

J/c



LMEL: EC-Half-Yearly/Compl/2024/359

Date: 19.02.2025

To,  
Addl. Principal Chief Conservator of Forests (C)  
Ministry of Env. Forest and Climate Change  
Regional Office (WCZ), Ground Floor  
East Wing, New Secretariat Building,  
Civil Lines, Nagpur-440001

Through: - Email: - [apccfcentral-ngp-mef@gov.in](mailto:apccfcentral-ngp-mef@gov.in) & personal courier.

Ref: DRI-EC No.ENV (NOC)2005/747/CR.97/D.1 Dtd.28 Dec 2005, CW-J - 11015/272  
2007-IA.II (M) & CPP-J-13012/123/07-1A-II Dtd.12.10.09

Sub: Submission of Half Yearly Compliance of EC of Sponge Iron Plant, Coal  
Washery, Power Plant, for the Period 1st June 2024 -31st December 2024.

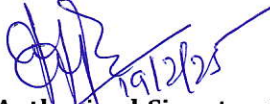
Dear Sir,

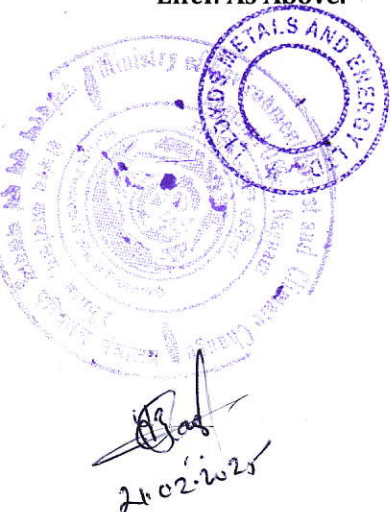
With reference to the Subject & reference mentioned above, we are herewith submitting  
the Six Monthly Environment Clearance (EC) Compliance Report of Existing Sponge Iron  
DRI Plant, Coal Washery, Power Plant, for the Period 1st June 2024 -31st December  
2024.

Soft Copy of Signed Covering letter along with said EC Compliance Report are being  
submitted as a single document in PDF to your good office by Email  
[apccfcentral-ngp-mef@gov.in](mailto:apccfcentral-ngp-mef@gov.in). and hard copy through personal courier.

We request your good offices to kindly acknowledge receipt of the same.

Yours Truly,  
(For LLOYDS METALS AND ENERGY LTD)

  
(Authorized Signatory)  
Encl: As Above.



## COMPLIANCE OF EC No.ENV (NOC)2005/747/CR.97/D.1 Dtd.28.12.2005

Period 1st June 2024 - 31st December 2024.

Sr.no	Specific Directives	Compliance
1	Take adequate safety precaution enhancing the raw material, plant and machinery & the product of the processes so as to avoid any damage/less of lie of property or environment.We have demarcated the areas for avoiding this type of damages and displayed the transport safety board at all the Areas.	We have demarcated the areas for avoiding this type of damage and displayed the transport safety board at all the Areas.
2	Provide personnel protective equipment imparts training and medical facilities to the worker handling the hazardous/dangerous raw material, finished product or processes.Provided PPEs to all the Employees and training has been conducted.	Provided PPE's to all the Employees and training has been conducted.
3	Prepare the onsite Disaster management plan and should submit to the DISH the copies of which shall also be submitted to the district collector, local authority, Maharashtra pollution control board MPCB and the environment department, government of Maharashtra. The project authority shall submit the information to the DISH for the preparation of the offsite disaster management plan .The project authority should carry out a periodical rehearsal of the onsite disaster management plan. Prepared Onsite Emergency Plan / Disaster Management plan & submitted updates to Govt authorities on and as per the emergency preparedness plan on site emergency mock drills conducted on a half yearly basis.	Prepared Onsite Emergency Plan / Disaster Management plan & submitted updates to Govt authorities on and as per the emergency preparedness plan on site emergency mock drills conducted on a half yearly basis. Enclosed as <b>Annex A</b>
4	All statutory requirement for safe transportation of raw material / finished product in case of trucks / tankers carrying hazardous raw material shall be washed and cleaned up within the plant premises, so as to ensure no pollution in the vicinity.We have followed the practice on safe handling and transportation of hazardous raw material and sprinkling of water / cleaning on a regular basis.	We have followed the practice on safe handling and transportation of hazardous raw material and sprinkling of water / cleaning on a regular basis.
5	Used cleaner technology for the manufacturing process and the clean fuel for the operation so as to reduce process waste liquid effluent and gaseous emission.Cleaned by the engaging the external contractors' vehicles and no any effluents is generated from the process.	Cleaned by the engaging the external contractors' vehicles and no any effluents is generated from the process.
6	Treat the liquid effluent so as to conform to the standard prescribed by MPCB .The disposal of the treated effluent shall be in accordance with the condition imposed by the MPCB/GOM .The continuous monitoring	NA

	<p>facility for the effluent should be provided by the project authority. If the effluent quality exceeds the standard at any time the corresponding unit of the plant which is contributing the excessive pollutant load shall be stopped from the operation till the quality of pollutant discharged from those units are brought down to the required level. Under no circumstances, the quality of the effluent shall exceed the limit mentioned in the consent letter. The project authority should draw water consumption plans and the time bound sincere efforts for the reduction of water consumption should be made.No Effluent in our industry and used 100% for Process. Treated Water is used for gardening.</p>	
7	<p>In case the treated effluent is proposed to be utilized for land irrigation/guarding on the land owned by the project authority, the sufficient area should be earmarked for the same purpose in consultation with the agriculture department. Under no circumstances, such an effluent should be allowed to flow outside the premises of the project. During monsoon during heavy rainfall period, the treated effluent cannot be absorbed in the project land and there is likelihood of the effluent going to the nearby areas. The respective unit should be put out of operation immediately. For the purpose of effluent disposal, the mechanical system (sprinkler etc) shall make adequate arrangements for the storage of excessive effluent (impervious storage tank etc.) in consultation with MPCB.</p>	NA
8	<p>Regularly and periodically undertake soil testing of the land which is being used for the disposal of the effluent and shall also undertake periodical and regular testing of water sources in the vicinity of the project.</p>	<p>No Effluent in our industry and used 100% for Process. We have installed STP of 10m3 capacity at the plant and treated the water. Treated water is used for gardening and sprinkling on the road.</p>
9	<p>The air emissions as per the standard prescribed by the MPCB. No change in the design of stack and fuel mix be done within the permission of MPCB. A minimum number of air quality monitoring regularly should be set up in consultation with MPCB in the plant and nearby areas. The air quantity should be mentioned on a regular basis. All the stack of the plant should be provided with the continuous stack monitoring equipment and the stack emission levels shall be recorded and submitted to the MPCB as per their objectives.</p>	<p>Industry has installed the 02 Nos of ambient air monitoring stations and both are connected to the MPCB / CPCB Server. Also 04 Nos of OCMS is installed to the ESP Stacks and connected to MPCB / CPCB Servers. Reading is within the limit as prescribed in MPCB Norms. Last 01 Year Ambient and Stack reading data as <b>Annex-B</b>.</p>

10	The process emission shall meet the standard prescribed by MPCB. At no. time the emission should be beyond the standard. The respective unit which exceeds the standard should be put out of order immediately and should not be restarted until the control systems are rectified.	Industry has followed strictly MPCB prescribed norms. As per the MPCB Joint Vigilance Sample results and monthly monitoring report results is in limit.
11	The solid waste shall be treated and disposed off as prescribed in the authorization certificate granted by MPCB in accordance with the hazardous waste (handling and management) Rules, 1989 (Wherever applicable)	As per the guidelines by the consent we have disposed off all the solid waste in proper manner (sold to Party) and Hazardous waste is generated 3.65 KL/A as per the consent conditions it is reused in kiln for firing and return submitted every year. Enclosed the Latest submitted Hazardous Waste return (Form IV) dtd.26/06/2024 as <b>Annex-C</b>
12	Take precautions so as to reduce other type environmental problems like noise, odour, thermal/heat and radioactivity etc. (if Applicable)	Industry has conducted the monthly monitoring by the NAABL / MoEF approved laboratory and report submitted to the State Pollution Control Board. Enclosed the Latest Monitoring Report for the Month of December 2024 as <b>Annex-D</b>
13	Set up an environment management cell with a suitable qualified staff to carry out various functions of the environment management. The environment management plan should be prepared by the project authority and also submitted to MPCB.	Industry has set up the Environment Management Cell.
14	In cases of any disaster / accident / mishap due to handling raw material, process, plant and machinery or finished product, shall be personally, jointly and severally be responsible for the event.	Prepared Onsite Emergency Plan / Disaster Management plan & submitted updates to Govt authorities on and as per the emergency preparedness plan on site emergency mock drills conducted on a half yearly basis.
15	The plantation programme should be undertaken at the rate of not less than 2500 trees per hectare on the factory land, in consultation with the forest department of the state government and MPCB.	Noted
16	Must strictly adhere to the stipulation made by MPCB/government of Maharashtra (Env.Dept) / government of India before commencement of production/activity.	Strictly followed.
17	The company should use treated effluent for a forestation and created a green belt around the factory premises with necessary fencing around it.	We have developed 33-40% Green belt around the Plant and necessary fencing is provided for outside protections. Till we have planted the approx. 234650 Nos. plant in 100 acres of open land.
18	The company should store molasses in steel tank and not in kaccha pit (SSK)	Not Applicable



Mock Drill Report

Mock Drill Report-Electrical Shock

Date: 14.10.2024  
Time: 03:45 pm  
Location: MPP Fabrication Yard opposite Fly Ash Silo

Participating Personnel:

Mr. Satish Khuspure, Male, 26 Years, Helper  
Mr. Manoj Sawarkar, Male, 34 Years, Electrician

Objective:

To increase awareness and response of personnel in handling electrocution/electrical shock emergencies.

Drill Scenario:

An employee suffered an electrical shock while working at the site due to damaged live power cable insulation.

Mock Drill Summary:

1. At 03:45 pm, the victim came into contact with a damaged live power cable insulation, resulting in electrical shock and unconsciousness at the workplace.
2. Co-workers attempted CPR when the victim became unconscious.
3. The site team supervisor reported the incident to the LMEL package in-charge, who summoned the plant ambulance on 03.48 pm
4. The ambulance arrived at the accident site at 03.57 pm within a 12 minutes of duration. 5. The victim was shifted to the ambulance and transported to the On-Site Health Center (OHC) in 03:59:40 seconds within the duration of 2 minutes 40 seconds.
6. Dr. Adarsh Nagargoje provided immediate treatment, and the victim was declared fit on 04:03:44 pm within the duration of 4 minutes 4 seconds.

Drill Observations:

1. Medical team response time: 4 minutes 4 seconds.
2. First Aid: The team isolated the electrical power source, and co-workers provided CPR. 3. Communication: Effective communication maintained among team members and emergency services.
4. Total duration of mock drill 19 minutes 44 seconds.

Challenges and Difficulties:

1. Blocked roads due to transport vehicles and material , delayed ambulance arrival. 2. Ambulance staff failed to use a stretcher to shift the victim.
3. OHC staff required updates on emergency procedures.

Recommendations:

1. Ensure road accessibility and prevent vehicle parking on road.
2. Provide training on stretcher usage for ambulance staff.

Mock Drill Report

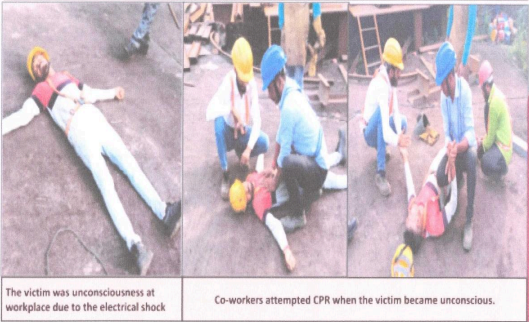
3. Regular training for emergency response teams and must be available in every shift.
4. The trained and dedicated ambulance driver must be available in every shift and must be familiar to each and every site location and access.
5. EPR-Emergency preparedness and response team roles and responsibility must be defined for adequate communication and immediate action.
6. Display of all emergency numbers at each site.
7. All workers train on emergency response every 6 months.

Conclusion:

The mock drill highlighted areas for improvement, emphasizing the importance of regular training and preparedness.

Evidence photos of the Mock drill:

Photos of Mock Drill Summary



Mock Drill Report

Photos of Mock Drill Summary



Photos of Mock Drill Summary



## STACK EMISSION MONITORING RESULTS

STACK	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec
500 TPD	31	SD	35	39	33	38	46	SD	42
100TPD 1 & 2	26	23	34	38	33	29	41	37	35
100TPD 3 & 4	SD	25	31	36	33	36	39	36	39
ESP-Boiler	37	33	30	26	31	42	38	35	33
De-6	19	-	23	29	27	20	35	-	39
De-7	17	-	18	27	20	19	38	-	42
De-8 Product	20	17	21	27	24	19	23	24	27
De-11	17	20	25	29	19	18	18	29	22
De-12	25	22	20	24	21	18	14	22	24
De-13	26	29	26	21	26	21	27	32	30
De-14	27	24	28	23	21	20	21	22	26

## HAZARDOUS WASTE (FORM IV)


**Maharashtra Pollution Control Board**
**महाराष्ट्र प्रदूषण नियंत्रण मंडळ**
**Form 4**

See rules 6(5),13(8),16(6) and 20(2) of Hazardous and other wastes 2016

**FORM FOR FILING ANNUAL RETURNS**

[ To be submitted to state pollution control board/pollution control committee by 30th June of every year for the preceeding period April to march]

**Unique Application Number:**  
 MPCB-HW\_ANNUAL\_RETURN-0000047466

**Submitted On:**  
 26-06-2024

**Industry Type :**  
 Generator

**Submitted for Year:**  
 2024

**1. Name of the generator/operator of facility** Address of the unit/facility  
 LLOYDS METALS & ENERGY LTD Plot No.A-01 & A-02, MIDC Industrial Area

**1b. Authorization Number** **Date of issue**

MPCBCONSENT- 0000183257/CO/2312002255 Dec 23, 2023

**Date of validity of consent**  
 Dec 31, 2027

**2. Name of the authorised person** **Full address of authorised person**  
 Sanjay Kumar - Unit Head Plot No.A-01 & A-02, MIDC Industrial Area

**Telephone**  
 8411965324

**Fax**  
 07172-285003

**Email**  
 vipinraikwar@lloyds.in

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

Product Type *	Product Name *	Consented Quantity	Actual Quantity	UOM
Iron & Steel	Sponge Iron (DRI)	324000.0000	230947	MT/A
Power Generating plants (excluding D.G Sets)	Power Generation (WHRB)	25.0000	24.90	MW

**PART A: To be filled by hazardous waste generators**
**1. Total Quantity of waste generated category wise**

Type of hazardous waste	Wate Name	Consented Quantity	Quantity	UOM
5.1 Used or spent oil	Used Spent Oil	3.650	1.135	KL/Anum

**2. Quantity dispatched category wise.**

Type of Waste	Quantity of waste	UOM	Dispatched to	Facility Name
0	0	KL/Anum	0	NA

**3. Quantity Utilised in-house,if any**

Type of Waste	Name of Waste	Quantity of Waste	UOM
NA	NA	0	KL/Anum

**4. Quantity in storage at the end of the year**

Type of Waste	Name of Waste	Quantity of Waste	UOM
NA	NA	0	KL/Anum

**5. Quantity disposed in landfills as such and after treatment**

Type	Quantity	UOM
Direct landfilling	NA	KL/Anum
Landfill after treatment	NA	KL/Anum

**6. Quantity incinerated (if applicable)**

NA

**UOM**

KL/Anum

**Personal Details**
**Place**  
 Ghugus

**Date**  
 2024-06-26

**Designation**  
 Unit Head

# HAZARDOUS WASTE MANAGEMENT MEMBERSHIP CERTIFICATE



## MEMBERSHIP CERTIFICATE

*We Embrace Nature*

December 18, 2024

### MAHARASHTRA

ENVIRO POWER LIMITED

(NAGPUR UNIT)

CHW-01, Butibori MIDC, Mandwa, Taluka - Hingna, Dist. Nagpur

Common Hazardous Waste Treatment Storage & Disposal Facility (CHWTSDF)

This is to certify that M/s. Lloyds Metals & Energy Ltd (GHUGUS)

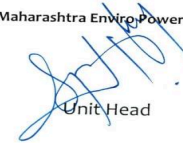
Address: A 1 - 2, MIDC, GHUGUS 442505, CHANDRAPUR, MAHARASHTRA.

is a member of (CHWTSDF) set up by "Maharashtra Enviro Power Limited (Nagpur Unit)". at CHW - 01, Village - Mandwa, MIDC Butibori, Dist. Nagpur in Memorandum of Understanding with Maharashtra Industrial Development Corporation ( MIDC ) & Maharashtra Pollution Control Board (MPCB).

Certificate valid from **November 1, 2024** up to **October 31, 2029**

Certificate No. : MEPLNU/MEMB.CERT./ **33007484**

For Maharashtra Enviro Power Limited,

  
Unit Head



AN ISO CERTIFIED COMPANY  
ISO 9001 : 2008 49121 / A / 0001 / UK / En  
ISO 14001 : 2004 49121 / B / 0001 / UK / En  
ISO 45001 : 2018 49121 / D / 0001 / UK / En

CIN-U 40105 MH 2005 PLC 150780  
Site Off : CHW-01, Mandwa, MIDC, Butibori, Nagpur - 441122. Ph. : 9923596274  
email : meplnu.mkt@smsl.co.in  
website : www.smepl.com | www.smsl.co.in | www.smevocare.co.in  
Corporate Office : 20, I.T. Park Parsodi, Nagpur - 440 022, Maharashtra, (India)  
Ph. 0712-7125000, Fax : 0712-7125000 Web : www.smsl.co.in  
Reg. Office : 267, Ganesh Phadanavis Bhavan, Near Triangular Park Dharampeth,  
Nagpur-440010.

**MAHARASHTRA**  
**ENVIRO POWER LIMITED**  
(NAGPUR UNIT)

(Common Hazardous Waste Transport Storage and Disposal Facility)



## Mahabal Enviro Engineers Pvt. Ltd.

PLOT NOS. 13,14,17,18, GRAMPANCHAYAT BOKHARA, CHHINDWARA ROAD, KORADI, NAGPUR, MAHARASHTRA, INDIA  
Phone: 0712-2612162/2612212 email: nagpur@mahabal.com

### TEST REPORT



Report No.:	ME-0055241203	Date:	07.12.2024
ULR No.:	TC748724000025040F		

Name and Address of Customer	LLOYDS METALS & ENERGY LTD. Plot No. A-1/2, M.I.D.C. Area, Ghugus, Dist: Chandrapur – 442 505.		PO No.: 6800007243 PO Date: 25.06.2024
Sample Description / Type	Stack Emission	Sampling Done by	Laboratory
Sampling Location	Kiln 500 TPD	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 CO: Bladder 1 L X 1 No
Date of Sampling	02.12.2024	Date of Receipt of Sample	03.12.2024
Sampling Procedure	As per method reference		
Date of Start of Analysis	03.12.2024	Date of Completion of Analysis	06.12.2024

<b>Stack Details</b>	
Stack Identity	Kiln 500 TPD
Stack attached to	ESP Outlet
Material of construction	RCC
Stack height above ground level (Meter)	60
Stack Diameter (Meter)	3.6
Stack shape at top	Round
Type of fuel	Coal
Fuel Consumption (t/d)	441
Time of Monitoring (h)	10:50 to 11:20

Sr. No.	Parameter	Unit	Result	#Limit	Method Reference
	<b>Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Stack Emission)</b>				
1	Flue gas Temperature	°C	130	-	IS 11255 (Part 3):2008
2	Flue gas Velocity	m/s	6.6	-	IS 11255 (Part 3):2008
3	Flue Gas Flow Rate	Nm <sup>3</sup> /h	162675	-	IS 11255 (Part 3):2008
4	Particulate Matter (PM)	mg/Nm <sup>3</sup>	42	50	IS 11255 (Part 1):1985
5	Sulphur Dioxide (SO <sub>2</sub> )	mg/Nm <sup>3</sup>	577	-	IS 11255 (Part 2):1985
6	Oxides of Nitrogen (NO <sub>x</sub> )	mg/Nm <sup>3</sup>	294	-	IS 11255 (Part 7): 2005
7	Carbon Monoxide	mg/Nm <sup>3</sup>	17	-	IS 5182 (Part 10): 1999

END OF REPORT

Page 1 of 2  
QF/SALE/04  
Issue No 03  
Date 05.12.2019.  
Amd 03 Date  
18.07.2023

Reviewed and  
authorised by

*Kishor Yeole*

Kishor Yeole  
Branch Manager  
Chemical Testing



## Mahabal Enviro Engineers Pvt. Ltd.

PLOT NOS. 13,14,17,18, GRAMPANCHAYAT BOKHARA, CHHINDWARA ROAD, KORADI, NAGPUR, MAHARASHTRA, INDIA  
Phone: 0712-2612162/2612212 email: nagpur@mahabal.com

### TEST REPORT



Report No.:	ME-0055241203	Date:	07.12.2024
ULR No.:	TC748724000025040F		

- Note:
1. BQL: Below Quantification Limit
  2. LOQ: Limit of Quantification
  3. #. Limit as per MPCB consent.
  4. The result listed refers only to the tested sample(s) and applicable parameter(s).
  5. This report is not to be reproduced except in full, without the written approval of the laboratory.
  6. Any complaint pertaining to the report can be addressed to mahabalreports@gmail.com

Page 2 of 2  
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Issue No 03  
Date 05.12.2019.  
Amd 03 Date  
18.07.2023

Reviewed and  
authorised by

*Kishor Yeole*

Kishor Yeole  
Branch Manager  
Chemical Testing







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Phone: 0712-2612162/2612212 email: nagpur@mahabal.com

## TEST REPORT



Report No.:	ME-0055241203N	Date: 07.12.2024
ULR No.:	-	

Name and Address of Customer	LLOYDS METALS & ENERGY LTD. Plot No. A-1/2, M.I.D.C. Area, Ghugus, Dist: Chandrapur - 442 505.		PO No.: 6800007243 PO Date: 25.06.2024
Sample Description / Type	Stack Emission	Sampling Done by	Laboratory
Sampling Location	Kiln 500 TPD	Sample Quantity / Packing	SO <sub>2</sub> :30 mL X 1 No. PVC Bottle
Date of Sampling	02.12.2024	Date of Receipt of Sample	03.12.2024
Sampling Procedure	As per method reference		
Date of Start of Analysis	03.12.2024	Date of Completion of Analysis	06.12.2024

<b>Stack Details</b>	
Stack Identity	Kiln 500 TPD
Stack attached to	ESP Outlet
Material of construction	RCC
Stack height above ground level (Meter)	60
Stack Diameter (Meter)	3.6
Stack shape at top	Round
Type of fuel	Coal
Fuel Consumption (t/d)	441
Time of Monitoring (h)	10:50 to 11:20

Sr. No.	Parameter	Unit	Result	#Limit	Method Reference
<b>Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Stack Emission)</b>					
1	Sulphur Dioxide (SO <sub>2</sub> )	t/d	2.25	6.24	IS 11255 (Part 2):1985

### END OF REPORT

- Note:**
1. BQL: Below Quantification Limit
  2. LOQ: Limit of Quantification
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Phone: 0712-2612162/2612212 email: nagpur@mahabal.com

## TEST REPORT



Report No.:	ME-0056241203	Date: 07.12.2024
ULR No.:	TC74872400025041F	

Name and Address of Customer	LLOYDS METALS & ENERGY LTD. Plot No. A-1/2, M.I.D.C. Area, Ghugus, Dist: Chandrapur - 442 505.		PO No.: 6800007243 PO Date: 25.06.2024
Sample Description / Type	Stack Emission	Sampling Done by	Laboratory
Sampling Location	100 TPD Kiln I & II	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 CO: Bladder 1 L X 1 No
Date of Sampling	02.12.2024	Date of Receipt of Sample	03.12.2024
Sampling Procedure	As per method reference		
Date of Start of Analysis	03.12.2024	Date of Completion of Analysis	06.12.2024

<b>Stack Details</b>	
Stack Identity	100 TPD Kiln I & II
Stack attached to	ESP Outlet
Material of construction	M.S.
Stack height above ground level (Meter)	55
Stack Diameter (Meter)	1.8
Stack shape at top	Round
Type of fuel	Coal
Fuel Consumption (t/d)	171
Time of Monitoring (h)	11:30 to 12:00

Sr. No.	Parameter	Unit	Result	#Limit	Method Reference
<b>Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Stack Emission)</b>					
1	Flue gas Temperature	°C	120	-	IS 11255 (Part 3):2008
2	Flue gas Velocity	m/s	9.5	-	IS 11255 (Part 3):2008
3	Flue Gas Flow Rate	Nm <sup>3</sup> /h	63060	-	IS 11255 (Part 3):2008
4	Particulate Matter (PM)	mg/Nm <sup>3</sup>	35	50	IS 11255 (Part 1):1985
5	Sulphur Dioxide (SO <sub>2</sub> )	mg/Nm <sup>3</sup>	561	-	IS 11255 (Part 2):1985
6	Oxides of Nitrogen (NO <sub>x</sub> )	mg/Nm <sup>3</sup>	289	-	IS 11255 (Part 7): 2005
7	Carbon Monoxide	mg/Nm <sup>3</sup>	19	-	IS 5182 (Part 10): 1999

### END OF REPORT

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Phone: 0712-2612162/2612212 email: nagpur@mahabal.com

### TEST REPORT



Report No.:	ME-0057241203	Date: 07.12.2024
ULR No.:	TC748724000025042F	

Name and Address of Customer	LLOYDS METALS & ENERGY LTD. Plot No. A-1/2, M.I.D.C. Area, Ghugus, Dist: Chandrapur - 442 505.		PO No.: 6800007243 PO Date: 25.06.2024
Sample Description / Type	Stack Emission	Sampling Done by	Laboratory
Sampling Location	100 TPD Kiln III & IV	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 CO: Bladder 1 L X 1 No
Date of Sampling	02.12.2024	Date of Receipt of Sample	03.12.2024
Sampling Procedure	As per method reference		
Date of Start of Analysis	03.12.2024	Date of Completion of Analysis	06.12.2024

<b>Stack Details</b>	
Stack Identity	100 TPD Kiln III & IV
Stack attached to	ESP Outlet
Material of construction	M.S.
Stack height above ground level (Meter)	55
Stack Diameter (Meter)	1.8
Stack shape at top	Round
Type of fuel	Coal
Fuel Consumption (t/d)	173
Time of Monitoring (h)	12:10 to 12:40

Sr. No.	Parameter	Unit	Result	#Limit	Method Reference
	<b>Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Stack Emission)</b>				
1	Flue gas Temperature	°C	129	-	IS 11255 (Part 3):2008
2	Flue gas Velocity	m/s	9.8	-	IS 11255 (Part 3):2008
3	Flue Gas Flow Rate	Nm <sup>3</sup> /h	63448	-	IS 11255 (Part 3):2008
4	Particulate Matter (PM)	mg/Nm <sup>3</sup>	39	50	IS 11255 (Part 1):1985
5	Sulphur Dioxide (SO <sub>2</sub> )	mg/Nm <sup>3</sup>	577	-	IS 11255 (Part 2):1985
6	Oxides of Nitrogen (NO <sub>x</sub> )	mg/Nm <sup>3</sup>	264	-	IS 11255 (Part 7): 2005
7	Carbon Monoxide	mg/Nm <sup>3</sup>	16	-	IS 5182 (Part 10): 1999

END OF REPORT

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18.07.2023

Reviewed and  
authorised by

Kishor Yeole  
Branch Manager  
Chemical Testing



## Mahabal Enviro Engineers Pvt. Ltd.

PLOT NOS. 13,14,17,18, GRAMPANCHAYAT BOKHARA, CHHINDWARA ROAD, KORADI, NAGPUR, MAHARASHTRA, INDIA  
Phone: 0712-2612162/2612212 email: nagpur@mahabal.com

### TEST REPORT



Report No.:	ME-0056241203N	Date: 07.12.2024
ULR No.:	-	

Name and Address of Customer	LLOYDS METALS & ENERGY LTD. Plot No. A-1/2, M.I.D.C. Area, Ghugus, Dist: Chandrapur - 442 505.		PO No.: 6800007243 PO Date: 25.06.2024
Sample Description / Type	Stack Emission	Sampling Done by	Laboratory
Sampling Location	100 TPD Kiln I & II	Sample Quantity / Packing	SO <sub>2</sub> : 30 mL X 1 No. PVC Bottle
Date of Sampling	02.12.2024	Date of Receipt of Sample	03.12.2024
Sampling Procedure	As per method reference		
Date of Start of Analysis	03.12.2024	Date of Completion of Analysis	06.12.2024

<b>Stack Details</b>	
Stack Identity	100 TPD Kiln I & II
Stack attached to	ESP Outlet
Material of construction	M.S.
Stack height above ground level (Meter)	55
Stack Diameter (Meter)	1.8
Stack shape at top	Round
Type of fuel	Coal
Fuel Consumption (t/d)	171
Time of Monitoring (h)	11:30 to 12:00

Sr. No.	Parameter	Unit	Result	#Limit	Method Reference
	<b>Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Stack Emission)</b>				
1	Sulphur Dioxide (SO <sub>2</sub> )	t/d	0.85	2.52	IS 11255 (Part 2):1985

END OF REPORT

Note: 1. BQL: Below Quantification Limit  
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Phone: 0712-2612162/2612212 email: nagpur@mahabal.com

### TEST REPORT



Report No.:	ME-0057241203N	Date:	07.12.2024
ULR No.:	-		

Name and Address of Customer	LLOYDS METALS & ENERGY LTD. Plot No. A-1/2, M.I.D.C. Area, Ghugus, Dist: Chandrapur – 442 505.		PO No.: 6800007243 PO Date: 25.06.2024
Sample Description / Type	Stack Emission	Sampling Done by	Laboratory
Sampling Location	100 TPD Kiln III & IV	Sample Quantity / Packing	SO <sub>2</sub> : 30 mL X 1 No. PVC Bottle
Date of Sampling	02.12.2024	Date of Receipt of Sample	03.12.2024
Sampling Procedure	As per method reference		
Date of Start of Analysis	03.12.2024	Date of Completion of Analysis	06.12.2024

<b>Stack Details</b>					
Stack Identity	100 TPD Kiln III & IV				
Stack attached to	ESP Outlet				
Material of construction	M.S.				
Stack height above ground level (Meter)	55				
Stack Diameter (Meter)	1.8				
Stack shape at top	Round				
Type of fuel	Coal				
Fuel Consumption (t/d)	173				
Time of Monitoring (h)	12:10 to 12:40				

Sr. No.	Parameter	Unit	Result	#Limit	Method Reference
	<b>Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Stack Emission)</b>				
1	Sulphur Dioxide (SO <sub>2</sub> )	t/d	0.88	2.52	IS 11255 (Part 2):1985

### END OF REPORT

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Phone: 0712-2612162/2612212 email: nagpur@mahabal.com

### TEST REPORT



Report No.:	ME-0219241204	Date:	10.12.2024
ULR No.:	TC748724000025193F		

Name and Address of Customer	LLOYDS METALS & ENERGY LTD. Plot No. A-1/2, M.I.D.C. Area, Ghugus, Dist: Chandrapur – 442 505.		PO No.: 6800007243 PO Date: 25.06.2024
Sample Description / Type	Stack Emission	Sampling Done by	Laboratory
Sampling Location	Power Plant Boiler	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 CO: Bladder 1 L X 1 No
Date of Sampling	03.12.2024	Date of Receipt of Sample	04.12.2024
Sampling Procedure	As per method reference		
Date of Start of Analysis	04.12.2024	Date of Completion of Analysis	07.12.2024

<b>Stack Details</b>					
Stack Identity	Power Plant Boiler				
Stack attached to	ESP Outlet (AFBC Boiler 90TPH)				
Material of construction	RCC				
Stack height above ground level (Meter)	100				
Stack Diameter (Meter)	4.9				
Stack shape at top	Round				
Type of fuel	Coal				
Fuel Consumption (t/d)	471				
Time of Monitoring (h)	10:30 to 11:00				

Sr. No.	Parameter	Unit	Result	#Limit	Method Reference
	<b>Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Stack Emission)</b>				
1	Flue gas Temperature	°C	125	-	IS 11255 (Part 3):2008
2	Flue gas Velocity	m/s	6.0	-	IS 11255 (Part 3):2008
3	Flue Gas Flow Rate	Nm <sup>3</sup> /h	291112	-	IS 11255 (Part 3):2008
4	Particulate Matter (PM)	mg/Nm <sup>3</sup>	33	50	IS 11255 (Part 1):1985
5	Sulphur Dioxide (SO <sub>2</sub> )	mg/Nm <sup>3</sup>	343	-	IS 11255 (Part 2):1985
6	Oxides of Nitrogen (NO <sub>x</sub> )	mg/Nm <sup>3</sup>	252	-	IS 11255 (Part 7): 2005
7	Carbon Monoxide	mg/Nm <sup>3</sup>	14	-	IS 5182 (Part 10): 1999

### END OF REPORT

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Phone: 0712-2612162/2612212 email: nagpur@mahabal.com

## TEST REPORT



Report No.:	ME-0219241204N	Date:	10.12.2024
ULR No.:	-		

Name and Address of Customer	LLOYDS METALS & ENERGY LTD. Plot No. A-1/2, M.I.D.C. Area, Ghugus, Dist: Chandrapur – 442 505.		PO No.: 6800007243 PO Date: 25.06.2024
Sample Description / Type	Stack Emission	Sampling Done by	Laboratory
Sampling Location	Power Plant Boiler	Sample Quantity / Packing	SO <sub>2</sub> 30 mL X 1 No. PVC Bottle
Date of Sampling	03.12.2024	Date of Receipt of Sample	04.12.2024
Sampling Procedure	As per method reference		
Date of Start of Analysis	04.12.2024	Date of Completion of Analysis	07.12.2024

<b>Stack Details</b>	
Stack Identity	Power Plant Boiler
Stack attached to	ESP Outlet (AFBC Boiler 90TPH)
Material of construction	RCC
Stack height above ground level (Meter)	100
Stack Diameter (Meter)	4.9
Stack shape at top	Round
Type of fuel	Coal
Fuel Consumption (t/d)	471
Time of Monitoring (h)	10:30 to 11:00

Sr. No.	Parameter	Unit	Result	#Limit	Method Reference
	<b>Discipline: Chemical Testing;</b> <b>Product Group: Atmospheric</b> <b>Pollution (Stack Emission)</b>				
1	Sulphur Dioxide (SO <sub>2</sub> )	t/d	2.40	3.4	IS 11255 (Part 2):1985

## END OF REPORT

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Phone: 0712-2612162/2612212 email: nagpur@mahabal.com

## TEST REPORT



Report No.:	ME-0058241203	Date:	07.12.2024
ULR No.:	TC748724000025043F		

Name and Address of Customer	LLOYDS METALS & ENERGY LTD. Plot No. A-1/2, M.I.D.C. Area, Ghugus, Dist: Chandrapur – 442 505.		PO No.: 6800007243 PO Date: 25.06.2024
Sample Description / Type	Stack Emission	Sampling Done by	Laboratory
Sampling Location	Dedusting -6	Sample Quantity / Packing	Thimble: 1 X 1 No.
Date of Sampling	02.12.2024	Date of Receipt of Sample	03.12.2024
Sampling Procedure	As per method reference		
Date of Start of Analysis	04.12.2024	Date of Completion of Analysis	05.12.2024

<b>Stack Details</b>	
Stack Identity	Dedusting -6
Stack attached to	Lump Iron Ore Crusher House
Material of construction	M.S.
Stack height above ground level (Meter)	35
Stack Diameter (Meter)	0.61
Stack shape at top	Round
Type of fuel	-
Fuel Consumption (L/h)	-
Time of Monitoring (h)	12:50 to 13:20

Sr. No.	Parameter	Unit	Result	#Limit	Method Reference
	<b>Discipline: Chemical Testing;</b> <b>Product Group: Atmospheric</b> <b>Pollution (Stack Emission)</b>				
1	Flue gas Temperature	°C	61	-	IS 11255 (Part 3):2008
2	Flue gas Velocity	m/s	8.5	-	IS 11255 (Part 3):2008
3	Flue Gas Flow Rate	Nm <sup>3</sup> /h	7711	-	IS 11255 (Part 3):2008
4	Particulate Matter (PM)	mg/Nm <sup>3</sup>	39	50	IS 11255 (Part 1):1985

## END OF REPORT

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Phone: 0712-2612162/2612212 email: nagpur@mahabal.com

## TEST REPORT



Report No.:	ME-0061241203	Date:	07.12.2024
ULR No.:	TC748724000025046F		

Name and Address of Customer	LLOYDS METALS & ENERGY LTD. Plot No. A-1/2, M.I.D.C. Area, Ghugus, Dist: Chandrapur – 442 505.		PO No.: 6800007243 PO Date: 25.06.2024
Sample Description / Type	Ambient Air	Sampling Done by	Laboratory
Sampling Location	Near Old Admin Building	Sample Quantity / Packing	PM <sub>10</sub> : Filter paper: 1 X 3 No. SO <sub>2</sub> : 30 mL X 6 No. PVC Bottle NO <sub>2</sub> : 30 mL X 6 No. PVC Bottle
Date of Sampling	02.12.2024 to 03.12.2024	Date of Receipt of Sample	03.12.2024
Sampling Procedure	As per method reference		
Date of Start of Analysis	03.12.2024	Date of Completion of Analysis	04.12.2024

Sr. No.	Parameter	Unit	Result	#NAAQS	Method Reference
<b>Discipline: Chemical Testing: Product Group: Atmospheric Pollution (Ambient Air)</b>					
1	Sulphur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	11.4	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.1-6
2	Nitrogen Dioxide (NO <sub>2</sub> )	µg/m <sup>3</sup>	14.5	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.7-10
3	Particulate Matter (size less than 10µm) or PM <sub>10</sub>	µg/m <sup>3</sup>	67	100	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.11-14

## END OF REPORT

- Note:**
1. BQL: Below Quantification Limit.
  2. LOQ: Limit of Quantification.
  3. Duration of Sampling: 24 h
  4. TWA: Time Weighted Average
  5. NAAQS: National Ambient Air Quality Standard
  6. # - NAAQS specified as: 24 h. TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM<sub>10</sub>
  7. The result listed refers only to the tested sample(s) and applicable parameter(s).
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Chemical Testing



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Phone: 0712-2612162/2612212 email: nagpur@mahabal.com

## TEST REPORT



Report No.:	ME-0060241203	Date:	07.12.2024
ULR No.:	TC748724000025045F		

Name and Address of Customer	LLOYDS METALS & ENERGY LTD. Plot No. A-1/2, M.I.D.C. Area, Ghugus, Dist: Chandrapur – 442 505.		PO No.: 6800007243 PO Date: 25.06.2024
Sample Description / Type	Ambient Air	Sampling Done by	Laboratory
Sampling Location	Near Welfare Building	Sample Quantity / Packing	PM <sub>10</sub> : Filter paper: 1 X 3 No. SO <sub>2</sub> : 30 mL X 6 No. PVC Bottle NO <sub>2</sub> : 30 mL X 6 No. PVC Bottle
Date of Sampling	02.12.2024 to 03.12.2024	Date of Receipt of Sample	03.12.2024
Sampling Procedure	As per method reference		
Date of Start of Analysis	03.12.2024	Date of Completion of Analysis	05.12.2024

Sr. No.	Parameter	Unit	Result	#NAAQS	Method Reference
<b>Discipline: Chemical Testing: Product Group: Atmospheric Pollution (Ambient Air)</b>					
1	Sulphur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	13.8	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.1-6
2	Nitrogen Dioxide (NO <sub>2</sub> )	µg/m <sup>3</sup>	15.7	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.7-10
3	Particulate Matter (size less than 10µm) or PM <sub>10</sub>	µg/m <sup>3</sup>	74	100	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.11-14

## END OF REPORT

- Note:**
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  6. # - NAAQS specified as: 24 h. TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM<sub>10</sub>
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Branch Manager  
Chemical Testing



**Compliance against the EC No.J - 11015/272 2007-IA.II (M) dtd.09.04.2008**

**Period 1st June 2024 - 31st December 2024.**

Sr.no	Specific Conditions	Compliance Status
i	The raw coal, washed coal and coal wastes (reject s) shall be stacked properly at earmarked site (s) within stock yards fitted with wind breakers/shields. The storage time and capacity of the stock yard shall be to store for not more than one day. Adequate measures shall be taken to ensure that the stored materials do not catch fire.	Raw coal is stored in a covered shed. Reject coal is already having moisture, is being stacked properly and dispatched to the plant. The wash coal is being used on a day to day basis in sponge iron plants. Adequate water sprinklers system is arranged to avoid the fugitive emission and fire probabilities.
ii	Hoppers of the coal crushing unit and washery unit shall be fitted with high efficiency bag filters / Dust extractors and mist spray water sprinkling system shall be installed and operated effectively at all times of operation to check fugitive emissions from crushing operations , transfer points of belts conveyor systems which shall be closed and from transportation roads.	A dust collector is provided in the coal crushing and screening plant, In addition to that adequate water sprinklers / mist water spray system is arranged on the conveyors at different transfer points to check the fugitive emission.
iii	All internal roads shall be concretized. The Roads shall be regularly cleaned with mechanical sweepers.Avenue plantation developed along the roads.	A major portion of concretization of internal roads has been completed. Regular cleaning of roads is being done manually and Industry has one sweeping machine for cleaning of roads. Mechanical sweeping. Avenue Plantation is done. Enclosed the Photographs of Concrete Roads with road sweeping as <b>Annex-A</b>
iv	The company shall prepare a plan for transportation of raw coal and coal rejects by rail as part of its integrated program with the sponge iron plant.	Industry has Complete transport of coal through properly tarpaulin covered to avoid spillages of coal by tippers / trucks as much as possible.
v	Prior approval of the competent authority in the state government shall be obtained to utilize 3600 m3 water and 400M3 /D of make -update from river Wardha for the coal washery operations. The company shall obtain prior approval of CGWA/CGWB Regional office for use of ground water if any, for the washery operations.	Industry has obtained the approval letter from the irrigation department Chandrapur for utilizing the water from wardha river and also upgraded the approval for our upcoming project. Enclosed the Authority letter as <b>Annex-B</b>
vi	Industrial waste water (workshop and waste water from the washery) shall be properly collected, treated so as to conform to the standards prescribed under GSR422(E)	Waste water is collected in a slime pond and allowed to settle the solid contaminants and clear water is re-circulated in washery.

	dated 19 th May1993 and 31st December 1993 Or as amended from time to time before discharge. Oil and grease traps shall be installed for treatment of workshop effluents.	
vii	The unit shall be a zero-discharge facility and no water shall be discharged from the washery into the drains of the MIDC or into River Wardha /its tributaries.	No Effluent in our industry and used 100% for Process. We have installed an STP of 10m3 capacity at the plant and treated the water. Treated water is used for gardening and sprinkling on the road. Also proposed the ZLD plant for this purpose. Enclosed the Work Order, Plant Layout as <b>Annex-C</b>
viii	Green belt shall be developed along the areas such as the washery unit, crushing unit, and stockyard and shall be not less than 45.87ha.	Adequate measures are being taken to develop the green belt in the area as applicable.
ix	The power plant using the coal waste/rejects proposed at Wardha shall be established within a time from one year from the date of this Clearance.	The erection work of Phase coal based Power Plant Wardha is already completed. The plant is now under operation.
x	Socio-economic and welfare measures for the local communities around the plant housing the washery unit shall be implemented under CSR.	The socio economic & welfare measure taken up such as installation of hand pump in nearby villages, organize the medical camp in Ghugus & surrounding villages distribution of books and uniforms to poor meritorious students of the nearby schools, financial assistance to nearby schools & public library, employment to family member / relative of family whose lend had taken by company.

i	No change in technology and scope of working shall be made without prior approval of the ministry of Environment and Forests	Agreed
ii	No change in the calendar plan for washing the Quantum of mineral coal and waste produced shall be made.	Agreed
iii	Four ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for SPM, RSPM, So2 and NOx Monitoring. Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and	Industry has conducted the monthly environment monitoring by the NAABL / MoEF Approved laboratory and a report submitted to the State Pollution Control Board, Chandrapur. Latest Report for the Month of December 2024.Enclosed as <b>Annex-D</b>



	ecologically sensitive targets in consultation with the State Pollution Control Board.	
iv	Fugitive dust emissions (SPM and RSPM) from all the sources shall be controlled, regularly monitored and data recorded properly. Water spraying arrangement on haul roads wagon loading dump trucks (loading and unloading) points shall be provided and properly maintained.	We have done the Water Sprinkling by the water Tankers 600 Liters x 02 and 1200 Liters and Approx.100 Number of Water Sprinklers is Installed at Coal Washery Area. As per the MPCB Directions fixed fogger system is installed at Coal Crusher Building.
v	Periodic monitoring reports with data on ambient air quality (SPM,RSPM,SO2 and NOx) shall be regularly submitted to the Ministry Including its Regional Office at Nagpur and to the State pollution Control Board and the Central pollution Control Board once in six months.	Industry has installed the 02 Nos of ambient air monitoring stations and both are connected to the MPCB / CPCB Server. Also 04 Nos of OCEMS is installed to the ESP Stacks and connected to MPCB / CPCB Servers.
vi	Adequate measures shall be taken for control of noise levels below as dBA in the work environment Workers engaged in blasting and drilling operations, Operation of HEMM, etc shall be provided with ear plugs/ muffs.	As we do not have any blasting and drilling operations. Hence noise levels are within prescribed norms and recognized agency is maintaining it.
vii	Vehicular emissions shall be kept under control and regularly monitored. Vehicles used for transporting the mineral shall be covered with tarpaulins and optimally loaded.	Being implemented.
viii	Environmental quality shall be regularly monitored and analyzed through an Environmental laboratory established under the Environment (Protection) Act1986.	Industry has conducted the monthly environment monitoring by the NAABL / MoEF Approved laboratory and a report submitted to the State Pollution Control Board, Chandrapur.
ix	Personnel working in dusty areas shall wear protective respiratory devices and they shall also be provided with adequate training and information on safety and health aspects. Occupational health surveillance programmed of the workers shall be undertaken periodically to observe any contractions due to exposure to dust and to take corrective measures, if needed.	The adequate training and information on safety and health aspects are being conducted and nose masks and other PPE's are provided as applicable.
x	An environmental management cell with suitable qualified personnel shall be set up under the control of a senior Executive, who will report directly to the head of the company	Industry has set up the Environment Management Cell.

( B)

xi	The funds earmarked for environmental protection measures shall be kept in separate account and shall not be diverted for other purpose. year wise expenditure shall be reported to this ministry and its Regional Office at Nagpur	We have taken Separate Capital Expenditure for the Environmental Protection Measures. Approx. 1-2 Corers fund in every year and intimate to the State Pollution Control Board.
xii	The Regional office of this Ministry located at Bhopal shall monitor compliance of the stipulated conditions. The project authorities shall extend full cooperation to the office(s) of the regional Office by furnishing the requisite data / information/ Monitoring reports.	Noted.
xiii	A copy of the will be marked to concerned Panchayat/ local NGO, if any from whom a suggestion/representation has been received while processing the proposal.	The coal washery plant is situated in the MIDC area.
xiv	The State Pollution Control Board shall display a copy of the clearance letter at the Regional Office, District Industry centre and Collector's Office / Tehsildar's Office for 30 days.	Agreed
xv	The project authorities shall advertise at least in two local newspapers widely circulated around the project, one of which shall be in the vernacular language of the locality concerned within seven days of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and may also be seen at the website of the ministry of Environment&Forests at <a href="http://envfor.nic.in">http://envfor.nic.in</a>	Compiled.  Advertisement was given in the Chandrapur express dated 12.04.2008, Chandrapur ki Buland awaz dated on 14.04.2008, Lokmat times Nagpur dated 16.04.2008.

CONCRETE ROAD



SWEEPING AND FOGGER MACHINE





## PLANTATION













## Mahabal Enviro Engineers Pvt. Ltd.

PLOT NOS. 13,14,17,18, GRAMPANCHAYAT BOKHARA, CHHINDWARA ROAD, KORADI, NAGPUR, MAHARASHTRA, INDIA  
Phone: 0712-2612162/2612212 email: nagpur@mahabal.com

### TEST REPORT



Report No.:	ME-0055241203	Date:	07.12.2024
ULR No.:	TC748724000025040F		

Name and Address of Customer	LLOYDS METALS & ENERGY LTD. Plot No. A-1/2, M.I.D.C. Area, Ghugus, Dist: Chandrapur – 442 505.		PO No.: 6800007243 PO Date: 25.06.2024
Sample Description / Type	Stack Emission	Sampling Done by	Laboratory
Sampling Location	Kiln 500 TPD	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 CO: Bladder 1 L X 1 No
Date of Sampling	02.12.2024	Date of Receipt of Sample	03.12.2024
Sampling Procedure	As per method reference		
Date of Start of Analysis	03.12.2024	Date of Completion of Analysis	06.12.2024

<b>Stack Details</b>	
Stack Identity	Kiln 500 TPD
Stack attached to	ESP Outlet
Material of construction	RCC
Stack height above ground level (Meter)	60
Stack Diameter (Meter)	3.6
Stack shape at top	Round
Type of fuel	Coal
Fuel Consumption (t/d)	441
Time of Monitoring (h)	10:50 to 11:20

Sr. No.	Parameter	Unit	Result	#Limit	Method Reference
	<b>Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Stack Emission)</b>				
1	Flue gas Temperature	°C	130	-	IS 11255 (Part 3):2008
2	Flue gas Velocity	m/s	6.6	-	IS 11255 (Part 3):2008
3	Flue Gas Flow Rate	Nm <sup>3</sup> /h	162675	-	IS 11255 (Part 3):2008
4	Particulate Matter (PM)	mg/Nm <sup>3</sup>	42	50	IS 11255 (Part 1):1985
5	Sulphur Dioxide (SO <sub>2</sub> )	mg/Nm <sup>3</sup>	577	-	IS 11255 (Part 2):1985
6	Oxides of Nitrogen (NO <sub>x</sub> )	mg/Nm <sup>3</sup>	294	-	IS 11255 (Part 7): 2005
7	Carbon Monoxide	mg/Nm <sup>3</sup>	17	-	IS 5182 (Part 10): 1999

END OF REPORT

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18.07.2023

Reviewed and  
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*Kishor Yeole*

Kishor Yeole  
Branch Manager  
Chemical Testing



## Mahabal Enviro Engineers Pvt. Ltd.

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Phone: 0712-2612162/2612212 email: nagpur@mahabal.com

### TEST REPORT



Report No.:	ME-0055241203	Date:	07.12.2024
ULR No.:	TC748724000025040F		

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Branch Manager  
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Phone: 0712-2612162/2612212 email: nagpur@mahabal.com

## TEST REPORT



Report No.:	ME-0055241203N	Date: 07.12.2024
ULR No.:	-	

Name and Address of Customer	LLOYDS METALS & ENERGY LTD. Plot No. A-1/2, M.I.D.C. Area, Ghugus, Dist: Chandrapur - 442 505.		PO No.: 6800007243 PO Date: 25.06.2024
Sample Description / Type	Stack Emission	Sampling Done by	Laboratory
Sampling Location	Kiln 500 TPD	Sample Quantity / Packing	SO <sub>2</sub> :30 mL X 1 No. PVC Bottle
Date of Sampling	02.12.2024	Date of Receipt of Sample	03.12.2024
Sampling Procedure	As per method reference		
Date of Start of Analysis	03.12.2024	Date of Completion of Analysis	06.12.2024

<b>Stack Details</b>	
Stack Identity	Kiln 500 TPD
Stack attached to	ESP Outlet
Material of construction	RCC
Stack height above ground level (Meter)	60
Stack Diameter (Meter)	3.6
Stack shape at top	Round
Type of fuel	Coal
Fuel Consumption (t/d)	441
Time of Monitoring (h)	10:50 to 11:20

Sr. No.	Parameter	Unit	Result	#Limit	Method Reference
<b>Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Stack Emission)</b>					
1	Sulphur Dioxide (SO <sub>2</sub> )	t/d	2.25	6.24	IS 11255 (Part 2):1985

## END OF REPORT

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Branch Manager  
Chemical Testing



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Phone: 0712-2612162/2612212 email: nagpur@mahabal.com

## TEST REPORT



Report No.:	ME-0056241203	Date: 07.12.2024
ULR No.:	TC74872400025041F	

Name and Address of Customer	LLOYDS METALS & ENERGY LTD. Plot No. A-1/2, M.I.D.C. Area, Ghugus, Dist: Chandrapur - 442 505.		PO No.: 6800007243 PO Date: 25.06.2024
Sample Description / Type	Stack Emission	Sampling Done by	Laboratory
Sampling Location	100 TPD Kiln I & II	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 CO: Bladder 1 L X 1 No
Date of Sampling	02.12.2024	Date of Receipt of Sample	03.12.2024
Sampling Procedure	As per method reference		
Date of Start of Analysis	03.12.2024	Date of Completion of Analysis	06.12.2024

<b>Stack Details</b>	
Stack Identity	100 TPD Kiln I & II
Stack attached to	ESP Outlet
Material of construction	M.S.
Stack height above ground level (Meter)	55
Stack Diameter (Meter)	1.8
Stack shape at top	Round
Type of fuel	Coal
Fuel Consumption (t/d)	171
Time of Monitoring (h)	11:30 to 12:00

Sr. No.	Parameter	Unit	Result	#Limit	Method Reference
<b>Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Stack Emission)</b>					
1	Flue gas Temperature	°C	120	-	IS 11255 (Part 3):2008
2	Flue gas Velocity	m/s	9.5	-	IS 11255 (Part 3):2008
3	Flue Gas Flow Rate	Nm <sup>3</sup> /h	63060	-	IS 11255 (Part 3):2008
4	Particulate Matter (PM)	mg/Nm <sup>3</sup>	35	50	IS 11255 (Part 1):1985
5	Sulphur Dioxide (SO <sub>2</sub> )	mg/Nm <sup>3</sup>	561	-	IS 11255 (Part 2):1985
6	Oxides of Nitrogen (NO <sub>x</sub> )	mg/Nm <sup>3</sup>	289	-	IS 11255 (Part 7): 2005
7	Carbon Monoxide	mg/Nm <sup>3</sup>	19	-	IS 5182 (Part 10): 1999

## END OF REPORT

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## TEST REPORT



Report No.:	ME-0057241203	Date: 07.12.2024
ULR No.:	TC748724000025042F	

Name and Address of Customer	LLOYDS METALS & ENERGY LTD. Plot No. A-1/2, M.I.D.C. Area, Ghugus, Dist: Chandrapur - 442 505.		PO No.: 6800007243 PO Date: 25.06.2024
Sample Description / Type	Stack Emission	Sampling Done by	Laboratory
Sampling Location	100 TPD Kiln III & IV	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 CO: Bladder 1 L X 1 No
Date of Sampling	02.12.2024	Date of Receipt of Sample	03.12.2024
Sampling Procedure	As per method reference		
Date of Start of Analysis	03.12.2024	Date of Completion of Analysis	06.12.2024

<b>Stack Details</b>	
Stack Identity	100 TPD Kiln III & IV
Stack attached to	ESP Outlet
Material of construction	M.S.
Stack height above ground level (Meter)	55
Stack Diameter (Meter)	1.8
Stack shape at top	Round
Type of fuel	Coal
Fuel Consumption (t/d)	173
Time of Monitoring (h)	12:10 to 12:40

Sr. No.	Parameter	Unit	Result	#Limit	Method Reference
	<b>Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Stack Emission)</b>				
1	Flue gas Temperature	°C	129	-	IS 11255 (Part 3):2008
2	Flue gas Velocity	m/s	9.8	-	IS 11255 (Part 3):2008
3	Flue Gas Flow Rate	Nm <sup>3</sup> /h	63448	-	IS 11255 (Part 3):2008
4	Particulate Matter (PM)	mg/Nm <sup>3</sup>	39	50	IS 11255 (Part 1):1985
5	Sulphur Dioxide (SO <sub>2</sub> )	mg/Nm <sup>3</sup>	577	-	IS 11255 (Part 2):1985
6	Oxides of Nitrogen (NO <sub>x</sub> )	mg/Nm <sup>3</sup>	264	-	IS 11255 (Part 7): 2005
7	Carbon Monoxide	mg/Nm <sup>3</sup>	16	-	IS 5182 (Part 10): 1999

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## TEST REPORT



Report No.:	ME-0056241203N	Date: 07.12.2024
ULR No.:	-	

Name and Address of Customer	LLOYDS METALS & ENERGY LTD. Plot No. A-1/2, M.I.D.C. Area, Ghugus, Dist: Chandrapur - 442 505.		PO No.: 6800007243 PO Date: 25.06.2024
Sample Description / Type	Stack Emission	Sampling Done by	Laboratory
Sampling Location	100 TPD Kiln I & II	Sample Quantity / Packing	SO <sub>2</sub> : 30 mL X 1 No. PVC Bottle
Date of Sampling	02.12.2024	Date of Receipt of Sample	03.12.2024
Sampling Procedure	As per method reference		
Date of Start of Analysis	03.12.2024	Date of Completion of Analysis	06.12.2024

<b>Stack Details</b>	
Stack Identity	100 TPD Kiln I & II
Stack attached to	ESP Outlet
Material of construction	M.S.
Stack height above ground level (Meter)	55
Stack Diameter (Meter)	1.8
Stack shape at top	Round
Type of fuel	Coal
Fuel Consumption (t/d)	171
Time of Monitoring (h)	11:30 to 12:00

Sr. No.	Parameter	Unit	Result	#Limit	Method Reference
	<b>Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Stack Emission)</b>				
1	Sulphur Dioxide (SO <sub>2</sub> )	t/d	0.85	2.52	IS 11255 (Part 2):1985

END OF REPORT

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Phone: 0712-2612162/2612212 email: nagpur@mahabal.com

### TEST REPORT



Report No.:	ME-0057241203N	Date:	07.12.2024
ULR No.:	-		

Name and Address of Customer	LLOYDS METALS & ENERGY LTD. Plot No. A-1/2, M.I.D.C. Area, Ghugus, Dist: Chandrapur – 442 505.		PO No.: 6800007243 PO Date: 25.06.2024
Sample Description / Type	Stack Emission	Sampling Done by	Laboratory
Sampling Location	100 TPD Kiln III & IV	Sample Quantity / Packing	SO <sub>2</sub> : 30 mL X 1 No. PVC Bottle
Date of Sampling	02.12.2024	Date of Receipt of Sample	03.12.2024
Sampling Procedure	As per method reference		
Date of Start of Analysis	03.12.2024	Date of Completion of Analysis	06.12.2024

<b>Stack Details</b>	
Stack Identity	100 TPD Kiln III & IV
Stack attached to	ESP Outlet
Material of construction	M.S.
Stack height above ground level (Meter)	55
Stack Diameter (Meter)	1.8
Stack shape at top	Round
Type of fuel	Coal
Fuel Consumption (t/d)	173
Time of Monitoring (h)	12:10 to 12:40

Sr. No.	Parameter	Unit	Result	#Limit	Method Reference
	<b>Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Stack Emission)</b>				
1	Sulphur Dioxide (SO <sub>2</sub> )	t/d	0.88	2.52	IS 11255 (Part 2):1985

### END OF REPORT

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Phone: 0712-2612162/2612212 email: nagpur@mahabal.com

### TEST REPORT



Report No.:	ME-0219241204	Date:	10.12.2024
ULR No.:	TC748724000025193F		

Name and Address of Customer	LLOYDS METALS & ENERGY LTD. Plot No. A-1/2, M.I.D.C. Area, Ghugus, Dist: Chandrapur – 442 505.		PO No.: 6800007243 PO Date: 25.06.2024
Sample Description / Type	Stack Emission	Sampling Done by	Laboratory
Sampling Location	Power Plant Boiler	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 CO: Bladder 1 L X 1 No
Date of Sampling	03.12.2024	Date of Receipt of Sample	04.12.2024
Sampling Procedure	As per method reference		
Date of Start of Analysis	04.12.2024	Date of Completion of Analysis	07.12.2024

<b>Stack Details</b>	
Stack Identity	Power Plant Boiler
Stack attached to	ESP Outlet (AFBC Boiler 90TPH)
Material of construction	RCC
Stack height above ground level (Meter)	100
Stack Diameter (Meter)	4.9
Stack shape at top	Round
Type of fuel	Coal
Fuel Consumption (t/d)	471
Time of Monitoring (h)	10:30 to 11:00

Sr. No.	Parameter	Unit	Result	#Limit	Method Reference
	<b>Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Stack Emission)</b>				
1	Flue gas Temperature	°C	125	-	IS 11255 (Part 3):2008
2	Flue gas Velocity	m/s	6.0	-	IS 11255 (Part 3):2008
3	Flue Gas Flow Rate	Nm <sup>3</sup> /h	291112	-	IS 11255 (Part 3):2008
4	Particulate Matter (PM)	mg/Nm <sup>3</sup>	33	50	IS 11255 (Part 1):1985
5	Sulphur Dioxide (SO <sub>2</sub> )	mg/Nm <sup>3</sup>	343	-	IS 11255 (Part 2):1985
6	Oxides of Nitrogen (NO <sub>x</sub> )	mg/Nm <sup>3</sup>	252	-	IS 11255 (Part 7): 2005
7	Carbon Monoxide	mg/Nm <sup>3</sup>	14	-	IS 5182 (Part 10): 1999

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### TEST REPORT



Report No.:	ME-0219241204N	Date:	10.12.2024
ULR No.:	-		

Name and Address of Customer	LLOYDS METALS & ENERGY LTD. Plot No. A-1/2, M.I.D.C. Area, Ghugus, Dist: Chandrapur – 442 505.		PO No.: 6800007243 PO Date: 25.06.2024
Sample Description / Type	Stack Emission	Sampling Done by	Laboratory
Sampling Location	Power Plant Boiler	Sample Quantity / Packing	SO <sub>2</sub> 30 mL X 1 No. PVC Bottle
Date of Sampling	03.12.2024	Date of Receipt of Sample	04.12.2024
Sampling Procedure	As per method reference		
Date of Start of Analysis	04.12.2024	Date of Completion of Analysis	07.12.2024

<b>Stack Details</b>	
Stack Identity	Power Plant Boiler
Stack attached to	ESP Outlet (AFBC Boiler 90TPH)
Material of construction	RCC
Stack height above ground level (Meter)	100
Stack Diameter (Meter)	4.9
Stack shape at top	Round
Type of fuel	Coal
Fuel Consumption (t/d)	471
Time of Monitoring (h)	10:30 to 11:00

Sr. No.	Parameter	Unit	Result	#Limit	Method Reference
	<b>Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Stack Emission)</b>				
1	Sulphur Dioxide (SO <sub>2</sub> )	t/d	2.40	3.4	IS 11255 (Part 2):1985

### END OF REPORT

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Phone: 0712-2612162/2612212 email: nagpur@mahabal.com

### TEST REPORT



Report No.:	ME-0058241203	Date:	07.12.2024
ULR No.:	TC748724000025043F		

Name and Address of Customer	LLOYDS METALS & ENERGY LTD.		PO No.: 6800007243
	Plot No. A-1/2, M.I.D.C. Area, Ghugus, Dist: Chandrapur – 442 505.		PO Date: 25.06.2024
Sample Description / Type	Stack Emission	Sampling Done by	Laboratory
Sampling Location	Dedusting -6	Sample Quantity / Packing	Thimble: 1 X 1 No.
Date of Sampling	02.12.2024	Date of Receipt of Sample	03.12.2024
Sampling Procedure	As per method reference		
Date of Start of Analysis	04.12.2024	Date of Completion of Analysis	05.12.2024

<b>Stack Details</b>	
Stack Identity	Dedusting -6
Stack attached to	Lump Iron Ore Crusher House
Material of construction	M.S.
Stack height above ground level (Meter)	35
Stack Diameter (Meter)	0.61
Stack shape at top	Round
Type of fuel	-
Fuel Consumption (L/h)	-
Time of Monitoring (h)	12:50 to 13:20

Sr. No.	Parameter	Unit	Result	#Limit	Method Reference
	<b>Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Stack Emission)</b>				
1	Flue gas Temperature	°C	61	-	IS 11255 (Part 3):2008
2	Flue gas Velocity	m/s	8.5	-	IS 11255 (Part 3):2008
3	Flue Gas Flow Rate	Nm <sup>3</sup> /h	7711	-	IS 11255 (Part 3):2008
4	Particulate Matter (PM)	mg/Nm <sup>3</sup>	39	50	IS 11255 (Part 1):1985

### END OF REPORT

- Note:**
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Branch Manager  
Chemical Testing





## Mahabal Enviro Engineers Pvt. Ltd.

PLOT NOS. 13,14,17,18, GRAMPANCHAYAT BOKHARA, CHHINDWARA ROAD, KORADI, NAGPUR, MAHARASHTRA, INDIA  
Phone: 0712-2612162/2612212 email: nagpur@mahabal.com

### TEST REPORT



Report No.:	ME-0061241203	Date:	07.12.2024
ULR No.:	TC748724000025046F		

Name and Address of Customer	LLOYDS METALS & ENERGY LTD. Plot No. A-1/2, M.I.D.C. Area, Ghugus, Dist: Chandrapur – 442 505.		PO No.: 6800007243 PO Date: 25.06.2024
Sample Description / Type	Ambient Air	Sampling Done by	Laboratory
Sampling Location	Near Old Admin Building	Sample Quantity / Packing	PM <sub>10</sub> : Filter paper: 1 X 3 No. SO <sub>2</sub> : 30 mL X 6 No. PVC Bottle NO <sub>2</sub> : 30 mL X 6 No. PVC Bottle
Date of Sampling	02.12.2024 to 03.12.2024	Date of Receipt of Sample	03.12.2024
Sampling Procedure	As per method reference		
Date of Start of Analysis	03.12.2024	Date of Completion of Analysis	04.12.2024

Sr. No.	Parameter	Unit	Result	#NAAQS	Method Reference
<b>Discipline: Chemical Testing: Product Group: Atmospheric Pollution (Ambient Air)</b>					
1	Sulphur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	11.4	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.1-6
2	Nitrogen Dioxide (NO <sub>2</sub> )	µg/m <sup>3</sup>	14.5	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.7-10
3	Particulate Matter (size less than 10µm) or PM <sub>10</sub>	µg/m <sup>3</sup>	67	100	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.11-14

### END OF REPORT

- Note:**
1. BQL: Below Quantification Limit.
  2. LOQ: Limit of Quantification.
  3. Duration of Sampling: 24 h
  4. TWA: Time Weighted Average
  5. NAAQS: National Ambient Air Quality Standard
  6. # - NAAQS specified as: 24 h. TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM<sub>10</sub>
  7. The result listed refers only to the tested sample(s) and applicable parameter(s).
  8. This report is not to be reproduced except in full, without the written approval of the laboratory.
  9. Any complaint pertaining to the report can be addressed to mahabalreports@gmail.com

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Issue No 03  
Date 05.12.2019.  
Amd 04 Date  
18.07.2023

Reviewed and  
authorised by

**Kishor Yeole**  
Branch Manager  
Chemical Testing



## Mahabal Enviro Engineers Pvt. Ltd.

PLOT NOS. 13,14,17,18, GRAMPANCHAYAT BOKHARA, CHHINDWARA ROAD, KORADI, NAGPUR, MAHARASHTRA, INDIA  
Phone: 0712-2612162/2612212 email: nagpur@mahabal.com

### TEST REPORT



Report No.:	ME-0060241203	Date:	07.12.2024
ULR No.:	TC748724000025045F		

Name and Address of Customer	LLOYDS METALS & ENERGY LTD. Plot No. A-1/2, M.I.D.C. Area, Ghugus, Dist: Chandrapur – 442 505.		PO No.: 6800007243 PO Date: 25.06.2024
Sample Description / Type	Ambient Air	Sampling Done by	Laboratory
Sampling Location	Near Welfare Building	Sample Quantity / Packing	PM <sub>10</sub> : Filter paper: 1 X 3 No. SO <sub>2</sub> : 30 mL X 6 No. PVC Bottle NO <sub>2</sub> : 30 mL X 6 No. PVC Bottle
Date of Sampling	02.12.2024 to 03.12.2024	Date of Receipt of Sample	03.12.2024
Sampling Procedure	As per method reference		
Date of Start of Analysis	03.12.2024	Date of Completion of Analysis	05.12.2024

Sr. No.	Parameter	Unit	Result	#NAAQS	Method Reference
<b>Discipline: Chemical Testing: Product Group: Atmospheric Pollution (Ambient Air)</b>					
1	Sulphur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	13.8	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.1-6
2	Nitrogen Dioxide (NO <sub>2</sub> )	µg/m <sup>3</sup>	15.7	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.7-10
3	Particulate Matter (size less than 10µm) or PM <sub>10</sub>	µg/m <sup>3</sup>	74	100	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.11-14

### END OF REPORT

- Note:**
1. BQL: Below Quantification Limit.
  2. LOQ: Limit of Quantification.
  3. Duration of Sampling: 24 h
  4. TWA: Time Weighted Average
  5. NAAQS: National Ambient Air Quality Standard
  6. # - NAAQS specified as: 24 h. TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM<sub>10</sub>
  7. The result listed refers only to the tested sample(s) and applicable parameter(s).
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**Kishor Yeole**  
Branch Manager  
Chemical Testing





**25 MW WHRB CAPTIVE POWER PLANT EC NO J-13012/123/07-1A-II Dtd.12.10.09**

Period 1st June 2024 - 31st December 2024..

**POWER PLANT**

Sr.no	Conditions	Compliance Status
1	It is noted that the proposal is for grant of environment clearance for 25 MW Waste Heat Recovery based captive power plant by M/s. Lloyds Metal & Engineers Ltd.	Noted & Aware
	Project information from submitted & considered documents is summarized as below-	
	Name of the Project: Environmental clearance for 25 MW Waste Heat Recovery based captive power plant.	
	Project Proponent : M/s. Lloyds Metal & Energy Ltd.	
	Location of Project: Plot no. A1 & A2, MIDC Industrial area Ghugus, Chandrapur-442505	
	Latitude: 19°56'15"N	
	Longitude:79007'39"E	
	Type of Project: Captive Power Plant: based on waste heat recovery from existing sponge iron unit	
	Total Plot Area:10 acres	
	Estimated cost of project : Rs.106 Cr.	
	Water Requirement: 6000 m <sup>3</sup> /day, Source: River water.Source: Wardha River.	
	Waste water generated : Effluent will be recirculated constantly and will be treated in Effluent Treatment plant with recirculation type,ETP capacity: 200 m <sup>3</sup> /hr.	
	Fuel requirement	

	<ul style="list-style-type: none"> <li>Coal-340 Tonne/day</li> </ul>	
	Solid Waste Generation : Total ash generated : Fly ash quantity: 109 T/day	
	Bottom ash quantity : 27 T/day	
	Fly ash Disposal: FBC Boiler with 100% dry dense A phase system is proposed for collection & transportation of ash collected, and will be stored in silos (capacity 250 m <sup>3</sup> ), it will be disposed of in trucks. The silos shall be partly of RCC and partly of steel construction. Compressors of required capacity and pressure of oil lubricated screw type will be provided for the ash handling system. The fly ash shall be sent to cement manufacturers.	Noted & Fly ash being sent to cement manufacturers.
	Air pollution control.	
	<ul style="list-style-type: none"> <li>High efficiency electrostatic precipitator shall be installed and designed with at least 99% efficiency.</li> </ul>	Installed the high capacity ETS , ELEX , 195000m <sup>3</sup> /Hrs
	<ul style="list-style-type: none"> <li>ESP to limit the dust content of the flue gas to less than 100 mg./Nm<sup>3</sup> will be provided.</li> </ul>	Upgraded the 50mg/Nm <sup>3</sup> and plan for the upgrading the new standard of 50mg/Nm <sup>3</sup>
	<ul style="list-style-type: none"> <li>The chimney is 75 meters high.</li> </ul>	100 Mtrs
	Green Belt Development: Area-45.87 acres 10,000 nos. of trees shall be planted for green belt.	Industry has already planted approx. 100000 Nos of Trees at the Power Plant area.
	Environmental Management Plan: During construction phase: Rs. 175.5 Lakhs, Operation phase: 19.9 Lakhs.	Noted
	The proposal has been considered by SEIAA in its 14th meeting decided to accord environmental clearance to the said project under the provisions of Environment Impact Assessment Notification, 2006 subject to implementation of the following terms and conditions :-	Noted
	i)Consent for Establishment&shall be obtained from Maharashtra Pollution Control Board under Air and Water Act and a copy shall be submitted to the Environment	Strictly followed

	department before start of any construction work at the site.	
	ii)No land development / construction work preliminary or otherwise relating to the project shall be taken up without obtaining due clearance from respective authorities.	Strictly followed
	iii) No additional land shall be used/ acquired for any activity of the project without obtaining proper permission.	Strictly followed
	iv)No fuel other than mentioned above with said contents shall be used without obtaining proper permission.	Strictly followed
	v)For controlling fugitive natural dust, regular sprinkling of water & wind shields at appropriate distances in vulnerable areas of the plant shall be ensured.	Approx.100 Numbers of Water Sprinklers are installed at the Power Plant area and 600 Liters X 02,1200 Liters Water Tankers is Engage for the Plant for avoiding Emission.
	vi) Regular monitoring of the air quality, including SPM &SO <sub>2</sub> levels both in work zone and ambient air shall be carried out in and around the power plant and records shall be maintained. The location of monitoring stations and frequency of monitoring shall be decided in consultation with Maharashtra pollution control board (MPCB) & submit a report accordingly to MPCB.	Industry has conducted the monthly environment monitoring by the NAABL / MoEF Approved laboratory and report submitted to State Pollution Control Board, Chandrapur as <b>Annex-A</b>
	vii)A detailed scheme for rain water harvesting shall be prepared and implemented to recharge ground water.	Implemented
	viii) Periodic monitoring of ground water shall be undertaken and results analyzed to ascertain any change in the quality of water. Results shall be regularly submitted to the Maharashtra Pollution Control Board.	Industry has conducted the Monthly Monitoring by the MoEF/NAABL Approved laboratory and report to be submitted to MPCB, Latest Report for the month of December 2024 is Attached as <b>Annex-A</b>
	ix) Leq. of Noise level shall be maintained as per standards. For people working in the high noise area, requisite personal protective equipment like earplugs etc. shall be provided.	Industry has conducted the Monthly Monitoring by the MoEF/NAABL Approved laboratory and report to be submitted to MPCB, Latest Report for the month of December 2024 is Attached as <b>Annex-A</b>
	x)The overall noise level In and around the plant shall be kept within the standards by providing noise control measures including acoustic hoods, silencers,enclosures,	Completed.



	etc. On all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under Environmental (Protection) Act.1986 Rules, 1989.	
	xi)Green belt shall be developed & maintained around plant periphery. Green Belt Development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the local DFO/Agriculture Deptt.	Develop 33-40% Greenery around the Plant Periphery and report to Concerned.
	xii)Adequate safety measures shall be provided to limit the risk zone within the plant boundary, in case of an accident. Leak detection devices shall also be installed at strategic places for early detection and warning.	Strictly followed.
	xiii)Occupational health surveillance of the workers shall be done on a regular basis and record maintained as per Factories Act.	Annual Medical Health Checkup is done by the Health & Safety Department.
	xiv) The company shall make the arrangement for protection of possible fire hazards during the manufacturing process in material handling.	Being Implemented
	xv) The project authorities must strictly comply with the rules and regulations with regards to handling and disposal of hazardous wastes in accordance with the Hazardous waste (Management and Handling) Rules, 2003. Authorization from MPCB shall be obtained for collections /treatment /storage/disposal of hazardous waste.	Strictly followed. Hazardous waste is generated 3.65 KL/A as per the consent conditions it is reused in kiln for firing and return submitted on every year. Enclosed the Latest submitted Hazardous Waste return (Form IV) dtd.26/06/2024 as <b>Annex-B</b> .
	xvi)The company shall undertake following Waste Minimization Measures:	Being Practiced
	•Metering of quantities of active ingredients to minimize waste.	Being Practiced
	•Reuse of By-products from process as raw materials or as raw materials substitutes in other processes.	Being Practiced
	•Maximizing Recoveries.	Being Practiced
	•Use of an automated material transfer system to minimize spillage.	Being Practiced

	•Use of Closed feed system into batch reactors.	Being Practiced
	xvii) Regular mock drills for on-site emergency management plan shall be carried out Implementation of changes /improvements required, if any, in the on-site management plan shall be ensured.	Being Practiced
	xviii) A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.	Already set up the qualified staff for the implementation of Environmental Safeguard.
	xix) Transportation of ash will be through closed containers and all measures should be taken to prevent spilling of the ash.	Transportation is allowed only Closed containers and covered with tarpaulin.
	xx) The coal will be transported through closed containers.	Transportation is allowed only Closed containers.
	xxi) Proper coal handling, transportation and handling system should be as per plan approved by MPCB.	Being Practiced
	xxii) Separate silos will be provided for collecting and storing bottom ash and fly ash.	Being Practiced
	xxiii) Separate funds shall be allocated for implementation of environmental protection measures /EMP along with item-wise breaks-up. These costs shall be included as part of the project cost .The funds earmarked for the environment protection measures shall not be diverted for other purposes and year- wise expenditure should be reported to the MPCB & this department.	Being Practiced
	xxiv) The project management shall advertise at least in two local newspapers around the project, one of which shall be in the Marathi language of the local concerned within seven days of the issue of this letter, informing that the project has been accorded environment clearance and copies of the clearance letter are available with the Maharashtra Pollution Control Board and may also seen at website at <a href="http://envis.maharashtra.gov.in">http://envis.maharashtra.gov.in</a> widely circulated in the region	Compiled and Circulated through Advertisement to News Paper.

	xxv) Project management should submit half yearly compliance reports in respect of the stipulated prior environment clearance terms and conditions in hard & soft copies to the MPCB & this department on 1st June & 1st December of each calendar year.	Submitted regularly as per the prescribed.
	xxvi) A copy of the clearance letter shall be sent by proponent to the concerned Municipal Corporation and the local NGO, if any from whom suggestions/representations, if any were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.	The coal washery plant is situated in the MIDC area.
	xxvii) The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective zonal office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO <sub>2</sub> , NO <sub>x</sub> , (ambient levels as well as stack emissions) or critical sartorial parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	Ambient air monitoring stations data displayed at main Gate. Attached Photographs of Display Board as <b>Annex-C</b>
	xxviii) The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.	Being Practiced
	xxix) The environmental statement for each financial year ending 31st March in form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.	Submitted on Every Year and informed to MPCB. Last Environment Statement (Form V) is submitted 25 th September 2024. Attached as <b>Annex-D</b>



	xxx) The environmental clearance is being issued without prejudice to the court as pending in the court of law and it does not mean that the project proponent has not violated any environmental laws in the past and whatever decision of the court will be binding on the project. Hence this clearance does not give immunity to the project proponent in the case filed against him.	Noted	
4	The Environment department reserves the right to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the department or for that matter, for any other administrative reason	Noted	
5	The validity of the Environmental Clearance accorded shall be valid for a period of 5 years to start of production operations by the power plant.	Noted	
6	In case any deviations or alteration in the project from those submitted to this department for clearance, a fresh reference should be made to the department to assess the adequacy of the condition(s) imposed and to incorporate additional environmental protection measures required, if any.	Noted	
7	The above stipulations would be enforced among others under the Water (Prevention & Control Pollution) Act, 1974, the Air (Prevention & Control Pollution) Act, 1981, the Environmental (Protection) Act, 1986 and rules there under, Hazardous Wastes (Management & Handling) Rules, 1989 and its amendments, the public Liability Insurance Act, 1991 and its amendments.	Noted	

1	The project proponent shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.	Agreed, will be done as per norms	Under Progress
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2	This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.	Agreed	Agreed for final verdict of any court of law
3	The project proponent shall utilize modern technologies for capturing of carbon emitted and shall also develop carbon sink/carbon sequestration resources capable of capturing more than emitted. The implementation report shall be submitted to the IRO, MoEFCC in this regard.	Agreed	Under Progress
4	In pursuance to MoEFCC OMs dated 31st October, 2019 & 30th December, 2019 issued in compliance of the order of Hon'ble NGT in OA No. 1038/2018 dated 19th August, 2019, the compliance of all the conditions applicable to CEPI shall be implemented as per the submitted plan.	Agreed	Under Progress
5	The nearest habitation to plant is Ghugus village located at 0.5 km away from the project site boundary in North direction. Project Proponent shall implement the action plan for environmental safeguard measures to minimize the impact on the habitation of the locals as submitted. The company shall also include this location in its environmental monitoring programme and strengthen the greenbelt layer towards the village.	The total area of the project area is 93.52 ha. Out of the total area, green belt development is done in 47.7 ha (51%) of plant area. 2,34,650 nos. of trees are planted and 1,05,000 nos. survived till date. Further gap filling will be done. About 15000 nos. additional trees will be planted. Out of 15000 nos. 15000 trees are planted. As informed, apart from above mentioned greenbelt development PP has planted and maintained about 1,00,000 trees in residential colonies 2 kms away from the plant. In addition to this it is committed to do plantations at locations suggested by Nagar Parishad Ghugus, Nearest Gram Panchayat Usgaon & Mhatardevi.	Complied

6	<p>There are two natural drainages passing through the project site. Anuradha Lake (620 m, W), Wardha River (2.5 Km, SW), Narguda Nala (3.0 Km, SSW), Penganga River (5.0 Km, SE) and Sarai Nala (6.5 Km, NE) are flowing within 10 Km. radius of the plant site. A robust and foolproof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be implemented.</p>	<p>The total length of drains passing within the boundary of the proposed project to the intersection is 2000 m. As on dated. Industry has allotted a budget of Rs. 2.05 Crores for reconstructing the drain. 40% of work for conservation of natural drain passing through the project site is completed. Rs. 0.82 Crores has already been spent for excavation and filling of Earth/ moorum and for thick stone pitching. We have submitted the revised Nala Diversion proposal to the State irrigation department for their approval. The work of natural drainages Diversion work will be started after obtaining the approval from the State irrigation department.</p>	Under progress
7	<p>The total water requirement of 6750 KLD shall be sourced from Wardha River after obtaining necessary permission from the Competent Authority. No groundwater abstraction is permitted.</p>	<p>Noted. Permission received &amp; the jackwell construction has started and will be completed.</p>	Under progress
8	<p>Three tier Green Belt shall be developed in at least 50% of total project area as per the submitted action plan with native species all along the periphery of the project site of adequate width and tree density shall not be less than 2500 per ha. Survival rate of green belt development shall be monitored on a periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years. Gap filling of existing plantations shall be completed within six months as per the commitment. PP shall develop greenbelt in the form of shelter belt consisting of a total of 6 rows of 2x2 m plantation with tall trees &amp; broad leaves with thick canopy along with windshield inside the plant premises to act as green barrier for air pollution &amp; noise levels towards Ghugus villages. Compliance status in this regard, shall be submitted to the concerned Regional Office of the MoEF&amp;CC.</p>	<p>The total area of the project area is 93.52 ha. Out of the total area, green belt development is done in 47.7 ha (51%) of plant area. 2,34,650 nos. of trees are planted and 1,05,000 nos. survived till date. Further gap filling will be done. About 15000 nos. additional trees will be planted. Out of 15000 nos. 15000 trees are planted. As informed, apart from above mentioned greenbelt development PP has planted and maintained about 1,00,000 trees in residential colonies 2 kms away from the plant. In addition to this it is committed to do plantations at locations suggested by Nagar Parishad Ghugus, Nearest Gram Panchayat Usgaon &amp; Mhatardevi.</p>	Already Complied



9	All the commitments made towards socio-economic development of the nearby villages shall be satisfactorily implemented. The action plan based on the social impact assessment study of the project as per the EMP in accordance with the Ministry's OM dated 30.09.2020 amounting to Rs. 7.39 Crores shall be strictly implemented and progress shall be submitted to the Regional Office of MoEFCC.	Under progress	Under progress
10	PP shall undertake village adoption programmes and prepare and implement the action plan to develop them into a model village.	Industry has adopted two villages and accordingly development activities are carried out based on need based assessment study. Skill development training was provided to 25 youths from Ghugus, Mhatardevi &Usgaon. 15 nos. of Solar paneled LED street light has been purchased and installed in Mhatardevi &Usgaon village. 1 Ambulance & 1 funeral vehicle has been purchased & handed over to Ghugus Nagar Parishad. Industry has appointed NGO LOLT (Light Of Life Trust) and through this NGO They have selected 3 nearby schools from 8th Std. to 10 std. and developed their Computer lab, Science Lab, Library, developed basic infrastructure like sanitation facility, shed etc. also they have appointed teachers for career guidance programs and to increase children participation in schools. LMEL have conducted medical health camps at Ghugus and also sponsored 2 health camps at Ghugus. 5000 trees have been planted at village Ghugus, Ussgaon, Mhatardevi, Nakoda, and Shengaon. PP informed that they will construct Public toilets and drinking water facilities at village Mhatardevi and Usgaon after the rainy season.	
	Statutory compliance:		

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 legislations, etc., as may be applicable to the project.	Noted and will be taken care of.	Continuous process
	<b>II. Air quality monitoring and preservation</b>		
I	The project proponent shall install a 24x7 continuous emission monitoring system at process stacks to monitor stack emission as well as 04 Nos. Continuous Ambient Air Quality Station (CAAQMS) for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS and CAAQMS 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.	Industry installed 02 Nos of Ambient air AAQMS and Stack emission OCEMS to Process Stacks and continuously monitored. Both are connected to MPCB/ CPCB Server,with the remaining two stations installed till 31st March 2025.	Under procurement
II	The project proponent shall carry out Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5 in reference to PM emission, an SO2 and NOx in reference to SO2 and NOx emissions) within and outside the plant area (at least at four locations one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.	Noted	
III	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.	Shall be complied along-with the project completion.	Continuous process
IV	Sampling facilities at process stacks shall be provided as per CPCB guidelines for manual monitoring of emissions.	Shall be complied along with project completion.	
V	An appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including	Presently under designing to meet the requirement shall be complied.The	

	fugitive dust from all vulnerable sources, so as to comply with prescribed stack emission and fugitive emission standards.	Design has been completed and the equipment are in construction State.(ESP) - Enclosed Photograph of Designed Construction as <b>Annex-E</b>	
VI	The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.	The Design has been completed and the equipment is in supply State.	
VII	A sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.	Shall be complied as per the guideline with the project completion.	
VIII	Ensure covered transportation and conveying of raw material to prevent spillage and dust generation. The project proponent uses leak proof trucks/dumpers carrying coal and other raw materials and covers them with tarpaulin.	Shall be complied as per guideline.	
IX	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.	Coal fines are consumed in the AFBC boiler, Iron fines shall be sold to Iron agglomeration units.	
X	The project proponent shall provide primary and secondary fume extraction systems at all heat treatment furnaces.	Not applicable	
XI	Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.	Covered Material storage is in operation partially and shall be done completely.	
XII	Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.	Under designing stage and will be complied with project completion.The Design has been completed and the equipment are in execution State.	
XIII	Pollution control systems in the plant shall be provided as per the CREP Guidelines of CPCB.	The system is being designed as per the guideline and will be implemented.The Design has been completed and the equipment are in execution State.	
XIV	The project proponent shall adopt the Clean Air practices like mechanical collectors, wet scrubbers, fabric filters	The equipment is planned with E.S.P's and Bag filter to ensure clean air	

	(bag houses), electrostatic precipitators, combustion systems (thermal oxidizers), condensers, absorbers, adsorbers, and biological degradation. Controlling emissions related to transportation shall include emission controls on vehicles as well as use of cleaner fuels. Sufficient numbers of additional truck mounted Fog/Mist water cannons shall be procured and operated regularly inside the project premises and also in the surrounding villages to arrest suspended dust in the atmosphere.	practices will be complied along with the project completion. Industry having sweeping and fogger machine for road cleaning, Photographs is enclosed as <b>Annex-A</b> . The Design has been completed and the equipments are in Execution State.	
XV	Bag filters shall be cleaned regularly and efficiency of the bag filter system shall be monitored at regular intervals.	The filters are designed with a self cleaning arrangement and will be monitored for efficient working.	
XVI	Water Sprinklers/Water mist system shall be installed near raw material yards, operational units and other strategic locations to control fugitive emissions from the plant.	The Mist system is being installed in the stock piles as per guidelines.	
XVII	The particulate matter emissions from the process stacks shall be less than 30 mg/Nm <sup>3</sup> and measures shall be undertaken as per the submitted action plan. Efficient Air monitoring equipment shall be installed.	Under execution state	
XVIII	Following additional arrangements to control fugitive dust shall be provided:		
a	Fog / Mist Sprinklers at all on bulk raw material storage areas (at the transfer points) like Iron Ore, Coal and for Fly Ash and similar solid waste storage areas	The fog systems are considered and under installation will be completed with the project completion. Installed Sprinklers Photographs, Enclosed as <b>Annex-F</b>	
b	Proper covered vehicles shall be used while transporting materials.	Shall be complied as per guideline.	
c	Wheel washing mechanism shall be provided in entry and exit gates with complete recirculation system.	02 Nos of Wheel Washing Mechanism is installed at ENTRY and EXIT. Photographs is Enclosed as <b>Annex-G</b>	



XIX	Hoppers of the coal crushing unit and other washery units shall be fitted with high efficiency bag filters/mist spray water sprinkling system shall be installed and operated effectively at all times of operation to check fugitive emissions from crushing operations, transfer points of closed belt conveyor systems and from transportation roads.	Under execution stage and will be commissioned along with the project commissioning.	
XX	The raw coal, washed coal and coal wastes (rejects) shall be stacked properly at rearmarked site (s) within stockyards fitted with wind breakers/shields. Adequate measures shall be taken to ensure that the stored mineral does not catch fire.	Coal is stored in a covered shed and the shed is being extended to store complete requirements.	
XXI	The temporary reject sites should appropriate planned and designed to avoid air and water pollution from such site	As per guidelines the sites are prepared and under implementation	
XXII	During the operational phase at Captive Power Plant, Action Plan to monitor coke/coal dust exposures in different process plants using personal and area air samplers and to compare with permissible limits as per Indian Factories Act, 1948 shall be implemented.	Shall be complied as per guidelines.	
XXIII	The coal dust should be monitored at coal unloading, crushing, furnace areas and should be within 2 mg/m <sup>3</sup> , respirable dust fraction containing less than 5% quartz as per Indian Factories Act, 1948.	Under designing and implementation.	
XXIV	Online stack monitoring system for IF and RHF shall be installed and monitoring report shall be submitted to the concerned Regional Office of the MoEF&CC along with the six monthly compliance report	Shall be done, if Applicable	
XXV	Low NO <sub>x</sub> Burners will be installed at Reheating Furnace for control of Gaseous emissions generated while using PNG.	Not Applicable	
	<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 as amended from time to time and 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.	Under continuous monitoring	Under procurement
II	The project proponent shall regularly monitor ground water quality at least twice a year (pre- and post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.	Complied	Under procurement
III	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 runoff.	Covered storage is planned and 50% completed and balance 50% is under progress.	
IV	Water meters shall be provided at the inlet to all unit processes in the plants.	Under Implementation	
V	The project proponent shall make efforts to minimise water consumption in the plant complex by segregation of used water, practicing cascade use and by recycling treated water.	Planned and will be implemented with completion of the project.	
VI	The proposed project shall be designated as "Zero Liquid Discharge" Plant. ETP shall be installed and there shall be no discharge of effluent from the plant. Domestic effluent shall be treated in Sewage Treatment Plant. Suitable measures shall be adopted for sewage water handling to ensure no contamination of any kind of water body.	Planned and will be implemented with completion of the project. The ZLD plant is under construction. Under Progress Photographs is Enclosed as <b>Annex-H</b>	900 KLD ZLD construction under progress
VII	All stockyards shall have impervious flooring and shall be equipped with a water spray system for dust suppression. Stock yards shall also have garland drains and catch pits to trap the run off material and shall be implemented as per the action plan submitted in the EIA/EMP report.	The covered shed has an impervious floor. Photos Enclosed as <b>Annex-I</b>	

VIII	Rain water harvesting shall be implemented to recharge/harvest water as per the action plan submitted in the EIA/EMP report.	Rain Water Harvesting is under implementation. Enclosed Photographs as <b>Annex-J</b>	4 pits completed 5 under progress out of 11 pits
IX	The project proponent shall provide the ETP for effluents of rolling mills to meet the standards prescribed in G.S.R. 277 (E) 31st March 2012 (applicable to IF/EAF) as amended from time to time.	Shall be taken care,if applicable.	
X	The effluent discharge (mine waste water, workshop effluent) shall be monitored in terms of the parameters notified under the Water Act, 1974 Coal Industry Standards vide GSR 742 (E) dated 25.9.2000 and as amended from time to time by the Central Pollution Control Board.	Under monitoring	
XI	Heavy metal content in raw coal and washed coal shall be analysed once in a year and records maintained thereof.	Complied, Enclosed Photographs as <b>Annex-K</b>	
XII	The rejects should preferably be utilized in FBC power plant or disposed off through sale for its gainful utilization. If the coal washery rejects are to be disposed off, it should be done in a safe and sustainable manner with adequate compaction and post closure arrangement to avoid water pollution due to leachate from rejects and surface run off from reject dumping sites.	Yes	
XIII	An Integrated Surface Water Management Plan for the washery area up to its buffer zone considering the presence of any river/rivulet/pond/lake etc. with impact of coal washing activities on it shall be prepared, submitted to MoEFCC and implemented.	Under Planning	
XIV	Waste Water shall be effectively treated and recycled completely either for washery operations or maintenance of green belt around the plant.	Under Planning The Design has been completed and is under execution stage.	
XV	Rainwater harvesting in the washery premises shall be implemented for conservation and augmentation of ground water resources in consultation with the Central Ground Water Board.	Under implementation	4 Nos recharge pit installed

XVI	No ground water shall be used for coal washing unless otherwise permitted in writing by competent authority (CGWA) or MoEFCC. The make-up water requirement of washery should not exceed 1.5 m <sup>3</sup> /tonne of raw coal.	Yes	
XVII	Regular monitoring of ground water level and quality shall be carried out in and around the mine lease area by establishing a network of existing wells and constructing new piezometers during the mining operations. The monitoring of ground water levels shall be carried out four times a year i.e.pre-monsoon, monsoon, post-monsoon and winter. The ground water quality shall be monitored once a year, and the data thus collected shall be sent regularly to MOEFCC/RO.	Agreed	
XVIII	The project proponent shall take all precautionary measures to ensure riverine/ riparian ecosystem in and around the coal mine up to a distance of 5 km. A riverine/riparian ecosystem conservation and management plan should be prepared and implemented in consultation with the irrigation / water resource department in the state government	Not applicable	
XIX	Air Cooled condensers shall be used in the captive power plant.	Under designing stage will be finalized based on Air/recycled water availability	
	<b>Noise monitoring and prevention</b>		
I	Noise pollution shall be monitored as per the prescribed Noise Pollution (Regulation and Control) Rules, 2000 and amendments thereof, and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.	Noted and will be implemented.	
II	The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.	Noted and will be implemented.	



III	PP shall identify extreme hot areas through heat stress survey as well as noise monitoring within process plants to ensure that workers not exposed above 90 dBA levels as per Factories Act, 1948.	Under designing and will be implemented along with the completion of the project.	
	<b>Energy Conservation measures</b>		
I	Use a torpedo ladle for hot metal transfer as far as possible. If ladles are not used, provide covers for open top ladles.	Shall be done,if applicable	
II	Provide solar power generation on roof tops of buildings, for solar light systems for all common areas, street lights, parking around project areas and maintain the same regularly.	Under implementation 1 Solar Power generation Unit has been installed at a four wheeler parking area and under commissioning.	
III	Provide LED lights in their offices and residential areas.	Complied	
IV	The project proponent shall provide a waste heat recovery system (pre-heating of combustion air) at the flue gases of reheating furnaces.		
V	Practice hot charging of slabs and billets/blooms as far as possible.		
VI	Ensure installation of regenerative type burners on all reheating furnaces.		
VII	The project proponent shall provide a waste heat recovery system on the DRI Kilns.	Under design and will be implemented along with the completion of the project.The Design has been completed and its under execution stage.	
VIII	The dolochar generated shall be used for power generation.	Under designing and will be implemented along with the completion of the project The Design has been completed and its under execution stage.	

IX	Tar shall be recovered from producer gas and shall be sold to registered processors and phenolic water shall be incinerated in After Burn Chamber (ABC) of DRI kilns.	Shall be done,if applicable	
X	The PP shall implement the guidelines on sponge iron plants issued by the CPCB/SPCB in this regard.	Agreed	
	<b>Waste management</b>		
I	Oil Collection pits shall be provided in oil cellars to collect and reuse/recycle spilled oil.	Not Applicable	
II	Kitchen waste shall be composted or converted to biogas for further use.	Complied,Enclosed Photographs as Annex-L	
III	100% utilization of fly ash shall be ensured. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding in this regard shall be submitted to the Ministry's Regional Office.	Agreed 1 Fly ash brick manufacturing unit has been finished and will be operating from Feb-2025.	Under progress
IV	The Plastic Waste Management Rules 2016, inter-alia, mandated banning of identified Single Use Plastic (SUP) items with effect from 01/07/2022. In this regard, CPCB has issued a direction to all the State Pollution Control Boards (SPCBs)/Pollution Control Committees (PCCs) on 30/06/2022 to ensure the compliance of Notification published by the Ministry on 12/08/2021.The technical guidelines issued by the CPCB in this regard is available at <a href="https://cpcb.nic.in/technical-guidelines-3/">https://cpcb.nic.in/technical-guidelines-3/</a> . All the project proponents are hereby requested to sensitize and create awareness among people working within the Project area as well as its surrounding area on the ban of SUP in order to ensure the compliance of Notification published by this Ministry on 12/08/2021. A report, along with photographs, on the measures taken shall also be included in the six monthly compliance reports being submitted by the project proponents.	Agreed	

V	A proper action plan must be implemented to dispose of the electronic waste generated in the industry.	Agreed	
VI	Rejects from coal washery shall only be used either in the captive power plant (or) in the Thermal Power Plants meeting emission standards.	Agreed	
	<b>Green Belt</b>		
I	The project proponent shall prepare GHG emissions inventory for the reduction of the same including carbon sequestration by trees.	Out of the total area, green belt development is done in 47.7 ha (51%) of plant area. 2,34,650 nos. of trees are planted and 1,05,000 nos. survived till date. Further gap filling will be done. About 15000 nos. additional trees will be planted. Out of 15000 nos. 15000 trees are planted. As informed, apart from above-mentioned greenbelt development PP has planted and maintained about 1,00,000 trees in residential colonies 2 kms away from the plant. In addition to this it is committed to do plantations at locations suggested by Nagar Parishad Ghugus, Nearest Gram Panchayat Usgaon & Mhatardevi.	
II	Project proponents shall submit a study report on the Decarbonisation program, which would essentially consist of the company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon capture, use and storage and offsetting strategies. Further, the report shall also contain a time bound action plan to reduce the carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to renewable energy etc. All these activities/ assessments should be measurable and monitorable with defined time frames.	A study report on Decarbonisation is submitted and actions taken towards decarbonisation are as follows: Out of the total area, green belt development is done in 47.7 ha (51%) of plant area. 2,34,650 nos. of trees are planted and 1,05,000 nos. survived till date. Further gap filling will be done about 15000 nos. additional trees will be planted. Out of 15000 nos. 15000 trees are planted. As informed, apart from above mentioned greenbelt development PP has planted and maintained about 1,00,000 trees in a residential colony 2 kms away from	

		the plant. In addition to this it is committed to do plantations at locations suggested by Nagar Parishad Ghugus, Nearest Gram Panchayat Usgaon & Mhatardevi	
III	Greening and Paving shall be implemented in the plant area to arrest soil erosion and dust pollution from exposed soil surface.	Under implementation will be completed with the completion of the project	
	<b>Public hearing and Human health issues</b>		
I	Emergency preparedness plans based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.	Industry is Prepared with the existing Emergency Preparedness Plan and Disaster Management Plan is Updated and regular mock drills are conducted as per the EPRP and continue as proposed projects.	
II	The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zones and provide Personal Protection Equipment (PPE) as per the norms.	Under implementation	
III	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP. Safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	Under implementation. Enclosed Photographs as <b>Annex-M</b>	
IV	Occupational health surveillance of the workers shall be done on a regular basis and records maintained.	Complied	
	<b>Environment Management</b>		



I	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. As part of Corporate Environment Responsibility (CER) activity, companies shall adopt nearby villages based on the socio-economic survey and undertake community developmental activities in consultation with the village Panchayat and the District Administration as committed.	Agreed	
II	The company shall have a well laid down environmental policy duly approved 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 a 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 MoEFCC as a part of a six-monthly report.	Agreed	
III	A separate Environmental Cell both at the project and company head quarter level,Qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.	Environment management cell established.	
IV	Performance tests shall be conducted on all pollution control systems every year and the report shall be submitted to the Integrated Regional Office of the MoEFCC.	Agreed	
	<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.	The Hitavada & Punyanagari on 11th Feb 2024	Complied
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.	Communicated through copies	
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 a half-yearly basis.	Will be updated as per norms	
IV	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.	Existing Industry has installed 02 Nos of AAQMS Stations and both data is uploaded to MPCB / CPCB Server and also a display board is installed at the main gate for Public and continuously showing the ambient data on LED display board. Enclosed Photographs as Annex-N	Complied
V	Action plan for developing connecting and internal road in terms of MSA as per IRC guidelines shall be implemented	Under implementation and will be completed along with the project completion	Under progress
VI	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 regularly.	Under progress

VII	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.	Industry submitted the existing plant environment statement (form v) on a regular basis. Last submitted 20/09/2024 also follows this condition's proposed project.	Continuous progress
VIII	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.	Noted	
IX	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.	Industry always abide by all the commitments and recommendations made in the EIA/EMP report	Under progress
X	The recommendations of the approved Site-Specific Wildlife Management Plan (in case of involvement of Schedule-I species) shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report to the concerned Regional Office of the MoEF&CC.	A request letter has been given to the District Forest Officer on 03rd Jan 24 for a wildlife conservation plan with a request for a budget for the amount to be spent.	
XI	The PP shall put all the environment related expenditure, related to Action Plan on the PH issues, and other commitments made in the EIA/EMP Report etc. in the company web site for the information to public/public domain. The PP shall also put the information on the left over funds allocated to EMP and PH as committed in the earlier ECs and shall be carried out and spent in next three years, in the company web site for the information to public/public domain.	Under planning	
XII	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment,Forests and Climate Change (MoEFCC).	Noted	


XIII	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	
XIV	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Agreed	
XV	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.	Agreed	
XVI	The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data /information/monitoring reports.	Agreed	
XVII	Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.	Agreed	



## LATEST ENVIRONMENT MONITORING REPORT

 **Mahabal Enviro Engineers Pvt. Ltd.**  
PLOT NOS. 13,14,17,18, GRAMPANCHAYAT BOKHARA, CHHINDWARA ROAD, KORADI, NAGPUR, MAHARASHTRA, INDIA  
Phone: 0712-2612162/2612212 email: nagpur@mahabal.com

**TEST REPORT**

 Report No.: ME-0055241203 Date: 07.12.2024  
ULR No.: TC748724000025040F

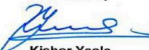
Name and Address of Customer	<b>LLOYDS METALS &amp; ENERGY LTD.</b> Plot No. A-1/2, M.I.D.C. Area, Ghugus, Dist: Chandrapur – 442 505.		PO No.: 6800007243 PO Date: 25.06.2024
Sample Description / Type	Stack Emission	Sampling Done by	Laboratory
Sampling Location	Kiln 500 TPD	Sample Quantity/Packing	Thimble: 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 CO: Bladder 1 L X 1 No
Date of Sampling	02.12.2024	Date of Receipt of Sample	03.12.2024
Sampling Procedure	As per method reference		
Date of Start of Analysis	03.12.2024	Date of Completion of Analysis	06.12.2024



<b>Stack Details</b>	
Stack Identity	Kiln 500 TPD
Stack attached to	ESP Outlet
Material of construction	RCC
Stack height above ground level (Meter)	60
Stack Diameter (Meter)	3.6
Stack shape at top	Round
Type of fuel	Coal
Fuel Consumption (t/d)	441
Time of Monitoring (h)	10:50 to 11:20


Sr. No.	Parameter	Unit	Result	#Limit	Method Reference
<b>Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Stack Emission)</b>					
1	Flue gas Temperature	°C	130	-	IS 11255 (Part 3):2008
2	Flue gas Velocity	m/s	6.6	-	IS 11255 (Part 3):2008
3	Flue Gas Flow Rate	Nm <sup>3</sup> /h	162675	-	IS 11255 (Part 3):2008
4	Particulate Matter (PM)	mg/Nm <sup>3</sup>	42	50	IS 11255 (Part 1):1985
5	Sulphur Dioxide (SO <sub>2</sub> )	mg/Nm <sup>3</sup>	577	-	IS 11255 (Part 2):1985
6	Oxides of Nitrogen (NO <sub>x</sub> )	mg/Nm <sup>3</sup>	294	-	IS 11255 (Part 7): 2005
7	Carbon Monoxide	mg/Nm <sup>3</sup>	17	-	IS 5182 (Part 10): 1999

**END OF REPORT**


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Issue No 03  
Date 05.12.2019.  
Amd 03 Date  
18.07.2023

Reviewed and authorised by  
  
**Kishor Yeole**  
Branch Manager  
Chemical Testing

 **Mahabal Enviro Engineers Pvt. Ltd.**  
PLOT NOS. 13,14,17,18, GRAMPANCHAYAT BOKHARA, CHHINDWARA ROAD, KORADI, NAGPUR, MAHARASHTRA, INDIA  
Phone: 0712-2612162/2612212 email: nagpur@mahabal.com


**TEST REPORT**



 Report No.: ME-0055241203 Date: 07.12.2024  
ULR No.: TC748724000025040F

**Note:**

1. BQL: Below Quantification Limit
2. LOQ: Limit of Quantification
3. #: Limit as per MPCB consent.
4. The result listed refers only to the tested sample(s) and applicable parameter(s).
5. This report is not to be reproduced except in full, without the written approval of the laboratory.
6. Any complaint pertaining to the report can be addressed to mahabalreports@gmail.com

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Issue No 03  
Date 05.12.2019.  
Amd 03 Date  
18.07.2023

Reviewed and authorised by  
  
**Kishor Yeole**  
Branch Manager  
Chemical Testing



# Mahabal Enviro Engineers Pvt. Ltd.

PLOT NOS. 13,14,17,18, GRAMPANCHAYAT BOKHARA, CHHINDWARA ROAD, KORADI, NAGPUR, MAHARASHTRA, INDIA  
Phone: 0712-2612162/2612212 email: nagpur@mahabal.com

## TEST REPORT



Report No.:	ME-0055241203N	Date: 07.12.2024
ULR No.:	-	

Name and Address of Customer	LLOYDS METALS & ENERGY LTD. Plot No. A-1/2, M.I.D.C. Area, Ghugus, Dist: Chandrapur - 442 505.		PO No.: 6800007243 PO Date: 25.06.2024
Sample Description / Type	Stack Emission	Sampling Done by	Laboratory
Sampling Location	Kiln 500 TPD	Sample Quantity / Packing	SO <sub>2</sub> :30 mL X 1 No. PVC Bottle
Date of Sampling	02.12.2024	Date of Receipt of Sample	03.12.2024
Sampling Procedure	As per method reference		
Date of Start of Analysis	03.12.2024	Date of Completion of Analysis	06.12.2024

<b>Stack Details</b>	
Stack Identity	Kiln 500 TPD
Stack attached to	ESP Outlet
Material of construction	RCC
Stack height above ground level (Meter)	60
Stack Diameter (Meter)	3.6
Stack shape at top	Round
Type of fuel	Coal
Fuel Consumption (t/d)	441
Time of Monitoring (h)	10:50 to 11:20

Sr. No.	Parameter	Unit	Result	#Limit	Method Reference
<b>Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Stack Emission)</b>					
1	Sulphur Dioxide (SO <sub>2</sub> )	t/d	2.25	6.24	IS 11255 (Part 2):1985

### END OF REPORT

- Note:**
1. BQL: Below Quantification Limit
  2. LOQ: Limit of Quantification
  3. #. Limit as per MPCB consent.
  4. The result listed refers only to the tested sample(s) and applicable parameter(s).
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18.07.2023

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**Kishor Yeole**  
Branch Manager  
Chemical Testing



# Mahabal Enviro Engineers Pvt. Ltd.

PLOT NOS. 13,14,17,18, GRAMPANCHAYAT BOKHARA, CHHINDWARA ROAD, KORADI, NAGPUR, MAHARASHTRA, INDIA  
Phone: 0712-2612162/2612212 email: nagpur@mahabal.com

## TEST REPORT



Report No.:	ME-0056241203	Date: 07.12.2024
ULR No.:	TC74872400025041F	

Name and Address of Customer	LLOYDS METALS & ENERGY LTD. Plot No. A-1/2, M.I.D.C. Area, Ghugus, Dist: Chandrapur - 442 505.		PO No.: 6800007243 PO Date: 25.06.2024
Sample Description / Type	Stack Emission	Sampling Done by	Laboratory
Sampling Location	100 TPD Kiln I & II	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 CO: Bladder 1 L X 1 No
Date of Sampling	02.12.2024	Date of Receipt of Sample	03.12.2024
Sampling Procedure	As per method reference		
Date of Start of Analysis	03.12.2024	Date of Completion of Analysis	06.12.2024

<b>Stack Details</b>	
Stack Identity	100 TPD Kiln I & II
Stack attached to	ESP Outlet
Material of construction	M.S.
Stack height above ground level (Meter)	55
Stack Diameter (Meter)	1.8
Stack shape at top	Round
Type of fuel	Coal
Fuel Consumption (t/d)	171
Time of Monitoring (h)	11:30 to 12:00

Sr. No.	Parameter	Unit	Result	#Limit	Method Reference
<b>Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Stack Emission)</b>					
1	Flue gas Temperature	°C	120	-	IS 11255 (Part 3):2008
2	Flue gas Velocity	m/s	9.5	-	IS 11255 (Part 3):2008
3	Flue Gas Flow Rate	Nm <sup>3</sup> /h	63060	-	IS 11255 (Part 3):2008
4	Particulate Matter (PM)	mg/Nm <sup>3</sup>	35	50	IS 11255 (Part 1):1985
5	Sulphur Dioxide (SO <sub>2</sub> )	mg/Nm <sup>3</sup>	561	-	IS 11255 (Part 2):1985
6	Oxides of Nitrogen (NO <sub>x</sub> )	mg/Nm <sup>3</sup>	289	-	IS 11255 (Part 7): 2005
7	Carbon Monoxide	mg/Nm <sup>3</sup>	19	-	IS 5182 (Part 10): 1999

### END OF REPORT

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Date 05.12.2019.  
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18.07.2023

Reviewed and  
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**Kishor Yeole**  
Branch Manager  
Chemical Testing







## Mahabal Enviro Engineers Pvt. Ltd.

PLOT NOS. 13,14,17,18, GRAMPANCHAYAT BOKHARA, CHHINDWARA ROAD, KORADI, NAGPUR, MAHARASHTRA, INDIA  
Phone: 0712-2612162/2612212 email: nagpur@mahabal.com

### TEST REPORT



Report No.:	ME-0057241203	Date: 07.12.2024
ULR No.:	TC748724000025042F	

Name and Address of Customer	LLOYDS METALS & ENERGY LTD. Plot No. A-1/2, M.I.D.C. Area, Ghugus, Dist: Chandrapur - 442 505.		PO No.: 6800007243 PO Date: 25.06.2024
Sample Description / Type	Stack Emission	Sampling Done by	Laboratory
Sampling Location	100 TPD Kiln III & IV	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 CO: Bladder 1 L X 1 No
Date of Sampling	02.12.2024	Date of Receipt of Sample	03.12.2024
Sampling Procedure	As per method reference		
Date of Start of Analysis	03.12.2024	Date of Completion of Analysis	06.12.2024

<b>Stack Details</b>	
Stack Identity	100 TPD Kiln III & IV
Stack attached to	ESP Outlet
Material of construction	M.S.
Stack height above ground level (Meter)	55
Stack Diameter (Meter)	1.8
Stack shape at top	Round
Type of fuel	Coal
Fuel Consumption (t/d)	173
Time of Monitoring (h)	12:10 to 12:40

Sr. No.	Parameter	Unit	Result	#Limit	Method Reference
	<b>Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Stack Emission)</b>				
1	Flue gas Temperature	°C	129	-	IS 11255 (Part 3):2008
2	Flue gas Velocity	m/s	9.8	-	IS 11255 (Part 3):2008
3	Flue Gas Flow Rate	Nm <sup>3</sup> /h	63448	-	IS 11255 (Part 3):2008
4	Particulate Matter (PM)	mg/Nm <sup>3</sup>	39	50	IS 11255 (Part 1):1985
5	Sulphur Dioxide (SO <sub>2</sub> )	mg/Nm <sup>3</sup>	577	-	IS 11255 (Part 2):1985
6	Oxides of Nitrogen (NO <sub>x</sub> )	mg/Nm <sup>3</sup>	264	-	IS 11255 (Part 7): 2005
7	Carbon Monoxide	mg/Nm <sup>3</sup>	16	-	IS 5182 (Part 10): 1999

END OF REPORT

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Issue No 03  
Date 05.12.2019.  
Amd 03 Date  
18.07.2023

Reviewed and  
authorised by

Kishor Yeole  
Branch Manager  
Chemical Testing



## Mahabal Enviro Engineers Pvt. Ltd.

PLOT NOS. 13,14,17,18, GRAMPANCHAYAT BOKHARA, CHHINDWARA ROAD, KORADI, NAGPUR, MAHARASHTRA, INDIA  
Phone: 0712-2612162/2612212 email: nagpur@mahabal.com

### TEST REPORT



Report No.:	ME-0056241203N	Date: 07.12.2024
ULR No.:	-	

Name and Address of Customer	LLOYDS METALS & ENERGY LTD. Plot No. A-1/2, M.I.D.C. Area, Ghugus, Dist: Chandrapur - 442 505.		PO No.: 6800007243 PO Date: 25.06.2024
Sample Description / Type	Stack Emission	Sampling Done by	Laboratory
Sampling Location	100 TPD Kiln I & II	Sample Quantity / Packing	SO <sub>2</sub> : 30 mL X 1 No. PVC Bottle
Date of Sampling	02.12.2024	Date of Receipt of Sample	03.12.2024
Sampling Procedure	As per method reference		
Date of Start of Analysis	03.12.2024	Date of Completion of Analysis	06.12.2024

<b>Stack Details</b>	
Stack Identity	100 TPD Kiln I & II
Stack attached to	ESP Outlet
Material of construction	M.S.
Stack height above ground level (Meter)	55
Stack Diameter (Meter)	1.8
Stack shape at top	Round
Type of fuel	Coal
Fuel Consumption (t/d)	171
Time of Monitoring (h)	11:30 to 12:00

Sr. No.	Parameter	Unit	Result	#Limit	Method Reference
	<b>Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Stack Emission)</b>				
1	Sulphur Dioxide (SO <sub>2</sub> )	t/d	0.85	2.52	IS 11255 (Part 2):1985

END OF REPORT

Note: 1. BQL: Below Quantification Limit  
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## Mahabal Enviro Engineers Pvt. Ltd.

PLOT NOS. 13,14,17,18, GRAMPANCHAYAT BOKHARA, CHHINDWARA ROAD, KORADI, NAGPUR, MAHARASHTRA, INDIA  
Phone: 0712-2612162/2612212 email: nagpur@mahabal.com

### TEST REPORT



Report No.:	ME-0057241203N	Date:	07.12.2024
ULR No.:	-		

Name and Address of Customer	LLOYDS METALS & ENERGY LTD. Plot No. A-1/2, M.I.D.C. Area, Ghugus, Dist: Chandrapur – 442 505.		PO No.: 6800007243 PO Date: 25.06.2024
Sample Description / Type	Stack Emission	Sampling Done by	Laboratory
Sampling Location	100 TPD Kiln III & IV	Sample Quantity / Packing	SO <sub>2</sub> : 30 mL X 1 No. PVC Bottle
Date of Sampling	02.12.2024	Date of Receipt of Sample	03.12.2024
Sampling Procedure	As per method reference		
Date of Start of Analysis	03.12.2024	Date of Completion of Analysis	06.12.2024

<b>Stack Details</b>	
Stack Identity	100 TPD Kiln III & IV
Stack attached to	ESP Outlet
Material of construction	M.S.
Stack height above ground level (Meter)	55
Stack Diameter (Meter)	1.8
Stack shape at top	Round
Type of fuel	Coal
Fuel Consumption (t/d)	173
Time of Monitoring (h)	12:10 to 12:40

Sr. No.	Parameter	Unit	Result	#Limit	Method Reference
	<b>Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Stack Emission)</b>				
1	Sulphur Dioxide (SO <sub>2</sub> )	t/d	0.88	2.52	IS 11255 (Part 2):1985

### END OF REPORT

- Note:**
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## Mahabal Enviro Engineers Pvt. Ltd.

PLOT NOS. 13,14,17,18, GRAMPANCHAYAT BOKHARA, CHHINDWARA ROAD, KORADI, NAGPUR, MAHARASHTRA, INDIA  
Phone: 0712-2612162/2612212 email: nagpur@mahabal.com

### TEST REPORT



Report No.:	ME-0219241204	Date:	10.12.2024
ULR No.:	TC748724000025193F		

Name and Address of Customer	LLOYDS METALS & ENERGY LTD. Plot No. A-1/2, M.I.D.C. Area, Ghugus, Dist: Chandrapur – 442 505.		PO No.: 6800007243 PO Date: 25.06.2024
Sample Description / Type	Stack Emission	Sampling Done by	Laboratory
Sampling Location	Power Plant Boiler	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 CO: Bladder 1 L X 1 No
Date of Sampling	03.12.2024	Date of Receipt of Sample	04.12.2024
Sampling Procedure	As per method reference		
Date of Start of Analysis	04.12.2024	Date of Completion of Analysis	07.12.2024

<b>Stack Details</b>	
Stack Identity	Power Plant Boiler
Stack attached to	ESP Outlet (AFBC Boiler 90TPH)
Material of construction	RCC
Stack height above ground level (Meter)	100
Stack Diameter (Meter)	4.9
Stack shape at top	Round
Type of fuel	Coal
Fuel Consumption (t/d)	471
Time of Monitoring (h)	10:30 to 11:00

Sr. No.	Parameter	Unit	Result	#Limit	Method Reference
	<b>Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Stack Emission)</b>				
1	Flue gas Temperature	°C	125	-	IS 11255 (Part 3):2008
2	Flue gas Velocity	m/s	6.0	-	IS 11255 (Part 3):2008
3	Flue Gas Flow Rate	Nm <sup>3</sup> /h	291112	-	IS 11255 (Part 3):2008
4	Particulate Matter (PM)	mg/Nm <sup>3</sup>	33	50	IS 11255 (Part 1):1985
5	Sulphur Dioxide (SO <sub>2</sub> )	mg/Nm <sup>3</sup>	343	-	IS 11255 (Part 2):1985
6	Oxides of Nitrogen (NO <sub>x</sub> )	mg/Nm <sup>3</sup>	252	-	IS 11255 (Part 7): 2005
7	Carbon Monoxide	mg/Nm <sup>3</sup>	14	-	IS 5182 (Part 10): 1999

### END OF REPORT

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Chemical Testing







# Mahabal Enviro Engineers Pvt. Ltd.

PLOT NOS. 13,14,17,18, GRAMPANCHAYAT BOKHARA, CHHINDWARA ROAD, KORADI, NAGPUR, MAHARASHTRA, INDIA  
Phone: 0712-2612162/2612212 email: nagpur@mahabal.com

## TEST REPORT



Report No.:	ME-0219241204N	Date:	10.12.2024
ULR No.:	-		

Name and Address of Customer	LLOYDS METALS & ENERGY LTD. Plot No. A-1/2, M.I.D.C. Area, Ghugus, Dist: Chandrapur – 442 505.		PO No.: 6800007243 PO Date: 25.06.2024
Sample Description / Type	Stack Emission	Sampling Done by	Laboratory
Sampling Location	Power Plant Boiler	Sample Quantity / Packing	SO <sub>2</sub> 30 mL X 1 No. PVC Bottle
Date of Sampling	03.12.2024	Date of Receipt of Sample	04.12.2024
Sampling Procedure	As per method reference		
Date of Start of Analysis	04.12.2024	Date of Completion of Analysis	07.12.2024

<b>Stack Details</b>	
Stack Identity	Power Plant Boiler
Stack attached to	ESP Outlet (AFBC Boiler 90TPH)
Material of construction	RCC
Stack height above ground level (Meter)	100
Stack Diameter (Meter)	4.9
Stack shape at top	Round
Type of fuel	Coal
Fuel Consumption (t/d)	471
Time of Monitoring (h)	10:30 to 11:00

Sr. No.	Parameter	Unit	Result	#Limit	Method Reference
	<b>Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Stack Emission)</b>				
1	Sulphur Dioxide (SO <sub>2</sub> )	t/d	2.40	3.4	IS 11255 (Part 2):1985

## END OF REPORT

- Note:**
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Branch Manager  
Chemical Testing



# Mahabal Enviro Engineers Pvt. Ltd.

PLOT NOS. 13,14,17,18, GRAMPANCHAYAT BOKHARA, CHHINDWARA ROAD, KORADI, NAGPUR, MAHARASHTRA, INDIA  
Phone: 0712-2612162/2612212 email: nagpur@mahabal.com

## TEST REPORT



Report No.:	ME-0058241203	Date:	07.12.2024
ULR No.:	TC748724000025043F		

Name and Address of Customer	LLOYDS METALS & ENERGY LTD.		PO No.: 6800007243
	Plot No. A-1/2, M.I.D.C. Area, Ghugus, Dist: Chandrapur – 442 505.		PO Date: 25.06.2024
Sample Description / Type	Stack Emission	Sampling Done by	Laboratory
Sampling Location	Dedusting -6	Sample Quantity / Packing	Thimble: 1 X 1 No.
Date of Sampling	02.12.2024	Date of Receipt of Sample	03.12.2024
Sampling Procedure	As per method reference		
Date of Start of Analysis	04.12.2024	Date of Completion of Analysis	05.12.2024

<b>Stack Details</b>	
Stack Identity	Dedusting -6
Stack attached to	Lump Iron Ore Crusher House
Material of construction	M.S.
Stack height above ground level (Meter)	35
Stack Diameter (Meter)	0.61
Stack shape at top	Round
Type of fuel	-
Fuel Consumption (L/h)	-
Time of Monitoring (h)	12:50 to 13:20

Sr. No.	Parameter	Unit	Result	#Limit	Method Reference
	<b>Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Stack Emission)</b>				
1	Flue gas Temperature	°C	61	-	IS 11255 (Part 3):2008
2	Flue gas Velocity	m/s	8.5	-	IS 11255 (Part 3):2008
3	Flue Gas Flow Rate	Nm <sup>3</sup> /h	7711	-	IS 11255 (Part 3):2008
4	Particulate Matter (PM)	mg/Nm <sup>3</sup>	39	50	IS 11255 (Part 1):1985

## END OF REPORT

- Note:**
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  2. LOQ: Limit of Quantification
  3. #: Limit as per MPCB consent.
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Branch Manager  
Chemical Testing





## Mahabal Enviro Engineers Pvt. Ltd.

PLOT NOS. 13,14,17,18, GRAMPANCHAYAT BOKHARA, CHHINDWARA ROAD, KORADI, NAGPUR, MAHARASHTRA, INDIA  
Phone: 0712-2612162/2612212 email: nagpur@mahabal.com

### TEST REPORT



Report No.:	ME-0061241203	Date:	07.12.2024
ULR No.:	TC748724000025046F		

Name and Address of Customer	LLOYDS METALS & ENERGY LTD. Plot No. A-1/2, M.I.D.C. Area, Ghugus, Dist: Chandrapur – 442 505.		PO No.: 6800007243 PO Date: 25.06.2024
Sample Description / Type	Ambient Air	Sampling Done by	Laboratory
Sampling Location	Near Old Admin Building	Sample Quantity / Packing	PM <sub>10</sub> : Filter paper: 1 X 3 No. SO <sub>2</sub> : 30 mL X 6 No. PVC Bottle NO <sub>2</sub> : 30 mL X 6 No. PVC Bottle
Date of Sampling	02.12.2024 to 03.12.2024	Date of Receipt of Sample	03.12.2024
Sampling Procedure	As per method reference		
Date of Start of Analysis	03.12.2024	Date of Completion of Analysis	04.12.2024

Sr. No.	Parameter	Unit	Result	#NAAQS	Method Reference
<b>Discipline: Chemical Testing: Product Group: Atmospheric Pollution (Ambient Air)</b>					
1	Sulphur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	11.4	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.1-6
2	Nitrogen Dioxide (NO <sub>2</sub> )	µg/m <sup>3</sup>	14.5	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.7-10
3	Particulate Matter (size less than 10µm) or PM <sub>10</sub>	µg/m <sup>3</sup>	67	100	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.11-14

### END OF REPORT

- Note:**
1. BQL: Below Quantification Limit.
  2. LOQ: Limit of Quantification.
  3. Duration of Sampling: 24 h
  4. TWA: Time Weighted Average
  5. NAAQS: National Ambient Air Quality Standard
  6. # - NAAQS specified as: 24 h. TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM<sub>10</sub>
  7. The result listed refers only to the tested sample(s) and applicable parameter(s).
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**Kishor Yeole**  
Branch Manager  
Chemical Testing



## Mahabal Enviro Engineers Pvt. Ltd.

PLOT NOS. 13,14,17,18, GRAMPANCHAYAT BOKHARA, CHHINDWARA ROAD, KORADI, NAGPUR, MAHARASHTRA, INDIA  
Phone: 0712-2612162/2612212 email: nagpur@mahabal.com

### TEST REPORT



Report No.:	ME-0060241203	Date:	07.12.2024
ULR No.:	TC748724000025045F		

Name and Address of Customer	LLOYDS METALS & ENERGY LTD. Plot No. A-1/2, M.I.D.C. Area, Ghugus, Dist: Chandrapur - 442 505.		PO No.: 6800007243 PO Date: 25.06.2024
Sample Description / Type	Ambient Air	Sampling Done by	Laboratory
Sampling Location	Near Welfare Building	Sample Quantity / Packing	PM <sub>10</sub> : Filter paper: 1 X 3 No. SO <sub>2</sub> : 30 mL X 6 No. PVC Bottle NO <sub>2</sub> : 30 mL X 6 No. PVC Bottle
Date of Sampling	02.12.2024 to 03.12.2024	Date of Receipt of Sample	03.12.2024
Sampling Procedure	As per method reference		
Date of Start of Analysis	03.12.2024	Date of Completion of Analysis	05.12.2024

Sr. No.	Parameter	Unit	Result	#NAAQS	Method Reference
<b>Discipline: Chemical Testing: Product Group: Atmospheric Pollution (Ambient Air)</b>					
1	Sulphur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	13.8	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.1-6
2	Nitrogen Dioxide (NO <sub>2</sub> )	µg/m <sup>3</sup>	15.7	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.7-10
3	Particulate Matter (size less than 10µm) or PM <sub>10</sub>	µg/m <sup>3</sup>	74	100	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.11-14

### END OF REPORT

- Note:**
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  3. Duration of Sampling: 24 h
  4. TWA: Time Weighted Average
  5. NAAQS: National Ambient Air Quality Standard
  6. # - NAAQS specified as: 24 h. TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM<sub>10</sub>
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Branch Manager  
Chemical Testing



HAZARDOUS WASTE (FORM IV)



MAHARASHTRA

Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

Form 4

See rules 6(5),13(8),16(6) and 20(2) of Hazardous and other wastes 2016

FORM FOR FILING ANNUAL RETURNS

[ To be submitted to state pollution control board/pollution control committee by 30th June of every year for the preceeding period April to march]

Unique Application Number:  
MPCB-HW\_ANNUAL\_RETURN-0000047466

Submitted On:  
26-06-2024

Industry Type :  
Generator

Submitted for Year:  
2024

1. Name of the generator/operator of facility  
LLOYDS METALS & ENERGY LTD

Address of the unit/facility  
Plot No.A-01 & A-02, MIDC Industrial Area

1b. Authorization Number  
MPCBCONSENT- 0000183257/CO/2312002255

Date of issue  
Dec 23, 2023

Date of validity of consent  
Dec 31, 2027

2. Name of the authorised person  
Sanjay Kumar - Unit Head

Full address of authorised person  
Plot No.A-01 & A-02, MIDC Industrial Area

Telephone  
8411965324

Fax  
07172-285003

Email  
vipinraikwar@lloyds.in

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

Product Type *	Product Name *	Consented Quantity	Actual Quantity	UOM
Iron & Steel	Sponge Iron (DRI)	324000.0000	230947	MT/A
Power Generating plants (excluding D.G Sets)	Power Generation (WHRB)	25.0000	24.90	MW

PART A: To be filled by hazardous waste generators

1. Total Quantity of waste generated category wise

Type of hazardous waste	Wate Name	Consented Quantity	Quantity	UOM
5.1 Used or spent oil	Used Spent Oil	3.650	1.135	KL/Anum

2. Quantity dispatched category wise.

Type of Waste	Quantity of waste	UOM	Dispatched to	Facility Name
	0	KL/Anum	0	NA

3. Quantity Utilised in-house,if any

Type of Waste	Name of Waste	Quantity of Waste	UOM
	NA	0	KL/Anum

4. Quantity in storage at the end of the year

Type of Waste	Name of Waste	Quantity of Waste	UOM
	NA	0	KL/Anum

5. Quantity disposed in landfills as such and after treatment

Type	Quantity	UOM
Direct landfilling	NA	KL/Anum
Landfill after treatment	NA	KL/Anum

6. Quantity incinerated (if applicable)

NA

UOM  
KL/Anum

Personal Details

Place  
Ghugus

Date  
2024-06-26

Designation  
Unit Head



# HAZARDOUS WASTE MANAGEMENT MEMBERSHIP CERTIFICATE



## MEMBERSHIP CERTIFICATE

*We Embrace Nature*

December 18, 2024

### MAHARASHTRA

ENVIRO POWER LIMITED

(NAGPUR UNIT)

CHW-01, Butibori MIDC, Mandwa, Taluka - Hingna, Dist. Nagpur

Common Hazardous Waste Treatment Storage & Disposal Facility (CHWTSDF)

This is to certify that M/s. Lloyds Metals & Energy Ltd (GHUGUS)

Address: A 1 - 2, MIDC, GHUGUS 442505, CHANDRAPUR, MAHARASHTRA.

is a member of (CHWTSDF) set up by "Maharashtra Enviro Power Limited (Nagpur Unit)". at CHW - 01, Village - Mandwa, MIDC Butibori, Dist. Nagpur in Memorandum of Understanding with Maharashtra Industrial Development Corporation ( MIDC ) & Maharashtra Pollution Control Board (MPCB).

Certificate valid from **November 1, 2024** up to **October 31, 2029**

Certificate No. : MEPLNU/MEMB.CERT./ **33007484**

For Maharashtra Enviro Power Limited,

  
Unit Head



AN ISO CERTIFIED COMPANY  
ISO 9001 : 2008 49121 / A / 0001 / UK / En  
ISO 14001 : 2004 49121 / B / 0001 / UK / En  
ISO 45001 : 2018 49121 / D / 0001 / UK / En

CIN-U 40105 MH 2005 PLC 150780  
Site Off : CHW-01, Mandwa, MIDC, Butibori, Nagpur - 441122. Ph. : 9923596274  
email : meplnu.mkt@smsl.co.in  
website : www.smepl.com | www.smsl.co.in | www.smevocare.co.in  
Corporate Office : 20, I.T. Park Parsodi, Nagpur - 440 022, Maharashtra, (India)  
Ph. 0712-7125000, Fax : 0712-7125000 Web : www.smsl.co.in  
Reg. Office : 267, Ganesh Phadanavis Bhavan, Near Triangular Park Dharampeth,  
Nagpur-440010.

**MAHARASHTRA**  
**ENVIRO POWER LIMITED**  
(NAGPUR UNIT)

(Common Hazardous Waste Transport Storage and Disposal Facility)





## ENVIRONMENT STATEMENT (FORM V)

## Annex-D



**Maharashtra Pollution Control Board**

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

**FORM V**

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2024

Unique Application Number

MPCB-ENVIRONMENT\_STATEMENT-0000071955

Submitted Date

25-09-2024

**PART A**

Company Information

**Company Name**

Lloyds Metals and Energy Limited

**Application UAN number**

MPCB-CONSENT- 0000183257/CO/2312002255

**Address**

MIDC Industrial Area

**Plot no**

A-01 and A-02

**Taluka**

Chandrapur

**Village**

Ghugus

**Capital Investment (In lakhs)**

803.86

**Scale**

LSI

**City**

Ghugus

**Pincode**

442505

**Person Name**

YGS Prasad

**Designation**

Unit Head

**Telephone Number**

8411965324

**Fax Number**

07172285003

**Email**

vipinraikwar@lloyds.in

**Region**

SRO-Chandrapur

**Industry Category**

Red

**Industry Type**

R53 Iron & Steel (involving processing from ore/ integrated steel plants) and or Sponge Iron units

**Last Environmental statement submitted online**

yes

**Consent Number**

MPCB-CONSENT- 0000183257/CO/2312002255

**Consent Issue Date**

2023-12-23

**Consent Valid Upto**

2027-12-31

**Establishment Year**

2006

**Date of last environment statement submitted**

Jan 1 1900 12:00:00:000AM

**Industry Category Primary (STC Code) & Secondary (STC Code)**

Product Information

**Product Name**

Sponge Iron (DRI)

**Consent Quantity**

324000

**Actual Quantity**

230947

**UOM**

MT/A

Power Generation (WHRB)

25

11.04

Mwh

Char

48000

31043

MT/A

Washed Coal

472500

40893

MT/A

Unwashed Coal

159375

20740

MT/A

Low Grade Coal

15000

0

MT/A

By-product Information

**By Product Name**

NA

**Consent Quantity**

00

**Actual Quantity**

0

**UOM**

MT/A

**Part-B (Water & Raw Material Consumption)**

1) Water Consumption in m3/day

**Water Consumption for Process**

**Consent Quantity in m3/day**

900.00

**Actual Quantity in m3/day**

865.00

**Cooling**

5665.00

2240.00

**Domestic**

75.00

70.00

**All others**

0.00

0.00

**Total**

6640.00

3175.00

2) Effluent Generation in CMD / MLD

**Particulars**

**Consent Quantity**

745

**Actual Quantity**

0

**UOM**

CMD

Trade Effluent

Domestic Effluent

55

0

CMD

2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

**Name of Products (Production)**

**During the Previous financial Year**

0

**During the current financial year**

0

**UOM**

CMD

NA

3) Raw Material Consumption (Consumption of raw material per unit of product)

**Name of Raw Materials**

**During the Previous financial Year**

1.85

**During the current financial year**

1.706

**UOM**

Ton/Ton

Iron Ore

Coal

1.594

1.131

Ton/Ton

Dolomite

0.160

0.099

Ton/Ton

4) Fuel Consumption

**Fuel Name**

COAL

**Consent quantity**

560

**Actual Quantity**

544.96

**UOM**

MT/A

LDO

146

140

KL/A

HSD

109.5

108.5

KL/A

**Part-C**

Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

[A] Water

**Pollutants Detail**

**Quantity of Pollutants discharged (KL/day)**

**Quantity**

0

**Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour**

**Concentration**

0

**Percentage of variation from prescribed standards with reasons**

**%variation**

0

**Standard**

0

**Reason**

0

[B] Air (Stack)

<b>Pollutants Detail</b>	<b>Quantity of Pollutants discharged (KL/day)</b>	<b>Concentration of Pollutants discharged(Mg/NM3)</b>	<b>Percentage of variation from prescribed standards with reasons</b>		
	<b>Quantity</b>	<b>Concentration</b>	<b>%variation</b>	<b>Standard</b>	<b>Reason</b>
Particulate Matter-Stack-01 (500TPD)	62.67	34.82	27.85	50	In Limit
Particulate Matter-Stack-02 (100TPD Kiln 01 & 02)	24.27	31.60	-7.33	50	In Limit
Particulate Matter-Stack-03 (100TPD Kiln 03 & 04)	33.08	32.82	0.26	50	In Limit
Particulate Matter-Stack-04 (AFBC Boiler)	66.26	33.67	32.59	50	In Limit
Particulate Matter- (DE-06)	11.62	22.00	-10.38	50	In Limit
Particulate Matter- (DE-07)	30.24	22.50	7.74	50	In Limit
Particulate Matter- (DE-08)	18.30	42.36	-24.06	50	In Limit
Particulate Matter- (DE-11)	20.26	21.10	-0.84	50	In Limit
Particulate Matter- (DE-12)	6.75	23.45	-16.70	50	In Limit
Particulate Matter- (DE-13)	13.31	20.55	-7.23	50	In Limit
Particulate Matter- (DE-14)	10.39	21.64	-11.25	50	In Limit

  
**Part-D**
  
**HAZARDOUS WASTES**
  
**1) From Process**

<b>Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
5.1 Used or spent oil	1.89	1.135	KL/A

  
**2) From Pollution Control Facilities**

<b>Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
0	0	0	KL/A

  
**Part-E**
  
**SOLID WASTES**
  
**1) From Process**

<b>Non Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
Bottom Ash	0000	0000	MT/A
Accretion	2200	2100	MT/A
Coal Reject/Middling & Slurry	2340	9200	MT/A

  
**2) From Pollution Control Facilities**

<b>Non Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
Fly Ash	38623	21333	MT/A
DE Dusting system Dust	07426	07200	MT/A

  
**3) Quantity Recycled or Re-utilized within the unit**

<b>Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
0	0	0	MT/A

<b>Part-F</b>			
<i>Please specify the characteristics(in terms of concentration and quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.</i>			
<b>1) Hazardous Waste</b>			
<b>Type of Hazardous Waste Generated</b>	<b>Qty of Hazardous Waste</b>	<b>UOM</b>	<b>Concentration of Hazardous Waste</b>
5.1 Used or spent oil	1.135	KL/A	Reused in Kiln for Firing
<b>2) Solid Waste</b>			
<b>Type of Solid Waste Generated</b>	<b>Qty of Solid Waste</b>	<b>UOM</b>	<b>Concentration of Solid Waste</b>
Fly Ash	21333	MT/A	Brick Manufacturing and Land Filling
Accretion	02200	MT/A	Landfill
Bottom Ash	00000	MT/A	Brick Manufacturing and Land Filling
Dedusting System Dust	7200	MT/A	Brick Manufacturing
Coal Reject/Middling & Slurry	9200	MT/A	Sold to Third Party
<b>Part-G</b>			
<i>Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.</i>			
<b>Description</b>	<b>Reduction in Water Consumption (M3/day)</b>	<b>Reduction in Fuel &amp; Solvent Consumption (KL/day)</b>	<b>Reduction in Raw Material (Kg)</b>
Utilisation of Cooling Tower	0	0	0
Blow down water for spraying at Plant Roads.			
<b>Reduction in Power Consumption (KWH)</b>			
<b>Capital Investment(in Lacs)</b>			
<b>Reduction in Maintenance(in Lacs)</b>			
<b>Part-H</b>			
<i>Additional measures/investment proposal for environmental protection abatement of pollution, prevention of pollution.</i>			
<b>[A] Investment made during the period of Environmental Statement</b>			
<b>Detail of measures for Environmental Protection</b>		<b>Environmental Protection Measures</b>	<b>Capital Investment (Lacks)</b>
500TPD Kiln Maintenance & Cooler Shell Replacement		2023-2024	150
Bag Filter Line Modification (DE-06,DE-07,DE-11 & DE-12)		2023-2024	45
New 100TPD Cooling Tower		2023-2024	45
500TPD ESP Internals and Duct Replacement Work		2023-2024	45
Water Treatment Plant		2023-2024	100
<b>[B] Investment Proposed for next Year</b>			
<b>Detail of measures for Environmental Protection</b>		<b>Environmental Protection Measures</b>	<b>Capital Investment (Lacks)</b>
Ash Conveying Pipe Line Replacement		2024-2025	173
Dedusting Daybin, Weigh Bridge		2024-2025	66
Dust suppression system at 100TPD & 500TPD dust & oversize chute		2024-2025	30
Dust suppression system at coal, iron & CHP circuit		2024-2025	5
PIPE LINE LAYING FOR TREE PLANTATION-R1		2024-2025	5.39

















## WHEEL WASHER

Annex-G



Entry



Exit



ZLD PLANT



Annex-H



COVERED SHED



Annex-





RAIN WATER HARVESTING PIT





## ANALYSIS OF WASHED COAL AND RAW COAL (Heavy Metal)

Annex-K



## Mahabal Enviro Engineers Pvt. Ltd.

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Phone: 0712-2612162/2612212 email: nagpur@mahabal.com



### TEST REPORT

Report No.:	ME-1482240821N	Date:	11.09.2024
ULR No.:	-		

Name and Address of Customer	LLOYDS METALS & ENERGY LTD. Plot No. A-1/2, M.I.D.C. Area, Ghugus, Dist: Chandrapur – 442 505.		PO No.: 6800007505 PO Date: 09/08/2024
Sample Description / Type	Coal	Sampling Done by	Customer
Sampling Location	Wash Coal	Sample Quantity / Packing	2 kg X 1 No. Polythene Bag 250g X 1 No. Polythene Bag
Date of Sampling	-	Date of Receipt of Sample	21.08.2024
Sampling Procedure	Sample tested as received		
Date of Start of Analysis	28.08.2024	Date of Completion of Analysis	05.09.2024

Sr. No.	Parameter	Unit	Result	Method Reference
<b>Discipline: Chemical Testing; Product Group: Solid Fuel (Coal)</b>				
1.	Loss on ignition	%	0.633	IS 10158: 1982
2.	Aluminium Oxide (as Al <sub>2</sub> O <sub>3</sub> )	%	28.0	IS 1355-1984
3.	Silicon Dioxide (as SiO <sub>2</sub> )	%	59.2	IS 1355-1984
4.	Iron Oxide (as Fe <sub>2</sub> O <sub>3</sub> )	%	5.58	IS 1355-1984
5.	Potassium Oxide (as K <sub>2</sub> O)	%	0.198	IS 1355-1984
6.	Sodium Oxide (as Na <sub>2</sub> O)	%	0.056	IS 1355-1984
7.	Calcium Oxide (as CaO)	%	3.21	IS 1355-1984
8.	Magnesium Oxide (as MgO)	%	0.704	IS 1355-1984
9.	Phosphorous Pentoxide (as P <sub>2</sub> O <sub>5</sub> )	%	0.186	IS 1355-1984
10.	Manganese Oxide (as Mn <sub>3</sub> O <sub>4</sub> )	%	0.320	IS 1355-1984
11.	Sulphur Trioxide (as SO <sub>3</sub> )	%	0.466	IS 1355-1984
12.	Titanium Dioxide (as TiO <sub>2</sub> )	%	1.30	IS 1355-1984
13.	Barium Oxide Dioxide (as BaO)	%	0.078	IS 1355-1984

### END OF REPORT

**Note:** 1. BQL: Below Quantification Limit; LOQ: Limit of Quantification  
2. All results expressed as % by weight of Ash.  
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Date 05.12.2019.  
Amd 03 Date  
18.07.2023

Reviewed and  
authorised by

Harish Mendhi  
Technical Manager  
Chemical Testing



## Mahabal Enviro Engineers Pvt. Ltd.

PLOT NOS. 13,14,17,18, GRAMPANCHAYAT BOKHARA, CHHINDWARA ROAD, KORADI, NAGPUR, MAHARASHTRA, INDIA  
Phone: 0712-2612162/2612212 email: nagpur@mahabal.com



### TEST REPORT

Report No.:	ME-1481240821N	Date:	11.09.2024
ULR No.:	-		

Name and Address of Customer	LLOYDS METALS & ENERGY LTD. Plot No. A-1/2, M.I.D.C. Area, Ghugus, Dist: Chandrapur – 442 505.		PO No.: 6800007505 PO Date: 09/08/2024
Sample Description / Type	Coal	Sampling Done by	Customer
Sampling Location	Raw Coal	Sample Quantity / Packing	2 kg X 1 No. Polythene Bag 250g X 1 No. Polythene Bag
Date of Sampling	-	Date of Receipt of Sample	21.08.2024
Sampling Procedure	Sample tested as received		
Date of Start of Analysis	28.08.2024	Date of Completion of Analysis	05.09.2024

Sr. No.	Parameter	Unit	Result	Method Reference
<b>Discipline: Chemical Testing; Product Group: Solid Fuel (Coal)</b>				
1.	Loss on ignition	%	0.888	IS 10158: 1982
2.	Aluminium Oxide (as Al <sub>2</sub> O <sub>3</sub> )	%	27.3	IS 1355-1984
3.	Silicon Dioxide (as SiO <sub>2</sub> )	%	60.3	IS 1355-1984
4.	Iron Oxide (as Fe <sub>2</sub> O <sub>3</sub> )	%	5.25	IS 1355-1984
5.	Potassium Oxide (as K <sub>2</sub> O)	%	0.104	IS 1355-1984
6.	Sodium Oxide (as Na <sub>2</sub> O)	%	0.030	IS 1355-1984
7.	Calcium Oxide (as CaO)	%	2.66	IS 1355-1984
8.	Magnesium Oxide (as MgO)	%	0.603	IS 1355-1984
9.	Phosphorous Pentoxide (as P <sub>2</sub> O <sub>5</sub> )	%	0.257	IS 1355-1984
10.	Manganese Oxide (as Mn <sub>3</sub> O <sub>4</sub> )	%	0.457	IS 1355-1984
11.	Sulphur Trioxide (as SO <sub>3</sub> )	%	0.514	IS 1355-1984
12.	Titanium Dioxide (as TiO <sub>2</sub> )	%	1.44	IS 1355-1984
13.	Barium Oxide Dioxide (as BaO)	%	0.111	IS 1355-1984

### END OF REPORT

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Technical Manager  
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# Mahabal Enviro Engineers Pvt. Ltd.

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Phone: 0712-2612162/2612212 email: nagpur@mahabal.com

## TEST REPORT



Report No.:	ME-1482240821	Date:	11.09.2024
ULR No.:	TC748724000017242F		

Name and Address of Customer	LLOYDS METALS & ENERGY LTD. Plot No. A-1/2, M.I.D.C. Area, Ghugus, Dist: Chandrapur – 442 505.		PO No.: 6800007505 PO Date: 09/08/2024
Sample Description / Type	Coal	Sampling Done by	Customer
Sampling Location	Wash Coal	Sample Quantity / Packing	2 kg X 1 No. Polythene Bag 250g X 1 No. Polythene Bag
Date of Sampling	-	Date of Receipt of Sample	21.08.2024
Sampling Procedure	Sample tested as received		
Date of Start of Analysis	28.08.2024	Date of Completion of Analysis	10.09.2024

Sr. No.	Parameter	Unit	Result	Method Reference
<b>Discipline: Chemical Testing; Product Group: Solid Fuel (Coal)</b>				
1.	#Ash Fusion Temperature (AFT)			ASTM D 1857/D1857M-2018
	<b>Oxidising Atmosphere</b>			
	DT	°C	1352	
	ST	°C	1426	
	HT	°C	1465	
	FT	°C	1492	
	<b>Reducing Atmosphere</b>			
	DT	°C	1413	
	ST	°C	1468	
	HT	°C	1471	
	FT	°C	>1500	
2.	Hardgrove Grindability Index (HGI)	-	54	ASTM D409 / D409 M: 2016
3.	<b>Proximate &amp; Ultimate Analysis (on ADB)</b>			
	Moisture (Inherent)	%	9.15	IS 1350 (Part I):1984
	Ash	%	32.04	IS 1350 (Part I):1984
	Volatile Matter	%	22.63	IS 1350 (Part I):1984
	Fixed Carbon	%	36.18	IS 1350 (Part I):1984
	Gross Calorific Value	kcal/kg	4347	IS 1350 (Part II):2022
	Carbon	%	46.25	ASTM D 5373: 2021

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Technical Manager  
Chemical Testing



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PLOT NOS. 13,14,17,18, GRAMPANCHAYAT BOKHARA, CHHINDWARA ROAD, KORADI, NAGPUR, MAHARASHTRA, INDIA  
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## TEST REPORT



Report No.:	ME-1482240821	Date:	11.09.2024
ULR No.:	TC748724000017242F		

Sr. No.	Parameter	Unit	Result	Method Reference
	Hydrogen	%	4.67	ASTM D 5373: 2021
	Nitrogen	%	1.05	ASTM D 5373: 2021
	Total Sulphur	%	0.82	ASTM D 4239: 2018
	Oxygen	%	15.17	ASTM D 3176: 2015
4.	<b>Proximate &amp; Ultimate Analysis (on ARB)</b>			
	Total Moisture	%	15.22	IS 1350 (Part I): 1984
	Ash	%	29.90	IS 1350 (Part I): 1984
	Volatile Matter	%	21.12	IS 1350 (Part I): 1984
	Fixed Carbon	%	33.76	IS 1350 (Part I): 1984
	Gross Calorific Value	kcal/kg	4057	IS 1350 (Part II): 2022
	Carbon	%	43.16	ASTM D 5373: 2021
	Hydrogen	%	5.10	ASTM D 5373: 2021
	Nitrogen	%	0.98	ASTM D 5373: 2021
	Total Sulphur	%	0.77	ASTM D 4239: 2018
	Oxygen	%	20.09	ASTM D 3176: 2015

## END OF REPORT

- Note:**
1. BQL: Below Quantification Limit
  2. LOQ: Limit of Quantification.
  3. ADB: Air Dry Basis; ARB: As Received Basis.
  4. Parameters marked with # indicates Subcontracted testing
  5. Results of Hydrogen and Oxygen Include Hydrogen and Oxygen in moisture.
  6. The result listed refers only to the tested sample(s) and applicable parameter(s).
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Technical Manager  
Chemical Testing



# BIOGAS GENERATED BY CANTEEN KITCHEN WASTE













