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

Ref. No:SMAL/EHS/REC/13

Tel: +91 891 2858200 Fax: +91 891 2700864

www.seml.co.in



Date: 11-09-2015

To
The Member Secretary,
AndhraPradesh Pollution Control Board,
Paryavaran Bhawan,
A-3, Industrial Estate,
Sanath Nager, Hyderabad
AndhraPradesh – 500018

Dear Sir,

Sub: Submission of Environmental Statement Form -V

We wish to bring your kind notice with reference to the above captioned subject, we are submitting Environmental statement Form – V report for the Financial 2014-2015 for your kind reference and oblige.

Thanking you with regards.

Your truly,

For Sarda Metals & Alloys Ltd.

Authorized Signatory.

Copy to:

- 1. The Regional Officer, Andhra Pradesh Pollution Control Board, Flat No. 11 Shivaji Colony, Pradeep Nagar, Vizianagaram, A.P
- 2. The Additional Principal Chief Conservator of Forests, Ministry of Environment, Forest and Climate Change, Regional Office (SEZ), Ist and IInd Floor, Handloom Export Promotion Council, 34, Cathedral Garden Road, Nungambakkam, Chennai 34

ENIVIRONMENTAL STATEMENT FORM-V

(See rule 14)

Environmental Statement for the financial year ending with 31st March

PART-A

(i)	Name and address of the owner/occupier of the industry operation or process	Mr Neeraj Sarda M/s. Sarda Metals & Alloys Ltd, APIIC Indusrial Park, Kantakapalli, Kottavalasa, Vizianagaram, Andhra Pradesh535240
(ii)	Industry category- Primary- Secondary-	Red category Coal based Captive Power Plant (1 x 80MW) & Ferro Alloys Plant (2 x 33 MVA Furnaces)
(iii)	Production capacity Units	80 MW – Captive Power Plant (CPP) Ferro Alloys Plant (2 x-33 MVA Furnaces)
(iv)	Year of establishment	FEB - 2013 (CPP); FeMn on 24-7-14; SiMn on 14-06-14
(v)	Date of the last Environmental Statement submitted	Submitted for year 2013-14

PART-B

Water and Raw Material Consumption

(i) Water Consumption in m³/d

 $Process: \ 61.42 \ m^3/d$

Cooling: 252.2 m³/d

Domestic: 17.48 m³/d

Name of Products	Process water consumption per unit of product output			
	During the previous Financial Year			
	(April 2013 – March 2014)	(April 2014 – March 2015)		
1. Electric Power	39 ml/Kwhr	37.39 ml/ Kwhr		
2. Fuel oil	0.792 ml/Kwhr	0.362 ml/Kwhr		

(ii) Raw Material Consumption

Name of raw	Name of Products	Consumption of raw material per unit of output		
materials		During the Previous financial	During the current financial	
·		year	year	
0 1	ļ <u>.</u>	(April 2013 – March 2014)	(April 2014 – March 2015)	
Coal	Electric Power	0.901 kg/Kwhr	0.738 kg/KWhr	
Fuel Oil	Electric Power	0.792 ml/Kwhr	0.362 ml/KWhr	
Mn Ore		-	2.414	
Coke			0.369	
Coal	FeMn	_	0.218	
Dolomite		_	0.019	
Quartz		_	0.0003	
Mill Scale		<u>.</u>	0.038	
Mn Ore		-	1.895	
Coke		-	0.318	
Coal	SiMn	-	0.442	
Dolomite		-	0.117	
Quartz	_		0.437	
Mill Scale	_	_	0.437	
Fe Mn Slag		-	0.222	

PART-C

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

Pollutants (a) Water	Quantity of pollutants discharged (mass/ day) Zero Discharge	Concentration of pollutants discharged (mass/volume) Effluent water being used for inland irrigation / Dust suppression system	Percentage of variation from prescribed standard with reasons.
(b) Air	Test Reports a	Nil	

(ii) Raw Material Consumption

Name of raw	Name of Products	Consumption of raw material	per unit of output
materials		During the Previous financial	During the current financial
		year	year
		(April 2013 – March 2014)	(April 2014 – March 2015)
Coal	Electric Power	0.901 kg/Kwhr	0.738 kg/KWhr
Fuel Oil	Electric Power	0.792 ml/Kwhṛ	0.362 ml/KWhr
Mn Ore		. -	2.414
Coke		-	0.369
Coal	FeMn	-	0.218
Dolomite		-	0.019
Quartz		-	0.0003
Mill Scale		_	0.038
Mn Ore		-	1.895
Coke		-	0.318
Coal	SiMn		0.442
Dolomite			0.117
Quartz			0.437
Mill Scale		-	0.041
Fe Mn Slag		-	0.222

PART-C

Pollution discharged to environment /unit of output

(Parameter as specified in the Consent issued)

Pollutants	Quantity of pollutants discharged (mass/ day)	Concentration of pollutants discharged (mass/volume)	Percentage of variation from prescribed standard with reasons.
(a) Water	Zero Discharge	Effluent water being used for inland irrigation / Dust suppression system	Nil
(b) Air	Test Reports are enclosed.		Nil

PART-D

Hazardous Wastes

[as specified under hazardous wastes(Management & Handling rules, 1989)].

-	Total Quantity (lts)			
Hazardous Waste	During the Previous financial year (April 2013 – March 2014)	During the current financial year (April 2014 – March 2015)		
Waste Oil	4602 Ltrs	1200 Ltrs		

PART-E

Solid Wastes

	Total Quantity				
Solid Waste	During the Previous financial year (April 2013 – March 2014)	During the Previous financial year (April 2014 – March 2015)			
(a) From Process	-	FeMn Slag: 16365.31 Tons SiMn Slag: 18287.41 Tons			
(b) From Pollution control Facility	Ash Generation : 26077 Tons	Ash Generation: 23930.15 Tons BagHouse Dust (FeMn): 1282.25Tons BagHouse Dust (SiMn): 1992.26 Tons			
(c) Quantity recycled or reused within the unit	Nil	Ash Sold: 496.06 T FeMn slag used as raw material in SiMn: 3550.48 T			

PART-F

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

Hazardous waste:

o Only Waste oil is generated from machineries and it is sent to authorize recycler.

Solid Waste:

- o FeMn slag generated is used in SiMn production
- o SiMn slag is used for civil works and disposed in low lying areas.
- o Fly ash is sold to third parties and disposed in low lying areas

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

o Effluent water used as dust suppression system and for green belt development so as to reduce the raw water consumption.

PART-H

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

- Laying of CC Roads to reduce the fugitive emissions due to vehicular movement at a cost of 2.6 crores.
- o Tree plantation of 1000 sapling is in progress inside the plant premises.

PART-I

Any other particulars for improving the quality of the environment.

The company has identified environment aspects and impacts which helpful in maintaining a good environment. And the company applied for IMS certification (ISO 9001, ISO 14001 & OSHA 18001).

(Signature of a person carrying out an industry

- operation or process)

Date: 11-09-15

Name: Mr. Rajendra Vohra

Designation: President

Address: M/s. Sarda Metals & Alloys Ltd,

APIIC Indusrial Park, Kantakapalli, Kottavalasa,

Vizianagaram, Andhra Pradesh - 535240



(LAB RECOGNISED BY MOEF, GOVT. OF INDIA)

(ISO 9001: 2008, OHSAS 18001:2007)

Issued to

Sarda Metals & Alloys Limited., APIIC, Industrial Park, Kantakapalli, Kothavalasa Mandal, Vizianagaram-535240, AP. Phone No. 0891-2701648, Fax no. 0891-2700864.

Date of Monitoring	10th August 2015	Date of Reporting	17th August 2015		
Your PO. No.	6000016679, dt.03/7/2015.	Report No.	PLCPL/SAL/14-15/		
Sample particulars	Ambient Air Quality, No. of sample 1 (one)				
Instruments used	RDS, Model / S. No.080145 & 080252; Calibration Date:06.10.2013; Next Cal. Date:05.10.2015 Model NPM FDS 2.5 & PM 10; Serial No.223, 224 & 225 Cal. Date:28.10.2013; Next Cal Date:27.10.2015				
Test required	PM _{2.5} , PM ₁₀ , SO ₂ & NO _X .				
Method of analysis IS: 5182		Page No.	1 of 12		

Ambient Air Quality

Location	Concentration μg/m³			
Location	PM ₁₀	PM _{2.5}	SO ₂	NO _x
Near Main Gate	59	29	11	13

Prescribed Limit (Revised Norms)

			Time Weight	Concentration In Ambient Air		
No.	Pollutant	Units	average	Industrial Area	Methods of Measurement	
1	Sulphur dioxide SO ₂		24 hrs	80	-Improved West &Gaeke	
2	Nitrogen Oxide NO _x		24 hrs	80	- Modified Jacob &Hochheiser(No Arsenite)	
3	Particulate Matter (Size <10µ) or PM ₁₀	μg/m³	24 hrs	100	-Gravimetric	
4	Particulate Matter (Size <2.5µ) or PM _{2.5}		24 hrs	60	-Gravimetric	

Note: All parameters sampling as per APPCB/CPCB/MoEF Guidelines



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Issued to

Sarda Metals & Alloys Limited., APIIC, Industrial Park, Kantakapalli, Kothavalasa Mandal, Vizianagaram-535240, AP. Phone No. 0891-2701648, Fax no. 0891-2700864.

Date of Monitoring	10th August 2015	Date of Reporting	17th August 2015		
Your PO. No.	6000016679, dt.03/7/2015.	Report No.	PLCPL/SAL/14-15/G-096/348		
Sample particulars	Ambient Air Quality, No. of sample 1 (one)				
Instruments used	RDS, Model / S. No.080145 & 080252; Calibration Date:06.10.2013; Next Cal. Date:05.10.2015 Model NPM FDS 2.5 & PM 10; Serial No.223, 224 & 225 Cal. Date:28.10.2013; Next Cal Date:27.10.2015				
Test required	PM 25, PM 10, SO2 & NOx.				
Method of analysis	IS: 5182	Page No.	2 of 12		

Ambient Air Quality

Location	Concentration μg/m³			
Location	PM 10	PM 2.5	SO ₂	NOx
Coal Handling Plant area	68	35	14	17

Prescribed Limit (Revised Norms)

			Time Weight		oncentration In Ambient Air
No.	Pollutant	Units	average	Industrial Area	Methods of Measurement
1	Sulphur dioxide SO ₂		24 hrs	80	-Improved West &Gaeke
2	Nitrogen Oxide NO _x		24 hrs	80	- Modified Jacob &Hochheiser(No
					Arsenite)
3	Particulate Matter (Size <10µ) or PM ₁₀	μg/m³	24 hrs	100	-Gravimetric
4	Particulate Matter (Size <2.5µ) or PM _{2.5}		24 hrs	60	-Gravimetric

Note: All parameters sampling as per APPCB/CPCB/MoEF Guidelines



(LAB RECOGNISED BY MOEF, GOVT. OF INDIA)

(ISO 9001: 2008, OHSAS 18001:2007)

Issued to

Sarda Metals & Alloys Limited., APIIC, Industrial Park, Kantakapalli, Kothavalasa Mandal, Vizianagaram-535240, AP. Phone No. 0891-2701648, Fax no. 0891-2700864.

Date of Monitoring	10 th August 2015	Date of Reporting	17th August 2015	
Your PO. No.	6000016679, dt.03/7/2015.	Report No.	PLCPL/SAL/14-15/G-096/349	
Sample particulars	Ambient Air Quality, No. of sample 1 (one)			
Instruments used	RDS, Model / S. No.080145 & 080252; Calibration Date:06.10.2013; Next Cal. Date:05.10.2015 Model NPM FDS 2.5 & PM 10; Serial No.223 , 224 & 225 Cal. Date:28.10.2013; Next Cal Date:27.10.2015			
Test required	PM _{2.5} , PM ₁₀ , SO ₂ & NO _X .			
Method of analysis	IS: 5182	Page No.	3 of 12	

Ambient Air Quality

Location		Concent		
Location	PM ₁₀	PM _{2.5}	SO ₂	NO _x
DM Plant area	53	22	10	12

Prescribed Limit (Revised Norms)

			Time Weight	(Concentration In Ambient Air
No.	Pollutant	Units	Time Weight average	Industrial Area	Methods of Measurement
1	Sulphur dioxide SO ₂		24 hrs	80	-Improved West &Gaeke
2	Nitrogen Oxide NO _x		24 hrs	80	- Modified Jacob &Hochheiser(No Arsenite)
3	Particulate Matter (Size <10µ) or PM ₁₀	μg/m³	24 hrs	100	-Gravimetric
4	Particulate Matter (Size <2.5µ) or PM _{2.5}		24 hrs	60	-Gravimetric

Note: All parameters sampling as per APPCB/CPCB/MoEF Guideline



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(ISO 9001: 2008, OHSAS 18001:2007)

Issued to

Sarda Metals & Alloys Limited., APIIC, Industrial Park, Kantakapalli, Kothavalasa Mandal, Vizianagaram-535240, AP. Phone No. 0891-2701648, Fax no. 0891-2700864.

Date of Monitoring	10 th August 2015	Date of Reporting	17th August 2015
Your PO. No.	6000016679, dt.03/7/2015.	Report No.	PLCPL/SAL/14-15/
Sample particulars	Flue gases, No. of samples 1 (One)		
Instrument used	Model No.: SEA-90 (with dry gas meter)/100307 Make: Aero Vironment		
Test required	Temperature, Velocity & PM.		
Method of analysis	IS: 11255	Page No.	12 of 12

Flue Gas Emission Analysis

Parameter	Unit	CPP Stack
Ambient temperature	оС	31
Flue gas temperature	οС	144
Flue gas velocity	m/s	5.9
Particulate Matter	mg/Nm³	20

Results: All above said values are well within the limits.

Prescribed Limit

Pollutants	Limit
Particulate Matter	50 mg/Nm³

(LAB RECOGNISED BY MOEF, GOVT. OF INDIA)

(ISO 9001: 2008, OHSAS 18001:2007)

Issued to

Sarda Metals & Alloys Limited., APIIC, Industrial Park, Kantakapalli, Kothavalasa Mandal, Vizianagaram-535240, AP. Phone No. 0891-2701648, Fax no. 0891-2700864.

Date of Monitoring	10th August 2015	Date of Reporting	17th August 2015
Your PO. No.	6000016679, dt.03/7/2015.	Report No.	PLCPL/SAL/14-15/
Sample particulars	Flue gases, No. of samples 1 (One)		
Instrument used	Model No.: SEA-90 (with dry gas meter)/100307 Make: Aero Vironment		
Test required	Temperature, Velocity & PM.		
Method of analysis	IS: 11255	Page No.	6 of 12

Flue Gas Emission Analysis

Parameter	Unit	FAD Stack
Ambient temperature	оС	32
Flue gas temperature	οС	88
Flue gas velocity	m/s	5.7
Particulate Matter	mg/Nm³	22

Results: All above said values are well within the limits.

Prescribed Limit

Pollutants	Limit
Particulate Matter	50 mg/Nm³