स्टील अथॉरिटी ऑफ इण्डिया लिमिटे
STEEL AUTHORITY OF INDIA LIMITE
सेलम इस्पात संयंत्र
SALEM STEEL PLANT

Ref : PC-9(2)
Date : 28.06.2022

To
The Additional Principal Chief Conservator of Forests,
Ministry of Environment, Forests, & Climate Change (MoEFCC),
Regional Office- South Eastern Zone,
1st & 2nd Floor, HEPC Building,
N0.34, Cathedral Garden Road,
Nungambakkam,
Chennai-600034.
Ph: 044- 2822 2325.

Sir:

Sub: Expansion of SAIL, Salem Steel Plant, Tamil Nadu – Six monthly Compliance Report for Environmental Clearance conditions - reg

Ref: MOEF Ref.No: F-No. J-11011/367/2006-IA II (I), dated 16th April, 2008

1. This has reference to the Environmental clearance issued for the above project vide ref. No: F-No. J-11011/367/2006-IA II (I), dated 16th April, 2008.
2. Compliance report for the stipulations is enclosed vide Annexure 1.
3. We wish to inform you that the project was successfully commissioned in September 2010 after receipt of Consent to Operate from TNPCB. The analysis reports of Stack Emission, Ambient Air Quality & Fugitive emissions from Oct'21 – Mar'22 are enclosed along with statistical interpretation. (Annexure 2).
4. All the conditions stipulated in EC issued by MOEF & CC have been complied and Environment monitoring is carried out by SSP & Statutory authorities, as required.

Thanking you,

Yours faithfully
For Steel Authority of India Limited
Salem Steel Plant

MKN 28-06-2022

M K Nayak
Chief General Manager I/c (Works)

Encl: As above

Copy to:
The Member Secretary
Tamil Nadu Pollution Control Board
100, Anna Salai, Guindy, Chennai 600 032.

सेल SAIL

Annexure-1

SIX MONTHLY COMPLIANCE REPORT (Oct'21 – Mar'22)

FOR

THE STIPULATED CONDITIONS OF ENVIRONMENTAL CLEARANCE

MoEF Ref.: F. No. J-11011/367/2006-IA II (I), Dt. 16.04.2008

Expansion of Salem Steel Plant at Salem, Tamil Nadu
by M/s Salem Steel Plant (a unit of M/s Steel Authority of India Ltd.)

Status: Unit is in operation.

The Project was given Environmental Clearance on 16.04.2008. Consent to Establish (CTE) was obtained from TNPCB on 22.04.2008 .The project was started on Apr'2008 and completed in September'2010. Subsequently, Consent to Operate (CTO) was obtained from TNPCB on 20.09.2010. Since then the units are under operation.

The status of compliance of the various conditions stipulated in the Environmental Clearance issued by MoEF on 16.04.2008 for the above project is given in the table below:

Sl. No.	MoEF points	SSP's Compliance / Action Plan
i)	Bag filters shall be provided to the furnaces to control the particulate emissions below 50 mg/Nm^3. Fume extraction system with gas cleaning facilities (bag house and canopy roof) shall be provided to Electric arc furnace (EAF), Ladle furnace (LF) and Argon Oxygen Decarburization (AOD).	Bag filters have been provided in the electric arc furnace to control the particulate emissions and emissions are controlled within 50mg/NM3. Common Fume extraction system for EAF & LF with gas cleaning facilities (bag house) & canopy for EAF have been commissioned for the equipment and working satisfactorily. Fume extraction system with Gas Cleaning Plant (Bag filter plant) equipment has been commissioned for AOD and working satisfactorily.
	Fume extraction system shall be provided to Hot Rolled Annealing and Pickling line, CRM and Mill.	Fume extraction system for the Hot Rolled Annealing and Pickling line, CRM and Mill have been provided and commissioned. The system is working satisfactorily.

Sl. No.	MoEF points	SSP's Compliance / Action Plan
	Dust extraction and cleaning system shall be provided to shot blasting machine, storage, transfer points and material handling areas.	Dust extraction and cleaning system for shot blasting machine with bag filter equipment have been commissioned and working satisfactorily.
	Slab casting machine shall be provided with steam exhaust system and mould fume exhaust system.	Steam exhaust system for Slab casting machine and mould fume exhaust system have been envisaged along with the main equipment and equipment have been commissioned and working satisfactorily.
	Data on Ambient Air Quality, stack emissions and fugitive emissions shall be regularly submitted to this Ministry including its Regional Office at Bangalore/TNPCB and CPCB once in six months.	Latest data pertaining to Ambient Air Quality, stack emissions and fugitive emissions (Oct'21 – Mar'22) along with statistical interpretation are given in Annexure -2.
ii)	Gaseous emissions including secondary fugitive emissions from all the sources shall be controlled within the latest permissible limits issued by the Ministry and regularly monitored and reports submitted to TNPCB / CPCB once in six months and Ministry's Regional Office at Bangalore.	In the expansion project, gaseous emissions including secondary fugitive emissions are being controlled within the permissible limits. Latest data pertaining to gaseous emissions & fugitive emissions is enclosed vide Annexure- 2.
	Guide lines / code of practice issued by the CPCB shall be followed.	Applicable Guide lines / code of practice issued by the CPCB is being adhered to.
iii)	In-plant control measures like tarring of roads, green belt and good house keeping shall be done within the plant premises to control fugitive emissions from all the vulnerable sources like raw material handling and storage areas shall be installed.	These measures like tarring of roads, development & maintenance of the green belt and good housekeeping activities are being carried out on regular basis.

Sl. No.	MoEF points	SSP's Compliance / Action Plan
	All the material transfer points, discharge points and raw material storage area shall be completely covered.	Necessary covering in the transfer points and storage area have been done to control fugitive emissions.
	Monitoring of fugitive emissions in the work zone environment shall be carried out regularly as per the CPCB guidelines and reports submitted to TNPCB / CPCB and Ministry's Regional Office at Bangalore.	Monitoring of fugitive emissions in the work zone environment is being carried and reports submitted to TNPCB and MoEF & CC regularly.
iv)	Total water requirement shall not exceed 3.5 MGD [1.5 MGD (6,819 KLD) for expansion project].	Total water requirement is contained within 3.5 MGD level. Based on present production, an average of less than 2.0 MGD water is being drawn.
	Direct cooling water from slab caster and Annealing and Pickling Line (APL) shall be treated in the effluent treatment plant (ETP) and recycled to the direct cooling circuit.	Direct cooling water from slab caster and AP Line is treated in a separate waste water treatment plant and the treated water is recycled to the direct cooling circuit.
	Total water from ARS after recovery of acid shall be neutralized.	Water from ARS after recovery of acid is being neutralized.
	The water from EAF, LF and AOD & CRM shall be routed through the cooling tower and pressure filter for recycling.	Indirect cooling water from EAF, LF, and AOD & CRM is being routed through the cooling tower and pressure filter for recycling.
	Total Acid Recovery System (ARS) shall be provided to APL.	Total Acid Recovery System (ARS) has been installed & commissioned. The system is under operation.
	All the treated process wastewater shall be recycled and reused in the process, dust suppression and green belt development.	All the treated process wastewater is being recycled and reused in the process, dust suppression and green belt development.
	No wastewater shall be discharged outside the plant premises and 'Zero' discharge shall be strictly adopted as proposed.	'Zero' discharge is being maintained.

Sl. No.	MoEF points	SSP's Compliance / Action Plan
	Dust extraction and cleaning system shall be provided to shot blasting machine, storage, transfer points and material handling areas. Slab casting machine shall be provided with steam exhaust system and mould fume exhaust system. Data on Ambient Air Quality, stack emissions and fugitive emissions shall be regularly submitted to this Ministry including its Regional Office at Bangalore/TNPCB and CPCB once in six months.	Dust extraction and cleaning system for shot blasting machine with bag filter equipment have been commissioned and working satisfactorily. Steam exhaust system for Slab casting machine and mould fume exhaust system have been envisaged along with the main equipment and equipment have been commissioned and working satisfactorily. Latest data pertaining to Ambient Air Quality, stack emissions and fugitive emissions (Oct'21 – Mar'22) along with statistical interpretation are given in Annexure -2.
ii)	Gaseous emissions including secondary fugitive emissions from all the sources shall be controlled within the latest permissible limits issued by the Ministry and regularly monitored and reports submitted to TNPCB / CPCB once in six months and Ministry's Regional Office at Bangalore. Guide lines / code of practice issued by the CPCB shall be followed.	In the expansion project, gaseous emissions including secondary fugitive emissions are being controlled within the permissible limits. Latest data pertaining to gaseous emissions & fugitive emissions is enclosed vide Annexure- 2. Applicable Guide lines / code of practice issued by the CPCB is being adhered to.
iii)	In-plant control measures like tarring of roads, green belt and good house keeping shall be done within the plant premises to control fugitive emissions from all the vulnerable sources like raw material handling and storage areas shall be installed.	These measures like tarring of roads, development & maintenance of the green belt and good housekeeping activities are being carried out on regular basis.

सेल SAIL

Sl. No.	MoEF points	SSP's Compliance / Action Plan
v)	Prior 'permission' for the drawal of 3.5 MGD from River Cauvery shall be obtained from the concerned department.	GO for 3.5 MGD water drawal obtained from Public Works Department, Govt. of Tamil Nadu having validity upto 31.03.2019 and renewal is recommended by PWD and under scrutiny by Gov.of Tamilnadu.
vi)	Metallic scrap, scales and mill cuttings shall be recycled and reused in the process. Iron oxide pellet should be recycled to Steel Melting Shop (SMS). The EAF, AOD and LF slag from SMS shall be disposed of in the slag dump yard within the plant premises. SMS slag shall be used for road making. Dust from bag house of EAF & AOD gas cleaning system shall be stored in dust silo and disposed off in environment friendly manner. All the other solid waste shall be properly utilized or disposed off in environment friendly manner.	Metallic scrap and mill cuttings is being recycled and reused in the process and scales will be commercially disposed. The slag from SMS is being disposed in the slag dump yard within the plant premises. SMS slag being used for paving of road and also around shops to prevent grass growth . Dust from bag house being stored in dust silo and disposed off in environment friendly manner. Other solid waste (boiler ash, grinding swarf and shot blast dust) are being disposed off in environment friendly manner and sold commercially.
vii)	All the hazardous waste like pickling sludge and waste diatomaceous earth shall be disposed off in the secured landfill (SLF) designed as per the CPCB guidelines. Waste oil shall be sold to registered recyclers.	All the hazardous wastes are disposed off in the secured Landfill (SLF) designed as per the CPCB guidelines. Waste oil is being disposed only to registered recyclers.
viii)	Green belt shall be developed in 33 % area all around the plant boundary and wherever space is available as per CPCB guidelines in consultation with local DFO.	SSP acquired total area of 1544.77 hectares (Natural vegetation = 600 hectares, Buildings = 267.10 hectares, Saline / rocky area= 400 hectares Total = 1267.10 hectares). In the area of 277.67 hectares available for Green belt, different species like C Siamia, Silver oak, Pungan, Neem, Silk Cotton, Parambai etc planted for about 217.081 hectares. Hence, Green belt has been developed more than 78.17%.
ix)	All the recommendations mentioned in the Charter on the Corporate Responsibility for the Environmental Protection (CREP) for the Steel Plants shall be implemented.	CREP conditions are not applicable directly to SSP as the unit is not covered under Integrated Steel Plants.

B. GENERAL CONDITIONS:

Sl. No.	MoEF points	SSP's Compliance / Action Plan
i)	The project authorities must strictly adhere to the stipulations made by the Tamil Nadu Pollution Control Board (TNPCB) and the State Government.	This is being complied with.
ii)	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests.	Being ensured.
iii)	The gaseous emissions from various process units shall conform to the load/mass based standards notified by this Ministry on 19th May, 1993 and standards prescribed from time to time. The TNPCB may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location. At no time, the emission level shall go beyond the prescribed standards. On-line continuous monitoring system shall be installed in stacks to monitor SPM and interlocking facilities shall be provided so that process can be automatically stopped in case emission level exceeds the limit.	The gaseous emissions from various process units confirm to the emission standards prescribed. On-line continuous monitoring system (opacity monitor) has been installed in stacks of EAF, AOD, and Slab Caster & Slab Grinder to monitor SPM. Necessary interlocking facilities incorporated with the process equipment.
iv)	At least four ambient air quality monitoring stations shall be established in the downward direction as well as where maximum ground level concentration of SPM, SO_2 and NO_X are anticipated in consultation with the TNPCB. Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its Regional Office at Bangalore / TNPCB and CPCB once in six months.	Presently 10 nos. of Ambient Air quality monitoring stations have been provided in consultation with the TNPCB. The latest data pertaining to ambient air quality and stack emissions (Oct'21 – Mar'22) along with statistical interpretation are given in **Annexure-2.**
v)	Industrial wastewater shall be properly collected and treated so as to confirm to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended form time to time. The treated wastewater shall be utilized for plantation purpose.	Industrial waste water is being treated to confirm the standards prescribed by board and the treated water is recycled for process usage.

Sl. No.	MoEF points	SSP's Compliance / Action Plan
vi)	The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).	The ambient noise level confirms to the norms and is being maintained.
vii)	The company shall develop surface water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table.	The Steel Melting Shop installed under the project expansion has been provided with Rain water harvesting system.
viii)	All the measures regarding occupational health surveillance of the workers shall be undertaken and regular medical examination of all the employees shall be ensured as per the Factories Act and records maintained.	All the measures regarding occupational health surveillance of the workers and all employees is undertaken and regular medical examination of all the employees being ensured as per the Factories Act and records maintained.
ix)	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA / EMP report.	The recommendations given in the EIA/EMP report for the environmental protection and safeguards are being complied with.
x)	The company must undertake socio-economic development activities in the surrounding villages like community development programs, educational programs, drinking water supply and health care etc.	Salem Steel Plant (SSP) is undertaking various socio-economic schemes under Corporate Social Responsibility (CSR) scheme in the surrounding villages like community development programs, educational programs, drinking water supply, roads & infrastructure development, tailoring and health care etc. In addition to the above activities in surrounding villages, SSP has adopted a village to develop as a "Model Village".

Sl. No.	MoEF points	SSP's Compliance / Action Plan
xi)	As mentioned in EIA/EMP, Rs.126.00 Crores earmarked towards environmental pollution control measures shall be judiciously used to implement the conditions stipulated by the Ministry of Environment and Forest as well as the State Government. An implementation schedule for implementing all the conditions stipulated herein shall be submitted to the Ministry and its Regional Office at Bangalore. The funds so provided shall not be diverted for any other purposes	The funds of Rs 126 Crores earmarked for gas cleaning plant, fume exhaust systems, DENOX system for pickling section in AP Line, total acid recovery system etc. were utilized for installation of the above systems. The systems are working satisfactorily and pollutants parameters are kept within the norms.
xii)	The Regional Office of this Ministry at Bangalore / CPCB / TNPCB shall monitor the stipulated conditions. A six monthly compliance report and the monitored data along with statistical interpretation shall be submitted to them regularly.	Being complied with.
xiii)	The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the TNPCB and may also be seen at Website of the Ministry of Environment and Forests at http:/envfor.nic.in. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same should be forwarded to the Regional office at Bangalore.	The public was informed through news paper advertisements on 21.04.2008 in two local newspapers which are widely circulated in the region and the advertisement copy has been sent to MoEF vide letter Ref. No: P-500/GEN/14 dated 24.04.2008.
xiv)	Project authorities 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 and the date of commencing the land development work.	The final approval of the project was obtained in January 2008 from the competent authority and the status of project developments intimated.

STACK EMISSION REPORT

STL	: B
Annexure : I	
Month	: OCT
Year	: 2021

1. Name of the Plant	SALEM STEEL PLANT
2.Name of the shop	Steel Melting Shop /Cold Rolling Mill/ Hot Rolling Mill
3. Process	Steel Melting ,Hot rolling, Annealing & Pickling , Cold Rolling
4. Control equipment installed	Scrubbers, Cyclones, Bag Filters
5. Sampling by	External Agencies

Stack No & Details	Exit Vel (m/s, Avg)	Temp.K (Avg)	Flow Rate (NM3/Hr Avg)	No.Of Obs	Parameters Avg. (mg/nm3) SPM	SO2	NOx	Remarks
HRM Reheating Furnace	9.8	514	31184	1	33.7	3.0	14.2	
Apl-3 Pre pickling	3.7	309	3561	1	25.4	3.0	5.3	
Apl-3 Mixed Acid	12.4	445	8287	1	21.9	7.7	9.2	
FBC Boiler 1	6.9	358	18403	1	42.6	19	44.9	
APL-1 Electrolytic	5.1	314	3812	1	20.4	3.0	15.3	
APL-1 Brightening	10.7	319	7873	1	24.9	3.0	9.5	
AP LINE -3 Shot Blasting	11.4	316	122609	1	31.8	3.0	2.0	
*EAF & LF (SMS)	13.2	337	522502	1	48.4	3.0	9.2	
*AOD (SMS)	15.2	338	165256	1	48.5	13	19.9	
Slab cutting machine	10.2	316	62051	1	23.4	3.0	5.2	
Slab Grinder	9.4	302	14545	1	19.7	3.0	2.0	
Z-Mill-2Fume Exhaust	6.8	308	45021	1	30.9	5	17.3	
Z-Mill-1Fume Exhaust	10.6	310	69727	1	30.2	4	13.4	
DG 2.0 MW -I	10.8	375	17343	1	25.7	3.0	222	
DG 2.0 MW -III	11.6	392	17820	1	29.4	3.0	288	

BDL : Below Detectable Limit

M. Kaniraj

STACK EMISSION REPORT

	STL : B
	Annexure : I
	Month : NOV
	Year : 2021

1. Name of the Plant	SALEM STEEL PLANT
2.Name of the shop	Steel Melting Shop /Cold Rolling Mill/ Hot Rolling Mill
3. Process	Steel Melting ,Hot rolling, Annealing & Pickling , Cold Rolling
4. Control equipment installed	Scrubbers, Cyclones, Bag Filters
5. Sampling by	External Agencies.

Stack No & Details	Exit Vel (m/s, Avg)	Temp.K (Avg)	Flow Rate (NM3/Hr Avg)	No.Of Obs	Parameters Avg. (mg/nm3) SPM	SO2	NOx	Remarks
HRM Reheating Furnace	10.4	532	31974	1	36.5	3.0	15.3	
Apl-3 Pre pickling	4.4	311	4207	1	28.5	3.0	6.9	
Apl-3 Mixed Acid	13.2	427	9193	1	24.3	8.2	10.0	
FBC Boiler 1	8.6	335	36263	1	40.2	19	58	
APL-1 Electrolytic	5.6	325	4044	1	23.3	3.0	13.2	
APL-1 Brightening	9.7	306	7440	1	27.5	3.0	8.8	
AP LINE -3 Shot Blasting	10.8	319	115063	1	27.9	3.0	2.0	
*EAF & LF (SMS)	12.4	325	508958	1	39.6	3.0	8.7	
*AOD (SMS)	13.7	342	147206	1	41.9	16	21.4	
APL-2 Electrolytic	8.0	313	21309	1	29.5	3.0	10.7	
APL-2 Brightening	10.6	318	7824	1	24.6	3.0	12.5	
Z-Mill-2Fume Exhaust	7.6	311	49832	1	27.8	8	19.6	
Z-Mill-1Fume Exhaust	11.4	303	76722	1	21.9	5	14.5	
AP LINE -2 Shot Blasting	9.4	312	7040	1	27.4	3.0	13	
AP LINE -3 Reheating Furnace	4.9	410	40656	1	14.6	3.0	17.7	

AP LINE -1 Pre heater	5.2	368	42471	1	16.9	3.0	15.4	
AP LINE -3 quench section-1	7.6	307	84135	1	19.3	3.0	12.8	
BDL : Below Detectable Limit								

STACK EMISSION REPORT

STL	: B
Annexure	: I
Month	:DEC
Year	: 2021

1. Name of the Plant	SALEM STEEL PLANT
2.Name of the shop	Steel Melting Shop /Cold Rolling Mill/ Hot Rolling Mill
3. Process	Steel Melting ,Hot rolling, Annealing & Pickling , Cold Rolling
4. Control equipment installed	Scrubbers, Cyclones, Bag Filters
5. Sampling by	External Agencies.

Stack No & Details	Exit Vel (m/s, Avg)	Temp.K (Avg)	Flow Rate (NM3/Hr Avg)	No.Of Obs	Parameters Avg. (mg/nm3) SPM	SO2	NOx	Remarks
HRM Reheating Furnace	11.8	540	35741	1	32.8	3.0	16.2	
Apl-3 Pre pickling	3.6	317	3377	1	24.9	3.0	7.8	
Apl-3 Mixed Acid	12.5	439	8468	1	28.2	9.4	12	
FBC Boiler(OLD)	7.8	389	19145	1	36.4	27	52	
APL-1 Electrolytic	4.7	318	3469	1	25.9	3.0	14	
APL-1 Brightening	11.2	303	8619	1	30.2	3.0	10.6	
*EAF & LF (SMS)	10.7	345	412566	1	33.9	3.0	7.5	
*AOD (SMS)	14.8	352	154507	1	38.6	17	18	
Z-Mill-1Fume Exhaust	10.4	302	69992	1	26.2	6	12.9	

BDL : Below Detectable Limit

STACK EMISSION REPORT

STL	: B
Annexure	: I
Month	: JAN
Year	: 2022

1. Name of the Plant	SALEM STEEL PLANT
2.Name of the shop	Steel Melting Shop /Cold Rolling Mill/ Hot Rolling Mill
3. Process	Steel Melting ,Hot rolling, Annealing & Pickling , Cold Rolling
4. Control equipment installed	Scrubbers, Cyclones, Bag Filters
5. Sampling by	External Agencies.

Stack No & Details	Exit Vel (m/s, Avg)	Temp. K (Avg)	Flow Rate (NM3/ Hr Avg)	No.Of Obs	Parameters Avg. (mg/nm3) SPM	SO2	NOx	Remarks
HRM Reheating Furnace	10.9	525	33958	1	38.4	3.0	15.7	
Apl-3 Pre pickling	4.2	310	4029	1	20.8	3.0	5.5	
Apl-3 Mixed Acid	1304	446	8935	1	23.9	7.0	9.8	
FBC Boiler(OLD)	6.9	349	27927	1	37.9	21	62	
APL-1 Electrolytic	5.4	313	4049	1	22.9	3.0	12.5	
APL-1 Brightening	9.5	311	7170	1	26.7	3.0	7.8	
*EAF & LF (SMS)	11.6	328	471767	1	36.5	3.0	8.4	
*AOD (SMS)	15.2	337	165746	1	37.1	18	20.2	
Z-Mill-1Fume Exhaust	11.0	315	71209	1	23.8	4	11.6	
Ap Line -3 Short Blasting	11.6	325	121305	1	29.3	<3.0	<2.0	
Diesel Generator -75 KVA (Township)	15.0	472	608	1	0.257	<3.0	2.088	

BDL : Below Detectable Limit

STACK EMISSION REPORT

STL	: B
Annexure	: I
Month	: FEB
Year	: 2022

1. Name of the Plant	SALEM STEEL PLANT
2.Name of the shop	Steel Melting Shop /Cold Rolling Mill/ Hot Rolling Mill
3. Process	Steel Melting ,Hot rolling, Annealing & Pickling , Cold Rolling
4. Control equipment installed	Scrubbers, Cyclones, Bag Filters
5. Sampling by	External Agencies.

Stack No & Details	Exit Vel (m/s, Avg)	Temp.K (Avg)	Flow Rate (NM3/Hr Avg)	No.Of Obs	Parameters Avg. (mg/nm3) SPM	SO2	NOx	Remarks
HRM Reheating Furnace	9.5	538	2881	1	33.9	<3.0	17.2	
Apl-3 Pre pickling	3.9	317	3659	1	25.9	<3.0	6.7	
Apl-3 Mixed Acid	12.7	423	8291	1	21.7	6.0	11.4	
FBC Boiler 11	8.4	327	36286	1	35.9	18	53	
APL-1 Electrolytic	4.6	321	3364	1	26.7	<3.0	15.8	
APL-1 Brightening	10.8	315	8047	1	23.9	<3.0	10.3	
*EAF & LF (SMS)	12.2	343	474471	1	40.7	<3.0	9.2	
*AOD (SMS)	13.9	355	143885	1	42.6	14	22.9	
Z-Mill-1Fume Exhaust	10.2	309	69952	1	27.2	5	12.4	
Z-Mill-11Fume Exhaust	6.7	306	44649	1	24.9	6	14.8	
Ap Line -2 Short Blasting	8.6	318	6319	1	29.3	<3.0	16.2	
Ap Line -3 Short Blasting	10.4	312	120368	1	26.8	<3.0	<2.0	

BDL : Below Detectable Limit

M. Kanakaraj

STACK EMISSION REPORT

STL	: B
Annexure	: I
Month	:MAR
Year	: 2022

1. Name of the Plant	SALEM STEEL PLANT
2.Name of the shop	Steel Melting Shop /Cold Rolling Mill/ Hot Rolling Mill
3. Process	Steel Melting ,Hot rolling, Annealing & Pickling , Cold Rolling
4. Control equipment installed	Scrubbers, Cyclones, Bag Filters
5. Sampling by	External Agencies.

Stack No & Details	Exit Vel (m/s, Avg)	Temp.K (Avg)	Flow Rate (NM3/Hr Avg)	No.Of Obs	Parameters Avg. (mg/nm3) SPM	SO2	NOx	Remarks
HRM Reheating Furnace	9.1	528	28298	1	29.6	<3.0	19.0	
Apl-3 Pre pickling	4.6	318	4362	1	23.2	<3.0	9.0	
Apl-3 Mixed Acid	12.5	430	47730	1	20.2	4.0	15.0	
FBC Boiler 11	7.0	332	29850	1	32.4	12	53	
APL-1 Electrolytic	6.5	312	4913	1	20.6	<3.0	18	
APL-1 Brightening.	12.4	325	8978	1	20.5	<3.0	9.0	
*EAF & LF (SMS)	13.6	349	522312	1	36.2	<3.0	12	
*AOD (SMS)	12.4	350	130885	1	38.5	8.0	17	
Z-Mill-1Fume Exhaust	9.2	311	60612	1	25.8	4.0	13	
Z-Mill-2 Fume Exhaust	6.1	309	40448	1	21.6	5.0	14	
Ap Line -2 preheater	8.5	314	81864	1	17.5	<3.0	19	
Ap Line -2 Short Blasting	9.4	309	7158	1	28.7	<3.0	12	
AP line -2 Equalisation	9.6	311	18683	1	18.2	<3.0	12	
AP Line-2 Brightening	8.6	308	6570	1	21.5	<3.0	7.0	

M. Leanelgong

AP Line-2 Quench	8.5	313	54656	1	17.2	<3.0	16	
APL-2 Electrolyting	9.1	312	24433	1	26.1	<3.0	15	
Ap Line -3 Short Blasting	11.7	318	125765		21.5	<3.0	2.0	
Z-Mill-1Motor commutator	7.4	316	23991		14.7	<3.0	12	

BDL : Below Detectable Limit

STACK MONITORING - STATISTICAL ANALYSIS (OCT21 TO MAR 22)										
Sl No	Name of stack	SPM (mg/Nm3)			SO_2 (mg/Nm3)			NOx (mg/Nm3)		
	Parameters	Min	Max	Average	Min	Max	Average	Min	Max	Average
1	EAF & LF stack	33.9	48.4	39.2	<3.0	<3.0	3	7.5	12	9.16
2	AOD stack (sms)	37.1	48.5	41.2	8	18	14.3	17	21.4	20
3	Re-Heating furnace-HRM	29.6	38.4	34.15	<3.0	<3.0	3	14.2	19	16.26
5	APL-3 Shot Blasting	21.5	31.8	27.46	<3.0	<3.0	3	<2.0	<2.0	2.00
6	APL-3 Prepickling	20.8	28.5	25.1	<3.0	<3.0	3	1	7.8	5.54
7	APL-3 Mixed Acid	21.7	28.2	24	6	9.4	7.6	9.2	12	10.48
8	APL-2 Shot Blasting	27.4	29.3	28.46	<3.0	<3.0	3	12	16	13.73
9	APL-1 Electrolytic	20.4	26.7	23.3	<3.0	<3.0	3	12.5	18	14.8
10	APL-1 Brightening (Fluoride)	20.5	30.2	25.6	<3.0	<3.0	3	7.8	10.6	9.3
11	Mill–I Fume Exhaust	22.9	30.2	26.01	4	6	4.6	11.6	14.5	12.96
12	Mill–II Fume Exhaust	21.6	30.9	26.3	5	8	6	14.8	19.6	16.92
13	FBC Boiler -II	36.4	42.6	39.27	19	27	21.5	44.9	60	54.22
14	Mill - oil celler	15.9	15.9	15.9	<3.0	<3.0	3	7	7	7.00
15	Z mill 1 motor commutator	8.8	8.8	8.8	<3.0	<3.0	3	12.4	12.4	12.4
16	APL-3 Mixed acid (fluoride)	21.7	28.2	24	6	9.4	7.6	9.2	12	10.48
17	APL- II Brightening	21.5	26.1	24.06	<3.0	<3.0	3	7	14	11.16
18	APL- II Electrolytic	8	9.1	8.55	<3.0	<3.0	3	10.7	15	12.85

AMBIENT AIR QUALITY REPORT

STL	: B
Annexure	: II
Month	:OCT
Year	: 2021

1. Name of the Plant	SALEM STEEL PLANT
2. Sampling by	External Agency

S.No. Location	Type of Sample	Date of Sampling	No.Of Obser's	Parameters Avg. (micro gm/Nm3) PM-2.5	PM-10	SO2	NOx	Remarks
	Cont / Int		Norm	60	100	80	80	
1.Works Office	Cont	22.10.2021	1	20.2	35.6	5.5	13.7	
2.IFFS	Cont	21.10.2021	1	17.9	32.5	5.0	11.8	
3.Makeup Water Pumphouse	Cont	21.10.2021	1	21.4	30.8	4.4	12.4	
4.Stainless Surabi	Cont	20.10.2021	1	19.6	36.9	5.0	14.9	
5.Naickenpatty	Cont	20.10.2021	1	21.2	39.5	6.1	15.5	
6.Ganapathi Nagar	Cont	20.10.2021	1	22.8	41.7	6.7	16.2	
7.Thoppukadu	Cont	21.10.2021	1	15.6	35.7	4.4	13.0	
8.Thoppur	Cont	21.10.2021	1	22.7	46.9	5	14.9	
9.SSP Main Hospital	Cont	20.10.2021	1	19.9	33.2	7.2	14.3	
10.Near Medical College	Cont	20.10.2021	1	20.8	40.5	5.5	16.8	

BDL : Below Detectable Limit

AMBIENT AIR QUALITY REPORT

STL	: B
Annexure	: II
Month	:Nov
Year	: 2021

1. Name of the Plant	SALEM STEEL PLANT
2. Sampling by	External Agency

S.No. Location	Type of Sample Cont / Int	Date of Sampling	No.of Obser's Norm	Parameters Avg. (micro gm/Nm3) PM-2.5 60	PM-10 100	SO2 80	NOx 80	Remarks
1.Works Office	Cont	24.11.2021	1	18.6	32.9	6.1	14.3	
2.IFFS	Cont	23.11.2021	1	16.2	34.7	5.5	13.7	
3.Makeup Water Pumphouse	Cont	23.11.2021	1	15.6	27.3	5.0	11.8	
4.Stainless Surabi	Cont	22.11.2021	1	17.5	33.8	4.4	13.2	
5.Naickenpatty	Cont	22.11.2021	1	18.9	34.6	4.9	12.7	
6.Ganapathi Nagar	Cont	22.11.2021	1	19.2	38.5	5.5	15.2	
7.Thoppukadu	Cont	23.11.2021	1	16.3	22.9	4.9	12.2	
8.Thoppur	Cont	23.11.2021	1	20.4	42.5	4.9	12.7	
9.SSP Main Hospital	Cont	22.11.2021	1	17.2	30.9	6.0	13.2	
10.Near Medical College	Cont	22.11.2021	1	18.8	36.7	4.4	14.2	

BDL : Below Detectable Limit

M. Leandoss

AMBIENT AIR QUALITY REPORT

STL	: B
Annexure	: II
Month	:DEC
Year	: 2021

1. Name of the Plant	SALEM STEEL PLANT
2. Sampling by	External Agency

S.No. Location	Type of Sample	Date of Sampling	No.Of Obser's	Parameters Avg. (micro gm/Nm3)				Remar.
	Cont / Int		Norm	PM-2.5 60	PM-10 100	SO2 80	NOx 80	
1.Works Office	Cont	22.12.2021	1	22.9	36.9	7.1	18.6	
2.IFFS	Cont	21.12.2021	1	26.9	54.2	8.2	19.6	
3.Makeup Water Pumphouse	Cont	21.12.2021	1	23.9	38.5	7.7	19.1	
4.Stainless Surabi	Cont	21.12.2021	1	19.8	35.9	5.5	15.6	
5.Naickenpatty	Cont	20.12.2021	1	20.7	39.5	6.6	17.6	
6.Ganapathi Nagar	Cont	20.12.2021	1	23.8	44.7	7.1	19.6	
7.Thoppukadu	Cont	21.12.2021	1	20.2	38.6	6.0	17.1	
8.Thoppur	Cont	20.12.2021	1	22.9	43.8	6.6	19.1	
9.SSP Main Hospital	Cont	20.12.2021	1	19.2	33.6	4.9	14.7	
10.Near Medical College	Cont	20.12.2021	1	21.5	41.9	60	18.6	

BDL : Below Detectable Limit

M. Ganapathy

AMBIENT AIR QUALITY REPORT

STL	: B
Annexure	: II
Month	:JAN
Year	: 2022

1. Name of the Plant	SALEM STEEL PLANT
2. Sampling by	External Agency

S.No. Location	Type of Sample	Date of Sampling	No.Of Obser's	Parameters Avg. (micro gm/Nm3)				Remarks
	Cont / Int		Norm	PM-2.5 60	PM-10 100	SO2 80	NOx 80	
1.Works Office	Cont	21.01.2022	1	24.3	40.8	5.7	14.8	
2.IFFS	Cont	20.01.2022	1	24.4	50.6	8.3	17.6	
3.Makeup Water Pumphouse	Cont	20.01.2022	1	22.5	41.7	7.3	19.5	
4.Stainless Surabi	Cont	20.01.2022	1	21.9	38.4	6.2	17.1	
5.Naickenpatty	Cont	20.01.2022	1	23.4	41.7	7.8	19.0	
6.Ganapathi Nagar	Cont	19.01.2022	1	25.3	45.9	78	20.0	
7.Thoppukadu	Cont	20.01.2022	1	18.5	39.9	5.2	15.7	
8.Thoppur	Cont	19.01.2022	1	23.6	46.2	5.7	18.6	
9.SSP Main Hospital	Cont	19.01.2022	1	20.9	37.5	5.2	16.2	
10.Near Medical College	Cont	19.01.2022	1	22.8	43.2	6.7	19.5	

BDL : Below Detectable Limit

AMBIENT AIR QUALITY REPORT

STL	: B
Annexure	: II
Month	: FEB
Year	: 2021

1. Name of the Plant	SALEM STEEL PLANT
2. Sampling by	External Agency

S.No. Location	Type of Sample	Date of Sampling	No.Of Obser's	Parameters Avg. (micro gm/Nm3) PM-2.5	PM-10	SO2	NOx	Rem
	Cont / Int		Norm	60	100	80	80	
1.Works Office	Cont	21.02.2022	1	22.2	43.9	7.8	15.7	
2.IFFS	Cont	21.02.2022	1	27.2	53.8	8.8	20.5	
3.Makeup Water Pumphouse	Cont	21.02.2022	1	24.5	45.2	8.3	20.0	
4.Stainless Surabi	Cont	21.02.2022	1	22.5	41.9	6.7	19.0	
5.Naickenpatty	Cont	21.02.2022	1	20.8	44.2	5.2	17.1	
6.Ganapathi Nagar	Cont	21.02.2022	1	27.2	50.2	9.3	21.4	
7.Thoppukadu	Cont	21.02.2022	1	21.3	40.6	4.7	16.2	
8.Thoppur	Cont	21.02.2022	1	26.2	48.8	8.3	20.5	
9.SSP Main Hospital	Cont	21.02.2022	1	21.6	39.8	6.2	17.1	
10.Near Medical College	Cont	21.02.2022	1	21.6	45.9	5.7	17.6	

BDL : Below Detectable Limit

M. Veeraraghavan

AMBIENT AIR QUALITY REPORT

STL	: B
Annexure	: II
Month	:MAR
Year	: 2022

1. Name of the Plant	SALEM STEEL PLANT
2. Sampling by	External Agency

S.No. Location	Type of Sample	Date of Sampling	No.Of Obser's	Parameters Avg. (micro gm/Nm3)				Remar
	Cont / Int		Norm	PM-2.5 60	PM-10 100	SO2 80	NOx 80	
1.Works Office	Cont	24.03.2022	1	21.7	39.2	6.2	16.7	
2.IFFS	Cont	25.03.2022	1	25.7	52.3	7.3	22.4	
3.Makeup Water Pumphouse	Cont	24.03.2022	1	26.0	47.2	9.9	18.6	
4.Stainless Surabi	Cont	22.03.2022	1	20.2	43.5	7.3	21.4	
5.Naickenpatty	Cont	22.03.2022	1	22.6	43.2	6.7	18.1	
6.Ganapathi Nagar	Cont	22.03.2022	1	23.6	53.0	6.2	22.4	
7.Thoppukadu	Cont	23.03.2022	1	21.3	43.5	6.2	17.1	
8.Thoppur	Cont	23.03.2022	1	24.9	51.4	7.8	21.4	
9.SSP Main Hospital	Cont	22.03.2022	1	23.8	42.4	5.7	19.0	
10.Near Medical College	Cont	22.03.2022	1	24.3	48.1	5.2	16.7	

BDL : Below Detectable Limit

M. Veerabhadra

Ambient Air Quality Monitoring -Statistical Analysis((OCT21 TO MAR 22)													
Sl No	Location	PM2.5			PM10			SO2			NOx		
		Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg
1	Works Office	18.60	24.30	21.65	32.90	43.90	38.21	5.5	7.8	6.40	13.7	18.6	15.63
2	IFFS	16.20	27.20	23.05	32.50	54.20	46.35	5	8.8	7.18	7.3	20.5	15.08
3	Makeup water PH	15.60	24.50	22.31	27.30	47.20	38.45	4.4	9.9	7.10	11.8	20	16.90
4	Stainless Surabhi	17.50	22.50	20.25	33.80	43.50	38.40	5	7.3	5.85	13.2	21.4	16.86
5	Naickenpatti	18.90	23.40	21.26	34.60	44.20	40.45	4.9	7.8	6.21	12.7	19	16.66
6	Ganapathi Nagar	19.20	27.20	23.65	38.50	53.00	45.66	5.5	9.3	7.10	15.2	22.4	19.13
7	Thoppukadu	15.60	21.30	18.86	22.90	43.50	36.86	4.7	6.2	5.40	13	17.1	15.22
8	Thoppur	20.40	26.20	23.45	42.50	51.40	46.60	4.9	8.3	6.38	12.7	21.4	17.86
9	SSPmain hospital	17.20	23.80	20.43	30.90	42.40	36.23	4.9	7.2	7.36	13.2	19	15.75
10	Near medical college	18.80	24.30	21.63	36.70	48.10	42.72	4.4	6.7	5.83	14.2	19.5	17.23

All values are in microgram/N Cu.m

FUGITIVE EMISSION MONITORING AT SMS (LF) Area

S.No	Month	Oct'21	Nov'21	Dec'21	Jan'22	Feb'22	Mar'22	REMARKS
	Parameters							
1	PM-2.5 (µg/m3)	29.2	27.3	32.6	33.6	36.4	32	
2	PM-10 (µg/m3)	55.7	52.9	60.7	64.4	65.9	61.5	
3	SO2 (µg/m3)	8	7.7	9.4	9.9	9.3	7.3	
4	NOX (µg/m3)	21.1	19.6	20.5	21.4	21.9	22.4	
5	CO (mg/m3)	BDL	BDL	BDL	BDL	BDL	BDL	
6	F (µg/m3)	BDL	BDL	BDL	BDL	BDL	BDL	

FUGITIVE EMISSION MONITORING AT SMS (LF) Area-

Statistical Analysis

S.No	Month	Oct'21	Nov'21	Dec'21	Jan'22	Feb'22	Mar'22	MIN	MAX	AVG	REMARKS
	Parameters										
1	PM-2.5 (µg/m3)	29.2	27.3	32.6	33.6	36.4	32	27.3	36.4	31.85	
2	PM-10 (µg/m3)	55.7	52.9	60.7	64.4	65.9	61.5	52.9	65.9	59.4	
3	SO2 (µg/m3)	8	7.7	9.4	9.9	9.3	7.3	7.3	9.9	8.5	
4	NOX (µg/m3)	21.1	19.6	20.5	21.4	21.9	22.4	20.5	22.4	21.45	
5	CO (mg/m3)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
6	F (µg/m3)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	