D. No. 50-96-4/1, Floor II & III
Srigowri Nilayam, Seethammadhara NE
Visakhapatnam -530013
CIN : U51420MH2008PLC187689

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www.seml.co.in

SARDA
SARDA METALS & ALLOYS LTD

Ref No: SMAL/APPCB-RO/Form-V/2023-24

Date: 18.09.2024

To

The Environmental Engineer,
Regional Office,
Andhra Pradesh Pollution Control Board,
Thotapalem, Vizianagaram, AP.

Dear Sir/ Madam,

Sub: Submission of Environment Statement F.Y. 2023-2024 - Reg.

With reference to the above subject, We, M/s. Sarda Metals & Alloys Ltd., APIIC Industrial Area, Kantakapalli (V), Kothavalasa (M), Vizianagaram District, Andhra Pradesh, are herewith submitting the Environment Statement for the Financial Year 2023-2024 to your good office.

This is for your kind information and records.

Please acknowledge same.

Thanking you.

Yours Faithfully
for **M/s. Sarda Metals & Alloys Ltd.**,

V. Surya Bhaskaram
Dy. General Manager - EHS
(Authorized Signatory)

APPCB RO VZM

Encl: As above.

ENVIRONMENT STATEMENT

(FORM-V)

of

M/s. SARDA METALS & ALLOYS Ltd.

Kantakapalli village, Kothavalasa Mandal, Vizianagaram Dist,
Andhra Pradesh.

Financial Year 2023-2024

ENVIRONMENT STATEMENT FORM-V

(See Rule-14)

Environmental Statement for the financial year (2023-2024) ending with 31st March

PART-A

i	Name and address of the owner/occupier of the industry operation or process	Shri Neeraj Sarda Deputy Managing Director, Sarda Metals & Alloys Ltd, APIIC Industrial Park, Kantakapalli Village, Kothavalasa Mandal, Vizianagaram District, Pin code-535240
ii	Industry category	Red Category
	Primary – (STC Code)	NA
	Secondary – (SIC Code)	NA
iii	Production capacity – Units	Ferro Alloys-1,50,000 MTPA (2 x 33 MVA & 1 x 36 MVA Furnaces) Captive Power Plant : 1 x 80MW
iv	Year of Establishment	2013
v	Date of last environmental statement submitted	12-09-2023

PART-B

1. WATER AND RAW MATERIAL CONSUMPTION

Water consumption Consented Capacity

Process	Permissible Quantity KLD	Consumption KLD
Cooling Tower Makeup	758	707.9
RO/Feed/DM Feed (Boiler Feed)	110	46.6
Softener Regeneration	34	12.9
Slag generation	225	209.1
Process	36.7	2.6
Domestic	62.84	8.9
Total	**1226.54**	**988**

Name of the Product	Process water Consumption per unit of Product	
	During the Previous financial year (April'2022 to March'2023)	During the Current financial year (April'2023 to March'2024)
Ferro Alloys	1.73	2.10
Power Generation (80 MW)	0.16	0.11

Process/Industrial Cooling water Consumption (in M^3) Details

Year	Cooling Tower Make up	Softener regeneration	Boiler Feed	Domestic
Permissible Limit	**2,72,880**	**12,410**	**40,150**	**22,936**
Previous FY 2022-2023	1,50,643	2800	22527	3410
Current FY 2023-2024	2,58,371	4706	16992	3261

Specific Water Consumption for Ferro Alloy Division

Year	Cooling Tower Make up KL	Production in MT	Specific Water Consumption per ton of product KL
Previous FY 2022-2023	135782	78419.26	1.73
Current FY 2023-2024	240282	114411.8	2.10

Specific Water Consumption for Captive Power Plant

Year	Cooling Tower Make up (KL)	Boiler Feed KL	Raw water required for DM water generation. (KL)	Production MW	Specific Water Consumption per MW of product (KL)
Previous FY 2022-2023	14861	22527	37147	452705	0.16
Current FY 2023-2024	18098	16992	31171	620589	0.11

2. RAW MATERIAL CONSUMPTION

Name of the Raw Material	Name of the Product	Consumption of raw material per unit of Product	
		During the Previous financial year (April'2022 to March'2023)	During the Current financial year (April'2023 to March'2024)
Mn Ore	Ferro Alloys	2.520	2.500
RB3 & RB2-Coal		0.616	0.609
Nut Coke		0.192	0.263
Quartz		0.279	0.121
Dolomite		0	0.005
Mill Scale		0	0

Ferro Alloy Division

Year	Raw Material Consumption-MT						Product-Tons
	Mn Ore	RB3 & RB2-Coal	Nut Coke	Quartz	Dolomite	Mill Scale	Ferro Alloys
Previous FY 2022-2023	197605.21	48290.09	15040.42	21884.08	0.00	0.00	78419.26
Current FY 2023-2024	286032	69677	30102	13833	567	0	114411.8

Raw material Specific Consumption

Year	Product-Tons	Specific Consumption per ton of Product out put					
	Ferro Alloys Silico Manganese	Mn Ore	RB3 & RB2-Coal	Nut Coke	Quartz	Dolomite	Mill Scale
Previous FY 2022-2023	78419.26	2.520	0.616	0.192	0.279	0.000	0.000
Current FY 2023-2024	114411.8	2.500	0.609	0.263	0.121	0.005	0.000

Captive Power Plant

Name of the Raw Material	Name of the Product	Consumption of raw material per unit of Product	
		During the previous financial year (Apr'2022 to March'2023)	During the Current financial year (Apr'2023 to March'2024)
Coal	Power Generation MW	0.79	0.75

Raw material & Specific Consumption

Month & Year	Raw material Consumption Coal Consumption (MT)	Production Electricity (MW)	Coal Consumption (Tons) per unit (MW) of Out Put of (Electricity Production)
Previous FY 2022-2023	357836.49	452705.00	0.790
Current FY 2023-2024	469704.83	626448	0.750

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

Pollutants	Concentrations of Pollutants discharges (Mass/volume)		Percentage of variation from prescribed standards With reasons.
Water			
Achieved Zero liquid discharge and the effluent waste water is used for Slag granulation purpose and green belt development			
Air			
Ferro Alloy Plant (Stack attached to RABH)			
Particulate Matter 50 (mg/Nm^3)	Avg	26 (mg/Nm^3)	Well within the limits as per APPCB
80MW Captive Power Plant (Stack attached to Boiler ESP)			
Particulate Matter 50 (mg/Nm^3)	Avg	29 (mg/Nm^3)	Well within the limits as per APPCB
SO_2 600 (mg/Nm^3)	Avg	248 (mg/Nm^3)	
NO_x 300 (mg/Nm^3)	Avg	147 (mg/Nm^3)	

PART-D
HAZARDOUS WASTE
(As specified under Hazardous Wastes (Management, Handling and Trans boundaryMovement) Rules, 2016) and its Amendments thereof)

Hazardous Wastes	Total Quantity	
	During the Previous financial year April'2022-March'2023	During the Current financial year April'2023-March'2024
Permissible Limit	**2688 Liters**	**2688 Liters**
Waste Oil	1540 Liters	1980 Liters
From Pollution Control Equipment	NIL	NIL

The hazardous waste generated is Used Waste oil under Clause 5.1 of Schedule-1 of HWM rules 2016. The waste oil generated is semi solid in nature and is stored in close iron barrels and disposed to the authorised recycler authorised by APPCB.

PART-E
SOLID WASTE
Quantity (Tons.)

Non Hazardous Solid Waste		Previous FY 2022-2023			Current FY 2023-2024		
Name of the waste	Permissible Limit	Generation	Recycled or re-utilized within the unit	Sold	Generation	Recycled or re-utilized within the unit	Sold
GCP Dust	7500	3,256.72	5,636.09	-	4,344.64	5,325	-
Si Mn Slag	3,00,000	5,636.09	Nil	90,075.23	1,12,331.41	Nil	1,39,238.65
Fly Ash & Bottom Ash	90,000	60,619.4	Nil	60,170.72	96,366	Nil	97,576.58

PART-F

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

The waste oil generated is semi solid in nature is store in a closed iron barrels and kept in a designated place of oil storage shed marking with FORM-8 Labeling of hazardous and other waste and sent to the authorized recycler authorized by APPCB in Form-10 as waste 7 Colour Copy manifest document with TREM CARD Form-9 and the annual returns are filled in Form-4 Annual Returns.

Description	Name of the Form	Frequency period	Quantity	Remarks
Permissible Limit	**2688 Liters**			
Hazardous Waste Annual Returns	FORM-4	2022-2023	1540 Liters	--
		2023-2024	1980 Liters	
Hazardous Waste Manifest	Form-10 (02.03.2023)	2022-2023	1540 Liters	Sent to M/s. Sri Siva Sai Petro Products
	Form-10 (28.08.2023)	2023-2024	1980 Liters	

The hazardous waste generated is Used Waste oil under Clause 5.1 of Schedule-1 of HWM rules 2016. The waste oil generated is semi solid in nature and is stored in close iron barrels and disposed to the authorized recycler authorized by APPCB.

1. Solid waste like Silica manganese slag, Fly ash & Bottom ash being sold to brick manufacturers which is a raw material for making bricks to brick manufacturing industry.
2. Dust from dedusting Units like transverse points of coal conveyors and silos reused as fuel.
3. The GCP dust generated is being used as feed raw material in making mineral briquette in briquette plant and this mineral briquette is used is mixed with raw material in required ratio in making Ferro alloy product.

PART-G

Impact of the pollution abatement measures taken on conservation of natural resources andon the cost of production.

1. Air cooled condenser installed at Captive power plant to reduce water consumption.
2. Developed green belt of 93.23 acres for the total site of 280.96 acres which is more than stipulated standard (33%)
3. Briquetting plant recycling GCP dust which being generated in Ferro Alloy gas cleaning plant.
4. The effluent waste water generated is used in slag granulation purpose.
5. The STP waste water is used in green belt development.

PART-H

Additional measures/investment proposal for environmental protection including abatementof pollution, prevention of pollution.

A New Fog Cannon arrange to arrest suspended dust.

PART-I

Any other particulars for improving the quality of the environment.

1. The company incorporated Integrated Management System for QMS, EMS & OHSAS etc.
2. The company accorded with below mentioned certifications by DNV certifying body.
   A. Quality Management System ISO 9001: 2015
   B. Environment Management System ISO 14001: 2015
   C. Occupational Health and Safety Management System ISO 45001: 2018
   D. Energy Management System ISO 50001:2018

Green belt Development

Green vegetal cover is not only pleasing to the eyes but also beneficial in many ways such as conservation of bio-diversity, retention of soil moisture, recharge of ground water and moderation of micro climate. It has been derived that trees can act as carbon sinks & efficient biological filters; removing significant amounts of particulate pollution and has tremendous potential for improved air quality. The dust capturing phenomenon of plant species is a cost effective technology for reduction of particulate load in urban agglomerations. Rising of green belt at the project site with right types of species can serve as a useful buffer to contain the menace of pollution from different sources. Whatever space is available around the periphery of the plant will be planned to be utilized for green belt and the open spaces within the factory will be converted to green areas in the form of lawns or flowering plants. A wide range of plant species have been planted in and around the premises to help capture the fugitive emissions and noise levels attenuate the noise generated and improve the aesthetics. This wide range covers plants of fast growing type with thick canopy cover, perennial green nature, native origin and a large leaf area index.

Green Belt Developed

2023 -2024 : 1050 Plants
Survival Rate: 100 %

QUALITY, ENVIRONMENT, HEALTH & SAFETY (QEHS) POLICY

మేము , శారదా మెటల్స్ ఎండ్ అల్లాయిస్ లిమిటెడ్ పర్యావరణ రక్షణ మరియు పరిరక్షణ, ,ఆరోగ్యం మరియు భద్రత ప్రమాణాలు మరియు నాణ్యతా వ్యవస్థల్లో నిరంతర మెరుగుదల ద్వారా, మా వ్యాపార కార్యకలాపాల్లో QEHS ఇండస్ట్రీ లీడర్ గా ఉండాలని , మరియు తద్వారా వినియోగదారుని తృప్తి పొందాలని మా ఉద్దేశ్యం .

మా ప్రయత్నం :

- ప్రపంచవ్యాప్త పర్యావరణ అనుకూల వాతావరణాన్ని మరియు సమర్థవంతమైన ఇంధన సాంకేతిక పరిజ్ఞానాన్ని అనుసరించి నిలకడతో కూడిన మా వ్యాపారాన్ని కొనసాగిస్తాము .
- పునరుత్పత్తి మరియు పునర్వినియోగం ద్వారా మరియు సహజ వనరలును సమర్థవంతంగా ఉప్యయోగించి వాతవరణం లో వచ్చే మార్పు తో ముందుగాని వ్యవహరించి పర్యావరణ మీద దాని ప్రభావాన్ని అంచన వేసి , తగ్గిస్తాము .
- ఉద్యోగులు , కార్మికులు , మరియు వ్యాపారాభాగస్వాములతో సంప్రదించి సంస్థలో ఉపయుక్తమైన సానుకూల , ఆరోగ్య మరియు భద్రతా సంస్కృతిని ప్రోత్సహిస్తాం .
- వృత్తిపరమైన ఆరోగ్య మరియు భద్రత ప్రమాదాలను ముందుగానే గుర్తించి , పర్యవేక్షించి , సమీక్షించి ఉత్తమ ఆరోగ్య మరియు భద్రత విధానాలకు అణుగుణంగా పని చేస్తాము .
- వినియోగదారుల అంచనాలను మించిన అధిక నాణ్యమైన ఉత్పత్తులు మరియు సేవలను అందించడం ద్వారా మా వాటాదారులందరి నమ్మకాన్ని , విలువను పొందుతాము. .
- మా వ్యాపార కార్యకలాపాలలో కొత్త ఆవిష్కరణను అమలు చేసి నిరంతరంగా మా నాణ్యత నిర్వహణ వ్యవస్థను మెరుగుపరుచుకుంటాము .
- సాధ్యమైనంతవరకు అన్ని చట్టసంబంధిత నియమ నిబంధనలకు మరియు చట్టపరమైన నియంత్రణలకు అణుగుణంగా ఉంటాము .
- పైన పేర్కొన్న QEHS విధానం నెరవేర్చడానికి అవగాహన నైపుణ్యం పెంపు, , జ్ఞాన విస్తరణ , శిక్షణ మరియు అవసరమైన వనరులను అందిస్తాము .

మేము ఈ లక్ష్యాన్ని సాధించడానికి ప్రమాణాలను , కొలమానాలను విధించి ,అభివృద్ధి నివేదిక ద్వారా మా QEHS ప్రమాణాలను మెరుగుపరచడానికి అంతర్గత మరియు బాహ్య పర్యవేక్షణను కాలానుగుణంగా నిర్వహిస్తాము. . ఈ విధానం మా వ్యాపార వ్యూహంలో అంతర్భాగంగా ఉంటుంది మరియు అందరు ఉద్యోగులకు , పంపిణీదారులకు , వినియోగదారులకు సమాజానికి మరియు ఇతర వాటాదారులకు అందుబాటులో ఉంటుంది. .

1st June, 2018
Visakhapatnam

NEERAJ SARDA
Dy. Managing Director

QUALITY, ENVIRONMENT, HEALTH & SAFETY (QEHS) POLICY

We at Sarda Metals & Alloys Ltd. (SMAL) intend to be a QEHS Industry Leader across all our Business activities, through Continual Improvement in Environment Protection and Conservation, Health & Safety Standards and Quality Systems, and thereby exceed Customer satisfaction

We Strive to :

- Conduct our business sustainably through adoption of world-class, environmental friendly and energy efficient technologies
- Assess, manage and reduce Environmental impact and deal proactively with climate change by efficient use of natural resources and promoting waste avoidance, reuse & recycling measures
- Promote a positive Health and Safety culture within the Organization through effective communication, participation and consultation with Employees, Workers and Business partners
- Identify, monitor and review occupational health and safety hazards and proactively mitigate the risks by adhering to best Health and Safety practices
- Deliver high quality products and services which exceed customer expectations while creating value for all our stake holders
- Adopt innovation in all our business process thinking to constantly improve our quality management system
- Comply with all applicable and prevalent statutory, regulatory and legal requirements and exceed wherever possible
- Facilitate awareness, skill up gradation, knowledge enhancement, training and necessary resources for enabling fulfillment of the above QEHS policy

We will set targets, measure and report progress against this policy and periodically conduct Internal and External audits to improve our QEHS standards. This policy shall form an integral part of our business strategy and shall be available to all employees, suppliers, customers, community and other stakeholders.

1st June 2018
Visakhapatnam

Neeraj Sarda
Dy Managing Director

DNV

MANAGEMENT SYSTEM
CERTIFICATE

Certificate no.: 187401-2015-AQ-IND-RvA | Initial certification date: 30 October 2015 | Valid: 30 October 2021 – 29 October 2024

This is to certify that the management system of
Sarda Metals & Alloys Ltd.
APIIC Industrial Park, Kantakapalli, Kothavalasa, Vizianagaram – 535 240, Andhra Pradesh, India
and the sites as mentioned in the appendix accompanying this certificate

has been found to conform to the Quality Management System standard:
ISO 9001:2015

This certificate is valid for the following scope:
- Manufacture of ferroalloys like ferromanganese and silicomanganese
- Generation & export of 80 MW power

Place and date: **Chennai, 02 December 2021**

For the issuing office: **DNV - Business Assurance ROMA, No. 10, GST Road, Alandur, Chennai - 600 016, India**

Sivadasan Madiyath
Management Representative

Lack of fulfilment of conditions as set out in the Certification Agreement may render this Certificate invalid.
ACCREDITED UNIT: DNV Business Assurance B.V., Zwolseweg 1, 2994 LB, Barendrecht, Netherlands - TEL: +31(0)102922689. www.dnv.com/assurance

DNV

MANAGEMENT SYSTEM
CERTIFICATE

Certificate no.: 187402-2015-AE-IND-RvA | Initial certification date: 30 October 2015 | Valid: 30 October 2021 – 29 October 2024

This is to certify that the management system of
Sarda Metals & Alloys Ltd.
APIIC Industrial Park, Kantakapalli, Kothavalasa, Vizianagaram – 535 240, Andhra Pradesh, India
and the sites as mentioned in the appendix accompanying this certificate

has been found to conform to the Environmental Management System standard:
ISO 14001:2015

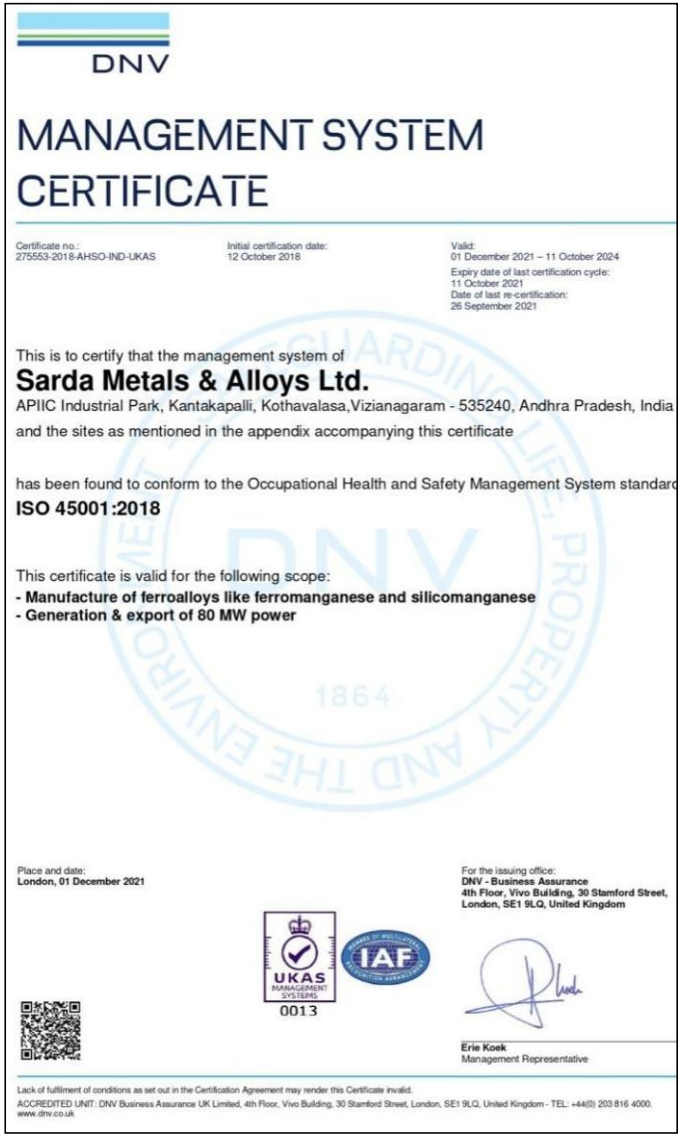
This certificate is valid for the following scope:
- Manufacture of ferroalloys like ferromanganese and silicomanganese
- Generation & export of 80 MW power

Place and date: **Chennai, 02 December 2021**

For the issuing office: **DNV - Business Assurance ROMA, No. 10, GST Road, Alandur, Chennai - 600 016, India**

Sivadasan Madiyath
Management Representative

Lack of fulfilment of conditions as set out in the Certification Agreement may render this Certificate invalid.
ACCREDITED UNIT: DNV Business Assurance B.V., Zwolseweg 1, 2994 LB, Barendrecht, Netherlands - TEL: +31(0)102922689. www.dnv.com/assurance



DNV

MANAGEMENT SYSTEM CERTIFICATE

Certificate no.:
275553-2018-AHSO-IND-UKAS

Initial certification date:
12 October 2018

Valid:
01 December 2021 – 11 October 2024
Expiry date of last certification cycle:
11 October 2021
Date of last re-certification:
26 September 2021

This is to certify that the management system of
Sarda Metals & Alloys Ltd.
APIIC Industrial Park, Kantakapalli, Kothavalasa,Vizianagaram - 535240, Andhra Pradesh, India
and the sites as mentioned in the appendix accompanying this certificate

has been found to conform to the Occupational Health and Safety Management System standard
ISO 45001:2018

This certificate is valid for the following scope:
- Manufacture of ferroalloys like ferromanganese and silicomanganese
- Generation & export of 80 MW power

Place and date:
London, 01 December 2021

For the issuing office:
DNV - Business Assurance
4th Floor, Vivo Building, 30 Stamford Street, London, SE1 9LQ, United Kingdom

UKAS MANAGEMENT SYSTEMS 0013

IAF

Erie Koek
Management Representative

Lack of fulfilment of conditions as set out in the Certification Agreement may render this Certificate invalid.
ACCREDITED UNIT: DNV Business Assurance UK Limited, 4th Floor, Vivo Building, 30 Stamford Street, London, SE1 9LQ, United Kingdom - TEL: +44(0) 203 816 4000. www.dnv.co.uk

DNV

MANAGEMENT SYSTEM CERTIFICATE

Certificate no.:
C563816

Initial certification date:
18 April 2024

Valid:
18 April 2024 – 17 April 2027

This is to certify that the management system of
Sarda Metals & Alloys Limited
APIIC Industrial Park, Kantakapalli, Kothavalasa, Vizianagaram - 535240, Andhra Pradesh, India

has been found to conform to the Energy Management System standard:
ISO 50001:2018

This certificate is valid for the following scope:
Manufacture of Ferro alloys like Ferro manganese, Silico Manganese and Generation and export of 80 MW power

Place and date:
Barendrecht, 18 April 2024

For the issuing office:
DNV - Business Assurance
Zwolseweg 1, 2994 LB Barendrecht, Netherlands

MGMT. SYS. RvA C 024

IAF

Erie Koek
Management Representative

Lack of fulfilment of conditions as set out in the Certification Agreement may render this Certificate invalid.
ACCREDITED UNIT: DNV Business Assurance B.V., Zwolseweg 1, 2994 LB, Barendrecht, Netherlands - TEL: +31(0)102922689. www.dnv.com/assurance