



SMEL/ENV/SPCB/2024/30

Date: 28.09.2024

The Member Secretary,  
Odisha State Pollution Control Board,  
Parivesh Bhavan,  
A/118, Nilakantha Nagar  
Unit - VIII, Bhubaneswar  
Odisha - 751012

Subject: Submission of Environmental Statement report for the year 2023 - 24.

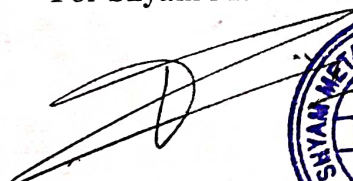
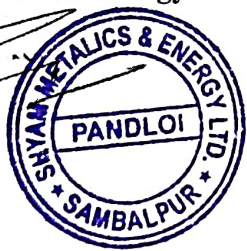
Dear Sir,

With reference to the subject cited above, we are submitting herewith the Environmental Statement for the Financial Year 2023 - 24.

This is for your kind information and needful action.

Thanking you  
Yours faithfully

For Shyam Metalics & Energy Ltd.

  
(DIRECTOR) 

Encl: As above

CC to: <sup>OUR BRANDS</sup> The Regional Officer, State Pollution Control Board, Sambalpur, Odisha.



**SHYAM METALICS AND ENERGY LIMITED**

REG. OFFICE: Trinity Tower, 7th Floor, 83, Topsia Road, Kolkata - 700 046, West Bengal, CIN: L40109WB2002PLC095491 GSTIN: 19AAHCS5842A2ZD  
SALES & MARKETING OFFICE: Viswakarma Building, North West Block, 1st, 2nd & 3rd Floor, 86C, Topsia Road, Kolkata - 700 046  
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## ENVIRONMENTAL STATEMENTS

### FORM – V

(See Rule 14)

The ministry of Environment and Forest vide its notification dated March, 1992 directed all industries which need to have consent under water (Prevention and Control of Pollution) 1974 and Air (Prevention and Control of Pollution) 1981 to file the Environmental Statement every year. This is to be filed for the period ending March by September Every year. The format for the same is as follows:

Environmental Statement for the financial year ending the 31<sup>st</sup> March 2024, on Dt. 28.09.2024

#### PART – A

- (i) Name and address of the owner / occupier of the industry operation or process. **M/s Shyam Metalics and Energy Ltd. Pondloi, Sambalpur.**
- (ii) Industry category Primary – (STC code) **Secondary – (SIC Code)**
- (iii) Production capacity – Units.  
**Integrated Steel Plant 1.44 Millon Tons Per Annum.**
- (iv) Year of establishment. **01.09.2006**
- (v) Date of the last environmental statement submitted. **28.09.2023**

#### PART – B

- (i) Water and Raw Materials Consumption
  - Process
  - Cooling
  - Domestic

**SEPARATE SHEET ATTACHED AS ANNEXURE – I**



Name of Product	Process Water Consumption Per Unit of Product Output <i>SEPARATE SHEET ATTACHED AS ANNEXURE - II</i>		
	During the Previous Financial Year		During the Current Financial Year
1	2		3
(1)			
(2)			
(3)			
(ii)	Raw Materials Consumption <i>SEPARATE SHEET ATTACHED AS ANNEXURE - III</i>		
Name of Raw Materials	Name of Products	Consumption of Raw Materials Per Unit of Output	
		During the previous financial year	During the Current Financial Year

Polluting industry may use codes if disclosing details of raw materials would violate Contractual obligations, otherwise all industries have to name the raw material used.

#### PART - C

Discharged to environment / unit of output specified if the consent issued.

Pollutants		Quantity of Pollutants Discharged (Mass/Day)	Concentration of Pollution In Discharges (Mass / Volume)	Preventive of Variation From Prescribed Standard With
(a)	Water	NIL	NIL	NIL
(b)	Air	NIL	NIL	NIL

#### PART - D

##### HAZARDOUS WASTAGES

(As specified under Hazardous Wastes /Management and Handling Rules, 1989)

Hazardous Waste	Total Quantity (Kg)	
	During the Previous Financial Year	During the Current Financial Year
(a) From Process		
(b) From Pollution Control Facilities		

*SEPARATE SHEET ATTACHED AS ANNEXURE - IV*

**PART –E**

**Solid Waste**

		Total Quantity	
		During the Previous Financial Year	During the Current Financial Year
(a)	From Process		
(b)	From Pollution Control Facility		
(c)	(1) Quantity recycled or reutilized within the unit		
	(2) Sold		
	(3) disposed		

**SEPARATE SHEET ATTACHED AS ANNEXURE – V**

**PART – F**

Please specify the characterization (in terms of composition and quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both the categories of Wastes.

- Fly ash- dry disposal system has been adopted. All the fly ash generated after making the fly ash bricks for factory internal use are being used in Low lying area filling.
- SMS Solid Waste – SMS solid waste are being used after removal of Iron particles in the Road Making / Raw material yard bed preparation.
- Ferro Solid Waste- Ferro Slags are being reused in the furnaces after removal of unused part. Waste slags are dumped into the identified dumping yard and used in road making.

**PART – G**

In respect of the pollution abatement measures taken up on conservation of natural Resources and on the cost of production.

- All the waste like char generated from DRI Kiln, rejects from Coal Washery like Middling and belt Press are being reused in AFBC Boiler as fuels.
- Effluent is treated in ETP of 7000 KLD capacity and treated waste water is reused in the process.

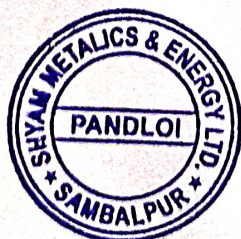
**PART – H**

Additional measures/ investment proposal for environment protection including abatement of pollution prevention of pollution.

- Total 18062 nos. of saplings have been planted inside the plant premises during the year 2023-24.

**Part – I**

Any other particular for improving the quality of the environment.

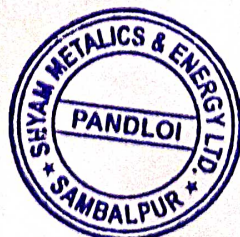




## M/S SHYAM METALICS AND ENERGY LTD.SAMBALPUR

Month Wise Water Consumption Details For The Year 2023-24

MONTH	TOTAL QUANTITY (M <sup>3</sup> /MONTH)	PROCESS WATER		COOLING WATER		DRINKING WATER	
		M <sup>3</sup> /MONTH	M <sup>3</sup> /DAY	M <sup>3</sup> /MONTH	M <sup>3</sup> /DAY	M <sup>3</sup> /MONTH	M <sup>3</sup> /DAY
APR-23	686550	164772	5492.4	514912.5	17163.75	6865.5	228.85
MAY-23	805868	193408.3	6446.944	604401	20146.7	8058.68	268.6227
JUN-23	293575	70458	2348.6	220181.3	7339.375	2935.75	97.85833
JUL-23	928561	222854.6	7428.488	696420.8	23214.025	9285.61	309.5203
AUG-23	929141	222993.8	7433.128	696855.8	23228.525	9291.41	309.7137
SEPT-23	300815	72195.6	2406.52	225611.3	7520.375	3008.15	100.2717
OCT-23	923238	221577.1	7385.904	692428.5	23080.95	9232.38	307.746
NOV-23	891070	213856.8	7128.56	668302.5	22276.75	8910.7	297.0233
DEC-23	924346	221843	7394.768	693259.5	23108.65	9243.46	308.1153
JAN-24	680439	163305.4	5443.512	510329.3	17010.975	6804.39	226.813
FEB-24	866284	207908.2	6930.272	649713	21657.1	8662.84	288.7613
MAR-24	928636	222872.6	7429.088	696477	23215.9	9286.36	309.5453



**SHYAM METALICS AND ENERGY LTD. SAMBALPUR**  
**Water consumption per Unit of Product**

Sl. No.	Products	Financial Year 2022-23		Financial Year 2023-24	
		Yearly Production MT	Water Consumption M3/MT	Yearly Production MT	Water Consumption M3/MT
1	Sponge Iron	954412.284	0.51	1113106	0.42
2	Coal Washery	0	0	0	0
3	Power (MW)	367569.29	3.48	303822.1	3.27
4	SMS (Billets)	676671.52	0.55	788642.901	0.68
5	Rolling Mill(TMT Bar)	230065.973	0.44	279874.875	0.42
6	Ferro Alloys	92022.839	2.29	84192	2.35
7	Pelletisation Plant	1391067	0.16	1951880	0.18
9	Wire Rods	228813	0.41	286252.902	0.34



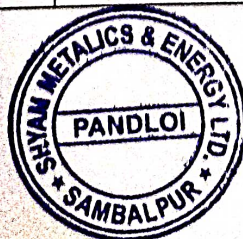


## SHYAM METALICS AND ENERGY LTD. SAMBALPUR

Details of Raw Materials Consumption

YEAR 2022-23				
PRODUCT	PRODUCTION FOR THE YEAR 2022-23(MT)	TOTAL RAW MATERIAL CONSUMED (MT)		CONSUMPTION PER MT OUTPUT
Sponge iron	954412.284	Iron ore/ Fines	888049.930	0.93
		Iron Pellets	650566.848	0.68
		Coal	1046513.581	1.10
M.S. billets	676671.520	Sponge iron and others	804607.666	1.19
Rolling Mill/TMT bars	230065.973	M.S.Billets	242996.929	1.06
Ferro alloys (Silicomang., ferro chrome, ferro mang )	92022.839	Mn ore, coal, coke, quartz and others	361935.452	3.93
Wire Rod	228813.011	M.S.Billets	236243.962	1.03
Iron pellets	1391067	Iron ore fines	1600437.609	1.15

YEAR 2023-24				
PRODUCT	PRODUCTION FOR THE YEAR 2023-24(MT)	TOTAL RAW MATERIAL CONSUMED (MT)		CONSUMPTION PER MT OUTPUT
Sponge iron	1113106.000	Iron ore/ Fines	475342.490	1.20
		Iron Pellets	1220085.29	1.70
		Coal	2076945.965	1.86
M.S. billets	788642.901	Sponge iron and others	930975.410	1.18
Rolling Mill/TMT bars	279874.875	M.S.Billets	292602.218	1.06
Ferro alloys (Silicomang., ferro chrome, ferro mang )	75368.330	Mn ore, coal, coke, quartz and others	319324.910	3.79
Wire Rod	286252.902	M.S.Billets	297665.630	1.04
Iron pellets	1951880.000	Iron ore fines	2236968.950	1.15

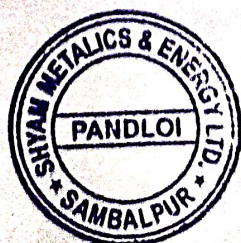




## SHYAM METALICS AND ENERGY LTD. SAMBALPUR

Details of Hazardous Waste Generation and Disposal During The Year 2023-24

Sl.No.	Hazardous waste	Physical form	Quantity Generated (2023-24)	Quantity dispatched to Disposal Facility/Recycler	Quantity used in house	Quantity in Storage	Storage facility/ Remarks
1.	Used Oil	Liquid	4.4 T	4.6 T		0	Stored in container under covered shed. & total 4.8 T sold to Authorized recycler.
2.	Waste containing oil	Solid	0.5 T	0.56 T		0	Stored in container under covered shed prior to disposal.
3.	Spent resin	Solid	0.8 T	-	0.65	0.15	Stored in container under covered shed prior to co-incinerate in Captive Coal based power Plant for energy recovery.
4.	Discarded Containers	Solid	7 T	2.2 T	4.8	0.4 T	Kept under the shed for storage of used oil & waste containing oil and disposed along with. Others are being reused in the plant premise.
5.	Tarry Residue	Semi-Solid	0.9 T	0.9 T		0	Stored in container under covered shed prior to disposal.





WASTE GENERATION AND ITS UTILISATION												Annexure - V
WIRE ROD MILL												
Sl. No.	Name of the Project.	No. of units	Year	Total capacity(TPA)	Billets (MT)	Production (MT)	Slag Generation (In MT)			Used In RCC Road bed & PCC Floor work(MT)	Reuse In Furnace(MT)	
							Miss roll (MT)	Mill scale (MT)	Total Missroll and mill scale (MT)			
1	Shyam Metalics & Energy Ltd.	WRM	2022-23	400000	236243.962	228813	1950.29	2330	4280.29	0	4280.29	
2		2X20000 TPA	2023-24		294840.59	286252.9	2290.02	2914.91	5204.93	0	5204.93	

Slag Generation and Its Utilization										
SMS DIVISION										
Sl. No.	No. of units	Year	Total capacity	Sponge Iron, Pig Iron scrap, Miss roll	Production	Slag Generation (In MT)			Used In RCC Road bed & PCC Floor work	Reuse In Furnace
						Slag (MT)	Iron particle recover from slag	Total Slag generated (MT)		
1	SMS 4X18 T/H, 4X8 T/H, 4X12 T/H, 4 X 18 T/H Induction Furnaces	2022-23	314 T/H	818773	676672	140829	22926	117903	117903	22926
2	SMS 4X18 T/H, 4X8 T/H, 4X12 T/H, 4 X 18 T/H & 5 X 18 T/H Induction Furnaces	2023-24	404 T/H	954257.76	788642.901	164132	26719	137413	137413	26719

WASTE GENERATION AND ITS UTILISATION											
ROLLING MILL											
Sl. No.	Name of the Project.	No. of units	Year	Total capacity	Billets	Production	Waste Generation (In MT)			Used In RCC Road bed & PCC Floor work	Reuse In Furnace
							Miss roll (MT)	Mill scale (MT)	Total Missroll and mill scale (MT)		
1	Shyam Metalics & Energy Ltd.	ROLLING MILL/TMT	2022-23	ROLLING MILL /TMT	242996.93	230066	2649.905	2946.209	5596.11	0	5596.11
			2023-24	295605.46	279874.9	3223.61	3584.05	6807.66		6807.66	

SHYAM METALICS AND ENRGY LTD. SAMBALPUR											
SLAG GENERATION AND ITS UTILISATION											
FERRO ALLOY											
Sl. No.	Name of the Project.	No. of units	Year	Total capacity	Mg ore, Dolomite, Quartz	Production	Slag Generation (In MT)			Used In RCC Road bed & PCC Floor work	Reuse In Furnace
							Slag ( MT)	Ferro recover from Slag (MT)	Total Slag generated (MT)		
1	Shyam Metalics & Energy Ltd.	FERRO (2X9,2X6,3X 11 & 1X5) MVA	2022-2023	68 MVA	361935.45	92022.84	97442.25	2182.09	95260.21	95260.21	2182.09
2			2023-2024	68 MVA	331135.4	84192	88401.6	1979.64	86421.96	86421.96	1979.64

M/s Shaym Metalics and Energy Ltd.											
Fly Ash Generation and Its Utilization											
POWER PLANT											
Sl. No.	Name of the Project.	o. of units(MV)	Year	Total capacity(MW)	Coal/Lignite Consumption (MT)	Power Generation (MW)	Ash Generation ( In MT)			LOW LYING AREA FILLING	Bricks Manufactureing (MT)
							Bottom Ash	Fly Ash	Total Ash		
1	Shyam Metalics & Energy Ltd.	169	2022-23	169	980654	367569.3	3435.88	183019.4	186455.58	169499.6	18645.6
2			2023-24	169	829081	303822.1	3164.69	149839.06	153003.75	135465.8	17538.39

