN/100 ml)

### Remarks:

- 1) Chemical test Parameters: **Compliance** – The test parameters except Total Hardness & Total Alkalinity are within desirable limit as per specification IS 10500:2012, however the values of Total Hardness & Total Alkalinity are within permissible limit in the absence of alternate source as per specification IS 10500:2012)
- 2) Bacteriological test parameters: **Compliance** – The above-mentioned test parameters are within desirable limit as per specification IS 10500:2012

Prepared By: N. Pramanik

Checked By: N. Pramanik

For, INDICATIVE CONSULTANT INDIA

Parbati Gouti  
(Quality Manager)  
Signature: Parbati Gouti  
Quality Manager  
INDICATIVE CONSULTANT INDIA

Test Witnessed By: Nil (Sampling was done in front of customer representatives)

Estimated Uncertainty: Not Required

- Note:
1. # Information provided by customer
  2. Sample is drawn by M/s. Indicative Consultant India
  3. Sample submitted and identified by customer as: N.A.
  4. Test results shown in this test report relate only to the sample (s) only
  5. The test results referred in test report are based on observations & measurements under the stated environmental conditions.
  6. The reproduction of the report except in full is invalid without written approval of the laboratory
  7. Once issued, the test report/certificate is in public domain and laboratory is not responsible for the authenticity of photocopied test report
  8. Retention period of tested samples (Water) is 10 days from the date of issue of test report unless otherwise specified.
  9. Location of Testing: Haldia Laboratory

Reviewed By: N. Pramanik

End of Report

Towards Sustainable Growth

ANNEXURE - XXII



# INDICATIVE CONSULTANT INDIA

(GOVT. REGISTERED TEST HOUSE)



EMAIL : indicativeconsultantindia@gmail.com / indicativeconsultantindia.kol@gmail.com

## TEST REPORT

Date: 23.07.2024	Report No: ICI/HL/W/RN-891/2024	Format No: ICI/FM/H/67
Customer Name	M/s. SHYAM SEL & POWER LIMITED	Sample ID No : 2024/W-891
Address	Vill- Dhasna, P.O.- Bahadurpur, Jamuria, Dist. -Paschim Bardhaman, West Bengal, Pin -713362	Sampling Date : 08.07.2024
#Customer Representative Name & Contact Number	Sr. Executive	Sampling Time : 12.40 PM
		Analysis Start Date : 11.07.2024
		Analysis complete Date : 22.07.2024
#Work Order No.	3000019828, Dtd 01.04.2024	
#Sample Description	EFFLUENT	
Sample Condition	In Plastic Bottle & Glass Bottle	
Sampling Method	IS-3025 (Part I): 1987 (RA 2019), APHA 24 <sup>th</sup> Edition, 2023	
#Location	STP OUTLET	
Material/ Test Specification	Schedule - VI: General Standards for Discharge of Environmental Pollutants; Part A: Effluents; The Environment (Protection) Rules, 1986	

Sl. No.	Parameters	Unit	Result	Schedule - VI: General Standards for Discharge of Environmental Pollutants Part A: Effluents**		Method Followed
				Inland Surface Water	Public Sewers	
1	pH (at 26°C)	—	7.11	5.5-9.0	5.5-9.0	IS: 3025(Part-11):2022, APHA 24 <sup>th</sup> Edition 4500-H <sup>o</sup> B
2	Total Suspended Solid (TSS)	mg/L	52.0	100 mg/L (max)	600 mg/L (max)	IS-3025 (Part-17): 2022, APHA 24 <sup>th</sup> Edition 2540D,
3	Chemical Oxygen Demand (COD)	mg/L	52.1	250 mg/L (max)	Not Specified	APHA 24 <sup>th</sup> Edition 5220B
4	Bio-Chemical Oxygen Demand (for 3 days at 27°C)	mg/L	12.0	30 mg/L (max)	350 mg/L (max)	IS-3025 (Part-44): 2023
5	Oil and Grease	mg/L	3.2	10 mg/L (max)	20 mg/L (max)	IS-3025 (Part-39): 2021, APHA 24 <sup>th</sup> Edition 5520B,
6	Total Dissolved Solid (TDS)	mg/L	360.0	Not Specified	Not Specified	IS-3025(Part-16):2023, APHA 24 <sup>th</sup> Edition 4500-H <sup>o</sup> B
7	Chloride (as Cl)	mg/L	34.0	Not Specified	Not Specified	IS-3025(Part-32):1988; RA 2019, APHA 24 <sup>th</sup> Edition 4500Cl B

\*\*The Environment (Protection) Rules, 1986

For, INDICATIVE CONSULTANT INDIA

Prepared By: N. Pramanik

Checked By: N. Pramanik

Parbari Golui  
(Quality Manager)  
Signatory Authority

Test Witnessed By: Nil (Sampling was done in front of customer representatives)  
Estimated Uncertainty: Not Required

Parbari Golui  
Quality Manager  
INDICATIVE CONSULTANT INDIA

- Note :
- Information provided by customer
  - Sample is drawn by M/s. Indicative Consultant India in front of customer representatives
  - Sample submitted and identified by customer as: N.A.
  - Test results shown in this test report relate only to the sample (s) only
  - The test results referred in test report are based on observations & measurements under the stated environmental conditions.
  - The reproduction of the report except in full is invalid without written approval of the laboratory.
  - Once issued, the test report/certificate is in public domain and laboratory is not responsible for the authenticity of photocopied test report
  - Retention period of tested samples (Water) is 10 days from the date of issue of test report unless otherwise specified.
  - Location of Testing: Haldia Laboratory

End of Report

Page 1 of 1

Reviewed By: QM/TM

ANNEXURE - XXIII

## GARLAND DRAIN



ANNEXURE - XXIV

## TYRE WASHING FACILITY



ANNEXURE - XXV

## PLANT INLET WATER FLOW MWTER



ANNEXURE - XXVI



# INDICATIVE CONSULTANT INDIA

(GOVT. REGISTERED TEST HOUSE)



EMAIL : indicativeconsultantindia@gmail.com / indicativeconsultantindia.kol@gmail.com

## TEST REPORT

Date: 23.07.2024	Report No: ICIHLN/TC-129/2024	Format No: ICI/FM/H/68
Customer Name	M/s. SHYAM SEL & POWER LIMITED	
Address	Dhasna, Bahadurpur, Jamuria, Dist.- Paschim Bardhaman, PIN -713 362	
#Customer Representative Name & Contact No.	Sr. Executive	
#Work Order No.	3000019828, Dtd. 01.04.2024	
#Sample Description	WORKZONE NOISE	
Sampling Method	By Digital Noise Meter	
Test Method	IS 4758:1968 (RA 2017)	
Monitoring Details:		
Height from the floor	1.5 M	Total Time (T) : 18 Min
Distance of Source	3.0 M	Difference (dt) : 2 Min

#Noise Source/ Location: DRI - 1 (NEAR ESP AREA)						DAY TIME
Sample ID	Sampling Date	Sampling Time	Results dB(A)			Limit* dB(A)
			Equivalent Noise (L <sub>eq</sub> ) dB(A)	Maximum Noise (L <sub>max</sub> ) dB(A)	Minimum Noise (L <sub>min</sub> ) dB(A)	
2024/N-639	08.07.2024	10:35 AM	87.30	89.2	85.8	As per note

#Noise Source/ Location: DRI - 2 (WHRB AREA)						DAY TIME
Sample ID	Sampling Date	Sampling Time	Results dB(A)			Limit* dB(A)
			Equivalent Noise (L <sub>eq</sub> ) dB(A)	Maximum Noise (L <sub>max</sub> ) dB(A)	Minimum Noise (L <sub>min</sub> ) dB(A)	
2024/N-640	08.07.2024	11:10 AM	87.14	88.4	85.8	As per note

#Noise Source/ Location: PELLET PLANT - 1 (T.G. FLOOR)						DAY TIME
Sample ID	Sampling Date	Sampling Time	Results dB(A)			Limit* dB(A)
			Equivalent Noise (L <sub>eq</sub> ) dB(A)	Maximum Noise (L <sub>max</sub> ) dB(A)	Minimum Noise (L <sub>min</sub> ) dB(A)	
2024/N-641	08.07.2024	11:55 AM	86.51	88.3	84.8	As per note

#Noise Source/ Location: PELLET PLANT - 3 (T.G. FLOOR)						DAY TIME
Sample ID	Sampling Date	Sampling Time	Results dB(A)			Limit* dB(A)
			Equivalent Noise (L <sub>eq</sub> ) dB(A)	Maximum Noise (L <sub>max</sub> ) dB(A)	Minimum Noise (L <sub>min</sub> ) dB(A)	
2024/N-642	08.07.2024	12:35 PM	88.53	89.4	87.4	As per note

#Noise Source/ Location: DRI - 3 (WHRB AREA)						DAY TIME
Sample ID	Sampling Date	Sampling Time	Results dB(A)			Limit* dB(A)
			Equivalent Noise (L <sub>eq</sub> ) dB(A)	Maximum Noise (L <sub>max</sub> ) dB(A)	Minimum Noise (L <sub>min</sub> ) dB(A)	
2024/N-643	08.07.2024	02:00 PM	85.49	87.0	83.8	As per note

#Noise Source/ Location: DRI - 4 (WHRB AREA)						DAY TIME
Sample ID	Sampling Date	Sampling Time	Results dB(A)			Limit* dB(A)
			Equivalent Noise (L <sub>eq</sub> ) dB(A)	Maximum Noise (L <sub>max</sub> ) dB(A)	Minimum Noise (L <sub>min</sub> ) dB(A)	
2024/N-644	08.07.2024	02:40 PM	87.63	89.9	80.3	As per note

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*Parbati Gohai*  
**Parbati Gohai**  
 Quality Manager  
 INDICATIVE CONSULTANT INDIA



# INDICATIVE CONSULTANT INDIA

(GOVT. REGISTERED TEST HOUSE)



EMAIL : indicativeconsultantindia@gmail.com / indicativeconsultantindia.kol@gmail.com

## TEST REPORT

Date: 23.07.2024	: Report No: ICI/ML/NTC-129/2024	Format No: ICI/FMH/68
Customer Name	: M/s. SHYAM SEL & POWER LIMITED	
Address	: Dhasna, Bahadurpur, Jampuria, Dist.- Paschim Bardhaman, PIN -713 362	
#Customer Representative Name & Contact No.	: Sr. Executive	
#Work Order No.	: 3000019828, Dtd: 01.04.2024	
#Sample Description	: WORKZONE NOISE	
Sampling Method	: By Digital Noise Meter	
Test Method	: IS 4758:1968 (RA 2017)	
<b>Monitoring Details:</b>		
Height from the floor	: 1.5 M	Total Time (T) : 18 Min
Distance of Source	: 3.0 M	Difference (dt) : 2 Min

#Noise Source/ Location: SMS – 1 (SMS AREA)						DAY TIME
Sample ID	Sampling Date	Sampling Time	Results dB(A)			Limit* dB(A)
			Equivalent Noise (L <sub>eq</sub> ) dB(A)	Maximum Noise (L <sub>max</sub> ) dB(A)	Minimum Noise (L <sub>min</sub> ) dB(A)	
2024/N-645	08.07.2024	03:20 PM	89.57	91.1	88.4	As per note

#Noise Source/ Location: SMS – 2 (SMS AREA)						DAY TIME
Sample ID	Sampling Date	Sampling Time	Results dB(A)			Limit* dB(A)
			Equivalent Noise (L <sub>eq</sub> ) dB(A)	Maximum Noise (L <sub>max</sub> ) dB(A)	Minimum Noise (L <sub>min</sub> ) dB(A)	
2024/N-646	08.07.2024	04:00 PM	89.30	90.6	88.3	As per note

#Noise Source/ Location: SMS – 3 (SMS AREA)						DAY TIME
Sample ID	Sampling Date	Sampling Time	Results dB(A)			Limit* dB(A)
			Equivalent Noise (L <sub>eq</sub> ) dB(A)	Maximum Noise (L <sub>max</sub> ) dB(A)	Minimum Noise (L <sub>min</sub> ) dB(A)	
2024/N-647	08.07.2024	04:35 PM	89.56	91.0	88.4	As per note

#Noise Source/ Location: SMS – 1 EXT (SMS EXTENSION AREA)						DAY TIME
Sample ID	Sampling Date	Sampling Time	Results dB(A)			Limit* dB(A)
			Equivalent Noise (L <sub>eq</sub> ) dB(A)	Maximum Noise (L <sub>max</sub> ) dB(A)	Minimum Noise (L <sub>min</sub> ) dB(A)	
2024/N-648	08.07.2024	05:15 PM	89.51	91.1	88.3	As per note

#Noise Source/ Location: ROLLING MILL (INSIDE AREA)						DAY TIME
Sample ID	Sampling Date	Sampling Time	Results dB(A)			Limit* dB(A)
			Equivalent Noise (L <sub>eq</sub> ) dB(A)	Maximum Noise (L <sub>max</sub> ) dB(A)	Minimum Noise (L <sub>min</sub> ) dB(A)	
2024/N-649	09.07.2024	10:25 AM	90.22	92.8	88.4	As per note

#Noise Source/ Location: STRUCTURE MILL (INSIDE AREA)						DAY TIME
Sample ID	Sampling Date	Sampling Time	Results dB(A)			Limit* dB(A)
			Equivalent Noise (L <sub>eq</sub> ) dB(A)	Maximum Noise (L <sub>max</sub> ) dB(A)	Minimum Noise (L <sub>min</sub> ) dB(A)	
2024/N-650	09.07.2024	11:10 AM	89.60	91.4	88.0	As per note

#Noise Source/ Location: L.S. MILL (INSIDE AREA)						DAY TIME
Sample ID	Sampling Date	Sampling Time	Results dB(A)			Limit* dB(A)
			Equivalent Noise (L <sub>eq</sub> ) dB(A)	Maximum Noise (L <sub>max</sub> ) dB(A)	Minimum Noise (L <sub>min</sub> ) dB(A)	
2024/N-651	09.07.2024	11:55 AM	90.06	92.4	88.9	As per note

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*Parbati Ghosh*  
 Parbati Ghosh  
 Quality Manager  
 INDICATIVE CONSULTANT INDIA



# INDICATIVE CONSULTANT INDIA

(GOVT. REGISTERED TEST HOUSE)

EMAIL : indicativeconsultantindia@gmail.com / indicativeconsultantindia.kol@gmail.com



## TEST REPORT

Date: 23.07.2024	Report No: ICIHL/N/TC-129/2024	Format No: ICI/PM/11/68
Customer Name	M/s. SHYAM SEL & POWER LIMITED	
Address	Dhasna, Bahadurpur, Jampuria, Dist.- Paschim Bardhaman, PIN -713 362	
#Customer Representative Name & Contact No.	Sr. Executive	
#Work Order No.	3000019828, Dtd. 01.04.2024	
#Sample Description	WORKZONE NOISE	
Sampling Method	By Digital Noise Meter	
Test Method	IS 4758:1968 (RA 2017)	
<b>Monitoring Details:</b>		
Height from the floor	1.5 M	Total Time (T) : 18 Min
Distance of Source	3.0 M	Difference (di) : 2 Min

#Noise Source/ Location: WIRE ROD MILL (INSIDE AREA)						DAY TIME
Sample ID	Sampling Date	Sampling Time	Results dB(A)			Limit* dB(A)
			Equivalent Noise (L <sub>eq</sub> ) dB(A)	Maximum Noise (L <sub>max</sub> ) dB(A)	Minimum Noise (L <sub>min</sub> ) dB(A)	
2024/N-652	09.07.2024	12:35 AM	90.39	92.4	88.9	As per note

#Noise Source/ Location: FERRO (FURNACE FLOOR - 4.5 MVA)						DAY TIME
Sample ID	Sampling Date	Sampling Time	Results dB(A)			Limit* dB(A)
			Equivalent Noise (L <sub>eq</sub> ) dB(A)	Maximum Noise (L <sub>max</sub> ) dB(A)	Minimum Noise (L <sub>min</sub> ) dB(A)	
2024/N-653	09.07.2024	02:10 PM	87.11	88.3	85.8	As per note

#Noise Source/ Location: FERRO (FURNACE FLOOR - 9.0 MVA)						DAY TIME
Sample ID	Sampling Date	Sampling Time	Results dB(A)			Limit* dB(A)
			Equivalent Noise (L <sub>eq</sub> ) dB(A)	Maximum Noise (L <sub>max</sub> ) dB(A)	Minimum Noise (L <sub>min</sub> ) dB(A)	
2024/N-654	09.07.2024	02:45 PM	87.57	88.9	86.4	As per note

#Noise Source/ Location: CPP - 1 (T.G. FLOOR AREA)						DAY TIME
Sample ID	Sampling Date	Sampling Time	Results dB(A)			Limit* dB(A)
			Equivalent Noise (L <sub>eq</sub> ) dB(A)	Maximum Noise (L <sub>max</sub> ) dB(A)	Minimum Noise (L <sub>min</sub> ) dB(A)	
2024/N-655	09.07.2024	03:35 PM	90.99	93.4	88.9	As per note

#Noise Source/ Location: CPP - 2 (T.G. FLOOR AREA)						DAY TIME
Sample ID	Sampling Date	Sampling Time	Results dB(A)			Limit* dB(A)
			Equivalent Noise (L <sub>eq</sub> ) dB(A)	Maximum Noise (L <sub>max</sub> ) dB(A)	Minimum Noise (L <sub>min</sub> ) dB(A)	
2024/N-656	09.07.2024	04:20 PM	90.69	93.4	88.9	As per note

\*Note:  
 OSHA's Permissible limit (PEL) is 90 dB (A) for all workers of an 8 Hour Day with 5 dB (A) exchange Rate  
 Indian Factory Act'1948 Permissible limit (PEL) is 90 dB (A) for all workers of an 8 Hour Day

Prepared by: N. Pramanik

Checked by: N. Pramanik

For, INDICATIVE CONSULTANT INDIA

Parbati Golui  
 (Quality Manager)  
 Signatory Authority

Test Witnessed By: Sampling was done in front of customer's representative  
 Estimated Uncertainty: Not Required

Parbati Golui  
 Quality Manager  
 INDICATIVE CONSULTANT INDIA

- Note :
- Information provided by customer
  - Sample is drawn by M/s. Indicative Consultant India
  - Sample submitted and identified by customer as: N.A.
  - Test results shown in this test report relate only to the sample (s) only
  - The test results referred in test report are based on observations & measurements under the stated environmental conditions.
  - Noise data was recorded in the customer site in presence of customer's representative.
  - Once issued, the test report/certificate is in public domain and laboratory is not responsible for the authenticity of photocopied test report
  - The reproduction of the report except in full is invalid without written approval of the laboratory
  - Location of Testing: Plant Site & Report was generated from Haldia Laboratory

End of Report

Page 3 of 3

Reviewed by: QM/TM

Towards Sustainable Growth

ANNEXURE - XXVII

**SMS LADLE TOP COVER**



ANNEXURE - XXVIII

## SOLAR PANEL FLOATING & ROOF TOP TYPE



ANNEXURE - XXIX

## FOOD COMPOSTER



ANNEXURE - XXX



Company Overview	
Company name	Shyam Sel & Power Limited , an Indian-based company, is a prominent player in the integrated metal production industry, specializing in long steel products and ferro alloys. Shyam Metalics operates four manufacturing plants, one in Odisha and three in West Bengal.
Description of the company	Shyam Metalics, an Indian-based company, is a prominent player in the integrated metal production industry, specializing in long steel products and ferro alloys. Shyam Metalics operates four manufacturing plants, one in Odisha and three in West Bengal.
Chosen consolidation approach (equity share, operational control or financial control)	Operational control
Description of the businesses and operations included in the company's organizational boundary	Jamuria Plant
The reporting period covered	FY 2023-24

For Identification of emission sources we divide sources into direct and indirect emissions category which is further divided into scope 1, 2, 3

**Scope 1** – GHG emissions directly from operations that are owned or controlled by the reporting company. (Direct Emissions)

**Scope 2** – Indirect GHG emissions from the generation of purchased or acquired electricity, steam, heating, or cooling consumed by the reporting company

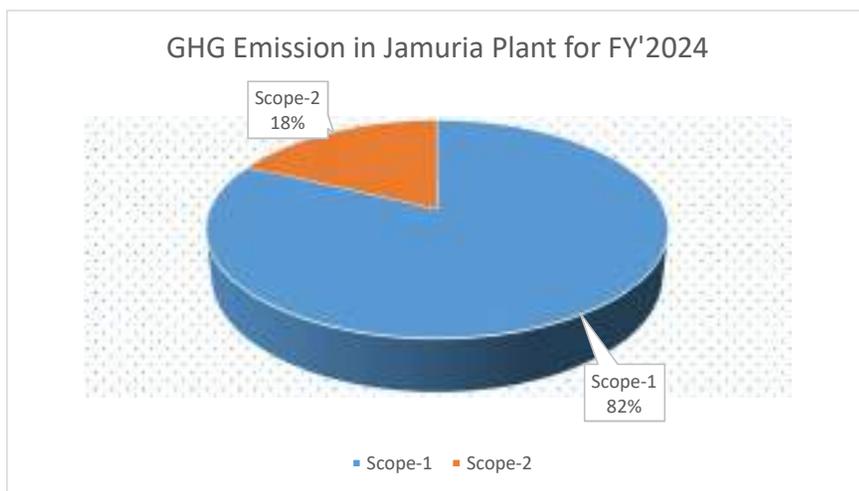
**Scope 3** – All indirect emissions (not included in scope 2) that occur in the value chain of the reporting company, including both upstream and downstream emissions

---

For each emissions source we identified in Step Two, first is finding the appropriate "activity data" and "emissions factor" to help us apply the following equation:  
**Activity data × Emissions factor = CO2 emissions**

This methodology used as per the "GHG Protocol". GHG Protocol supplies the world's most widely used greenhouse gas accounting standards. The standards are designed to provide a framework for businesses, governments, and other entities to measure and report their greenhouse gas emissions in ways that support their missions and goals.

	Category	Discription	Sources	Emmision(t CO2e)	
Scope-1	Stationary Combustion	Most emission sources from stationary combustion in dairy processing include — but are not limited to — boilers, combustion turbine process	Boiler	Fuels	1137937.42
			Combustion Turbines		
			Process Heaters		
			Incinerators		
	Fugitive Emissions	Direct emissions arising from owned or controlled stationary sources that use fossil fuels and/ore emit fugitive emissions	Air conditioning		0
			DG set	Diesel	10179.83
Fire suppression system				0	
Refrigerants				0	
				<b>Scope-1</b>	<b>11,48,117.25</b>
Scope-2	Purchased Electricity	The total electricity purchased and consumed during the reporting period in energy units, MWh or kWh	Location-based emissions from the generation of purchased electricity, heat, steam or colling	251276.552	
				<b>Scope-2</b>	<b>2,51,276.55</b>
				<b>Physical output (FY'2024)</b>	<b>449512.97</b>
				<b>Energy Intensity per Physical output (tCO2e/Metric tonne)</b>	<b>3.11</b>



ANNEXURE - XXXI



o/c  
**SHYAM SEL & POWER LTD.**

CIN: U27199WB1991PLC052962



Power | Iron Alloys | Stainless Steel | H. H. Coil | Special Steel | Pipes & Tubes | Structural | Cement | Wire Rods | Pig Iron | Spinning | Sinter | TMT Rebars

To  
The Dy. Chief Inspector of factories, Asansol  
SHRAMIK BHAWAN, Ground Floor  
KALYANPUR SATELLITE TOWNSHIP PROJECT  
Asansol-713305, Dist – Paschim Bardhaman (W.B)

Date- 12.04.2019

**Sub- Submission of Onsite emergency plan of Jamuria unit**

Respected Sir,

Please find enclosed herewith on site emergency plan of Jamuria unit.

Kindly acknowledge the receipt of the above.

Thanking You,

For Shyam Sel & Power Ltd.

Alok Kumar Mishra  
Alok Kumar Mishra  
Factory Manager



12/04/19  
Alok Kumar Mishra  
Factory Manager  
SHYAM SEL AND POWER LTD.  
Bijaynagar Mora, P.O.-Behadurpur  
Jamuria, Burdwan, West Bengal

IDENTIFICATION OF HAZARD AND RISK, RISK ASSESSMENT AND RISK MANAGEMENT MEASURE

SIYAM SEL & POWER LTD.										Date:20.01.2022					Content Rev# 01 - Hazard (Electrical Preventive Maintenance)				
Sl. No.	Activities/Services (including Contractors)	Hazard			Condition			Adequacy of Measure			Risk		Scale of Severity of Risk S=L x C					Over riding factor (LC/DC/any others)	Risk Management Measures Required
		Potential Hazard	Impact of hazard	HIS	DI	R/NR	MA/NE	Existing control as per hierarchy of control Elimination Substitution Engineering control Administrative control PPE	Gaps, if any	Likely hood (1-4)	Consequence (1-5)	State of State (1-5)	Likely hood (L)	Level of consequence (C)	Detectability (D)	Total - S+L+C+D	Risk Classification		
1	Cleaning of Equipment	Use of Tools	Injury due to slippage of tools	S	D1	R	N	Administrative Control: Periodical checking of tools & facilities PPE Control - Use of hand gloves.	Behavioral issues	UL	Minor Injury	1	2	4	1	10	Moderate	1. Display of safety signages at site	
2	Inspection of Electrical Equipments, cables, feeder & drives.	Dust Generation	Health Issues	H	D0	R	N	PPE Control: Use of appropriate PPEs (Dust Mask)	Behavioral issues	UL	Minor Injury	1	2	4	1	8	Moderate	1. Training on Behaviour Safety for Use of PPEs	
		STP Hazard	Injury due to Slip/Trip, fall	S	D	R	N	PPE Control-Use of appropriate PPEs including safety shoes, safety helmet & safety goggles.	Behavioral issues	UL	Minor Injury	1	2	4	1	10	Moderate	1. Training on Behaviour Safety for Use of PPEs. 2. Safety Coos & Dents Signages to be Displayed at Site	
3	Assembly, testing & installation of Motors.	Dust Generation	Health Issues	H	D1	R	N	PPE Control-Use of appropriate PPEs (Dust Mask)	Behavioral issues	UL	Minor Injury	1	2	4	2	10	Moderate	1. Skilled Drivers & Operators with proper License. 2. Proper roads with display of safety signages. 3. SOP to be available in Local Language & displayed at site	
		Vehicle Collision & Topping	Major Injury	S	D1	R	N	Administrative Control: Provision of Vehicle Character velocity of pedestrians	Unskilled Driver	UL	Major Injury	1	2	6	1	14	Substantial	1. Training on Behaviour Safety for Use of PPEs 2. Safety signages to be displayed at prominent places in local language 3. Predefined Medical Check Up to be Done as per guidelines.	
4	Checking & Replacement of Faulty Electrical Equipments	Dust Generation	Health Issues	H	D0	R	N	PPE Control- use of appropriate PPEs (Dust Mask)	Behavioral issues	UL	Minor Injury	1	2	4	1	8	Moderate	1. Training on Behaviour Safety for Use of PPEs 2. Safety Coos & Dents Signages to be Displayed at Site	
		STP Hazard	Injury due to Slip/Trip, fall	S	D	R	N	PPE Control-Use of appropriate PPEs including safety shoes, safety helmet & safety goggles.	Behavioral issues	UL	Minor Injury	1	2	4	1	10	Moderate		

## IDENTIFICATION OF HAZARD AND RISK, RISK ASSESSMENT AND RISK MANAGEMENT MEASURE

SHYAM SEL & POWER LTD.		OHS Hazard/Associated Risk Identification														
		Date: 20.01.2022					Contract Rev.# 51 - Pellet (Electrical Preventive Maintenance)									
Sl. No	Activity/Services (Including Contractors)	Hazard		Condition		Adequacy of Measure		Risk		Scale of Severity of Risk S <sub>2</sub> x C			Over riding factor (LC/DCLs or others)	Risk Management Measure Required		
		Potential Hazard	Impact of hazard	HIS	DI/NR	NAME	Existing control as per hierarchy of control Elimination Substitution Engineering control Administrative control PPE	Gaps, if any	Likelihood (1-4)	Consequence (1 to 8)	Level of consequence (C)	Liability (L)			Defectibility (D)	Total - S <sub>2</sub> x C + D
7	Shipping of Material (including cases, meter, panel etc.	Heat	Injury Due to Heat	S	D	N	Addressing Control- Appropriate PPEs for heat resistance is Provided	Behavioral Issues	UL	Minor Injury	2	6	1	14	Substantial	1. Training on behavioral safety 2. PPE Matrix to be Displayed at Site 3. SOP for the job is local language to be Displayed at Site 4. Alternative control to be adequate through implementation of work permit system
	Out Generation	Health Issues	Health Issues	H	D	N	PPE Control- Use of appropriate PPEs	Behavioral Issues	UL	Minor Injury	2	4	1	10	Medium	1. Training on Behaviour Safety

LC : Legal Concern, if concerning activity / associated hazard is covered under Indian OHS legislation.

DC : Donning Concern, if concerning activity / associated hazard can trigger series of accident.

AO : Any other relevant factor if applicable related to / or affecting the significance of OHS risks.

H : Health S : Safety D : Direct; I : Indirect; R : Routine; NR : Non Routine; N : Normal; AN : Abnormal; E : Emergency

Signature

HOD (Plant Plant)

Signature

HOD (Safety)

*Abhishek Kumar Mishra*  
Factory Manager

SHYAM SEL AND POWER LTD.  
Bijayanagar Mem. P.O.-Sahadarpur  
Jamunia, Burdwan, West Bengal

**IDENTIFICATION OF HAZARD AND RISK ASSESSMENT AND RISK MANAGEMENT MEASURES**

Activities/Operations (including Connections)	Hazard				Condition				Adequacy of Measure				Risk	Scale of Severity of Risk, 1-10				Overall Rating Factor (LC/CC/CL or others)	Risk Management Measures Required
	Potential Hazard	Impact of Hazard	MES	SE	S/NR	N/A/M/W	Existing control as per hierarchy of control Elimination, Substitution, Engineering control, Administrative control, PPE	Likelihood (1-4)	Consequences (1-4)	Scale S1	Level of consequence (1-4)	Detectability (1-10)		Total - S1+S2+D	Risk Classification				
																H	D		
1. Cleaning of Equipment	Use of Tools	Minor cuts to exposed parts	B	CA	N	N	Administrative Control: Periodical checking of tools & PPE Control - Use of hand gloves	UL	Minor injury	1	2	4	1	10	Minor	1. Training on SOP			
2. Repairs of Electrical Equipments, cables, feeder & drives.	Over Distribution	Health issues	H	DA	R	N	PPE Control- Use of appropriate PPEs (Ear Muffs)	UL	Minor injury	1	2	4	1	10	Minor	1. Training on Behaviour Safety for Use of PPEs			
	317 Hazards	Minor cuts to Skin/Trauma	B	D	R	N	PPE Control-Use of appropriate PPEs including safety shoes, safety helmet & safety goggles.	UL	Minor injury	1	2	4	1	10	Minor	1. Training on Behaviour Safety for Use of PPEs 2. Safety Data & Don't Spillages to be Discussed at Site			
3. Assembly, testing & installation of Motors.	Over Distribution	Health issues	H	DA	R	N	PPE Control- Use of appropriate PPEs (Dust Mask)	UL	Minor injury	1	2	4	2	10	Minor	1. Training on Electrical Safety 2. SOP to be available in Local Language & displayed at site			
	Medical Issues	Headache	B	D	R	N	Administrative Control: Following Work Rest System	UL	Minor injury	1	2	4	1	14	Substantial	LC			
4. Cabling & Refinement of Faulty Electrical Equipments	Over Distribution	Health issues	H	DA	R	N	PPE Control- Use of appropriate PPEs (Ear Muffs)	UL	Minor injury	1	2	4	1	10	Minor	1. Training on Behaviour Safety for Use of PPEs 2. Safety Data & Don't Spillages to be Discussed at Site			
	317 Hazards	Minor cuts to Skin/Trauma	B	D	R	N	PPE Control-Use of appropriate PPEs including safety shoes, safety helmet & safety goggles.	UL	Minor injury	1	2	4	1	10	Minor	1. Training on Behaviour Safety for Use of PPEs 2. Safety Data & Don't Spillages to be Discussed at Site			
	Noise	hearing loss	H	D	R	N	PPE Control- Ear Muff provided	UL	Minor injury	1	2	4	1	10	Minor	1. Training on improved safety 2. Display of PPE status at site			

**IDENTIFICATION OF HAZARD AND RISK ASSESSMENT AND RISK MANAGEMENT MEASURE**

SHYAM S&L & POWER LTD.		Hazard		Condition		Adequacy of Measure		Risk		Risk Assessment				Overall Rating Factor (A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z, AA, AB, AC, AD, AE, AF, AG, AH, AI, AJ, AK, AL, AM, AN, AO, AP, AQ, AR, AS, AT, AU, AV, AW, AX, AY, AZ, BA, BB, BC, BD, BE, BF, BG, BH, BI, BJ, BK, BL, BM, BN, BO, BP, BQ, BR, BS, BT, BU, BV, BW, BX, BY, BZ, CA, CB, CC, CD, CE, CF, CG, CH, CI, CJ, CK, CL, CM, CN, CO, CP, CQ, CR, CS, CT, CU, CV, CW, CX, CY, CZ, DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, DK, DL, DM, DN, DO, DP, DQ, DR, DS, DT, DU, DV, DW, DX, DY, DZ, EA, EB, EC, ED, EE, EF, EG, EH, EI, EJ, EK, EL, EM, EN, EO, EP, EQ, ER, ES, ET, EU, EV, EW, EX, EY, EZ, FA, FB, FC, FD, FE, FF, FG, FH, FI, FJ, FK, FL, FM, FN, FO, FP, FQ, FR, FS, FT, FU, FV, FW, FX, FY, FZ, GA, GB, GC, GD, GE, GF, GG, GH, GI, GJ, GK, GL, GM, GN, GO, GP, GQ, GR, GS, GT, GU, GV, GW, GX, GY, GZ, HA, HB, HC, HD, HE, HF, HG, HH, HI, HJ, HK, HL, HM, HN, HO, HP, HQ, HR, HS, HT, HU, HV, HW, HX, HY, HZ, IA, IB, IC, ID, IE, IF, IG, IH, II, IJ, IK, IL, IM, IN, IO, IP, IQ, IR, IS, IT, IU, IV, IW, IX, IY, IZ, JA, JB, JC, JD, JE, JF, JG, JH, JI, JJ, JK, JL, JM, JN, JO, JP, JQ, JR, JS, JT, JU, JV, JW, JX, JY, JZ, KA, KB, KC, KD, KE, KF, KG, KH, KI, KJ, KK, KL, KM, KN, KO, KP, KQ, KR, KS, KT, KU, KV, KW, KX, KY, KZ, LA, LB, LC, LD, LE, LF, LG, LH, LI, LJ, LK, LL, LM, LN, LO, LP, LQ, LR, LS, LT, LU, LV, LW, LX, LY, LZ, MA, MB, MC, MD, ME, MF, MG, MH, MI, MJ, MK, ML, MM, MN, MO, MP, MQ, MR, MS, MT, MU, MV, MW, MX, MY, MZ, NA, NB, NC, ND, NE, NF, NG, NH, NI, NJ, NK, NL, NM, NO, NP, NQ, NR, NS, NT, NU, NV, NW, NX, NY, NZ, OA, OB, OC, OD, OE, OF, OG, OH, OI, OJ, OK, OL, OM, ON, OO, OP, OQ, OR, OS, OT, OU, OV, OW, OX, OY, OZ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ, PK, PL, PM, PN, PO, PP, PQ, PR, PS, PT, PU, PV, PW, PX, PY, PZ, QA, QB, QC, QD, QE, QF, QG, QH, QI, QJ, QK, QL, QM, QN, QO, QP, QQ, QR, QS, QT, QU, QV, QW, QX, QY, QZ, RA, RB, RC, RD, RE, RF, RG, RH, RI, RJ, RK, RL, RM, RN, RO, RP, RQ, RR, RS, RT, RU, RV, RW, RX, RY, RZ, SA, SB, SC, SD, SE, SF, SG, SH, SI, SJ, SK, SL, SM, SN, SO, SP, SQ, SR, SS, ST, SU, SV, SW, SX, SY, SZ, TA, TB, TC, TD, TE, TF, TG, TH, TI, TJ, TK, TL, TM, TN, TO, TP, TQ, TR, TS, TT, TU, TV, TW, TX, TY, TZ, UA, UB, UC, UD, UE, UF, UG, UH, UI, UJ, UK, UL, UM, UN, UO, UP, UQ, UR, US, UT, UV, UW, UX, UY, UZ, VA, VB, VC, VD, VE, VF, VG, VH, VI, VJ, VK, VL, VM, VN, VO, VP, VQ, VR, VS, VT, VU, VV, VW, VX, VY, VZ, WA, WB, WC, WD, WE, WF, WG, WH, WI, WJ, WK, WL, WM, WN, WO, WP, WQ, WR, WS, WT, WU, WV, WW, WX, WY, WZ, XA, XB, XC, XD, XE, XF, XG, XH, XI, XJ, XK, XL, XM, XN, XO, XP, XQ, XR, XS, XT, XU, XV, XW, XX, XY, XZ, YA, YB, YC, YD, YE, YF, YG, YH, YI, YJ, YK, YL, YM, YN, YO, YP, YQ, YR, YS, YT, YU, YV, YW, YX, YY, YZ, ZA, ZB, ZC, ZD, ZE, ZF, ZG, ZH, ZI, ZJ, ZK, ZL, ZM, ZN, ZO, ZP, ZQ, ZR, ZS, ZT, ZU, ZV, ZW, ZX, ZY, ZZ		
Activity/Service (Including No. Contractors)	Potential Hazard	Hazard	Impact of Hazard	Hazard ID	IRP	IRP NAME	Existing Control Measures per hierarchy of control (Elimination, Substitution, Engineering control, Administrative control, PPE)	Gap/ Missing Item	Liability (1-4)	Consequence (1-5)	Level of Exposure (1-4)	Likelihood (1-5)	Detectability (1-10)		Total Risk Classification	Risk Management Measure Required
1	Over Voltage	Over Voltage	Health Issues	OV-01	R	R	PPE Control- Use of appropriate PPEs	Barriers Issues	UL	Minor Injury	2	4	1	10	Medium	1. Training on safe work practices for use of PPEs 2. Safety signages to be displayed at junctions where over voltage occurs 3. Periodical Medical Check Up to be Done as per guidelines
2	Electric Shock	Electric Shock	Injury Due to Shock	ES-02	R	R	Administrative Control- Appropriate PPEs to be used (Insulation of Personnel)	Signage Issues	UL	Major Injury	3	6	1	14	Substantial	1. Training on safe work practices 2. PPE (Gloves) to be Displayed at Site 3. SOP for the job to be Displayed to be Displayed a Site 4. Administrative Control to be adequate through implementation of work permit system
3	Dust Generation	Dust Generation	Health Issues	DI-03	R	R	PPE Control- Use of appropriate PPEs	Signage Issues	UL	Minor Injury	2	4	1	10	Medium	1. Training on safe work practices

IDENTIFICATION OF HAZARD AND RISK ASSESSMENT AND RISK MANAGEMENT MEASURE

SHYAM SEL AND POWER LTD.		DHS Hazard/Routine Risk Identification		Risk Assessment		Risk Management Measure Required					
Activity/Service (including No Construction)	Potential Hazard	Hazard		Atsopony of Measure		Scale of Severity of Risk S=L x C					
		Impact of hazard	HS	DI	NAME	LI	LI	LI			
1. Storing of Material including Cable, Insulator, glass etc.	Heat	Injury Due to heat	E	D	H	Minor injury	3	3	9	Minor	1. Training on behaviour safety 2. PPE to be Deployed at Site 3. SOP for the job to be developed & Deployed at Site 4. Administrative Control to be applicable through implementation of each point system
2. Storing of Material	Dust Generation	Health Issue	H	D	N	Minor injury	1	2	2	Minor	1. Training on Behaviour Safety 2. PPE to be Deployed at Site 3. SOP for the job to be developed & Deployed at Site 4. Administrative Control to be applicable through implementation of each point system
3. Breaking of Castable	Heat	Injury Due to heat	E	D	N	Minor injury	1	2	2	Minor	1. Training on behaviour safety 2. PPE to be Deployed at Site 3. SOP for the job to be developed & Deployed at Site 4. Administrative Control to be applicable through implementation of each point system
4. Application of Castable	Dust Generation	Health Issue	H	D	N	Minor injury	1	2	2	Minor	1. Training on Behaviour Safety 2. PPE to be Deployed at Site 3. SOP for the job to be developed & Deployed at Site 4. Administrative Control to be applicable through implementation of each point system
5. Cleaning of Form	Heat	Injury Due to heat	E	D	N	Minor injury	1	2	2	Minor	1. Training on behaviour safety 2. PPE to be Deployed at Site 3. SOP for the job to be developed & Deployed at Site 4. Administrative Control to be applicable through implementation of each point system

L: Legal Concern, if concerning activity / associated hazard is covered under Indian laws/Regulation.  
 DC: Domestic Concern, if concerning activity / associated hazard can trigger series of accident.  
 Any Other: Any other relevant factor if applicable related to / or affecting the significance of Dd risk.  
 H: Health S - Safety D - Dient, I - Injuri, R - Routine, NR - Non Routine, N: Normal, AN - Abnormal E - Emergency

Signature  
HOD (Safety)

Signature  
HOD (Plant)

*Alok Kumar Mishra*  
 Factory Manager  
 SHYAM SEL AND POWER LTD.  
 Bijaynagar More, P.O.-Bahadurpur  
 Jamuria, Birbhum, West Bengal

## IDENTIFICATION OF HAZARD AND RISK, RISK ASSESSMENT AND RISK MANAGEMENT MEASURE

SIYAM SEL & POWER LTD.																		
OH&S Hazard/Associated Risk Identification																		
Sl. No	Activity/Services (Including Contractors)	Hazard			Condition			Adequacy of Measure			Risk		Scale of Severity of Risk 5=H, 4=C, 3=L, 2=B, 1=A				Over riding factor (LC/DC/Consequence (C) or others)	Risk Management Measures Required
		Potential Hazard	Impact of Hazard	HIS	DI	R/NR	NI/NR/IE	Existing control as per Hierarchy of control Elimination, Substitution, Engineering control, Administrative control, PPE	Gaps, if any	Likelihood (1-4)	Consequences (1-3)	Level of Consequence (C)	Detectability (D)	Total Risk (S+L+D)	Risk Classification			
1	Tightening of Fasteners, bolts & Nuts	Use of Tools	Injury due to slippage of tools	S	DI	R	N	Administrative Control- Periodical checking of tools & PPE Control- Use of hand gloves	Behavioural issues	UL	Minor injury	1	2	4	1	10	Minor	1. PPE Matrix to be available as per activities being performed
2	Inspection & Lubrication of System	Dust Generation	Health Issues	H	DI	R	M	PPE Control- Use of appropriate PPEs (Dust Mask)	Behavioural issues	UL	Minor injury	1	2	4	1	8	Moderate	1. Training on Behaviour Safety for Use of PPEs 2. Safety signals to be displayed at prominent places in tool language
3	Inspection & Lubrication of System	Slip- Hazard	Injury due to Slip/Trip, fall	S	DI	R	N	PPE Control-Use of appropriate PPEs including safety shoes, safety helmet & safety goggles	Behavioural issues	UL	Minor injury	1	2	4	1	10	Moderate	1. Training on Behaviour Safety for Use of PPEs 2. Safety Dots & Cones Signals to be displayed at the 3. Training on MSDS & display of MSDS in local language at site
3	Welding Activity	Use of Lubricants	Health Issues	H	DI	R	N	PPE Control- Use of appropriate PPEs (Hand Gloves)	Behavioural issues	UL	Major injury	1	2	6	1	14	Substantial	1. SOP to be available in Local Language & displayed at site 2. Training on Electrical Safety
4	Grinding	Pinus Generation	Health Issues	H	DI	R	N	PPE Control- Use of appropriate PPEs (Welding Shield & Apron)	Behavioural issues	UL	Minor injury	1	2	4	1	8	Moderate	1. Training on Behaviour Safety for Use of PPEs 2. Training on Electrical Safety
4	Grinding	Electrical Source	Electrocution	H	D	R	N	PPE Control- Use of appropriate PPEs	Behavioural issues	UL	Minor injury	1	2	4	1	8	Moderate	1. Training on Behaviour Safety for Use of PPEs 2. Training on Electrical Safety
4	Grinding	Electrical Source	Electrocution	H	D	R	N	PPE Control- Use of appropriate PPEs	Behavioural issues	UL	Minor injury	1	2	4	1	8	Moderate	1. Training on Behaviour Safety for Use of PPEs 2. Training on Electrical Safety
4	Grinding	Grinding Wheel	Major Injury Due to Failure of Grinding Wheel	S	D	R	N	PPE Control-Use of appropriate PPEs including safety shoes, safety helmet & safety goggles	Behavioural issues	UL	Minor injury	1	2	4	1	10	Moderate	1. Training on Behaviour Safety for Use of PPEs 2. Safety Dots & Cones Signals to be Displayed at Site
4	Grinding	Fire	Burn Injury	H	D	R	N	PPE Control- Ear Muff Provided	Behavioural issues	UL	Major injury	1	2	6	1	14	Substantial	1. Training on Behavioural safety 2. Display of PPE Matrix at site

IDENTIFICATION OF HAZARD AND RISK, RISK ASSESSMENT AND RISK MANAGEMENT MEASURE

SHYAM BELL & POWER LTD.										GHG Hazard/Associated Risk Identification										Context Rev.A.01 - Pellet (Shut Down: Mechanical)																																							
Hazard										Adequacy of Measure										Risk										Scale of Severity of Risk S <sub>1</sub> -L <sub>1</sub> x C										Over riding factor (LCC/DCs by others)										Risk Management Measure Required									
Sl. No	Activity/Services (Including Contractors)	Potential Hazard	Impact of hazard	HIS	DI	RI/IR	NAME	Existing control as per hierarchy of control Elimination Substitution Engineering control Administrative control PPE	Gaps, if any	Likelihood (1-4)	Consequence (1 to 5)	Scale S <sub>1</sub>	Scale L <sub>1</sub>	Likelihood (L <sub>1</sub> )	Level of consequence (L <sub>1</sub> )	Detectability (D <sub>1</sub> )	Total S <sub>1</sub> -L <sub>1</sub> x C	Risk Classification	Over riding factor (LCC/DCs by others)	Risk Management Measure Required																																							
5	Gas Cutting	Heat	Injury Due to Heat	S	D	R	N	Administrative Control- Appropriate PPEs for Heat Resistance is Provided	Behavioral Issues	UL	Major Injury	1	2	2	6	1	14	Substantial	-	1. Training as Behaviour Safety for Use of PPEs 2. Display of SCDP in local language in prominent places																																							
6	Flare Cleaning & Replacement	STP Hazard	Injury due to Stp/Trp. Hit	S	D	R	N	PPE Control-Use of appropriate PPEs including safety shoes, safety helmet & safety goggles	Behavioral Issues	UL	Minor Injury	1	2	2	4	1	10	Moderate	-	1. Training on STP Hazards																																							
7	Cleaning of Equipment	Dust Generation	Health Issues	H	D	R	N	PPE Control-Use of appropriate PPEs.	Behavioral Issues	UL	Minor Injury	1	2	2	4	1	10	Moderate	-	1. Training on use of PPEs																																							
8	Shifting of Material	Heat	Injury Due to Heat	S	D	R	N	Administrative Control- Appropriate PPEs for Heat Resistance is Provided	Behavioral Issues	UL	Major Injury	1	2	2	6	1	14	Substantial	-	1. Training on STP Hazards 1. Training on Behaviour Safety 1. Training on behavioural safety 2. PPE Matrix to be Displayed at Site 3. SCDP for the job in local language to be Displayed at Site 4. Administrative Control to be adequate through implementation of work permit system																																							
9	Breaking of Cassette	Dust Generation	Health Issues	H	D	R	N	PPE Control- Use of appropriate PPEs	Behavioral Issues	UL	Minor Injury	1	2	2	4	1	10	Moderate	-	1. Training as Behaviour Safety 1. Training on behavioural safety 2. PPE Matrix to be Displayed at Site 3. SCDP for the job in local language to be Displayed at Site 4. Administrative Control to be adequate through implementation of work permit system																																							
10	Application of Cassette	Heat	Injury Due to Heat	S	D	R	N	Administrative Control- Appropriate PPEs for Heat Resistance is Provided	Behavioral Issues	UL	Major Injury	1	2	2	6	1	14	Substantial	-	1. Training on behavioural safety 2. PPE Matrix to be Displayed at Site 3. SCDP for the job in local language to be Displayed at Site 4. Administrative Control to be adequate through implementation of work permit system																																							
11	Cleaning of Barrier	Dust Generation	Health Issues	H	D	R	N	PPE Control- Use of appropriate PPEs	Behavioral Issues	UL	Minor Injury	1	2	2	4	1	10	Moderate	-	1. Training on Behaviour Safety 1. Training on behavioural safety 2. PPE Matrix to be Displayed at Site 3. SCDP for the job in local language to be Displayed at Site 4. Administrative Control to be adequate through implementation of work permit system																																							

## IDENTIFICATION OF CHS HAZARD AND RISK, RISK ASSESSMENT AND RISK MANAGEMENT MEASURE

SHYAM SEL & POWER LTD.		CHS Hazard/Associated Risk Identification		Date: 20.01.2022		Content Rev.# 01 - Pallet (Shut Down Mechanism)					Risk Assessment						
Sl. No	Activity/Services (Including Contractors)	Hazard		Condition		Adequacy of Measure		Risk		Scale of Severity of Risk S <sub>1</sub> -L x C			Over riding factor (LC/DC/Ch or others)	Risk Management Measure Required			
		Potential Hazard	Impact of hazard	HIS	ID1	R/ NR	NUA/IE	Existing control as per Hierarchy of control Elimination Substitution Engineering control Administrative control PPE	LC	DC	Ch	NI			Level of consequence (L)	Likely hood (L)	Consequence (C)
		Dust Generation	Health Hazard	H	D	R	N	PEE Control: Use of appropriate PPEs	LC	Minor Injury	1	2	4	1	10	Moderate	1. Training on Behaviour Safety

LC : Legal Concern, if concerning activity / associated hazard is covered under Indian OHS Legislation.

DC : Dominio Concern, if concerning activity / associated hazard can trigger series of a accident.

Any Other : Any other relevant factor if applicable related to / or affecting the significance of CHS risks.

H : Health S : Safety D : Direct I : Indirect R : Routine NR : Non Routine N : Normal AN : Abnormal E : Emergency

Signature  
HOD (Pallet Plant)

Signature  
HOD (Safety)

*Alage Kumar Mishra*  
Factory Manager

SHYAM SEL AND POWER LTD.  
Bijaysagar More, P.O.-Sahadapur  
Jamuria, Burdwan, West Bengal

IDENTIFICATION OF HAZARD AND RISK, RISK ASSESSMENT AND RISK MANAGEMENT MEASURE

SHYAM SEL & POWER LTD.																		
OH&S Hazard/Associated Risk Identification																		
Content Ref:01 - Pallet (Provisional Mechanical)																		
Sl. No	Activity/Services (Including Contractors)	Hazard			Condition		Adequacy of Measure		Risk		Scale of Severity of Risk 5=U x C			Over rating factor (LC/DC/CC/Other)	Risk Management Measure Required			
		Potential Hazard	Impact of Hazard	HUS	D/I	R/NR	NO/NE	Existing control as per Hierarchy of control Elimination Substitution Engineering control Administrative control PPE	Gaps, if any	Likelihood (1-4)	Consequence (5 to 8)	Scale 5=U	Scale 1=C			Level of consequence (C)	Detectability (D)	Total = 51+52 +D
1	Typing of Forms, labels & tags	Loss of Tools	Injury due to slippage of tools	S	DI	R	N	Administrative Control- Periodical checking of tools & proper PPE Control - Use of hand gloves.	Behavioral issues	UL	Minor Injury	1	2	4	1	10	Moderate	1. Skilled Drivers & Operation with proper Licenses. 2. Proper tools with display of safety signals. 3. SOP to be available in Local Language & displayed at site. 4. Training on Behaviour Safety for Use of PPEs. 5. Safety signals to be displayed at prominent places in local language. 6. Periodical Medical Check Up to be Done as per guidelines.
2	Inspection & Lubrication of System	Dust Generation	Health Issues	H	DI	R	N	PPE Control- Use of appropriate PPEs (Dust Mask)	Behavioral issues	UL	Minor Injury	1	2	4	1	10	Moderate	1. Training on Behaviour Safety for Use of PPEs. 2. Safety signals to be displayed at prominent places in local language. 3. Periodical Medical Check Up to be Done as per guidelines.
3	Welding Activity	Vehicle Collision & Toppling	Major Injury	S	DI	R	N	PPE Control- Use of appropriate PPEs (Dust Mask)	Behavioral issues	UL	Major Injury	1	2	6	1	14	Substantial	1. Skilled Drivers & Operation with proper Licenses. 2. Proper tools with display of safety signals. 3. SOP to be available in Local Language & displayed at site. 4. Training on Behaviour Safety for Use of PPEs. 5. Safety signals to be displayed at prominent places in local language. 6. Periodical Medical Check Up to be Done as per guidelines.
4	Grinding	Dust Generation	Health Issues	H	DI	R	N	PPE Control- Use of appropriate PPEs (Dust Mask)	Behavioral issues	UL	Minor Injury	1	2	4	1	8	Moderate	1. Training on Behaviour Safety for Use of PPEs. 2. Safety signals to be displayed at prominent places in local language. 3. Periodical Medical Check Up to be Done as per guidelines.
5	Gas Cutting	STP Hazard	Injury due to Slip/Trip, Fall	S	D	R	N	PPE Control- Use of appropriate PPEs including safety shoes, safety helmet & safety goggles.	Behavioral issues	UL	Minor Injury	1	2	4	1	10	Moderate	1. Training on Behaviour Safety for Use of PPEs. 2. Safety signals to be displayed at prominent places in local language. 3. Periodical Medical Check Up to be Done as per guidelines.
		Noise	Hearing Loss	H	D	R	N	PPE Control- Ear Muff Provided	Behavioral issues	UL	Major Injury	1	2	6	1	14	Substantial	1. Training on Behaviour Safety for Use of PPEs. 2. Safety signals to be displayed at prominent places in local language. 3. Periodical Medical Check Up to be Done as per guidelines.
		Dust Generation	Health Issues	H	D	R	N	PPE Control- Use of appropriate PPEs	Behavioral issues	UL	Minor Injury	1	2	4	1	10	Moderate	1. Training on Behaviour Safety for Use of PPEs. 2. Safety signals to be displayed at prominent places in local language. 3. Periodical Medical Check Up to be Done as per guidelines.

## IDENTIFICATION OF HAZARD AND RISK, RISK ASSESSMENT AND RISK MANAGEMENT MEASURE

SHYAM SEL & POWER LTD.		OHS Hazard/Associated Risk Identification										Content: Rev. 01 Pallet (Preventive Mechanical)					
SL No	Activity/Services (including Contractors)	Hazard				Condition		Adequacy of Measure		Risk		Scale of Severity of Risk S <sub>Q</sub> L x C				Over riding factor (L,DC,CA or others)	Risk Management Measures Required
		Potential Hazard	H/S	D/H	R/NR	M/A/N/E	Existing control as per hierarchy of control Elimination Substitution Engineering control Administrative control PPE	Gaps, if any	Likely Inj/Inc (1-4)	Consequence (2 to 5)	Likelihood (L)	Scale S1	Likelihood (L)	Level of consequence (C)	Detectability (D)		
4	Filer/Chasing & Replacement	Hear	S	O	R	N	Administrative Control- Appropriate PPEs for Hear Resistance is Provided	Behavioral Issues	UL	Major Injury	1	3	6	1	14	Substantial	1. Training on behavioral safety 2. PPE Mats to be Deployed at Site 3. SOP for the job in local language to be Deployed at Site 4. Administrative Control to be adequate through implementation of work permit system
T	Cleaning of Equipment	Dust Generation	H	D	R	N	PPE Control- Use of appropriate PPEs	Behavioral Issues	UL	Minor Injury	1	3	4	1	10	Medium	1. Training on use of PPEs
		Hear	S	D	R	M	Administrative Control- Appropriate PPEs for Hear Resistance is Provided	Behavioral Issues	UL	Major Injury	1	3	6	1	14	Substantial	1. Training on behavioral safety 2. PPE Mats to be Deployed at Site 3. SOP for the job in local language to be Deployed at Site 4. Administrative Control to be adequate through implementation of work permit system
4	Sanding of Material	Dust Generation	H	D	R	N	PPE Control- Use of appropriate PPEs	Behavioral Issues	UL	Minor Injury	1	2	4	1	10	Medium	1. Training on Behavioral Safety
		Hear	S	O	R	N	Administrative Control- Appropriate PPEs for Hear Resistance is Provided	Behavioral Issues	UL	Major Injury	1	2	6	1	14	Substantial	1. Training on behavioral safety 2. PPE Mats to be Deployed at Site 3. SOP for the job in local language to be Deployed at Site 4. Administrative Control to be adequate through implementation of work permit system
		Dust Generation	H	D	R	N	PPE Control- Use of appropriate PPEs	Behavioral Issues	UL	Minor Injury	1	2	4	1	10	Medium	1. Training on Behavioral Safety

LC : Legal Concern, if concerning activity / associated hazard is covered under Indian OHS Legislation.

DC : Domino Concern, if concerning activity / associated hazard can trigger series of accident.

Any Other : Any other relevant factor if applicable related to / or affecting the significance of OHS risk.

H - Health S - Safety D - Direct; I - Indirect; R - Routine; NR - Non Routine; M - Normal; AN - Abnormal; E : Emergency

Signature  
HOD (Pallet Plant)Signature  
HOD (Safety)

*Alok Kumar Mishra*  
Factory Manager  
SHYAM SEL AND POWER LTD.  
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Jamuria, Burdwan, West Bengal

## IDENTIFICATION OF HAZARD AND RISK, RISK ASSESSMENT AND RISK MANAGEMENT MEASURE

Sl. No	Activity/Services (Including Contractors)	GHG Hazards/Associated Risk Identification										Risk Management Measure Required						
		Hazard		Condition		Adequacy of Measure		Risk		Risk Assessment			Over riding factor (L,C,D,Ca or others)					
		Potential Hazard	Impact of Hazard	HIS	DI	R/NR	NAME	Existing control as per Hierarchy of control Elimination Substitution Engineering control Administrative control PPE	Gaps, if any	Likelihood (1-4)	Consequence (1-6)			Severity (1-5)	Level of consequence (1-5)	Defectibility (D) S1-S2 +D	Total - (S1+S2 +D)	Risk Classification
1	Sample Preparation	Use of Tools	Physical Injury	S	D	R	N	PPE Control: Use of Appropriate PPEs, Gloves, mask etc.	Behavioral issues	UL	Minor Injury	1	2	4	1	10	Moderate	1. PPE Masks to be displayed at Lab
2	Physical Testing	Noise	Hearing Loss	H	D	R	N	PPE Control: Use of Ear Muff for operator	Behavioral issues	UL	Major Injury	1	2	6	1	14	Substantial	1. Training on Behavioural safety 2. Display of PPE Masks at site
		Dust Generation	Health Issues	H	DI	R	N	PPE Control: Use of appropriate PPEs (Dust Mask)	Behavioral issues	UL	Minor Injury	1	2	4	1	8	Moderate	1. Training on Behavioural Safety for Use of PPEs 2. Safety Signages to be displayed at government places in local language
		Use of Tools	Physical Injury	S	D	R	M	PPE Control: Use of Appropriate PPEs, Gloves, mask etc.	Behavioral issues	UL	Minor Injury	1	2	4	1	10	Moderate	1. Training of Behavioural Safety for Use of PPEs 2. Safety Signages to be displayed at Site
3	Chemical Testing	Dust Generation	Health Issues	H	DI	R	N	PPE Control: Use of appropriate PPEs (Dust Mask)	Behavioral issues	UL	Minor Injury	1	2	4	2	10	Moderate	1. Trained employees with proper training 2. SOP to be available in Local Language & displayed at site 3. MSDS in local language & in personal form
		Purges of Chemicals	Health Issues	H	DI	R	M	Engg Control: Fume Hood with Exhaust Fan, Local Exhaust System, Washdown at site PPE Control: Appropriate PPEs including Mask, Goggles	Behavioral issues	UL	Major Injury	1	2	6	1	14	Substantial	1. Training on Behavioural Safety for Use of PPEs
		Use of Glass Ware	Injury due to Strainage of Glass ware	S	U	R	N	PPE Control: Use of appropriate PPEs	Behavioral issues	UL	Minor Injury	1	2	4	1	8	Moderate	1. Training on Behavioural Safety for Use of PPEs

LC: Legal Concern, if concerning activity / associated hazard is covered under Indian OHS Legislation.

DC: Dominant Concern, if concerning activity / associated hazard can trigger series of accident.

Any Other: any other relevant factor if applicable related to / or affecting the significance of OHS risks.

H: Health S: Safety D: Direct; I: Indirect; R: Routine; NR: Non Routine; N: Normal; AN: Abnormal; E: Emergency

Signature

HOD (Pallet Plant)

Signature

HOD (Safety)

*Alok Kumar Mishra*  
Factory Manager  
SHYAM SEL AND POWER LTD,  
Bijaynagar More, P.O.-Subedipur,  
Jamuria, Burdwan, West Bengal

IDENTIFICATION OF HAZARD AND RISK, RISK ASSESSMENT AND RISK MANAGEMENT MEASURE

SIYAM SEL & POWER LTD.										CHS Hazards/Associated Risk Identification									
Date:20.01.2022										Content Rev # 01 Packet (Operational)									
Risk Assessment										Risk Assessment									
Sl. No	Activity/Services (including Contractors)	Hazard		MS	D/E	R/NR	NAME	Adaptivity of Measure		Risk	Scale of Severity of Risk S2=L x C				Over riding factor (L/OC/As by others)	Risk Management Measure Required			
		Potential Hazard	Impact of hazard					Existing control as per hierarchy of control Elimination Substitution Engineering control Administrative control PPE	Gaps, if any		Likely- hood (1- 4)	Conse- quence (2 to 5)	Scale S1	Likely- hood (L)			Level of conseque- nce (C)	Determi- nability (D)	Total - S1+S2 +D
1	Iron Ore Finer (OF) Transfer from Railway siding to Yard	Vehicle Collision & Topping	Major injury	S	DI	R	N	Administrative Control- Following of Vehicle Checklist with all parameters	Unskilled Driver	UL	Major injury	1	2	6	1	14	Substantial	1. Skilled Drivers & Operation with proper Licenses. 2. Proper roads with display of safety signages. 3. Sign to be available in Local Language & displayed at site	
2	Sampling of iron Ore Finer for Testing	Dust Generation	Health Issues	H	DI	R	N	PPE Control- Use of appropriate PPEs (Dust Mask)	Behavioral Issues	UL	Minor injury	1	2	4	1	9	Moderate	1. Training on Behaviour Safety for Use of PPEs 2. Safety signages to be displayed at prominent places in local language 3. Periodical Medical Check Up to be Done as per guidelines	
3	Iron Ore Feeding From Yard to Hoop	Vehicle Collision & Topping	Major injury	S	DI	R	N	PPE Control-Use of appropriate PPEs including safety shoes, safety helmet & safety goggles	Behavioral Issues	UL	Major injury	1	2	6	1	16	Moderate	1. Training on Behaviour Safety for Use of PPEs. 2. Safety signages to be displayed at prominent places in local language 3. Safety Docs & Certs Signages to be Displayed at site	
4	Screening of Iron Ore & Sample Collection	Dust Generation	Health Issues	H	DI	R	N	Administrative Control- Following of Vehicle Checklist with all parameters	Unskilled Driver	UL	Major injury	1	2	6	1	14	Substantial	1. Skilled Drivers & Operation with proper Licenses. 2. Proper roads with display of safety signages. 3. Sign to be available in Local Language & displayed at site	
5	Burden Feed to Mixer	Vehicle Collision & Topping	Major injury	S	DI	R	N	PPE Control- Use of appropriate PPEs (Dust Mask)	Behavioral Issues	UL	Minor injury	1	2	4	1	9	Moderate	1. Training on Behaviour Safety for Use of PPEs 2. Safety signages to be displayed at prominent places in local language 3. Periodical Medical Check Up to be Done as per guidelines	
6	Screening of Iron Ore & Sample Collection	Dust Generation	Health Issues	H	DI	R	N	PPE Control- Use of appropriate PPEs including safety shoes, safety helmet & safety goggles	Behavioral Issues	UL	Major injury	1	2	6	1	16	Moderate	1. Training on Behaviour Safety for Use of PPEs. 2. Safety signages to be displayed at prominent places in local language 3. Safety Docs & Certs Signages to be Displayed at Site	
7	Burden Feed to Mixer	Vehicle Collision & Topping	Major injury	S	DI	R	N	PPE Control- Car Seat Provided	Behavioral Issues	UL	Major injury	1	2	6	1	14	Substantial	1. Training on behavioural safety 2. Display of PPE Matrix at site	
8	Burden Feed to Mixer	Dust Generation	Health Issues	H	DI	R	N	PPE Control- Use of appropriate PPEs	Behavioral Issues	UL	Minor injury	1	2	4	1	10	Moderate	1. Training on Behaviour Safety for Use of PPEs 2. Safety signages to be displayed at prominent places in local language 3. Periodical Medical Check Up to be Done as per guidelines	

ANNEXURE - XXXII

## INDICATIVE CONSULTANT INDIA

<b>Name of the Factory</b>	:	<b>M/s. SHYAM SEL &amp; POWER LTD</b> Dhasna, Bahadurpur, Jamuria, Dist- Paschim Bardwan, PIN - 713 362
<b>Date of Execution of job</b>	:	<b>23.03.2024 TO 29.03.2024</b>

**1.0 HEAT STRESS CONDITION** is mostly the result of effective and suitable provisions in every factory for securing and maintaining the adequate ventilation in every workroom by circulation of fresh air and such a temperature as will secure to workers therein reasonable condition of comfort and prevent injury to health.

**M/S. INDICATIVE CONSULTANT INDIA** has been asked to carry out the survey of the Heat Stress condition as per the provision of Sections 19A of the Factories Act, 1948. Accordingly, the monitoring has been conducted with the use of Portable monitoring instruments.

The entire fieldwork was completed within the period of **23.03.2024 TO 29.03.2024**. The Result of Heat Stress Condition has been *in Table No. 1 TO 38*.



## 2.0 DISCUSSION:

Results as indicated in Form No. 30, which is, annexed herewith reveals the following facts.

- i) *Results of Heat Stress condition is within the acceptable limit at every measured location: Except (TABLE: 14, 15, 16, 30, 33, 34, 35 & 36).*

## 3.0 RECOMMENDATION:

To maintain a healthy, pollution free environment in the workplace, following recommendations are suggested:-

- i) *Attention to be given for better housekeeping arrangements.*
- ii) *Working personnel should be protected with suitable safety appliances for protection against dust, gases and noise.*
- iii) *Periodical assessment of the work environment is suggested for better control of work zone environment and protection of working personnel.*

## 4.0 ACKNOWLEDGEMENT:

- a) *Mr. Sumit Chokraborty (Director)*
- b) *Mr. Mayank Tiwari (Sr. Manager)*
- c) *Mr. Pradip Bhattachariya (Sr. Executive)*
- d) *All Staff of M/s. Shyam Sel & Power Ltd. Dhasna, Bahadurpur, Jamuria, Dist- Paschim Bardwan, PIN - 713 362*
- e) *Security Staff.*

We acknowledge our sincere thanks and gratitude to the above persons for their co-operation and help to our sampling team during the survey work.

For, INDICATIVE CONSULTANT INDIA



# INDICATIVE CONSULTANT INDIA

HPL Link Road, Basudevpur, Khanjanchak, Haldia, Purba Medinipur, PIN - 721 602

Register Containing Particulars of Testing of HEAT STRESS

Table No. - 1

Name of Customer - **M/s. SHYAM SEL & POWER LTD.**

**Dhasna, Bahadurpur, Jamuria, Dist. - Paschim Bardwan, PIN - 713 362.**

Name of the Plant / Department : **SMS - 1 (Near Crucible Charging Area) (IF-18MT x 4)**

(WBGT °C = 0.7 WB + 0.3 GT)

AMBIENT TEMPERATURE	
Dry Bulb	Wet Bulb
34.0°C	27.0°C
Wind Velocity (m/min) : 78 m/min, South West to North East	

Sl No	Location	Date & Time of Monitoring	Sampling Instrument Use	Dry bulb Temperature (DB)	Wet bulb Temperature (WB)	Globe Temperature (GT)	WBGT °C	Limit TLV °C	Reference Method	Remarks	Signature	Name
1.	SMS - 1 (Near Crucible Charging Area)	23.03.2024 11:20 AM to 12:05 PM	Annexure- I	38°C	25°C	41°C	29.8°C	32.2°C	Annexure- I	Below TLV Limit		A. BHATTACHARYA

For, INDICATIVE CONSULTANT INDIA



# INDICATIVE CONSULTANT INDIA

HPL Link Road, Basudevpur, Khanjanchak, Haldia, Purba Medinipur, PIN - 721 602

Register Containing Particulars of Testing of HEAT STRESS

Table No. - 2

Name of Customer - M/s. SHYAM SEL & POWER LTD.

Dhasna, Bahadurpur, Jamuria, Dist. - Paschim Bardwan, PIN - 713 362.

Name of the Plant / Department : SMS - 1 (Near Crucible Charging Area) (IF-15MT x 2)

(WBGT °C = 0.7 WB + 0.3 GT)

AMBIENT TEMPERATURE	
Dry Bulb	Wet Bulb
34.0°C	27.0°C
Wind Velocity (m/min) : 78 m/min, South West to North East	

Sl No	Location	Date & Time of Monitoring	Sampling Instrument Use	Dry bulb Temperature (DB)	Wet bulb Temperature (WB)	Globe Temperature (GT)	WBGT °C	Limit TLV °C	Reference Method	Remarks	Signature	Name
I.	SMS - 1 (Near Crucible Charging Area)	23.03.2024 12:15 PM to 12:55 PM	Annexure-1	38°C	25°C	42C	30.1°C	32.2°C	Annexure-1	Below TLV Limit		A. CHARYY A

For, INDICATIVE CONSULTANT INDIA



# INDICATIVE CONSULTANT INDIA

HPL Link Road, Basudevpur, Khanjanchak, Haldia, Purba Medinipur, PIN - 721 602

Register Containing Particulars of Testing of HEAT STRESS

Name of Customer - M/s. SHYAM SEL & POWER LTD.  
Dhasna, Bahadurpur, Jamuria, Dist. - Paschim Bardwan, PIN - 713 362.

Table No. - 3

Name of the Plant / Department : SMS - 1 (Ext. Near Crucible Charging Area) (IF-20MT x 4)  
(WBGT °C = 0.7 WB + 0.3 GT)

AMBIENT TEMPERATURE	
Dry Bulb	Wet Bulb
36.0°C	24.0°C
Wind Velocity (m/min) : 60m/min, South to North	

Sl No	Location	Date & Time of Monitoring	Sampling Instrument Use	Dry bulb Temperature (DB)	Wet bulb Temperature (WB)	Globe Temperature (GT)	WBGT °C	Limit TLV °C	Reference Method	Remarks	Signature	Name
1.	SMS-1 (Ext. Near Crucible Charging Area) (IF-20MT x 4)	29.03.2024 12:05 PM to 12:40 PM	Annexure- I	37°C	26°C	39C	29.9°C	32.2°C	Annexure- I	Below TLV Limit		A. BHATTACHARYA

For, INDICATIVE CONSULTANT INDIA



# INDICATIVE CONSULTANT INDIA

HPL Link Road, Basudevpur, Khanjanchak, Haldia, Purba Medinipur, PIN - 721 602

Register Containing Particulars of Testing of HEAT STRESS

Table No. - 4

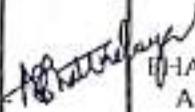
Name of Customer - M/s. SHYAM SEL & POWER LTD.

Dhasna, Bahadurpur, Jamuria, Dist. - Paschim Bardwan, PIN - 713 362.

Name of the Plant / Department : SMS - 2 (Near Crucible Charging Area) (IF-5MT x 4)

(WBGT °C = 0.7 WB + 0.3 GT)

AMBIENT TEMPERATURE	
Dry Bulb	Wet Bulb
35.0°C	26.0°C
Wind Velocity (m/min) : 60 m/min, South West to North East	

Sl No	Location	Date & Time of Monitoring	Sampling Instrument Use	Dry bulb Temperature (DB)	Wet bulb Temperature (WB)	Globe Temperature (GT)	WBGT °C	Limit TLV °C	Reference Method	Remarks	Signature	Name
1.	SMS - 2 (Near Crucible Charging Area)	23.03.2024 02:05 PM to 02:15 PM	Annexure-1	37°C	24°C	39°C	28.5°C	32.2°C	Annexure-1	Below TLV Limit		A. HATTACH ARYYA

For, INDICATIVE CONSULTANT INDIA



# INDICATIVE CONSULTANT INDIA

HPL Link Road, Basudevpur, Khanjanchak, Haldia, Purba Medinipur, PIN - 721 602

Register Containing Particulars of Testing of **HEAT STRESS**

Name of Customer - **M/s. SHYAM SEL & POWER LTD.**  
 Dhasna, Bahadurpur, Jamuria, Dist. - Paschim Bardwan, PIN - 713 362.

Table No. - 5

Name of the Plant / Department : **SMS - 2 (Near Crucible Charging Area) (IF-8MT x 2)**  
 (WBGT °C = 0.7 WB + 0.3 GT)

AMBIENT TEMPERATURE	
Dry Bulb	Wet Bulb
35.0°C	26.0°C
Wind Velocity (m/min) : 60 m/min, South West to North East	

Sl No	Location	Date & Time of Monitoring	Sampling Instrument Use	Dry bulb Temperature (DB)	Wet bulb Temperature (WB)	Globe Temperature (GT)	WBGT °C	Limit TLV °C	Reference Method	Remarks	Signature	Name
1.	SMS - 2 (Near Crucible Charging Area)	23.03.2024 03:00 PM to 03:40 PM	Annexure- I	38°C	26°C	40°C	30.2°C	32.2°C	Annexure- I	Below TLV Limit		A. SHATTACH ARYYA

For, INDICATIVE CONSULTANT INDIA



# INDICATIVE CONSULTANT INDIA

HPL Link Road, Basudevpur, Khanjanchak, Haldia, Purba Medinipur, PIN - 721 602

Register Containing Particulars of Testing of HEAT STRESS

Table No. - 6

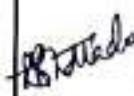
Name of Customer - M/s. SHYAM SEL & POWER LTD.

Dhasna, Bahadurpur, Jamuria, Dist. - Paschim Bardwan, PIN - 713 362.

Name of the Plant / Department : SMS - 3 (Near Crucible Charging Area) (IF-SMT x 6)

(WBGT °C = 0.7 WB + 0.3 GT)

AMBIENT TEMPERATURE	
Dry Bulb	Wet Bulb
32.0°C	26.0°C
Wind Velocity (m/min) : 66 m/min, South West to North East	

Sl No	Location	Date & Time of Monitoring	Sampling Instrument Use	Dry bulb Temperature (DB)	Wet bulb Temperature (WB)	Globe Temperature (GT)	WBGT °C	Limit TLV °C	Reference Method	Remarks	Signature	Name
1.	SMS - 3 (Near Crucible Charging Area)	23.03.2024 09:40 AM to 10:20 AM	Annexure- I	37°C	23°C	39°C	27.8°C	32.2°C	Annexure- I	Below TLV Limit		A. BHATTACHARYA

For, INDICATIVE CONSULTANT INDIA



# INDICATIVE CONSULTANT INDIA

HPL Link Road, Basudevpur, Khanjanchak, Haldia, Purba Medinipur, PIN - 721 602

Register Containing Particulars of Testing of HEAT STRESS

Table No. - 7

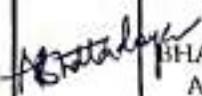
Name of Customer - M/s. SHYAM SEL & POWER LTD.

Dhasna, Bahadurpur, Jamuria, Dist. - Paschim Bardwan, PIN - 713 362.

Name of the Plant / Department : SMS - 3 Extension (Near Crucible Charging Area) (IF-18MT x 2)

(WBGT °C = 0.7 WB + 0.3 GT)

AMBIENT TEMPERATURE	
Dry Bulb	Wet Bulb
32.0°C	26.0°C
Wind Velocity (m/min) : 66 m/min, South West to North East	

Sl No	Location	Date & Time of Monitoring	Sampling Instrument Use	Dry bulb Temperature (DB)	Wet bulb Temperature (WB)	Globe Temperature (GT)	WBGT °C	Limit TLV °C	Reference Method	Remarks	Signature	Name
1.	SMS - 3 (Near Crucible Charging Area)	23.03.2024 10:30 AM to 11:10 AM	Annexure- I	38°C	23°C	40°C	28.1°C	32.2°C	Annexure- I	Below TLV Limit		A. BHATTACHARYA

For, INDICATIVE CONSULTANT INDIA



# INDICATIVE CONSULTANT INDIA

HPL Link Road, Basudevpur, Khanjanchak, Haldia, Purba Medinipur, PIN - 721 602

Register Containing Particulars of Testing of HEAT STRESS

Table No. - 8

Name of Customer - M/s. SHYAM SEL & POWER LTD.  
Dhasna, Bahadurpur, Jamuria, Dist. - Paschim Bardwan, PIN - 713 362.

Name of the Plant / Department : Rolling Mill (Hot Charging Area)  
(WBGT °C = 0.7 WB + 0.3 GT)

AMBIENT TEMPERATURE	
Dry Bulb	Wet Bulb
32.0°C	27.0°C
Wind Velocity (m/min) : 60 m/min, South West to North East	

Sl No	Location	Date & Time of Monitoring	Sampling Instrument Use	Dry bulb Temperature (DB)	Wet bulb Temperature (WB)	Globe Temperature (GT)	WBGT °C	Limit TLV °C	Reference Method	Remarks	Signature	Name
1.	Rolling Mill (Hot Charging Area)	26.03.2024 09:35 AM to 10:10 AM	Annexure- I	39°C	26°C	40°C	30.2°C	32.2°C	Annexure- I	Below TLV Limit		A. BHATTACHARYA A

For, INDICATIVE CONSULTANT INDIA



# INDICATIVE CONSULTANT INDIA

HPL Link Road, Basudevpur, Khanjanchak, Haldia, Purba Medinipur, PIN - 721 602

Register Containing Particulars of Testing of HEAT STRESS

Table No. - 9

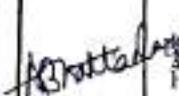
Name of Customer - M/s. SHYAM SEL & POWER LTD.

Dhasna, Bahadurpur, Jamuria, Dist. - Paschim Bardwan, PIN - 713 362.

Name of the Plant / Department : H.S. Mill (Hot Charging Area)

(WBGT °C = 0.7 WB + 0.3 GT)

AMBIENT TEMPERATURE	
Dry Bulb	Wet Bulb
35.0°C	26.0°C
Wind Velocity (m/min) : 84 m/min, South to North	

Sl No	Location	Date & Time of Monitoring	Sampling Instrument Use	Dry bulb Temperature (DB)	Wet bulb Temperature (WB)	Globe Temperature (GT)	WBGT °C	Limit TLV °C	Reference Method	Remarks	Signature	Name
I.	H.S. Mill (Hot Charging Area)	23.03.2024 05:50 PM to 06:20 PM	Annexure-1	41°C	24°C	42°C	29.4°C	32.2°C	Annexure-1	Below TLV Limit		ATTAC HARYYA

For, INDICATIVE CONSULTANT INDIA



# INDICATIVE CONSULTANT INDIA

HPL Link Road, Basudevpur, Khanjanchak, Haldia, Purba Medinipur, PIN - 721 602

Register Containing Particulars of Testing of HEAT STRESS

Table No. - 10

Name of Customer - M/s. SHYAM SEL & POWER LTD.

Dhasna, Bahadurpur, Jamuria, Dist. - Paschim Bardwan, PIN - 713 362.

Name of the Plant / Department : L.S. Mill (Hot Charging Area)

(WBGT °C = 0.7 WB + 0.3 GT)

AMBIENT TEMPERATURE	
Dry Bulb	Wet Bulb
35.0°C	26.0°C
Wind Velocity (m/min) : 84 m/min, South to North	

Sl No	Location	Date & Time of Monitoring	Sampling Instrument Use	Dry bulb Temperature (DB)	Wet bulb Temperature (WB)	Globe Temperature (GT)	WBGT °C	Limit TLV °C	Reference Method	Remarks	Signature	Name
1.	L.S. Mill (Hot Charging Area)	23.03.2024 05:10 PM to 05:40 PM	Annexure-1	40°C	24°C	41°C	29.1°C	32.2°C	Annexure-1	Below TLV Limit		A. HATTACH ARYYA

For, INDICATIVE CONSULTANT INDIA



# INDICATIVE CONSULTANT INDIA

HPL Link Road, Basudevpur, Khanjanchak, Haldia, Purba Medinipur, PIN - 721 602

Register Containing Particulars of Testing of HEAT STRESS

Table No. - 11

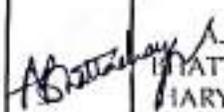
Name of Customer - M/s. SHYAM SEL & POWER LTD.

Dhasna, Bahadurpur, Jamuria, Dist. - Paschim Bardwan, PIN - 713 362.

Name of the Plant / Department : WR Mill (Hot Charging Area)

(WBGT °C = 0.7 WB + 0.3 GT)

AMBIENT TEMPERATURE	
Dry Bulb	Wet Bulb
35.0°C	26.0°C
Wind Velocity (m/min) : 78 m/min, South West to North East	

Sl No	Location	Date & Time of Monitoring	Sampling Instrument Use	Dry bulb Temperature (DB)	Wet bulb Temperature (WB)	Globe Temperature (GT)	WBGT °C	Limit TLV °C	Reference Method	Remarks	Signature	Name
1.	WR Mill (Hot Charging Area)	23.03.2024 03:50 PM to 04:50 PM	Annexure-1	38°C	26°C	39°C	29.9°C	32.2°C	Annexure-1	Below TLV Limit		PARBATA KHATUN

For, INDICATIVE CONSULTANT INDIA



# INDICATIVE CONSULTANT INDIA

HPL Link Road, Basudevpur, Khanjanchak, Haldia, Purba Medinipur, PIN - 721 602

Register Containing Particulars of Testing of HEAT STRESS

Table No. - 12

Name of Customer - M/s. SHYAM SEL & POWER LTD.

Dhasna, Bahadurpur, Jamuria, Dist. - Paschim Bardwan, PIN - 713 362.

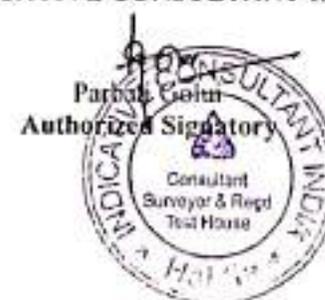
Name of the Plant / Department : Ferro Alloys (Tapping Area) (SEAF-4.5MVA - 1)

(WBGT °C = 0.7 WB + 0.3 GT)

AMBIENT TEMPERATURE	
Dry Bulb	Wet Bulb
33.0°C	28.0°C
Wind Velocity (m/min) : 72 m/min, South West to North East	

Sl No	Location	Date & Time of Monitoring	Sampling Instrument Use	Dry bulb Temperature (DB)	Wet bulb Temperature (WB)	Globe Temperature (GT)	WBGT °C	Limit TLV °C	Reference Method	Remarks	Signature	Name
1.	Ferro Alloys (Tapping Area)	26.03.2024 10:30 AM to 11:00 AM	Annexure-1	42°C	26°C	43°C	31.1°C	32.2°C	Annexure-1	Below TLV Limit		A. SHATTA CHARY A

For, INDICATIVE CONSULTANT INDIA



# INDICATIVE CONSULTANT INDIA

HPL Link Road, Basudevpur, Khanjanchak, Haldia, Purba Medinipur, PIN - 721 602

Register Containing Particulars of Testing of HEAT STRESS

Table No. - 13

Name of Customer - M/s. SHYAM SEL & POWER LTD.

Dhasna, Bahadurpur, Jamuria, Dist. - Paschim Bardwan, PIN - 713 362.

Name of the Plant / Department : Ferro Alloys (Tapping Area) (SEAF-4.5MVA - 2)

(WBGT °C = 0.7 WB + 0.3 GT)

AMBIENT TEMPERATURE	
Dry Bulb	Wet Bulb
33.0°C	28.0°C
Wind Velocity (m/min) : 72 m/min, South West to North East	

Sl No	Location	Date & Time of Monitoring	Sampling Instrument Use	Dry bulb Temperature (DB)	Wet bulb Temperature (WB)	Globe Temperature (GT)	WBGT °C	Limit TLV °C	Reference Method	Remarks	Signature	Name
1.	Ferro Alloys (Tapping Area)	26.03.2024 11:10 AM to 11:40 AM	Annexure- I	42°C	27°C	44°C	32.1°C	32.2°C	Annexure- I	Below TLV Limit		A. BHATTACHARYA

For, INDICATIVE CONSULTANT INDIA



# INDICATIVE CONSULTANT INDIA

HPL Link Road, Basudevpur, Khanjanchak, Haldia, Purba Medinipur, PIN - 721 602

Register Containing Particulars of Testing of HEAT STRESS

Table No. - 14

Name of Customer - M/s. SHYAM SEL & POWER LTD.

Dhasna, Bahadurpur, Jamuria, Dist. - Paschim Bardwan, PIN - 713 362.

Name of the Plant / Department : Ferro Alloys (Tapping Area) (SEAF-9MVA - 1)

(WBGT °C = 0.7 WB + 0.3 GT)

AMBIENT TEMPERATURE	
Dry Bulb	Wet Bulb
35.0°C	28.0°C
Wind Velocity (m/min) : 66 m/min, South West to North East	

Sl No	Location	Date & Time of Monitoring	Sampling Instrument Use	Dry bulb Temperature (DB)	Wet bulb Temperature (WB)	Globe Temperature (GT)	WBGT °C	Limit TLV °C	Reference Method	Remarks	Signature	Name
1.	Ferro Alloys (Tapping Area)	26.03.2024 11:50 AM to 12:20 AM	Annexure- I	43°C	28°C	44°C	*32.8°C	32.2°C	Annexure- I	Above TLV Limit		A. HATTACH ARYYA

For, INDICATIVE CONSULTANT INDIA



# INDICATIVE CONSULTANT INDIA

HPL Link Road, Basudevpur, Khanjanchak, Haldia, Purba Medinipur, PIN - 721 602

Register Containing Particulars of Testing of HEAT STRESS

Table No. - 15

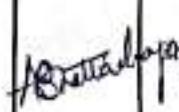
Name of Customer - M/s. SHYAM SEL & POWER LTD.

Dhasna, Bahadurpur, Jamuria, Dist. - Paschim Bardwan, PIN - 713 362.

Name of the Plant / Department : Ferro Alloys (Tapping Area) (SEAF-9 MVA - 2)

(WBGT °C = 0.7 WB + 0.3 GT)

AMBIENT TEMPERATURE	
Dry Bulb	Wet Bulb
35.0°C	28.0°C
Wind Velocity (m/min) : 66 m/min, South West to North East	

Sl No	Location	Date & Time of Monitoring	Sampling Instrument Use	Dry bulb Temperature (DB)	Wet bulb Temperature (WB)	Globe Temperature (GT)	WBGT °C	Limit TLV °C	Reference Method	Remarks	Signature	Name
1.	Ferro Alloys (Tapping Area)	26.03.2024 12:30 PM to 01:05 PM	Annexure-1	44°C	28°C	45°C	*33.1°C	32.2°C	Annexure-1	Below TLV Limit		PARBAT GHOSH ATTACH ARYIA

For, INDICATIVE CONSULTANT INDIA



# INDICATIVE CONSULTANT INDIA

HPL Link Road, Basudevpur, Khanjanchak, Haldia, Purba Medinipur, PIN - 721 602

Register Containing Particulars of Testing of HEAT STRESS

Table No. - 16

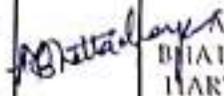
Name of Customer - M/s. SHYAM SEL & POWER LTD.

Dhasna, Bahadurpur, Jamuria, Dist. - Paschim Bardwan, PIN - 713 362.

Name of the Plant / Department : Ferro Alloys (Tapping Area) (SEAF-9MVA - 3)

(WBGT °C = 0.7 WB + 0.3 GT)

AMBIENT TEMPERATURE	
Dry Bulb	Wet Bulb
36.0°C	29.0°C
Wind Velocity (m/min) : 60 m/min, South West to North East	

Sl No	Location	Date & Time of Monitoring	Sampling Instrument Use	Dry bulb Temperature (DB)	Wet bulb Temperature (WB)	Globe Temperature (GT)	WBGT °C	Limit TLV °C	Reference Method	Remarks	Signature	Name
1.	Ferro Alloys (Tapping Area)	26.03.2024 02:05 PM to 02:35 PM	Annexure- I	43°C	28°C	44°C	*32.8°C	32.2°C	Annexure- I	Below TLV Limit		BHATTARAYA S. HARYYA

For, INDICATIVE CONSULTANT INDIA



# INDICATIVE CONSULTANT INDIA

HPL Link Road, Basudevpur, Khanjanchak, Haldia, Purba Medinipur, PIN - 721 602

Register Containing Particulars of Testing of HEAT STRESS

Table No. - 17

Name of Customer - M/s. SHYAM SEL & POWER LTD.

Dhasna, Bahadurpur, Jamuria, Dist. - Paschim Bardwan, PIN - 713 362.

Name of the Plant / Department : Ferro Alloys (Tapping Area) (SEAF-9 MVA - 4)

(WBGT °C = 0.7 WB + 0.3 GT)

AMBIENT TEMPERATURE	
Dry Bulb	Wet Bulb
36.0°C	29.0°C
Wind Velocity (m/min) : 60 m/min, South West to North East	

Sl No	Location	Date & Time of Monitoring	Sampling Instrument Use	Dry bulb Temperature (DB)	Wet bulb Temperature (WB)	Globe Temperature (GT)	WBGT °C	Limit TLV °C	Reference Method	Remarks	Signature	Name
1.	Ferro Alloys (Tapping Area)	26.03.2024 02:45 PM to 03:15 PM	Annexure-1	42°C	27°C	43°C	31.8°C	32.2°C	Annexure-1	Below TLV Limit		A. BHATTACHARYA

For, INDICATIVE CONSULTANT INDIA



# INDICATIVE CONSULTANT INDIA

HPL Link Road, Basudevpur, Khanjanchak, Haldia, Purba Medinipur, PIN - 721 602

Register Containing Particulars of Testing of HEAT STRESS

Table No. - 18

Name of Customer - M/s. SHYAM SEL & POWER LTD.  
Dhasna, Bahadurpur, Jamuria, Dist. - Paschim Bardwan, PIN - 713 362.

Name of the Plant / Department : CPP - 1, AFBC BOILER  
(WBGT °C = 0.7 WB + 0.3 GT)

AMBIENT TEMPERATURE	
Dry Bulb	Wet Bulb
35.0°C	26.0°C
Wind Velocity (m/min) : 84 m/min, South to North	

Sl No	Location	Date & Time of Monitoring	Sampling Instrument Use	Dry bulb Temperature (DB)	Wet bulb Temperature (WB)	Globe Temperature (GT)	WBGT °C	Limit TLV °C	Reference Method	Remarks	Signature	Name
1.	CPP - 1, AFBC BOILER	26.03.2024 03:35 PM to 04:05 PM	Annexure-1	40°C	27°C	41°C	31.2°C	32.2°C	Annexure-1	Below TLV Limit		S. CHATTARAJ

For, INDICATIVE CONSULTANT INDIA



# INDICATIVE CONSULTANT INDIA

HPL Link Road, Basudevpur, Khanjanchak, Haldia, Purba Medinipur, PIN - 721 602

Register Containing Particulars of Testing of **HEAT STRESS**

Table No. - 19

Name of Customer - **M/s. SHYAM SEL & POWER LTD.**

Dhasna, Bahadurpur, Jamuria, Dist. - Paschim Bardwan, PIN - 713 362.

Name of the Plant / Department : **CPP - 1, CFBC BOILER**

(WBGT °C = 0.7 WB + 0.3 GT)

AMBIENT TEMPERATURE	
Dry Bulb	Wet Bulb
35.0°C	26.0°C
Wind Velocity (m/min) : 84 m/min, South to North	

Sl No	Location	Date & Time of Monitoring	Sampling Instrument Use	Dry bulb Temperature (DB)	Wet bulb Temperature (WB)	Globe Temperature (GT)	WBGT °C	Limit TLV °C	Reference Method	Remarks	Signature	Name
1.	CPP - 1, CFBC BOILER	26.03.2024 04:20 PM to 04:50 PM	Annexure- I	40°C	28°C	41°C	31.9°C	32.2°C	Annexure- I	Below TLV Limit		S. CHATTARAJ

For, **INDICATIVE CONSULTANT INDIA**



# INDICATIVE CONSULTANT INDIA

HPL Link Road, Basudevpur, Khanjanchak, Haldia, Purba Medinipur, PIN - 721 602

Register Containing Particulars of Testing of HEAT STRESS

Table No. - 20

Name of Customer - **M/s. SHYAM SEL & POWER LTD.**

Dhasna, Bahadurpur, Jamuria, Dist. - Paschim Bardwan, PIN - 713 362.

Name of the Plant / Department : **CPP - 1, T.G. FLOOR**

(WBGT °C = 0.7 WB + 0.3 GT)

AMBIENT TEMPERATURE	
Dry Bulb	Wet Bulb
35.0°C	26.0°C
Wind Velocity (m/min) : 84 m/min, South to North	

Sl No	Location	Date & Time of Monitoring	Sampling Instrument Use	Dry bulb Temperature (DB)	Wet bulb Temperature (WB)	Globe Temperature (GT)	WBGT °C	Limit TLV °C	Reference Method	Remarks	Signature	Name
1.	CPP - 1, T.G. FLOOR	26.03.2024 05:10 PM to 05:45 PM	Annexure- I	39°C	26C	41°C	30.5°C	32.2°C	Annexure- I	Below TLV Limit		S. CHATTARAJ

For, INDICATIVE CONSULTANT INDIA

Parbati Golui  
Authorized Signatory  
Consultant  
Surveyor & Regd  
Test House  
INDICATIVE CONSULTANT INDIA  
Haldia

# INDICATIVE CONSULTANT INDIA

HPL Link Road, Basudevpur, Khanjanchak, Haldia, Purba Medinipur, PIN - 721 602

Register Containing Particulars of Testing of HEAT STRESS

Table No. - 21

Name of Customer - M/s. SHYAM SEL & POWER LTD.  
Dhasna, Bahadurpur, Jamuria, Dist. - Paschim Bardwan, PIN - 713 362.

Name of the Plant / Department : CPP - 2, CFBC BOILER (T.G. FLOOR)  
(WBGT °C = 0.7 WB + 0.3 GT)

AMBIENT TEMPERATURE	
Dry Bulb	Wet Bulb
33.0°C	25.0°C
Wind Velocity (m/min) : 66 m/min, South West to North East	

Sl No	Location	Date & Time of Monitoring	Sampling Instrument Use	Dry bulb Temperature (DB)	Wet bulb Temperature (WB)	Globe Temperature (GT)	WBGT °C	Limit TLV °C	Reference Method	Remarks	Signature	Name
1.	CPP - 2, CFBC BOILER (T.G. FLOOR)	28.03.2024 02:00 PM to 02:30 PM	Annexure-1	36°C	26C	38°C	29.6°C	32.2°C	Annexure-1	Below TLV Limit		S. CHATTARAJ

For, INDICATIVE CONSULTANT INDIA



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HPL Link Road, Basudevpur, Khanjanchak, Haldia, Purba Medinipur, PIN - 721 602

Register Containing Particulars of Testing of HEAT STRESS

Table No. - 22

Name of Customer - M/s. SHYAM SEL & POWER LTD.

Dhasna, Bahadurpur, Jamuria, Dist. - Paschim Bardwan, PIN - 713 362.

Name of the Plant /Department : CPP - 2, CFBC BOILER

(WBGT °C = 0.7 WB + 0.3 GT)

AMBIENT TEMPERATURE	
Dry Bulb	Wet Bulb
33.0°C	25.0°C
Wind Velocity (m/min) : 66 m/min, South West to North East	

Sl No	Location	Date & Time of Monitoring	Sampling Instrument Use	Dry bulb Temperature (DB)	Wet bulb Temperature (WB)	Globe Temperature (GT)	WBGT °C	Limit TLV °C	Reference Method	Remarks	Signature	Name
1.	CPP - 2, CFBC BOILER	28.03.2024 03:05 PM to 03:40 PM	Annexure- I	35°C	25C	37°C	28.6°C	32.2°C	Annexure- I	Below TLV Limit		S. CHATTARAJ

For, INDICATIVE CONSULTANT INDIA



# INDICATIVE CONSULTANT INDIA

HPL Link Road, Basudevapur, Khanjanchak, Haldia, Purba Medinipur, PIN - 721 602

Register Containing Particulars of Testing of HEAT STRESS

**Table No. - 23**

Name of Customer - **M/s. SHYAM SEL & POWER LTD.**  
Dhasna, Bahadurpur, Jamuria, Dist. - Paschim Bardwan, PIN - 713 362.

Name of the Plant / Department : **PELLET PLANT (PELLET KILN NO. - 2)**  
(WBGT °C = 0.7 WB + 0.3 GT)

AMBIENT TEMPERATURE	
Dry Bulb	Wet Bulb
32.0°C	26.0°C
Wind Velocity (m/min) : 66 m/min, South to North	

Sl No	Location	Date & Time of Monitoring	Sampling Instrument Use	Dry bulb Temperature (DB)	Wet bulb Temperature (WB)	Globe Temperature (GT)	WBGT °C	Limit TLV °C	Reference Method	Remarks	Signature	Name
1.	PELLET PLANT (PELLET KILN NO.-2)	27.03.2024 09:40 AM to 10:10 AM	Annexure- I	41°C	26°C	42°C	30.8°C	32.2°C	Annexure- I	Above TLV Limit		S. CHATTARAJ

For, INDICATIVE CONSULTANT INDIA



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HPL Link Road, Basudevpur, Khanjanchak, Haldia, Purba Medinipur, PIN - 721 602

Register Containing Particulars of Testing of HEAT STRESS

Table No. - 24

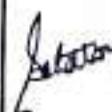
Name of Customer - M/s. SHYAM SEL & POWER LTD.

Dhasna, Bahadurpur, Jamuria, Dist. - Paschim Bardwan, PIN - 713 362.

Name of the Plant / Department : PELLET PLANT (PELLET T. G. NO. - 2)

(WBGT °C = 0.7 WB + 0.3 GT)

AMBIENT TEMPERATURE	
Dry Bulb	Wet Bulb
32.0°C	26.0°C
Wind Velocity (m/min) : 66 m/min, South to North	

Sl No	Location	Date & Time of Monitoring	Sampling Instrument Use	Dry bulb Temperature (DB)	Wet bulb Temperature (WB)	Globe Temperature (GT)	WBGT °C	Limit TLV °C	Reference Method	Remarks	Signature	Name
1.	PELLET PLANT (PELLET T. G. NO.- 2)	27.03.2024 10:30 AM to 11:00 AM	Annexure- I	43°C	25°C	44°C	30.7°C	32.2°C	Annexure- I	Below TLV Limit		S. CHATTARAJ

For, INDICATIVE CONSULTANT INDIA



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HPL Link Road, Basudevpur, Khanjanchak, Haldia, Purba Medinipur, PIN - 721 602

Register Containing Particulars of Testing of HEAT STRESS

Table No. - 25

Name of Customer - M/s. SHYAM SEL & POWER LTD.

Dhasna, Bahadurpur, Jamuria, Dist. - Paschim Bardwan, PIN - 713 362.

Name of the Plant / Department : PELLET - 3 (T.G. FLOOR)

(WBGT °C = 0.7 WB + 0.3 GT)

AMBIENT TEMPERATURE	
Dry Bulb	Wet Bulb
35.0°C	26.0°C
Wind Velocity (m/min) : 72 m/min, South to North	

Sl No	Location	Date & Time of Monitoring	Sampling Instrument Use	Dry bulb Temperature (DB)	Wet bulb Temperature (WB)	Globe Temperature (GT)	WBGT °C	Limit TLV °C	Reference Method	Remarks	Signature	Name
1.	PELLET-3 (T.G. FLOOR)	29.03.2024 09:40 AM to 10:15 AM	Annexure- I	37°C	26°C	39°C	29.9°C	32.2°C	Annexure- I	Below TLV Limit		S. CHATTARAJ

For, INDICATIVE CONSULTANT INDIA



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HPL Link Road, Basudevpur, Khanjanchak, Haldia, Purba Medinipur, PIN - 721 602

Register Containing Particulars of Testing of HEAT STRESS

Table No. - 26

Name of Customer - M/s. SHYAM SEL & POWER LTD.

Dhasna, Bahadurpur, Jamuria, Dist. - Paschim Bardwan, PIN - 713 362.

Name of the Plant / Department : PELLET - 3 (KILN FLOOR)

(WBGT °C = 0.7 WB + 0.3 GT)

AMBIENT TEMPERATURE	
Dry Bulb	Wet Bulb
35.0°C	26.0°C
Wind Velocity (m/min) : 72 m/min, South to North	

Sl No	Location	Date & Time of Monitoring	Sampling Instrument Use	Dry bulb Temperature (DB)	Wet bulb Temperature (WB)	Globe Temperature (GT)	WBGT °C	Limit TLV °C	Reference Method	Remarks	Signature	Name
1.	PELLET-3 (KILN FLOOR)	29.03.2024 10:40 AM to 11:15 AM	Annexure- I	37°C	25°C	42°C	30.1°C	32.2°C	Annexure- I	Below TLV Limit		S. CHATTARAJ

For, INDICATIVE CONSULTANT INDIA



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HPL Link Road, Basudevpur, Khanjanchak, Haldia, Purba Medinipur, PIN - 721 602

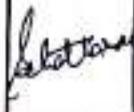
Register Containing Particulars of Testing of HEAT STRESS

Table No. - 27

Name of Customer - M/s. SHYAM SEL & POWER LTD.  
Dhasna, Bahadurpur, Jamuria, Dist. - Paschim Bardwan, PIN - 713 362.

Name of the Plant / Department : DRI - 1, KILN NO. - 1 (150 TPD)  
(WBGT °C = 0.7 WB + 0.3 GT)

AMBIENT TEMPERATURE	
Dry Bulb	Wet Bulb
35.0°C	27.0°C
Wind Velocity (m/min) : 72 m/min, South to North	

Sl No	Location	Date & Time of Monitoring	Sampling Instrument Use	Dry bulb Temperature (DB)	Wet bulb Temperature (WB)	Globe Temperature (GT)	WBGT °C	Limit TLV °C	Reference Method	Remarks	Signature	Name
1.	DRI - 1, KILN - 1 (150 TPD)	27.03.2024 11:20 AM to 11:50 AM	Annexure- I	40°C	28°C	41°C	31.9°C	32.2°C	Annexure- I	Below TLV Limit		S. CHATTARA

For, INDICATIVE CONSULTANT INDIA

Parbati Gola  
Authorized Signatory



P 27/38

# INDICATIVE CONSULTANT INDIA

HPL Link Road, Basudevpur, Khanjanchak, Haldia, Purba Medinipur, PIN - 721 602

Register Containing Particulars of Testing of HEAT STRESS

Table No. - 28

Name of Customer - M/s. SHYAM SEL & POWER LTD.

Dhasna, Bahadurpur, Jamuria, Dist. - Paschim Bardwan, PIN - 713 362.

Name of the Plant / Department : DRI - 1, KILN NO. - 2 (150 TPD)

(WBGT °C = 0.7 WB + 0.3 GT)

AMBIENT TEMPERATURE	
Dry Bulb	Wet Bulb
35.0°C	27.0°C
Wind Velocity (m/min) : 72 m/min, South to North	

Sl No	Location	Date & Time of Monitoring	Sampling Instrument Use	Dry bulb Temperature (DB)	Wet bulb Temperature (WB)	Globe Temperature (GT)	WBGT °C	Limit TLV °C	Reference Method	Remarks	Signature	Name
1.	DRI - 1, KILN - 2 (150 TPD)	27.03.2024 12:15 PM to 12:45 PM	Annexure-1	43°C	26°C	44°C	31.4°C	32.2°C	Annexure-1	Below TLV Limit		S. CHATTARAJ

For, INDICATIVE CONSULTANT INDIA



# INDICATIVE CONSULTANT INDIA

HPL Link Road, Basudevpur, Khanjanchak, Haldia, Purba Medinipur, PIN - 721 602

Register Containing Particulars of Testing of HEAT STRESS

Table No. - 29

Name of Customer - M/s. SHYAM SEL & POWER LTD.

Dhasna, Bahadurpur, Jamuria, Dist. - Paschim Bardwan, PIN - 713 362.

Name of the Plant / Department : DRI -1, KILN NO. - 3 (150 TPD)

(WBGT °C = 0.7 WB + 0.3 GT)

AMBIENT TEMPERATURE	
Dry Bulb	Wet Bulb
37.0°C	28.0°C
Wind Velocity (m/min) : 66 m/min, South to North	

Sl No	Location	Date & Time of Monitoring	Sampling Instrument Use	Dry bulb Temperature (DB)	Wet bulb Temperature (WB)	Globe Temperature (GT)	WBGT °C	Limit TLV °C	Reference Method	Remarks	Signature	Name
1.	DRI - 1, KILN NO. - 3 (150 TPD)	27.03.2024 01:40 PM to 02:10 PM	Annexure- I	41°C	27°C	44°C	32.1°C	32.2°C	Annexure- I	Above TLV Limit		S. CHATTARAJ

For, INDICATIVE CONSULTANT INDIA



# INDICATIVE CONSULTANT INDIA

HPL Link Road, Basudevpur, Khanjanchak, Haldia, Purba Medinipur, PIN - 721 602

Register Containing Particulars of Testing of HEAT STRESS

Table No. - 30

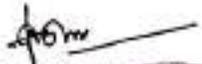
Name of Customer - M/s. SHYAM SEL & POWER LTD.  
Dhasna, Bahadurpur, Jamuria, Dist. - Paschim Bardwan, PIN - 713 362.

Name of the Plant / Department : DRI - 1, KILN NO. - 4 (150 TPD)  
(WBGT °C = 0.7 WB + 0.3 GT)

AMBIENT TEMPERATURE	
Dry Bulb	Wet Bulb
37.0°C	28.0°C
Wind Velocity (m/min) : 66 m/min, South to North	

Sl No	Location	Date & Time of Monitoring	Sampling Instrument Use	Dry bulb Temperature (DB)	Wet bulb Temperature (WB)	Globe Temperature (GT)	WBGT °C	Limit TLV °C	Reference Method	Remarks	Signature	Name
1.	DRI - 1, KILN NO.- 4 (150 TPD)	27.03.2024 02:30 PM to 03:05 PM	Annexure- I	44°C	28°C	45°C	*33.1°C	32.2°C	Annexure- I	Below TLV Limit		S. CHATTARAJ

For, INDICATIVE CONSULTANT INDIA

  
Parbati Golu  
Authorized Signatory



# INDICATIVE CONSULTANT INDIA

HPL Link Road, Basudevpur, Khanjanchak, Haldia, Purba Medinipur, PIN - 721 602

Register Containing Particulars of Testing of HEAT STRESS

Table No. - 31

Name of Customer - M/s. SHYAM SEL & POWER LTD.

Dhasna, Bahadurpur, Jamuria, Dist. - Paschim Bardwan, PIN - 713 362.

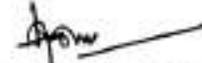
Name of the Plant / Department : DRI - 2, KILN - 5 (450 TPD)

(WBGT °C = 0.7 WB + 0.3 GT)

AMBIENT TEMPERATURE	
Dry Bulb	Wet Bulb
37.0°C	29.0°C
Wind Velocity (m/min) : 72 m/min, South West to North East	

Sl No	Location	Date & Time of Monitoring	Sampling Instrument Use	Dry bulb Temperature (DB)	Wet bulb Temperature (WB)	Globe Temperature (GT)	WBGT °C	Limit TLV °C	Reference Method	Remarks	Signature	Name
1.	DRI - 2, KILN - 5 (450 TPD)	27.03.2024 03:25 PM to 04:05 PM	Annexure-1	40°C	28°C	41°C	31.9°C	32.2°C	Annexure-1	Below TLV Limit		S. CHATTARAJ

For, INDICATIVE CONSULTANT INDIA

  
Parbati Golui  
Authorized Signatory



P 31/38

# INDICATIVE CONSULTANT INDIA

HPL Link Road, Basudevpur, Khanjanchak, Haldia, Purba Medinipur, PIN - 721 602

Register Containing Particulars of Testing of HEAT STRESS

Table No. - 32

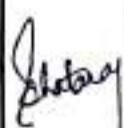
Name of Customer - M/s. SHYAM SEL & POWER LTD.

Dhasna, Bahadurpur, Jamuria, Dist. - Paschim Bardwan, PIN - 713 362.

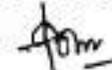
Name of the Plant / Department : DRI - 2, KILN - 6 (450 TPD)

(WBGT °C = 0.7 WB + 0.3 GI)

AMBIENT TEMPERATURE	
Dry Bulb	Wet Bulb
37.0°C	29.0°C
Wind Velocity (m/min) : 72 m/min, South West to North East	

Sl No	Location	Date & Time of Monitoring	Sampling Instrument Use	Dry bulb Temperature (DB)	Wet bulb Temperature (WB)	Globe Temperature (GT)	WBGT °C	Limit TLV °C	Reference Method	Remarks	Signature	Name
1.	DRI - 2, KILN - 6 (450 TPD)	27.03.2024 04:20 PM to 05:00 PM	Annexure- I	42°C	27°C	43°C	31.8°C	32.2°C	Annexure- I	Below TLV Limit		S. CHATTARAJ

For, INDICATIVE CONSULTANT INDIA

  
Parbati Golui  
Authorized Signatory



# INDICATIVE CONSULTANT INDIA

HPL Link Road, Basudevpur, Khanjanchak, Haldia, Purba Medinipur, PIN - 721 602

Register Containing Particulars of Testing of HEAT STRESS

Table No. - 33

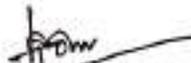
Name of Customer - M/s. SHYAM SEL & POWER LTD.  
Dhasna, Bahadurpur, Jamuria, Dist. - Paschim Bardwan, PIN - 713 362.

Name of the Plant / Department : DRI - 3, KILN NO. - 7 (450 TPD)  
(WBGT °C = 0.7 WB + 0.3 GT)

AMBIENT TEMPERATURE	
Dry Bulb	Wet Bulb
34.0°C	27.0°C
Wind Velocity (m/min) : 66m/min, South to North	

Sl No	Location	Date & Time of Monitoring	Sampling Instrument Use	Dry bulb Temperature (DB)	Wet bulb Temperature (WB)	Globe Temperature (GT)	WBGT °C	Limit TLV °C	Reference Method	Remarks	Signature	Name
1.	DRI - 3, KILN - 7 (450 TPD)	28.03.2024 09:30 AM to 10:05 AM	Annexure- I	43°C	29°C	44°C	*33.5°C	32.2°C	Annexure- I	Below TLV Limit		S. CHATTARAJ

For, INDICATIVE CONSULTANT INDIA

  
Parbati Golui  
Authorized Signatory



# INDICATIVE CONSULTANT INDIA

HPL Link Road, Basudevpur, Khanjanchak, Haldia, Purba Medinipur, PIN - 721 602

Register Containing Particulars of Testing of HEAT STRESS

Table No. - 34

Name of Customer - M/s. SHYAM SEL & POWER LTD.

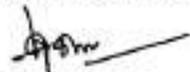
Dhasna, Bahadurpur, Jamuria, Dist. - Paschim Bardwan, PIN - 713 362.

Name of the Plant /Department : DRI - 3, KILN NO. - 8 (450 TPD)  
(WBGT °C = 0.7 WB + 0.3 GT)

AMBIENT TEMPERATURE	
Dry Bulb	Wet Bulb
34.0°C	27.0°C
Wind Velocity (m/min) : 66m/min, South to North	

Sl No	Location	Date & Time of Monitoring	Sampling Instrument Use	Dry bulb Temperature (DB)	Wet bulb Temperature (WB)	Globe Temperature (GT)	WBGT °C	Limit TLV °C	Reference Method	Remarks	Signature	Name
1.	DRI - 3, KILN NO.-8 (450 TPD)	28.03.2024 10:25 AM to 11:00 AM	Annexure-1	41°C	29°C	43°C	*33.2°C	32.2°C	Annexure-1	Below TLV Limit		S. CHATTARAJ

For, INDICATIVE CONSULTANT INDIA

  
Parbat Golui  
Authorized Signatory



# INDICATIVE CONSULTANT INDIA

HPL Link Road, Basudevpur, Khanjanchak, Haldia, Purba Medinipur, PIN - 721 602

Register Containing Particulars of Testing of HEAT STRESS

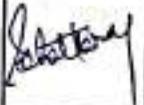
Table No. - 35

Name of Customer - M/s. SHYAM SEL & POWER LTD.

Dhasna, Bahadurpur, Jamuria, Dist. - Paschim Bardwan, PIN - 713 362.

Name of the Plant / Department : DRI - 3, KILN NO. - 9 (450 TPD)  
(WBGT °C = 0.7 WB + 0.3 GT)

AMBIENT TEMPERATURE	
Dry Bulb	Wet Bulb
36.0°C	28.0°C
Wind Velocity (m/min) : 72m/min, South to North	

Sl No	Location	Date & Time of Monitoring	Sampling Instrument Use	Dry bulb Temperature (DB)	Wet bulb Temperature (WB)	Globe Temperature (GT)	WBGT °C	Limit TLV °C	Reference Method	Remarks	Signature	Name
1.	DRI - 3, KILN NO.-9 (450 TPD)	28.03.2024 11:20 AM to 12:05 PM	Annexure- I	44°C	28°C	45°C	*33.1°C	32.2°C	Annexure- I	Below TLV Limit		S. CHATTARAJ

For, INDICATIVE CONSULTANT INDIA



# INDICATIVE CONSULTANT INDIA

HPL Link Road, Basudevpur, Khanjanchak, Haldia, Purba Medinipur, PIN - 721 602

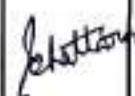
Register Containing Particulars of Testing of HEAT STRESS

Table No. - 36

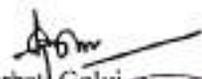
Name of Customer - M/s. SHYAM SEL & POWER LTD.  
Dhasna, Bahadurpur, Jamuria, Dist. - Paschim Bardwan, PIN - 713 362.

Name of the Plant / Department : DRI - 3, KILN NO. - 10 (450 TPD)  
(WBGT °C = 0.7 WB + 0.3 GT)

AMBIENT TEMPERATURE	
Dry Bulb	Wet Bulb
36.0°C	28.0°C
Wind Velocity (m/min) : 72m/min, South to North	

Sl No	Location	Date & Time of Monitoring	Sampling Instrument Use	Dry bulb Temperature (DB)	Wet bulb Temperature (WB)	Globe Temperature (GT)	WBGT °C	Limit TLV °C	Reference Method	Remarks	Signature	Name
1.	DRI - 3, KILN NO.-10 (450 TPD)	28.03.2024 12:25 PM to 01:05 PM	Annexure- I	44°C	28°C	45°C	*33.1°C	32.2°C	Annexure- I	Below TLV Limit		S. CHATTARAJ

For, INDICATIVE CONSULTANT INDIA

  
Parbat Golui  
Authorized Signatory



# INDICATIVE CONSULTANT INDIA

HPL Link Road, Basudevpur, Khanjanchak, Haldia, Purba Medinipur, PIN - 721 602

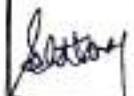
Register Containing Particulars of Testing of HEAT STRESS

Table No. - 37

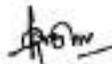
Name of Customer - M/s. SHYAM SEL & POWER LTD.  
Dhasna, Bahadurpur, Jamuria, Dist. - Paschim Bardwan, PIN - 713 362.

Name of the Plant / Department : DRI - 4, KILN NO. - 11 (700 TPD)  
(WBGT °C = 0.7 WB + 0.3 GT)

AMBIENT TEMPERATURE	
Dry Bulb	Wet Bulb
35.0°C	26.0°C
Wind Velocity (m/min) : 84m/min, South West to North East	

Sl No	Location	Date & Time of Monitoring	Sampling Instrument Use	Dry bulb Temperature (DB)	Wet bulb Temperature (WB)	Globe Temperature (GT)	WBGT °C	Limit TLV °C	Reference Method	Remarks	Signature	Name
1.	DRI - 4, KILN NO.-11 (700 TPD)	28.03.2024 04:05 PM to 04:35 PM	Annexure- I	38°C	26°C	40°C	30.2°C	32.2°C	Annexure- I	Below TLV Limit		S. CHATTARAJ

For, INDICATIVE CONSULTANT INDIA

  
Parbat Golu  
Authorized Signatory



P 37/38

# INDICATIVE CONSULTANT INDIA

HPL Link Road, Basudevpur, Khanjanchak, Haldia, Purba Medinipur, PIN - 721 602

Register Containing Particulars of Testing of HEAT STRESS

Table No. - 38

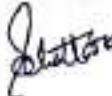
Name of Customer - M/s. SHYAM SEL & POWER LTD.

Dhasna, Bahadurpur, Jamuria, Dist. - Paschim Bardwan, PIN - 713 362.

Name of the Plant / Department : DRI - 4, KILN NO. - 12 (700 TPD)

(WBG T °C = 0.7 WB + 0.3 GT)

AMBIENT TEMPERATURE	
Dry Bulb	Wet Bulb
35.0°C	26.0°C
Wind Velocity (m/min) : 84m/min, South West to North East	

Sl No	Location	Date & Time of Monitoring	Sampling Instrument Use	Dry bulb Temperature (DB)	Wet bulb Temperature (WB)	Globe Temperature (GT)	WBG T °C	Limit TLV °C	Reference Method	Remarks	Signature	Name
1.	DRI - 4, KILN NO.-12 (700 TPD)	28.03.2024 05:00 PM to 05:35 PM	Annexure- I	39°C	27°C	41°C	31.2°C	32.2°C	Annexure- I	Below TLV Limit		S. CHATTARAJ

For, INDICATIVE CONSULTANT INDIA



## ANNEXURE - 1

### 1. RAW MATERIAL:

- *Coal, Dolomite, Diesel Oil, Pellet, Iron Ore, Iron Pellet, Dolochar, Manganese Ore, Quartz, Coke, Lome Stone, MS Billets, Furnace Oil, Lime Powder, Bentonite, sponge Iron, M.S Scarp, Sponge Iron, COKE, Ferro Silicon, Ferro Manganese,*

### 2. BY-PRODUCT:

- *Dolochar, Fly Ash, Bottom Ash, Ferro Manganese Slag, Silico Manganese Slag, Grease, Lubricants, Jute, MS Billets,*

### 3. FINISH PRODUCT:

- *Sponge Iron, Captive Power, Ferro Manganese, Silico Manganese, TMT, Structure, Pellet ore, MS Billets.*

### 4. INSTRUMENTS USED:

The following standard instrument utilised during the entire survey period and the instrument are calibrated

1. *Hydrometer / Dry Bulb- Wet Bulb Temperature Indicator Meter*

-----○-----



ANNEXURE - XXXIII



## OPD BILL

JHID	: 17562401240530	Visit No	: ICTOP240036575
Patient Name	: MR AMARJEET KUMAR SAH	Bill No.	: IQCTDCR240005855
Age/Gender	: 40 Yrs/Male	Bill Date & Time	: 24/06/2024 08:14 PM
Patient Address	: DGP	Patient Category	: CORPORATE
Patient Phone No.	: 9771900387	Payer Name	: SHYAM SEL AND POWER LTD - CREDIT
Consultant Doctor	: Dr.CONSULTANT HEALTH CHECK UP MEDICINE	Referred By	:
Department	:GENERAL MEDICINE	Unit Name	:

Sr. No.	Service	Code	Service Name	Service Remark	Qty.	Rate	Discount	Amount (Rs.)
1	SHYAM SEL AND POWER LTD HEALTH CHECK UP- CREDIT				1.00			2750.00
			BLOOD SUGAR F		1.00			
			BLOOD SUGAR PP		1.00			
			MICROALBUMIN		1.00			
			URIC ACID		1.00			
			LIPID PROFILE(CHOL,TG, HDL, LDL, VDL)		1.00			
			LIVER PROFILE [ LFT ] (T.BIL+OT+PT+ALP+PRO +ALB+GLOB+A/G RATIO)		1.00			
			URINE FOR COMPLETE TEST (routine + microscopic)/ URINE R/M		1.00			
			THYROID PROFILE- 1 (T3 T4 TSH)		1.00			
			CBC-COMplete BLOOD COUNT		1.00			
			ESR (Erythrocyte Sedimentation Rate)		1.00			
			BLOOD FOR GROUPING		1.00			
			UREA & CREATININE		1.00			
		GENM000001	CONSULTATION- FIRST VISIT(G.MED)		1.00			
		CARD00001	CONSULTATION- FIRST VISIT(CARDIOLOGY)		1.00			
			ECHO SCREENING		1.00			
			USG:WHOLE ABDOMEN SCREENING		1.00			
			X-RAY CHEST (PA)		1.00			
			ECG		1.00			
<b>Total Amount (Rs.) :</b>								<b>2750.00</b>

Amount in Words : Rs. TWO THOUSAND SEVEN HUNDRED FIFTY ONLY

Payer/Patient	Bill Amt.	Discount	Deposit	Receipt	Refund	Credit Note	Debit Note	Balance
SHYAM SEL AND POWER LTD - CREDIT	2750.00	0.00	0.00	0.00	0.00	0.00	0.00	2750.00
Patient	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	<b>2750.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>2750.00</b>

Total : 2750.00 Cashier : UTTAM LIMAI

\* - Refunded Items. # - Cancelled Items Print Date & Time : 24/06/2024 08:15 PM

I have perused the above mentioned bill and acquiesce to the same. I undertake to make the payment immediately and this undertaking will be binding upon me and/or my legal heirs for any non-payment of the bill. This undertaking shall be enforceable till the full and final amount is realized.

User : UTTAM LIMAI

UTTAM LIMAI

Prepared By

Printed By

Authorised By

Patient / Attendant Sign



OP CASE SHEET

OHID	: 17562401240530	Date	: Jun 24, 2024 09:14 PM
Patient Name	: MR AMARJEET KUMAR SAH	Department	: CARDIOLOGY
Gender/Age	: Male / 40Y 0M 9D	Consultant	: Dr. CONSULTANT HEALTH CHECK UP CARDIOLOGY
Address	: DGP	Unit	:
Visit No.	: ICTOP240036575	Ref. Hospital	:
Visit Type	: OP	Ref. Doctor	:
Mobile No.	: 9771900387	Payer Name	: SHYAM SEL AND POWER LTD - CREDIT

CASE HISTORY: B.P. 120/90 Pulse: 100/min Wt: 78kg RR: Temperature:

Chief Complaint: *16/6*

GENERAL EXAMINATION:

Allergies:

Body Habitus:

Pertinent Family History:

Psychological Assessment:

*- BB -*  
*- EM -*

SYSTEMIC EXAMINATION:

*-*

INVESTIGATIONS:

TREATMENT SUGGESTED:

REVIEW ON:

Print By:

UTTAM LMAJ

Print Date:

24/06/2024 09:15 PM



OP CASE SHEET

UHID	: 17562401240530	Date	: Jun 24, 2024 08:14 PM
Patient Name	: MR AMARJEET KUMAR SAH	Department	: CARDIOLOGY
Gender/Age	: Male / 40Y 0M 0D	Consultant	: Dr CONSULTANT HEALTH CHECK UP CARDIOLOGY <i>Medicine</i>
Address	: DGP	Unit	:
Visit No	: ICTOP240036575	Ref. Hospital	:
Visit Type	: OP	Ref. Doctor	:
Mobile No	: 9771900387	Payer Name	: SHYAM SEL AND POWER LTD - CREDIT

CASE HISTORY : B.P. Pulse: WL RR: Temperature:

Chief Complaint

GENERAL EXAMINATION: *One pt irregular heartbeats;*

Allergies

Body Habitus:

Pertinent Family History

Psychological Assessment:

*-FBS - 88 mg/dl  
PPH -*

*GR (suppl)  
- Normal*

SYSTEMIC EXAMINATION:

*WBC - 13.5 / dl  
Hem - 14.5 / dl  
CRP - 1.11 L*

*Lipid profile - normal*

*Factor I/AF - 60%  
No RW or Q*

INVESTIGATIONS:

*- No other specific complaints*

TREATMENT SUGGESTED:

*[Signature]*  
*(Dr. [Name])*

REVIEW ON

Print By :

UTTAM LMAI

Print Date :

24/06/2024 08:15 PM



## DEPARTMENT OF LABORATORY MEDICINE

BIOCHEMISTRY				Final Report
Patient Name	: MR AMARJEET KUMAR SAH	Order Date	: 24/06/2024 08:14 PM	
Age / Gender	: 40 Yrs / Male	Sample Collection	: 25/06/2024 11:20 AM	
UHID	: 17562401240530	Sample Received	: 25/06/2024 11:20 AM	
Ref Doctor	:	Reporting Date	: 25/06/2024 04:06 PM	
Primary Consultant	: Dr.CONSULTANT HEALTH CHECK UP MEDICINE	Specimen	: PLASMA	
Order No.	: 534618	Visit Type	: OP	
Visit No.	: ICTOP240036575			
PARAMETER	METHOD	RESULT	UNIT	B.R.]
<b>BLOOD SUGAR F</b>				
BLOOD SUGAR F	Hexokinase	88	mg/dl	74-106
<i>Plasma glucose Fasting [ Adults-74-106 mg/dL ]</i>				
<i>Glucose Random: [ Cord blood: 45 - 96 mg/dL, Premature: 20 - 60 mg/dL, Neonatal: 30 - 60 mg/dL,</i>				
<i>New born: 1 day: 40 - 60 mg/dL, &gt;1 day: 50 - 90 mg/dL, Child: 60 - 100 mg/dL ]</i>				
<i>Adult: 70 - 160 mg/dL</i>				
<i>Glucose Post Prandial: 80 - 140 mg/dL</i>				
<b>BLOOD SUGAR PP</b>				
BLOOD SUGAR PP	Hexokinase	108	mg/dl	80-140
<i>Plasma glucose Fasting [ Adults-74-106 mg/dL ]</i>				
<i>Glucose Random: [ Cord blood: 45 - 96 mg/dL, Premature: 20 - 60 mg/dL, Neonatal: 30 - 60 mg/dL,</i>				
<i>New born: 1 day: 40 - 60 mg/dL, &gt;1 day: 50 - 90 mg/dL, Child: 60 - 100 mg/dL, Adult: 70 - 160 mg/dL ]</i>				
<i>Glucose Post Prandial: 80 - 140 mg/dL</i>				
<b>MICROALBUMIN</b>				
URINE MICROALBUMIN	Particle Enhanced Turbidimetric Inhibition	0.9	mg/dl	0.13 -2.0
<b>UREA &amp; CREATININE</b>				
UREA	Urease	18	mg/dl	19.0 - 43.0
CREATININE	Alkaline picrate-kinetic	1.0	mg/dl	0.66 - 1.25
<b>URIC ACID</b>				
URIC ACID	Uricase, UV	6.3	mg/dl	3.5 - 8.5
<b>LIPID PROFILE(CHOL,Tg, HDL, LDL, VDL)</b>				
CHOLESTEROL	CHOD-POD	142	mg/dl	Borderline high: 200 - 239 mg/dl High: >240 mg/dl
TRIGLYCERIDE	Enzymatic colorimetric	77	mg/dl	40.0-150.0
HDL CHOLESTEROL	Direct measure-PEG	32	mg/dl	40-60
LDL CHOLESTEROL	Enzymatic	95	mg/dl	0.0-100.0
VLDL CHOLESTEROL	Calculated	15	mg/dl	0.0-30.0
CARDIAC RISK RATIO (T, CHOL / HDL-C)		4.4		0.0-3.5
<b>LIVER PROFILE ( LFT ) ( T.BIL+OT+PT+ALP+PRO+ALB+GLOB+A/G RATIO)</b>				

IQ City

Medical College Hospital

IQ City Rd, Sovapur, Jinnua Durgapur-713206, West Bengal,  
Durgapur, WEST BENGAL, INDIA

Phone: 0343-2608000

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TEST	METHOD	RESULT	UNIT	REFERENCE RANGE
TOTAL BILIRUBIN	Jendrassik Grof	0.7	mg/dl	Cord Blood Premature: <2.0 Full term: <2.0 0 - 1 Day Premature: <8.0 Full term: <5.0 1 - 2 Days Premature: <12.0 Full Term: <8.0 2 - 5 days Premature: <16.0 >5 Day Premature: <20.0 Mature: <10.0 Adult: 0.2 - 1.3
DIRECT BILIRUBIN	Diazotization	0.2	mg/dl	0.0-0.3
INDIRECT BILIRUBIN	Calculated	0.5	mg/dl	0.0-0.75
SGOT/AST	UV with PSP	26	U/L	15.0-46.0
SGPT/ALT	UV with PSP	19	U/L	0.0-50.0
GGT	Glutamyl-p-nitroanilide	27	U/L	15-73
ALP	PNPP, AMP Buffer	61	U/L	38-125
TOTAL PROTEIN	Biuret	8.0	g/dL	6.3 - 8.2
ALBUMIN	Bromcresol Purple (BCP)	4.2	g/dl	3.4-5.0
GLOBULIN	Calculated	3.8	g/dL	1.8-3.6
A/G RATIO	Calculated	1.1		1.0-2.0

--- END OF REPORT ---

SWARNA MODAK  
Verified By

Dr. KAMALA KANTA PARHI  
Dr. KAMALA KANTA PARHI  
BIOCHEMIST

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**IQ City**

**Medical College Hospital**

IQ City Rd, Sovapur, Jenua Durgapur-713203, West Bengal,  
Durgapur, WEST BENGAL, INDIA

Phone: (343)-2608000

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**DEPARTMENT OF LABORATORY MEDICINE**

Final Report

**CLINICAL PATHOLOGY**

Patient Name	: MR AMARJEET KUMAR SAH	Order Date	: 24/06/2024 08:14 PM
Age / Gender	: 40 Yrs / Male	Sample Collection	: 25/06/2024 11:20 AM
UHID	: 17562401240530	Sample Received	: 25/06/2024 01:20 PM
Ref Doctor	:	Reporting Date	: 25/06/2024 07:12 PM
Primary Consultant	: Dr. CONSULTANT HEALTH CHECK UP MEDICINE	Specimen	: URINE
Order No.	: 534618	Visit Type	: OP
Visit No.	: ICTOP240036575		

PARAMETER	METHOD	RESULT	UNIT	B.R.I
-----------	--------	--------	------	-------

**URINE FOR COMPLETE TEST (routine + microscopic)/ URINE R/M**

**PHYSICAL EXAMINATION**

QUANTITY	30	ml
COLOUR	Watery	
APPEARANCE	Clear	

**CHEMICAL EXAMINATION**

SPECIFIC GRAVITY	1.000
REACTION	Acidic
PROTEIN	Absent
SUGAR	Absent
BLOOD	Absent

**MICROSCOPIC EXAMINATION**

PUS CELL	1-2	Cells/hpf
EPITHELIAL CELL	0-1	Cells/hpf
RBCs	Nil	Cells/hpf
CRYSTAL	Nil	
CAST	Nil	
BACTERIA	Absent	
YEAST CELL	Absent	
OTHERS	Nil	

-- END OF REPORT --

SWARNA MODAK  
Verified By

**Dr. SHREYA BOSE CHANDRA**  
Postgraduate, M.D. (Pathology)  
West Bengal State Emblem  
**Dr. SHREYA BOSE CHANDRA**  
PATHOLOGIST

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Patient- MR AMARJEET KUMAR SAH 40 Yrs/ Male  
17562401240530

Sample No- 534618



## DEPARTMENT OF LABORATORY MEDICINE

Final Report

## HEMATOLOGY

Patient Name	: MR AMARJEET KUMAR SAH	Order Date	: 24/06/2024 08:14 PM
Age / Gender	: 40 Yrs / Male	Sample Collection	: 25/06/2024 11:20 AM
UHID	: 17562401240530	Sample Received	: 25/06/2024 11:20 AM
Ref Doctor	:	Reporting Date	: 25/06/2024 02:43 PM
Primary Consultant	: Dr.CONSULTANT HEALTH CHECK UP MEDICINE	Specimen	: WHOLE BLOOD
Order No.	: 534618	Visit Type	: OP
Visit No.	: ICTOP240036575		

PARAMETER	METHOD	RESULT	UNIT	B.R.I
<b>CBC-COMplete BLOOD COUNT</b>				
HEMOGLOBIN / Hb%	Colorimetric Method	15.6	g/dl	* 15.0-20.0
TLC (Total Leukocyte Count)	Fluorescent Flow Cytometry	8.64	10 <sup>3</sup> /μL	4.0-10.0
TOTAL RBC COUNT	Electrical impedance	5.73	10 <sup>6</sup> / μL	4.5-5.5
PCV (Packed cell volume)	RBC pulse height detection	44.1	%	40.0-50.0
PLATELET COUNT	Electrical impedance/microscopy	150	10 <sup>3</sup> /μL	150.0-450.0
<b>DLC (Differential Leukocyte Count)</b>				
NEUTROPHIL	Fluorescent Flow Cytometry / Microscopy	57	%	40-80
LYMPHOCYTE	Fluorescent Flow Cytometry / Microscopy	36	%	25.0-40.0
EOSINOPHIL	Fluorescent Flow Cytometry / Microscopy	03	%	1.0-6.0
MONOCYTE	Fluorescent Flow Cytometry / Microscopy	04	%	2.0-10.0
BASOPHIL	Fluorescent Flow Cytometry / Microscopy	00	%	<1.0-2.0
OTHERS		00		
MCV (Mean corpuscular volume)	Calculated	77.0	fl	* 83.0-101.0
MCH (Mean Corpuscular Hemoglobin)	Calculated	29.0	pg	27.0-32.0
MCHC (Mean Corpuscular Hemoglobin Concentration)	Calculated	37.6	g/dL	30.0-36.0
<b>ESR (Erythrocyte Sedimentation Rate)</b>				
ESR	Modified Westergren Method	16	mm of 1st hour	0.0-10.0
<b>BLOOD FOR GROUPING</b>				
BLOOD GROUP		B		
R H TYPE		POSITIVE		

--- END OF REPORT ---

SWARNA MODAK  
Verified ByPatient- MR AMARJEET KUMAR SAH 40 Yrs/ Male  
17562401240530

Sample No- 534618

Dr. SHREYA BOSE CHANDRA  
Assistant Professor, Dept. of Pathology  
IQ CITY MEDICAL COLLEGE HOSPITAL  
Dr. SHREYA BOSE CHANDRA  
PATHOLOGIST

**IQ City**

**Medical College Hospital**

IQ City Rd, Sovapur, Jemua Durgapur-713206, West Bengal,  
Durgapur, WEST BENGAL, INDIA

Phone: 0343-2608000

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\*\* Please Correlate Clinically

Patient- MR AMARJEET KUMAR SAH 40 Yrs/ Male  
17562401240530

Sample No- 534618



## DEPARTMENT OF LABORATORY MEDICINE

## SPECIAL BIOCHEMISTRY

## Final Report

Patient Name	: MR AMARJEET KUMAR SAH	Order Date	: 24/06/2024 08:14 PM
Age / Gender	: 40 Yrs / Male	Sample Collection	: 25/06/2024 11:17 AM
UHID	: 17562401240530	Sample Received	: 25/06/2024 11:20 AM
Ref Doctor	:	Reporting Date	: 25/06/2024 04:06 PM
Primary Consultant	: Dr.CONULTANT HEALTH CHECK UP MEDICINE	Specimen	: SERUM
Order No.	: 534618	Visit Type	: OP
Visit No.	: ICTOP240036575		

PARAMETER	METHOD	RESULT	UNIT	B.R.I
<b>THYROID PROFILE- 1 (T3 T4 TSH)</b>				
TOTAL T3	CLIA	2.24	nmol/l	1.32-2.96
TOTAL T4	CLIA	164.0	nmol/l	41.3-162.5
TSH-(THYROID STIMULATING HORMONE)	CLIA	2.63	µIU/ml	0.27-4.2

[TOTAL T3 - Adult: (21 YEAR TO 99 YEAR)]

Euthyroid : 0.92-2.79 nmol/L Hypothyroid : <0.92 nmol/L Hyperthyroid : >2.79 nmol/L Infants(1-23 months):1.80-3.68 nmol/L  
Children(2-12 YEAR):1.62-3.19 nmol/L Adolescents(13-20 YEAR):1.32-2.96 nmol/L]

[TOTAL T4 - Adult: (21 YEAR - 99 YEAR)]

Hypothyroid : 0.0-71.0 nmol/L Hyperthyroid :139.3-246.4 nmol/L  
Pregnant Euthyroid :82.6-138.0 nmol/L Sick Euthyroid :24.5-171.6 nmol/L]

[TSH - Adult: 0.27 - 4.2 µIU/ml]

Paediatric: Premature (28 - 36 weeks:) 1st week of life: 0.70 - 27.0 µIU/ml

Term infants: Birth - 4 days: 1.0 - 38.9 µIU/ml

2 - 20 weeks: 1.7 - 9.1 µIU/ml 5 months - 20 YEAR: 0.7 - 6.4 µIU/ml]

— END OF REPORT —

SWARNA MODAK  
Verified By

  
Dr. KAMALA KANTA PARHI  
BIOCHEMIST

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\* B.R.I : BIOLOGICAL REFERENCE INTERVAL

\*\* Please Correlate Clinically

IQ City  
Medical College Hospital  
IQ City Road, Scvapur, Jamua  
Durgapur 713206, India  
Phone: 0343-2608000, 0343-2608886

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Patient Name	SAH AMARJEET KUMAR MR. 40Y	Birth	
Patient ID	17562401240530	Age	
Referral Dr		Sex	Male
Study Date Time	25 Jun 2024 12:01pm	Report Date Time	25 Jun 2024 2:21pm

**CHEST X ray AP**

Both lungs grossly appear normal.  
Heart and mediastinum appear normal.  
No significant pleural effusion seen.  
Both the domes of diaphragm appear normal.  
Spine is normal.

**Adv: Clinical correlation.**

*SDB Bendale*

Dr. Sandeep D Bendale  
MD

mani

Patient ID:	17562401240530	Patient Name:	JEET KUMAR SAH
Age:	40	Sex:	
Referring Physician:		Modality:	
Study Date:	25 Jun 2024	Study:	

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Hospital



### USG WHOLE ABDOMEN

**LIVER:** Liver (13.8 cm) is normal in size and **increased homogeneous echotexture**. No focal lesion is seen. Intrahepatic biliary radicles are not dilated.

**PORTA:** Portal vein is normal and measures 8 mm.

**GALLBLADDER:** Gallbladder is normal in size, shape and contour. Gallbladder wall thickness is within normal limits. No calculus or mass lesion is seen.

**CBD:** Common bile duct is not dilated and measures 3 mm. in diameter.

**PANCREAS:** Visualized pancreatic head and body grossly appears normal. Tail is obscured by bowel gas.

**SPLEEN:** Spleen is normal in size with homogeneous echotexture. Splenic span is 10.3 cm.

**RETROPERITONEUM:** Aorta and IVC are normal. No enlarged pre and para-aortic lymph nodes are seen.

**KIDNEYS:** Both kidneys are normal in size and show normal corticomedullary differentiation. No evidence of any hydronephrosis, renal calculus or mass lesion is seen. Right kidney = 11.7 cm. and Left kidney = 11.7 cm.

**URETER:** Both ureters are not visualized hence not dilated.

**URINARY BLADDER:** Urinary bladder is seen normal in size and shape. Urinary bladder wall thickness is within normal limits. No intraluminal lesion is seen.

**PROSTATE:** Prostate is normal in size with homogeneous echopattern.

Prostate volume = 11.6 cm<sup>3</sup>.

**\*\* No free fluid is seen in the abdomen.**

### **IMPRESSION**

**\* Fatty liver grade II.**

Please correlate clinically.

*Soumit Roy*

DR. SOUMIT ROY  
MBBS, MD(CM), CBET(USG)  
SONOLOGIST  
Reg. No.- 73442 (WBMC)

Date: 25-Jun-2024 13:40:47

CARDIOLOGY

*Dr. C. L. ...*

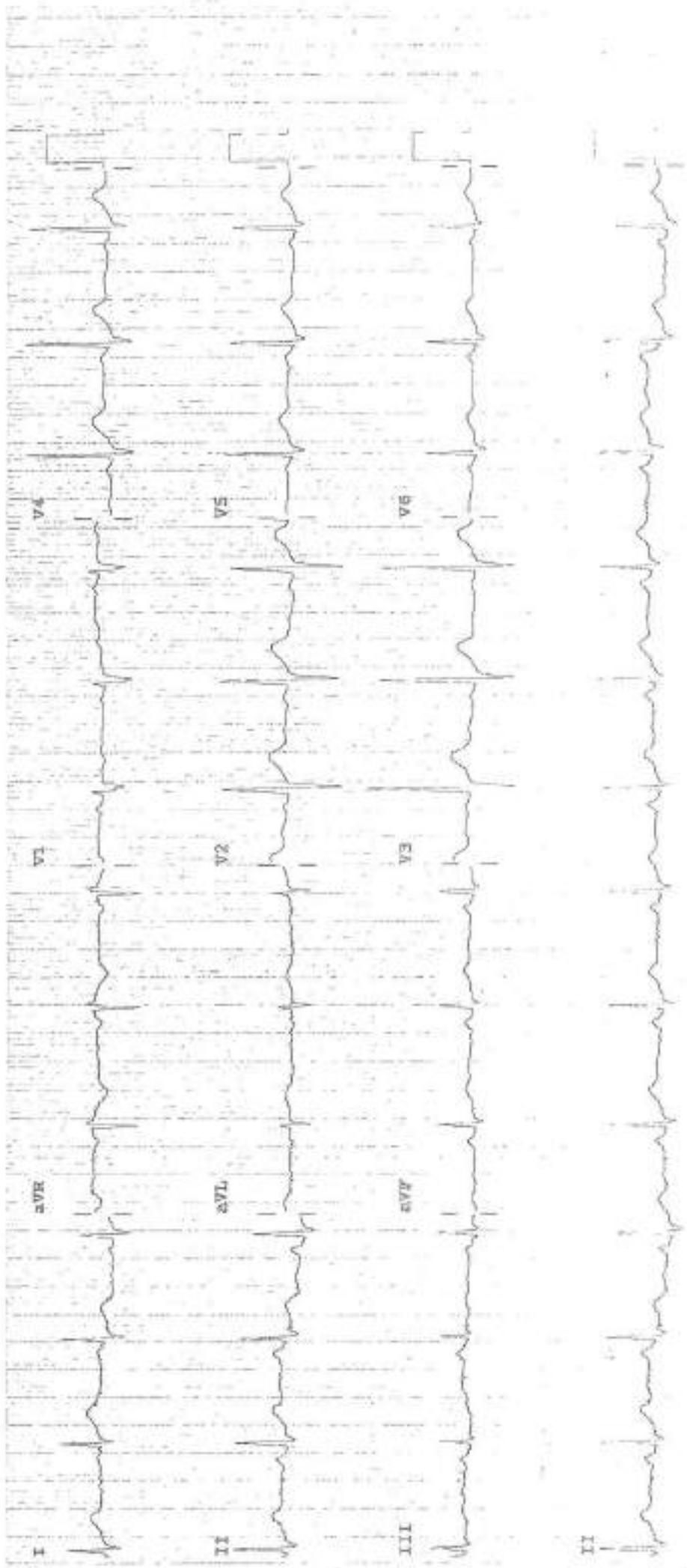
Rate 76 . Age not entered, assumed to be 50 years old for purpose of ECG interpretation  
 PR 129 Sinus rhythm.....normal P axis, V-rate 50-99  
 QRS 98 . Abnormal R-wave progression, early transition.....QRS area>0 in V2  
 QT 370  
 QTc 417

--AXIS--  
 P 65  
 QRS 69  
 T 30

12 Lead; Standard Placement

Unconfirmed Diagnosis

- OTHERWISE NORMAL ECG -



mani



## TRANSTHORACIC ECHO-DOPPLER REPORT OPD

NAME	AMARJEET KUMAR SAH	AGE / SEX	40Yrs./M
Ref. Dr		Date	25.06.2024
MR No.	17562401240530	B/P	
Done by Dr.	Dr. C. Nandy/Dr. Kaushleendra Kumar/ Dr. Sanjay Singh / Dr. Shankhanath Pal		

### SUMMARY

- > Normal chamber size
- > Normal valve morphology, Trivial TR.
- > No RWMA.
- > Great arteries normal in size and relation.
- > Interatrial and interventricular septum intact
- > Normal LV systolic function. LVEF 60%
- > Grade I diastolic dysfunction.
- > Systemic and pulmonary venous drainage normal.
- > No PAH.
- > Pericardium normal.

### FINAL IMPRESSION

-Normal LV systolic function.  
*Please correlate clinically.*

  
Dr. (Sars.) C. Nandy  
(Consultant Cardiologist)

Dr. Kaushleendra Kumar  
(Consultant Cardiologist)

Dr. Sanjay Singh  
(Consultant Cardiologist)

Dr. Shankhanath Pal  
(Consultant Cardiologist)

Cont. Page 2

IQ City Medical College Hospital  
 IQ City Rd, Durgapur, West Bengal 713206  
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 www.iqcity.in



NAME	AMARJEET KUMAR SAH	AGE / SEX	40Yrs./M
Ref. Dr		Date	25.06.2024
MR No.	17562401240530	B/P	
Done by Dr.	Dr. C. Nandy / Dr. Kaushendra Kumar / Dr. Sonjay Singh / Dr. Shaikhunath Pal		

Measurements	Values		
LA	25 mm	LV ed	48 mm
LA	29 mm	LV es	31 mm
LA	36 %	IVS ed	10 mm
LA	60 %	PW (LV)	10 mm

**VALVES:-**

**MITRAL VALVE**

Morphology : AML Normal / Thickening / Calcification / Flutter / Vegetation / Prolapse / SAM / Doming.  
 PML Normal / Thickening / Calcification / Prolapse / Paradoxical motion / Fixed.  
 Subvalvular deformity (present / absent).

Doppler : Normal / Abnormal.  
 Mitral stenosis : Absent / Present.  
 Mitral Regurgitation : Absent / Trivial / Mild / Moderate / Severe.

**TRICUSPID VALVE**

Morphology : Normal / Atriose / Thickening / Calcification / Prolapse / Vegetation / Doming.  
 Doppler : Normal / Abnormal.  
 Tricuspid Stenosis : Absent / Present.  
 Tricuspid regurgitation : Absent / Trivial / Mild / Moderate / Severe.

**PULMONARY VALVE**

Morphology : Normal / Atriose / Thickening / Doming / Vegetation.  
 Doppler : Normal / Abnormal.  
 Pulmonary stenosis : Absent / Present. Level:  
 Pulmonary regurgitation : Absent / Present

**AORTIC VALVE**

Morphology : Normal / Thickening / Calcification / Restricted opening / Flutter / Vegetation.  
 No of cusps 1 / 2 / 3 / 4.  
 Doppler : Normal / Abnormal.  
 Aortic stenosis : Absent / Present.  
 Aortic regurgitation : Absent / Trivial / Mild / Moderate / Severe.

**CHAMBERS:-**

Left Ventricle : Cavity normal. Walls normal in thickness and motion.  
 Left Atrium : Normal; No clots seen.  
 Right Atrium : Normal.  
 Right Ventricle : Normal.

**OTHERS:-**

GREAT ARTERIES : Normal in size and relation.  
 PERICARDIUM : Normal.

Checked by.....



## OPD BILL

UHID	: 17562401240523	Visit No	: ICTOP240036433
Patient Name	: MR SHAKIT KUMAR	Bill No.	: IQCTOCR240005853
Age/Gender	: 37 Yrs/Male	Bill Date & Time	: 24/06/2024 07:57 PM
Patient Address	: DGP	Patient Category	: CORPORATE
Patient Phone No.	: 7595044270	Payer Name	: SHYAM SEL AND POWER LTD - CREDIT
Consultant Doctor	: Dr. CONSULTANT HEALTH CHECK UP MEDICINE	Referred By	:
Department	: GENERAL MEDICINE	Unit Name	: UNIT 1

Sr. No.	Service	Code	Service Name	Service Remark	Qty.	Rate	Discount	Amount (Rs.)
1	SHYAM SELAND POWER LTD HEALTH CHECK UP- CREDIT				1.00			2750.00
			BLOOD SUGAR F		1.00			
			BLOOD SUGAR PP		1.00			
			MICROALBUMIN		1.00			
			URIC ACID		1.00			
			LIPID PROFILE(CHOL,TG, HDL, LDL, VDL)		1.00			
			LIVER PROFILE ( LFT ) [T.BIL+GT+PT+ALP+PRO +ALB+GLOB+A/G RATIO]		1.00			
			URINE FOR COMPLETE TEST (routine + microscopic)/ URINE R/M		1.00			
			THYROID PROFILE- 1 (T3 T4 TSH)		1.00			
			CBC-COMplete BLOOD COUNT		1.00			
			ESR (Erythrocyte Sedimentation Rate)		1.00			
			BLOOD FOR GROUPING		1.00			
			UREA & CREATININE		1.00			
		GENM000001	CONSULTATION-FIRST VISIT(G.MED)		1.00			
		CARD000001	CONSULTATION- FIRST VISIT(CARDIOLOGY)		1.00			
			ECHO SCREENING		1.00			
			USG:WHOLE ABDOMEN SCREENING		1.00			
			X-RAY CHEST (PA)		1.00			
			ECG		1.00			
<b>Total Amount (Rs.) :</b>								<b>2750.00</b>

Amount In Words : Rs. TWO THOUSAND SEVEN HUNDRED FIFTY ONLY

	Bill Amt.	Discount	Deposit	Receipt	Refund	Credit Note	Debit Note	Balance
SHYAM SFL AND POWER LTD - CREDIT	2750.00	0.00	0.00	0.00	0.00	0.00	0.00	2750.00
Patient	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	<b>2750.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>2750.00</b>

Total : 2750.00 Cashier : UTTAM LIMAI

\* - Refunded Items: # - Cancelled Items Print Date & Time : 24/06/2024 07:58 PM

I have perused the above mentioned bill and acquiesce to the same. I undertake to make the payment immediately and this undertaking will be binding upon me and/or my legal heirs for any non-payment of the bill. This undertaking shall be enforceable till the full and final amount is realized.

User : UTTAM LIMAI

UTTAM LIMAI

Prepared By

Printed By

Authorised By

Patient / Attendant Sign



### OP CASE SHEET

UHID	: 17562401240523	Date	: Jun 24, 2024 07:57 PM
Patient Name	: MR SHAKIT KUMAR	Department	: CARDIOLOGY
Gender/Age	: Male (37Y 10M 23D)	Consultant	: Dr CONSULTANT HEALTH CHECK UP CARDIOLOGY
Address	: DGP	Unit	: UNIT 1
Visit No.	: ICTOP240036433	Ref. Hospital	:
Visit Type	: OP	Ref. Doctor	:
Mobile No.	: 7595044270	Payer Name	: SHYAM SEL ANQ POWER LTD - CREDIT

CASE HISTORY: B.P: 110/70 Pulse: 80b/min Wt: 70kg RR: Temperature:

Chief Complaint: *chest pain*

#### GENERAL EXAMINATION:

Allergies:

Body Habitus:

Pertinent Family History:

Psychological Assessment:

*Elev: WNL*  
*Elev: WNL*

#### SYSTEMIC EXAMINATION:

*Healthy diet*

#### INVESTIGATIONS:

#### TREATMENT SUGGESTED:

REVIEW ON:

Print By:

UTTAM LIMA

Print Date:

24/06/2024 07:58 PM



OP CASE SHEET

UHID	: 17562401240523	Date	: Jun 24, 2024 07:57 PM
Patient Name	: MR SHAKIT KUMAR	Department	: CARDIOLOGY
Gender/Age	: Male / 37Y 10M 23D	Consultant	: Dr. CONSULTANT HEALTH CHECK UP CARDIOLOGY <i>Medicine</i>
Address	: DGP	Unit	: UNIT 1
Visit No.	: ICTOP240036433	Ref. Hospital	:
Visit Type	: OP	Ref. Doctor	:
Mobile No.	: 7595044270	Payor Name	: SHYAM SEL AND POWER LTD - CREDIT

CASE HISTORY : B.P: Pulse: Wt: RR: Temperature:

Chief Complaint :

GENERAL EXAMINATION:

*Case of regular heart checkup*

Allergies:

Body Habitus:

Pertinent Family History:

*lipid profile*

Psychological Assessment:

*- Hb - 93 g/dl*

*- RFT - WNL*

*• Cholesterol - 203 g/dl*

*• TG - 119 g/dl*

SYSTEMIC EXAMINATION:

*- LFT - WNL*

*• Hb1c - 4.8 g/dl*

*• LFT - 131 g/dl*

*ECHO :- 100% - 60%*

INVESTIGATIONS:

*- Any*  
*⇒ ~~stress~~ Life style modifications*

TREATMENT SUGGESTED:

*→ High fibre diet*

REVIEW ON:

Print By:

UTTAM LIMAI

Print Date:

24/06/2024 07:58 PM

## DEPARTMENT OF LABORATORY MEDICINE

BIOCHEMISTRY				Final Report
Patient Name	: MR SHAKIT KUMAR	Order Date	: 24/06/2024 07:57 PM	
Age / Gender	: 37 Yrs / Male	Sample Collection	: 25/06/2024 11:25 AM	
UHID	: 17562401240523	Sample Received	: 25/06/2024 11:26 AM	
Ref Doctor	:	Reporting Date	: 25/06/2024 04:07 PM	
Primary Consultant	: Dr. CONSULTANT HEALTH CHECK UP MEDICINE	Specimen	: PLASMA	
Order No.	: 534607	Visit Type	: OP	
Visit No.	: ICTOP240036433			
PARAMETER	METHOD	RESULT	UNIT	B.R.I
<b>BLOOD SUGAR F</b>				
BLOOD SUGAR F	Hexokinase	93	mg/dl	74-106
<i>Plasma glucose Fasting [ Adults-74-106 mg/dL ]</i>				
<i>Glucose Random: [ Cord blood: 45 - 96 mg/dL, Premature: 20 - 60 mg/dL, Neonatal: 30 - 60 mg/dL,</i>				
<i>New born: 1 day: 40 - 60 mg/dL, &gt;1 day: 50 - 90 mg/dL, Child: 60 - 100 mg/dL ]</i>				
<i>Adult: 70 - 160 mg/dL</i>				
<i>Glucose Post Prandial: 80 - 140 mg/dL</i>				
<b>BLOOD SUGAR PP</b>				
BLOOD SUGAR PP	Hexokinase	100	mg/dl	80-140
<i>Plasma glucose Fasting [ Adults-74-106 mg/dL ]</i>				
<i>Glucose Random: [ Cord blood: 45 - 96 mg/dL, Premature: 20 - 60 mg/dL, Neonatal: 30 - 60 mg/dL,</i>				
<i>New born: 1 day: 40 - 60 mg/dL, &gt;1 day: 50 - 90 mg/dL, Child: 60 - 100 mg/dL, Adult: 70 - 160 mg/dL ]</i>				
<i>Glucose Post Prandial: 80 - 140 mg/dL</i>				
<b>MICROALBUMIN</b>				
URINE MICROALBUMIN	Particle Enhanced Turbidimetric Inhibition	0.7	mg/dl	0.13 - 2.0
<b>UREA &amp; CREATININE</b>				
UREA	Urease	17	mg/dl	19.0 - 43.0
CREATININE	Alkaline picrate-kinetic	1.0	mg/dl	0.66 - 1.25
<b>URIC ACID</b>				
URIC ACID	Uricase, UV	5.5	mg/dl	3.5 - 8.5
<b>LIPID PROFILE(CHOI,Tg, HDL, LDL, VDL)</b>				
CHOLESTEROL	CHOD-POD	203	mg/dl	Borderline high: 200 - 239 mg/dl High: =240 mg/dl
TRIGLYCERIDE	Enzymatic colorimetric	119	mg/dl	40.0-150.0
HDL CHOLESTEROL	Direct measure-PEG	48	mg/dl	40-60
LDL CHOLESTEROL	Enzymatic	131	mg/dl	0.0 - 100.0
VLDL CHOLESTEROL	Calculated	24	mg/dl	0.0 - 30.0
CARDIAC RISK RATIO (T. CHOL / HDL-C)		4.2		0.0 - 3.5
<b>LIVER PROFILE ( LFT ) ( T.BIL+OT+PT+ALP+PRO+ALB+GLOB+A/G RATIO)</b>				

Patient- MR SHAKIT KUMAR 37 Yrs/ Male  
17562401240523

Sample No- 534607



TOTAL BILIRUBIN	Jendrassik Grof	0.7	mg/dl	Cord Blood Premature: <2.0 Full term: <2.0 0-1 Day Premature: <8.0 Full term: <6.0 1-2 Days Premature: <12.0 Full Term: <8.0 2-5 days Premature: <16.0 >5 Day Premature: <20.0 Mature: <10.0 Adult: 0.2-1.3
DIRECT BILIRUBIN	Diazotization	0.1	mg/dl	0.0-0.3
INDIRECT BILIRUBIN	Calculated	0.6	mg/dl	0.0-0.75
SGOT/AST	UV with PSP	47	U/L	15.0-46.0
SGPT/ALT	UV with PSP	62	U/L	0.0-50.0
GGT	Glutamyl-p-nitroanilide	33	U/L	15-73
ALP	PNPP, AMP Buffer	81	U/L	38-126
TOTAL PROTEIN	Biuret	8.5	g/dL	6.3-8.2
ALBUMIN	Bromcresol Purple (BCP)	4.4	g/dl	3.4-5.0
GLOBULIN	Calculated	4.1	g/dL	1.8-3.6
A/G RATIO	Calculated	1.1		1.0-2.0

--- END OF REPORT ---

SWARNA MODAK  
Verified By

  
**Dr. KAMALA KANTA PARHI**  
 BIOCHEMIST

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\*\* Please Correlate Clinically



**DEPARTMENT OF LABORATORY MEDICINE**

CLINICAL PATHOLOGY		Final Report	
Patient Name	: MR SHAKIT KUMAR	Order Date	: 24/06/2024 07:57 PM
Age / Gender	: 37 Yrs / Male	Sample Collection	: 25/06/2024 11:25 AM
UHID	: 17562401240523	Sample Received	: 25/06/2024 01:20 PM
Ref Doctor	:	Reporting Date	: 25/06/2024 07:12 PM
Primary Consultant	: Dr.CONSULTANT HEALTH CHECK UP MEDICINE	Specimen	: URINE
Order No.	: 534607	Visit Type	: OP
Visit No.	: ICTOP240036433		

PARAMETER	METHOD	RESULT	UNIT	B.R.I
<b>URINE FOR COMPLETE TEST (routine + microscopic)/ URINE R/M</b>				
<b>PHYSICAL EXAMINATION</b>				
QUANTITY		30	ml	
COLOUR		Pale Straw		
APPEARANCE		Clear		
<b>CHEMICAL EXAMINATION</b>				
SPECIFIC GRAVITY		1.025		
REACTION		Acidic		
PROTEIN		Absent		
SUGAR		Absent		
BLOOD		Absent		
<b>MICROSCOPIC EXAMINATION</b>				
PUS CELL		1-2	Cells/hpf	
EPITHELIAL CELL		0-1	Cells/hpf	
RBCs		0-1	Cells/hpf	
CRYSTAL		Nil		
CAST		Nil		
BACTERIA		Absent		
YEAST CELL		Absent		
OTHERS		Nil		

--- END OF REPORT ---

SWARNA MODAK  
 Verified By

*Dr. Shreya Bose Chandra*  
**Dr. SHREYA BOSE CHANDRA**  
Assistant Professor, Dept. of Pathology  
**Dr. SHREYA BOSE CHANDRA**  
 PATHOLOGIST

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Patient- MR SHAKIT KUMAR 37 Yrs/ Male  
 17562401240523

Sample No- 534607

**IQ City**

**Medical College Hospital**

IQ City Rd, Sovapur, Jemua Durgapur-713206, West Bengal,  
Durgapur, WEST BENGAL, INDIA

Phone: 0343-2808000

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**DEPARTMENT OF LABORATORY MEDICINE**

**HEMATOLOGY**

**Final Report**

Patient Name	: MR SHAKIT KUMAR	Order Date	: 24/06/2024 07:57 PM
Age / Gender	: 37 Yrs / Male	Sample Collection	: 25/06/2024 11:25 AM
UHID	: 17562401240523	Sample Received	: 25/06/2024 11:26 AM
Ref Doctor	:	Reporting Date	: 25/06/2024 02:43 PM
Primary Consultant	: Dr. CONSULTANT HEALTH CHECK UP MEDICINE	Specimen	: WHOLE BLOOD
Order No.	: 534607		
Visit No.	: ICTOP240036433	Visit Type	: OP

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNIT</u>	<u>B.R.I</u>
<b><u>CBC-COMplete BLOOD COUNT</u></b>				
HEMOGLOBIN / Hb%	Colorimetric Method	15.5	g/dl	15.0-20.0
TLC (Total Leukocyte Count)	Fluorescent Flow Cytometry	9.25	10 <sup>3</sup> / $\mu$ L	4.0-10.0
TOTAL RBC COUNT	Electrical impedance	5.27	10 <sup>6</sup> / $\mu$ L	4.5-5.5
PCV (Packed cell volume)	RBC pulse height detection	41.2	%	40.0-50.0
PLATELET COUNT	Electrical impedance/microscopy	160	10 <sup>3</sup> / $\mu$ L	150.0-450.0
<b><u>DLC (Differential Leukocyte Count)</u></b>				
NEUTROPHIL	Fluorescent Flow Cytometry / Microscopy	63	%	40-80
LYMPHOCYTE	Fluorescent Flow Cytometry / Microscopy	27	%	25.0-40.0
EOSINOPHIL	Fluorescent Flow Cytometry / Microscopy	08	%	1.0-6.0
MONOCYTE	Fluorescent Flow Cytometry / Microscopy	02	%	2.0-10.0
BASOPHIL	Fluorescent Flow Cytometry / Microscopy	00	%	<1.0-2.0
OTHERS		00		
MCV (Mean corpuscular volume)	Calculated	78.2	fl	83.0-101.0
MCH (Mean Corpuscular Hemoglobin)	Calculated	29.4	pg	27.0-32.0
MCHC (Mean Corpuscular Hemoglobin Concentration)	Calculated	37.6	g/dL	30.0-36.0
<b><u>ESR (Erythrocyte Sedimentation Rate)</u></b>				
ESR	Modified Westergren Method	12	mm of 1st hour	0.0-10.0

**BLOOD FOR GROUPING**

BLOOD GROUP	B
R H TYPE	POSITIVE

— END OF REPORT —

SWARNA MODAK  
Verified By

Patient- MR SHAKIT KUMAR 37 Yrs/ Male  
17562401240523

Sample No- 534607

**Dr. SHREYA BOSE CHANDRA**  
Assistant Professor, Dept. of Pathology  
IQ CITY MEDICAL COLLEGE HOSPITAL  
**Dr. SHREYA BOSE CHANDRA**  
PATHOLOGIST

**IQ City**

**Medical College Hospital**

IQ City Rd, Sovapur, Jemua Durgapur-713206, West Bengal,  
Durgapur, WEST BENGAL, INDIA

Phone: 0343-2608000

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Patient- MR SHAKIT KUMAR 37 Yrs/ Male  
17562401240523

Sample No- 534607



## DEPARTMENT OF LABORATORY MEDICINE

## SPECIAL BIOCHEMISTRY

Final Report

Patient Name	: MR SHAKIT KUMAR	Order Date	: 24/06/2024 07:57 PM
Age / Gender	: 37 Yrs / Male	Sample Collection	: 25/06/2024 11:21 AM
UHID	: 17562401240523	Sample Received	: 25/06/2024 11:26 AM
Ref Doctor	:	Reporting Date	: 25/06/2024 04:07 PM
Primary Consultant	: Dr. CONSULTANT HEALTH CHECK UP MEDICINE	Specimen	: SERUM
Order No.	: 534607	Visit Type	: OP
Visit No.	: ICTOP240036433		

PARAMETER	METHOD	RESULT	UNIT	B.R.I
<b>THYROID PROFILE- 1 (T3 T4 TSH)</b>				
TOTAL T3	CLIA	1.76	nmol/l	1.32-2.96
TOTAL T4	CLIA	105.2	nmol/l	41.3-162.5
TSH-(THYROID STIMULATING HORMONE)	CLIA	1.71	$\mu$ U/ml	0.27-4.2

[TOTAL T3 - Adult: (21 YEAR TO 99 YEAR)

Euthyroid : 0.52-2.79 nmol/L Hypothyroid : <0.92 nmol/L Hyperthyroid : >2.79 nmol/L Infants(1-23 months):1.80-3.68 nmol/L  
Children(2-12 YEAR):1.62-3.19 nmol/L Adolescents(13-20 YEAR):1.32-2.95 nmol/L]

[TOTAL T4 - Adult: (21 YEAR - 99 YEAR)

Hypothyroid : 0.0-71.0 nmol/L Hyperthyroid :139.3-246.4 nmol/L  
Pregnant Euthyroid :82.6-138.0 nmol/L Sick Euthyroid :24.5-171.6 nmol/L][TSH - Adult: 0.27 - 4.2  $\mu$ U/mlPaediatric: Premature (28 - 36 weeks:) 1st week of life: 0.70 - 27.0  $\mu$ U/ml  
Term Infants: Birth - 4 days: 1.0 - 38.9  $\mu$ U/ml  
2 - 20 weeks: 1.7 - 9.1  $\mu$ U/ml 5 months - 20 YEAR: 0.7 - 6.4  $\mu$ U/ml]

— END OF REPORT —

SWARNA MODAK  
Verified By

Dr. KAMALA KANTA PARHI  
BIOCHEMIST

Partial Reproduction of Report not permitted.This Report Relates to Sample received by Laboratory

\* B.R.I : BIOLOGICAL REFERENCE INTERVAL

\*\* Please Correlate Clinically

IQ City  
Medical College Hospital  
IQ City Road, Sovapur, Jemua  
Durgapur 713206, India  
Phone: 0343-2608000, 0343-2608888



www.iqcity.in

Patient Name	37Y SHAKIT KUMAR MR.	Birth	
Patient ID	17562401240523	Age	
Referral Dr		Sex	Male
Study Date Time	25 Jun 2024 12:07pm	Report Date Time	25 Jun 2024 1:49pm

**CHEST X ray AP**

Both lungs grossly appear normal.  
Heart and mediastinum appear normal.  
No significant pleural effusion seen.  
Both the domes of diaphragm appear normal.  
Spine is normal.

**Adv: Clinical correlation.**

*SDBendale*

Dr. Sandeep D Bendale  
MD

mani

Patient ID:	17562401240523	Patient Name:	SHAKTI KUMAR
Age:	37	Sex:	M
Referring Physician:		Modality:	
Study Date:	25-Jun-2024	Study:	

www.locity.in

### USG WHOLE ABDOMEN

Medical College  
Hospital



- LIVER:** Liver (12 cm) is normal in size and increased homogeneous echotexture. No focal lesion is seen. Intrahepatic biliary radicles are not dilated.
- PORTA:** Portal vein is normal and measures 1 cm.
- GALLBLADDER:** A calculus measure 2.6 cm noted with sludge.
- CBD:** Common bile duct is not dilated and measures 5 mm. in diameter.
- PANCREAS:** Visualized pancreatic head and body grossly appears normal. Tail is obscured by bowel gas.
- SPLEEN:** Spleen is normal in size with homogeneous echotexture. Splenic span is 11.4 cm.
- RETROPERITONEUM:** Aorta and IVC are normal. No enlarged pre and para-aortic lymph nodes are seen.
- KIDNEYS:** Both kidneys are normal in size and show normal corticomedullary differentiation. No evidence of any hydronephrosis, renal calculus or mass lesion is seen. Right kidney = 8.7 cm. and Left kidney = 9.9 cm.
- URETER:** Both ureters are not visualized hence not dilated.
- URINARY BLADDER:** Urinary bladder is seen normal in size and shape. Urinary bladder wall thickness is within normal limits. No intraluminal lesion is seen.
- PROSTATE:** Prostate is normal in size with homogeneous echopattern.  
Prostate volume = 22 cm<sup>3</sup>.
- \*\* No free fluid is seen in the abdomen.**

### IMPRESSION

- \* Cholelithiasis.
- \* Fatty liver grade I.

Please correlate clinically.

*Soumit Roy*

DR. SOUMIT ROY  
MBBS, MD(CM), CBET(USG)  
SONOLOGIST  
Reg. No.- 73442 (WBMC)

Date: 25-Jun-2024 13:40:11

---

SEAKIT KUMAR  
Male

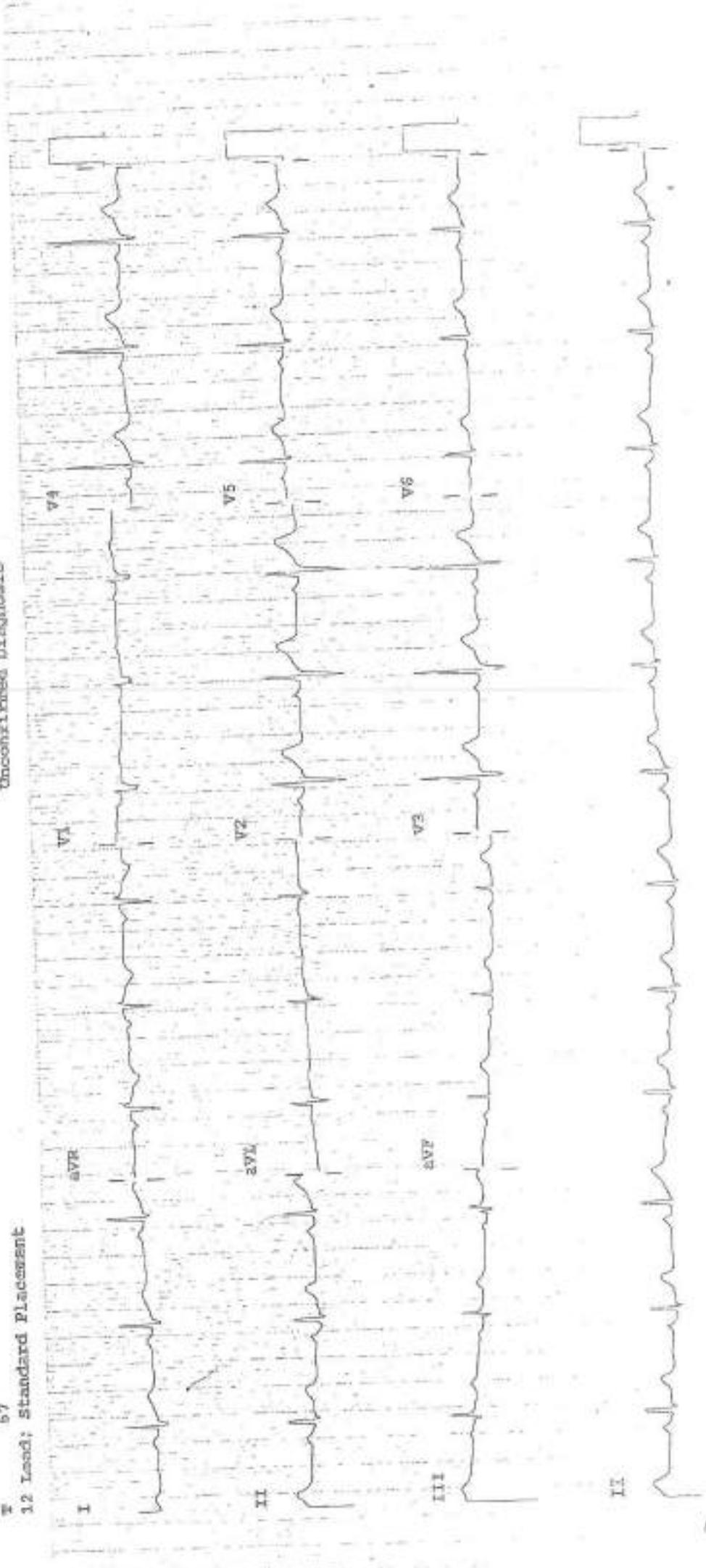
01/20/2023 14:00:00 PM  
IQ CITY HOSPITAL  
CARDIOLOGI

*Duclemey...*

Rate 75 . Age not entered, assumed to be 50 years old for purpose of ECG interpretation  
PR 146 . Sinus rhythm.....normal p axis, v-rate 50- 99  
QRS 84 . Baseline wander in lead(s) III, aVL, aVF, V4, V5  
QT 359  
QTc 401

--AXIS--  
P 3  
QRS 51  
T 57  
12 Lead; Standard Placement

- NORMAL ECG -  
Unconfirmed Diagnosis



IQ City Medical College Hospital  
 IQ City Rd, Durgapur, West Bengal 713206  
 Phone: 0343-2660000, 0343-2503888  
 www.iqcity.in



NAME	SHAKTI KUMAR	AGE / SEX	37Yrs./M
Ref. Dr		Date	25.06.2024
MR No.	17562401240523	B/P	
Done by Dr.	Dr. C. Nandy / Dr. Koushendra Kumar / Dr. Sanjay Singh / Dr. Shankhanath Pal		

Measurements	Values		
A-VCG	24 mm	LV ed	44 mm
LA	28 mm	LV es	29 mm
PS	30 %	IVS ed	10 mm
LVEF	60 %	PW (LV)	10 mm

**VALVES:-**

**MITRAL VALVE:**

Morphology : AML Normal / Thickening / Calcification / Flutter / Vegetation / Prolapse / SAM / Doming.  
 PML Normal / Thickening / Calcification / Prolapse / Paradoxical motion / Fixed.  
 Subvalvular deformity (present / absent).

Doppler : Normal / Abnormal.  
 Mitral stenosis : Absent / Present.  
 Mitral Regurgitation : Absent / Trivial / Mild / Moderate / Severe.

**TRICUSPID VALVE:**

Morphology : Normal / Atrisia / Thickening / Calcification / Prolapse / Vegetation / Doming.  
 Doppler : Normal / Abnormal.  
 Tricuspid Stenosis : Absent / Present.  
 Tricuspid regurgitation : Absent / Trivial / Mild / Moderate / Severe.

**PULMONARY VALVE:**

Morphology : Normal / Atrisia / Thickening / Doming / Vegetation.  
 Doppler : Normal / Abnormal.  
 Pulmonary stenosis : Absent / Present. Level:  
 Pulmonary regurgitation : Absent / Present.

**AORTIC VALVE:**

Morphology : Normal / Thickening / Calcification / Restricted opening / Flutter / Vegetation.  
 No of cusps 1 / 2 / 3 / 4.  
 Doppler : Normal / Abnormal.  
 Aortic stenosis : Absent / Present.  
 Aortic regurgitation : Absent / Trivial / Mild / Moderate / Severe.

**CHAMBERS:-**

Left Ventricle : Cavity normal. Walls normal in thickness and motion.  
 Left Atrium : Normal; No clots seen.  
 Right Atrium : Normal.  
 Right Ventricle : Normal.

**OTHERS:-**

GREAT ARTERIES : Normal in size and relation.  
 PERICARDIUM : Normal.

Checked by.....

Dr. C. Nandy  
Dr. Kaushendra Kumar  
Dr. Sanjay Singh  
Dr. Shankhanath Pal



## TRANSTHORACIC ECHO-DOPPLER REPORT OPD

NAME	SHAKTI KUMAR	AGE / SEX	37Yrs./M
Ref. Dr		Date	25.06.2024
MR No.	17562401240523	B/P	
Done by Dr.	Dr. C. Nandy/Dr. Kaushendra Kumar/ Dr. Sanjay Singh / Dr. Shankhanath Pal		

### SUMMARY

- > Normal chamber size
- > Normal valve morphology, Trivial TR (RVSP=18+RAP).
- > No RWMA.
- > Great arteries normal in size and relation.
- > Interatrial and interventricular septum intact
- > Normal LV systolic function. LVEF 60%
- > Normal diastolic function.
- > Systemic and pulmonary venous drainage normal.
- > No PAH.
- > Pericardium normal.

### FINAL IMPRESSION

-Normal LV function.  
*to be correlated clinically.*

*CN*  
  
Dr. (Mrs.) C. Nandy  
(Consultant Cardiologist)

Dr. Kaushendra Kumar  
(Consultant Cardiologist)

Dr. Sanjay Singh  
(Consultant Cardiologist)

Dr. Shankhanath Pal  
(Consultant Cardiologist)

Cont. Page 2

\*\* This report is not for medico-legal purposes \*\*

ANNEXURE - XXXIV

**BUDGET DETAILS FOR CSR ACTIVITIES OF JAMURIA UNIT - FINANCIAL YEAR 24-25**

Sr. No.	Programmes (List of activities /inputs)	Unit	Physical Target (No. of Units)	Cost per Unit in lakh	Total Cost (in lakh)	April 24	May 24	June 24	July 24	Aug 24	Sep 24	Total process bill amt	Balance
						Process bill							
<b>1</b>	<b>SOCIAL INFRASTRUCTURE</b>												
1.1	Complete Renovatation of AWC ICDS Model center with equipment	Approx	2	2.00	4.00							0.00	4.00
1.2	Renovation & development school with equipment for digital class room & science section	Approx	2	4.50	9.00						0.53	0.53	8.47
1.3	Construction of playground, Stage & club	Approx	2	5.00	10.00						0.07	0.07	9.93
1.4	Boundary wall of Health center & village infrastructure	Approx	2	2.00	4.00							0.00	4.00
1.5	Work for community infrastructure as per the commitment basis by IR	Approx			29.00	7.00	0.08	1.63			1.57	10.28	18.72
	<b>Subtotal - Social Infrastruture</b>				<b>56.00</b>	<b>7.00</b>	<b>0.08</b>	<b>1.63</b>	<b>0.00</b>	<b>0.00</b>	<b>2.18</b>	<b>10.89</b>	<b>45.11</b>
<b>2</b>	<b>SEHAT</b>												
<b>2.1</b>	<b>SWASTHYA</b>												
2.1.1	Provide basic health related equipment & awearness program for community	No	1	0.25	0.25							0.00	0.25
2.1.2	Drinking Water arrangement in Near by villages	Month	12	2.18	26.16	1.57	1.86	1.51	1.50	2.51	2.41	11.35	14.81
2.1.3	Nutrition Garden for Addressing Malnutrition	No	10	0.03	0.25							0.00	0.25
2.1.4	Mobile Health Unit for health services	Month	12	2.22	30.31	3.65	5.64		0.08	4.37		13.73	16.58
2.1.5	Homeopathic clinic center	Month	12	0.15	1.80	0.10	0.10	0.10	0.17	0.10	0.10	0.67	1.13
2.1.6	Animal welfare program in coordination with Government/ health camp	No	12	0.08	0.90							0.00	0.90
	<b>Total Swasthya</b>				<b>59.67</b>	<b>5.32</b>	<b>7.59</b>	<b>1.61</b>	<b>1.75</b>	<b>6.98</b>	<b>2.51</b>	<b>25.75</b>	<b>33.92</b>
<b>2.2</b>	<b>SWACHTA</b>												
2.2.1	WASH ( Drinking Water, Health & Hygiene) Program	Approx	2	1.50	3.00						2.17	2.17	0.83
2.2.2	Construction of community Toilet and bathroom	No	10	0.65	6.50						0.61	0.61	5.89
2.2.3	Installation sanitary pad machine to make pad & disposal unit & MHM program	Approx	3	0.50	1.50					0.48		0.48	1.02
	<b>Total Swachta</b>				<b>11.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.48</b>	<b>2.78</b>	<b>3.26</b>	<b>7.74</b>
<b>2.3</b>	<b>SAAZEDARI</b>												
2.3.1	Wall Painting on informative messages ( health, environment, education, nutrition, sanitation) & branding with logo	Approx	10	0.05	0.50			0.11				0.11	0.39
	<b>Sub Total- Sehat</b>				<b>71.17</b>	<b>5.32</b>	<b>7.59</b>	<b>1.72</b>	<b>1.75</b>	<b>7.46</b>	<b>5.28</b>	<b>29.12</b>	<b>42.05</b>
<b>3</b>	<b>SUSTAINABILITY</b>												
<b>3.1</b>	<b>WATER</b>												
3.1.1	Renovation of pond & water harvesting structure	No	2	1.00	2.00							0.00	2.00

3.1.2	Rain water harvesting structure	No	3	1.20	3.60							0.00	3.60
	<b>Total Water</b>				<b>5.60</b>	<b>0.00</b>	<b>5.60</b>						
<b>3.2</b>	<b>ENVIRONMENT</b>												
3.2.1	Community waste management initiative / Single use plastic	Approx	2	0.50	1.00							0.00	1.00
3.2.2	Plantation work	No	25000	0.00	52.50			0.55	1.21		0.48	2.24	50.26
3.2.3	Promotion of Renewable energy	No	3	0.38	1.14							0.00	1.14
	<b>Total Environment</b>				<b>54.64</b>	<b>0.00</b>	<b>0.00</b>	<b>0.55</b>	<b>1.21</b>	<b>0.00</b>	<b>0.48</b>	<b>2.24</b>	<b>52.40</b>
<b>3.3</b>	<b>AGRICULTURE &amp; OTHER ACTIVITIES</b>												
3.3.1	Promotion of agriculture equipment, technology & seeds	Approx	200	0.00	0.40				0.15			0.15	0.25
3.3.2	Special day celebration ( Environment day/ Earth day/ Water day/women's day)	No	3	0.50	1.50			0.35				0.35	1.15
	<b>Total Agriculture</b>				<b>1.90</b>	<b>0.00</b>	<b>0.00</b>	<b>0.35</b>	<b>0.15</b>	<b>0.00</b>	<b>0.00</b>	<b>0.51</b>	<b>1.39</b>
	<b>Sub Total - Sustainability</b>				<b>62.14</b>	<b>0.00</b>	<b>0.00</b>	<b>0.90</b>	<b>1.36</b>	<b>0.00</b>	<b>0.48</b>	<b>2.74</b>	<b>59.40</b>
<b>4</b>	<b>SKILL DEVELOPMENT</b>												
4.1	Computer training center	No	150	0.03	3.88	0.22	0.21	0.28	0.35	0.24	0.13	1.43	2.45
4.2	Coaching & Tuition classes. 2 SMART Classes in Govt school of Digital Class room Learning	No	80	0.03	2.50	0.19	0.21	0.19	0.19	0.19	0.22	1.19	1.32
4.3	Scholarship/ Annual function program/ ITI Training support	No	6	0.20	1.20							0.00	1.20
4.4	Promotion of sport & Run the sports academy	Month	12	2.36	28.28	2.25	2.36	2.75	3.03	2.73	2.45	15.57	12.71
4.5	Sewing center cum production center	Month	12	0.22	2.69	0.13	0.16	0.00	0.13	0.13	0.50	1.04	1.65
4.6	Advance Jute training with materials	Days	72	0.03	2.40				0.38			0.38	2.02
4.7	Development of Mushroom center and training	Approx	55	0.01	0.67							0.00	0.67
4.8	Training for promotion of alternate source of Livelihood/enterprise development (Food processing / Business support)	Approx	25	0.06	1.50							0.00	1.50
	<b>Sub Total - Skill Development</b>				<b>43.13</b>	<b>2.79</b>	<b>2.94</b>	<b>3.22</b>	<b>4.08</b>	<b>3.29</b>	<b>3.30</b>	<b>19.62</b>	<b>23.51</b>
<b>5</b>	<b>WELFARE PROGRAM</b>												
5.1	Fire truck services	Monthly	12	2.80	33.60			3.35		7.06	7.29	17.71	15.89
5.2	Volunteer (Ambulance driver/barning ghat/ cleaner)	Monthly	12	0.27	3.18	0.19	0.34	0.27	0.27	0.27	0.27	1.59	1.59
5.3	Medical support	Approx	5	0.20	1.00	0.20	0.10	0.03	0.05		0.10	0.48	0.52
5.4	Medical camp/ blood donation camp	Approx	3	0.60	1.80				0.03			0.03	1.77

5.5	Marriage support	Approx	4	0.20	0.80					0.14		0.14	0.66
5.6	Art & cultural support	Approx	2	0.25	0.50							0.00	0.50
5.7	Educational support	Approx	6	0.36	2.16	0.50	0.76		0.10			1.36	0.80
5.8	Clothes & blanket	Approx	3	2.00	6.00					0.40	7.34	7.73	-1.73
5.9	Others (Ambulance & others miscellaneous)	Approx		17.50	17.50	0.66		0.43	15.25		0.69	17.03	0.47
	<b>Sub total- welfare program</b>				<b>66.54</b>	<b>1.56</b>	<b>1.20</b>	<b>4.07</b>	<b>15.70</b>	<b>7.87</b>	<b>15.68</b>	<b>46.08</b>	<b>20.47</b>
<b>6</b>	<b>ADMINISTRATIVE</b>												
6.1	Village Volunteer for program support	Month	12	0.22	2.60	0.22	0.22	0.22	0.22	0.22	0.07	1.15	1.45
6.2	Vehicle Hiring	Month	11	2.10	23.10		0.09					0.09	23.01
6.3	Stationery, printing, journal, printer, camera	LS	12	0.02	0.24			0.00				0.00	0.24
6.4	Staff training, capacity building, CSR meeting , award	LS	12	0.02	0.24							0.00	0.24
	<b>Sub total Administrative</b>				<b>26.18</b>	<b>0.22</b>	<b>0.31</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.07</b>	<b>1.25</b>	<b>24.94</b>
	<b>Total Budget of CSR activities</b>				<b>325.16</b>	<b>16.88</b>	<b>12.12</b>	<b>11.77</b>	<b>23.11</b>	<b>18.83</b>	<b>26.98</b>	<b>109.69</b>	<b>215.47</b>
<b>7</b>	<b>Special Venture</b>												
7.1	Housing for the poor families with all setup	Nos	40	4.20	332.50			78.99	114.98		17.01	210.98	121.52
	<b>Sub total of special project</b>				<b>332.50</b>	<b>0.00</b>	<b>0.00</b>	<b>78.99</b>	<b>114.98</b>	<b>0.00</b>	<b>17.01</b>	<b>210.98</b>	<b>121.52</b>
	<b>Grand Total</b>				<b>657.66</b>	<b>16.88</b>	<b>12.12</b>	<b>90.76</b>	<b>138.09</b>	<b>18.83</b>	<b>43.99</b>	<b>320.67</b>	<b>336.99</b>

ANNEXURE - XXXV



# SIYAM SEL & POWER LTD.

CIN: U27100WB1991PLC052962



## ENVIRONMENTAL POLICY

We are committed to stand united to achieve the satisfaction of stakeholders and Interested parties through complying the statutory, regulatory and other applicable legal requirement with other requirements for our SMS, Ferro Alloy, Sponge Iron, Pellets, TMT Bars and generation of Captive Power and protect the environment by minimizing the significant Environment Aspects and to ensure the continual improvement of our system, process, products and service including resources.

Vice Chairman and Managing Director

Date : 20.02.2016

ANNEXURE - XXXVI

**INTER OFFICE COMMUNICATION**

**From : HR Department**

**Date: 05/08/2024**

**To : HOD's (Concerned Dept./Division)**

**Subject: Reconstitution of Environment Cell of SSPL- Jamuria Unit.**

**Dear Sir,**

With reference to the above subject matter we have Reconstitute our Environment Cell with effective from 05/08/2024.

Environment Cell consist of following officials;

**Chairman : Mr. Sumit Chakraborty**

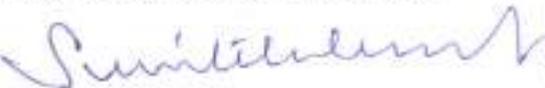
**Convener : Mr. Subhasis Dutta**

**Members :**

1. Mr. S. K. Maity
2. Mr. Alok Kumar Mishra
3. Mr. Deepak Yadav
4. Mr. Mansur Ali Khan
5. Mr. Chinmoy Das
6. Mr. Prabhat Dey
7. Mr. Pradip Bhattacharya
8. Ms. Moumita Roy
9. Ms. Minu Ghosh

We hope that team will work for the conservation of Environment, Environmental compliances and take proper corrective actions to ensure pollution free environment.

**From Shyam Sel & Power Ltd**



**Sumit Chakraborty**

**Director / Chairman Env. Cell**

OUR BRANDS:



**SHYAM SEL AND POWER LIMITED**

(A wholly owned subsidiary of SHYAM METALICS AND ENERGY LIMITED)

REG. OFFICE: S S Chambers, 5, C.F. Avenue, Kolkata - 700 072, West Bengal, CIN: U27109WB1991PLC052962 GSTIN: 19AAECS9421J1ZZ

SALES & MARKETING OFFICE: Vswakarma Building, North West Block, 1st, 2nd & 3rd Floor, 86C, Topola Road, Kolkata - 700 046

T: +91 33 4011 1000 F: +91 33 4011 1001 Email: contact@shyamgroup.com Web: www.shyammetalics.com Follow us on:    

ANNEXURE - XXXVII





### জনসাধারণের জন্য বিজ্ঞপ্তি

এত্রদ্বারা সকল জনসাধারণকে জানানো যাইতেছে যে, আমাদের প্রস্তাবিত প্রকল্পটি অর্থাৎ পশ্চিমবঙ্গের পশ্চিম বর্ধমান জেলার গ্রাম ধাননা, পুলিশ স্টেশন: জামুরিয়া, পোঃ বাহাদুরপুরে বর্তমান ইনটিগ্রাটেড ইম্প্লান্ট কারখানার প্রস্তাবিত সম্পসারণ এবং পরিবর্তনের জন্য পরিবেশগত ছাড়পত্র (ই.সি.) পরিবেশ, বন এবং জনবায়ু পরিবর্তন মন্ত্রক বিভাগ (MoEF &CC), ভারত সরকার ১৬ই নভেম্বর ২০২১ সালে মঞ্জুর করেছেন (ছাড়পত্র তদ্যানির্দেশ সংখ্যা ও J-11011/887/2007-IA-II(I))। পরিবেশগত ছাড়পত্রের অনুলিপিটি পশ্চিমবঙ্গ দূষণ নিয়ন্ত্রণ পর্ষদ থেকে পাওয়া যাবে এবং পরিবেশ, বন এবং জনবায়ু পরিবর্তন মন্ত্রক বিভাগে (MoEF &CC) ওয়েবসাইট <http://environmentclearance.nic.in> থেকেও দেখা যাবে। প্রকল্পকারীর নাম

মেসার্স শ্যাম সোল এবং  
পাওয়ার লিমিটেড  
এস. এস. চেম্বার,  
৫, সি.আর. এভিনিউ,  
কলকাতা- ৭০০০৭২, পশ্চিমবঙ্গ

ANNEXURE - XXXVIII

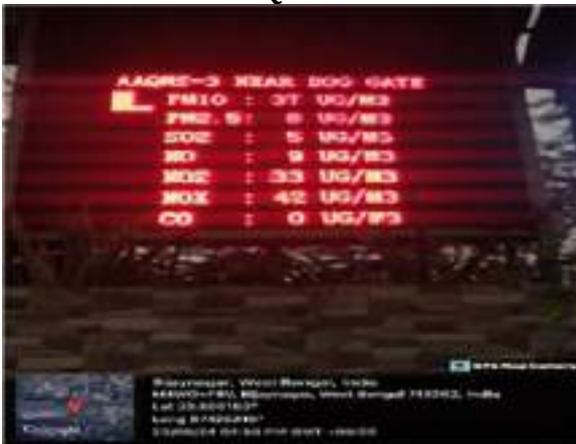
# DISPLAY BOARD AT MAIN GATE



AAQMS-1



AAQMS-2



AAQMS-3



AAQMS-4

