

Letter No: TSL/FAMD/FAPA/FY25/1665

Date: 26.11.2024

To.

The Director, MOEF & CC
Impact Assessment Division (EAC – Industry-I)
Ministry of Environment, Forest, and Climate Change
Indira Paryavaran Bhavan, Jor Bagh Road, Aliganj
New Delhi- 110003

Sub: Submission of Half Yearly EC Compliance Report for a period of **April'2024 to September'2024** considering the financial year from 1st April 2024 to 31st March 2025.

Ref: EC Vide File No. J-11011/43/2011-IA II (I) dated: 17th July 2019.

Dear Sir,

With reference to the subject and reference no cited above, we are herewith submitting the "Half yearly Compliance of Environment clearance conditions for the period of April'2024 to September'2024 for your kind perusal.

With best regards

For Tata Steel Limited.

Authorized Signatory

Head, Ferro Alloys Plant Athagarh, Cuttack Tata Steel Limited

Enclosure: As Enclosed

Copy to: The Regional Officer, Cuttack, MOEF & CC

Regional office, Bhubaneswar

State Pollution Control Board, Bhubaneswar

Half Yearly Compliance Report 2024 01 Dec(01 Apr - 30 Sep)

Acknowledgement

Proposal Name	Proposed for expansion of Ferro Alloys Plant with addition of 2x16.5 MVA SAF - Amendment of EC for existing 2X16.5 SAF(i.e production capacity of 59400 TPA) at village Ananthapur, Tehsil Athagarh, Dist cuttack, Odisha
Name of Entity / Corporate Office	Tata Steel Limited
Village(s)	N/A
District	CUTTACK

Proposal No.	IA/OR/IND/26031/2010
Plot / Survey / Khasra No.	N/A
State	ODISHA
MoEF File No.	F. No. J-11011/43/2011- IA II (I)

Category	Industrial Projects - 1
Sub-District	N/A
Entity's PAN	****2803M
Entity name as per PAN	UTSAV KASHYAP

Compliance Reporting Details

Reporting Year 2024

Submission of Half Yearly

EC Compliance for a

Remarks (if any) period of April 2024 to

September 2024 in details

below.

Reporting Period 01 Dec(01 Apr - 30 Sep)

Details of Production and Project Area

Name of Entity / Corporate Office

Tata Steel Limited

	Project Area as per EC Granted	Actual Project Area in Possession
Private	33.79	33.79
Revenue Land	0	0
Forest	0	0
Others	0	0
Total	33.79	33.79

Production Capacity

Sr. no	Product Name	units	Valid Upto	Capacity	Production last year	Capacity as per CTO
1	High Carbon Ferro Chrome/High Carbon Silico Manganese/Medium Carbon Silico Manganese/High CarbFerro	Million Tons per Annum (MTPA)	31/03/2026	59,400	52741.48MT	59,400

Conditions

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Corporate Environmental

Sr.No.	Condition Type	Condition Details	
1	AIR QUALITY MONITORING AND PRESERVATION	The project proponent should install 24 X 7 air mon to monitor air emission, as provided by CPCB and subministry and its regional office.	
Complie	abmission: Complied d. We have four stations installed wit ng Report is attached in Annexure 2	thin the premises and the Ambient Air Quality	Date: 29/11/2024
2	WATER QUALITY MONITORING AND PRESERVATION	Regular monitoring of influent and effluent surface, and ground water shall be ensured and treated waste v the norms prescribed by the SPCB or described under whichever are more stringent.	vater shall me
Complie	abmission: Complied d .Regular monitoring is carried out a attached as in Annexure 6	as per the CPCB norms and related Water analysis	Date: 29/11/2024
3	MISCELLANEOUS	Slag produced in ferro manganese production shall manufacture of Silico-manganese. The other Ferro all used in the preparation of building materials.	
Complie	abmission: Complied d .Right now the ferro chrome slag is e of the slag is being sold to vendor a	s being stacked within the premises in an identified area s alternate building material.	Date: 29/11/2024
1	Risk Mitigation and Disaster Management	Risk and Disaster Management Plan along with the measures shall be prepared and a copy submitted to th Regional Office at Bhubaneswar, SPCB and CPCB w of issue of Environment Clearance letter.	e Ministry's
PPs Su	Management abmission: Complied	measures shall be prepared and a copy submitted to the Regional Office at Bhubaneswar, SPCB and CPCB w	e Ministry's
PPs Su	Management bmission: Complied d .The approved DMP has already be	measures shall be prepared and a copy submitted to th Regional Office at Bhubaneswar, SPCB and CPCB w of issue of Environment Clearance letter.	Date: 29/11/2024

All the recommendations made in the Charter on Corporate

	Responsibility	Responsibility for Environment Protection for the stee be implemented	el plants shall
Compli	Submission: Complied ied .All the applicable recommendati nment protection for the Steel plant h	on made in the charter on Corporate responsibility for tave been implemented	Date: 29/11/2024
7	Corporate Environmental Responsibility	At least 5 percent of the total project cost shall be eatowards Enterprise Social Commitment based on local proponent shall prepare a detailed CSR plan for every for the existing -cum-expansion project which included sector wise (Health requirements, sanitation, health state development and infrastructure requirements such as sof village roads, avenue plantation etc.). The CSR plathe amount of 2 percent retain annual profits as provided Companies Act, 2013 which provides for 2 percent of net profits of previous 3 years towards CSR activities project.	I needs. The next 5 years is village wise kill strengthening in will include led in the average
Complifrom Magnetic Complex Co	IoEF and CC vide letter no. J-11011/	dropped and accordingly the amended EC obtained 43/2011-IA.II(I) dt:17.07.2019 . 2. A minimum of rs is being spent by Tata Steel in the nearby villages	Date: 29/11/2024
8	WATER QUALITY MONITORING AND PRESERVATION	The concrete drains shall be de-silted and regular su the areas shall be carried out so that blocking of the dravoided for quick discharge of rainwater	
	Submission: Complied ied .Storm water drains are provided	and maintained before rainy season.	Date: 29/11/2024
9	WATER QUALITY MONITORING AND PRESERVATION	Rainwater harvesting scheme shall be prepared so the rainwater can be collected, reused and may be used for recharge	
Compli sides of	f the plant premises and therefore 12	catchment area are isolated by boundary wall on all 4 nos of water recharge pits are available to handle the run water recharge controlled by local control gradient.	Date: 29/11/2024
10	AIR QUALITY MONITORING AND PRESERVATION	Monitoring report on Ambient Air Quality, fugitive levels inside the plant shall be submitted along with the compliance reports	
Compli	Submission: Complied ied .Regular monitoring is being carr ring at 4 locations and noise monitor	ied out at 4 AAQ monitoring stations, Fugitive dust ing at 22 locations.	Date: 29/11/2024
11	MISCELLANEOUS	Environmental Management Cell shall be establishe and shall be headed by a Senior Officer and the mand shall be defined for effective Management of environmeasures.	ate of the Cel
Compli	Submission: Complied ied .Environment management cell is plant head. The plant head is reporting	present consisting of manager environment and headed g to MD.	Date: 29/11/2024
by the	-		

		measure taken to reduce pollution and to ensure imple transparency with general public.	mentation of
Compli commo		compliance are regularly uploaded on company orporate/our-organisations/environmentenvironment-	Date: 29/11/2024
13	MISCELLANEOUS	Prior clearance from standing committee for national life(NBWL) shall be obtained before commencement the site for the proposed expansion project	
Compli 11011/ product will be	43/2011-IA.II(I) dt:17.07.2019 for the tion capacity of 59400 TPA of Ferro ch	and the amended EC has been issued vide letter no. Jexisting configuration 2X16.5 MVA SAF of plant arome/silico manganese/Ferro manganese. Hence there remises. This may be kindly acknowledged against the nexure 1.	Date: 29/11/2024
14	ENERGY PRESERVATION MEASURES	The loss of chromium shall be further reduced	
Compliexisting Month 2478.00 408.34	g Jigging plant. If any other new technol Production of Ferro chrome Jigging Re 0 May 2024 2949.00 294.28 2654.00 Ju	een taken for recovery of Chromium through the blogy will be available in future shall be adopted. ecovery Slag Generation April 2024 2753.00 316.38 ane 2024 3925.00 273.36 3533.00 July 2024 4098.00 3940.00 Sept 2024 3933.20 278.41 3540.00 Total	Date: 29/11/2024
15	AIR QUALITY MONITORING AND PRESERVATION	Measures shall be taken to reduce PM levels in the a Stack of adequate height and diameter with continuou monitoring facilities for all stacks shall be provided at pollution control devices viz. Electronic precipitator (house, bag filters etc shall be provided to keep the em below 50 mg/Nm3 and installing energy efficient tech	s stack nd sufficient ESO), bag ission levels
Compli report A (m3/hr)	As per the Annexure 3 Stack Pollution	nsistent efficiency of 95 percent. The stack monitoring Control Equipment Size Qty of Flue Gas Handled to 2160 Bags 240000 Furnace 2 Bag Filter 12 x 180 et Scrubber 40 Hp pump 22000	Date: 29/11/2024
16	AIR QUALITY MONITORING AND PRESERVATION	The national ambient air quality emission standard a ministry vide G.S.R. no 826(E) dated 16th November followed	
Compli NAAQ		e that the AAQ results are very much within the the pollution control equipment. Ambient Air Quality re 2	Date: 29/11/2024
	AIR QUALITY MONITORING AND	Gaseous emission levels including secondary fugitive from all the sources shall be controlled within the late limits issued by the Ministry and regularly monitored.	st permissibl

PPs Submission: Complied Complied Inside the plant ambient air quality results indicate the control of emission from secondary sources as on date. The various control measures taken for secondary emission sources Date: are: Source of Secondary Emission Control Measures Road All internal roads are concretized and 29/11/2024 additional mobile water sprinkler are engaged within the premises for fugitive dust suppression. Tapping Fume Tapping fumes are sucked by a Hood and collection system which is routed through GCP. Feeding Points All Feeding points are installed with water fogging system. Raw material Conveyers In conveyer nodes intermittent water sprinkling is practise. Dust extraction system comprising of pulse jet type bag filter, AIR QUALITY centrifugal fan and motors, dust work including suction hoods, dust MONITORING AND 18 supports, stack dust hoppers, rotary air lock, valves etc should be **PRESERVATION** installed **PPs Submission:** Complied Date: Complied. Adequate Pollution control measures have been provided at the point of generation of 29/11/2024 fugitive dust as mentioned in sl. no. 6 above. In addition, Plantation programs are enforced at periphery, avenue, open spaces surrounding point and area sources as in Annexure 4 WATER QUALITY Water sprinkling arrangements as well as dry fog system to control 19 MONITORING AND fugitive emission shall be undertaken **PRESERVATION** Date: PPs Submission: Complied 29/11/2024 Complied .Dry Fog system is installed at Ground Hopper 1 and 2 at Raw Material feeding System. Water Sprinkling is being carried out in Jigging Plant area as well. AIR QUALITY Tap hole emissions shall be taken to GCP system by providing MONITORING AND 20 proper hood and suction system. **PRESERVATION** Date: PPs Submission: Complied 29/11/2024 Complied .Tap hole emissions are taken to GCP through covered hoods and appropriate suction System. WATER QUALITY Water sprinkling at the raw material stock yard to control fugitive 21 MONITORING AND emission **PRESERVATION** Date: **PPs Submission:** Complied 29/11/2024 Complied .This is being carried out by mobile sprinkler. AIR QUALITY Driver system shall be provided at feeding point, transfer point at 22 MONITORING AND proportioning system to control fugitive dust emission **PRESERVATION** Date: PPs Submission: Complied 29/11/2024 Complied .The system is fully mechanized and driver system has been provided at feeding and transfer points. AIR QUALITY Dust suppression system and bag filters shall be installed to control

PPs Submission: Complied
Complied .Suitable arrangement has been made to control the fugitive emissions.

Date: 29/11/2024

handling, loading and unloading points.

the fugitive emissions at conveyor and transfer points, product

24 WATER QUALITY The water consumption shall not exceed as per the standard

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MONITORING AND

PRESERVATION

	MONITORING AND PRESERVATION	prescribed for the steel plants.	
Compli	Submission: Complied ed .Flow meter data for this period aption is well within the permissib	d is provided in Annexure 5. Our Monthly water le drawl limit	Date: 29/11/2024
25	WATER QUALITY MONITORING AND PRESERVATION	Efforts shall be further made to use maximum water water harvesting sources. If needed, capacity of the renhanced to meet the maximum water requirement. Water requirement shall be met from other sources. Use condensers shall be explored and closed circuit coolid be monitored accordingly	eservoir shall b Only balance Jse of air coole
Compli four sic	le of the plant premises and thereforf water from the plant premises	ng catchment areas are isolated by boundary wall on all ore 12No s of water recharge pits are available to handle for ground water Recharge controlled by local control	Date: 29/11/2024
26	WATER QUALITY MONITORING AND PRESERVATION	All the effluent shall be treated and used for ash ha suppression, and green belt development. No effluen discharged and Zero Discharge shall be adopted. San shall be treated in septic tank followed by soak pit	t shall be
Compli plant it		red and effluent is being treated by ETP and reused in the lary facilities are connected to a STP whose overflow is	Date: 29/11/2024

Sr.No.	Condition Type	Condition Details	
1	WASTE MANAGEMENT	Industrial waste water shall be properly collected tree conform to the standards prescribed under GSR 422(E May, 1993 and 31st December, 1993 or as amended fr time.) dated 19th
Complie	abmission: Complied d .Effluent generated from the indust. Zero effluent discharge is being man	stry is being collected and treated in the ETP for reuse in aintained.	Date: 29/11/2024
2	Human Health Environment	Occupational health surveillance of the workers shall regular basis and records maintained as per the Factori	
Complie every 3r		of workers is being done as per the Factories Act in ecords of the same are being maintained in Form 31A.	Date: 29/11/2024
3	WATER QUALITY MONITORING AND PRESERVATION	The company shall develop rain water harvesting strain harvest the rain water for utilization in the lean season recharging the ground water table	
Complie	abmission: Complied d. 12Nos of water recharge pits are and water recharge as a measure of ra	constructed and in operation along the contour slopes	Date: 29/11/2024

4 Statutory compliance

The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report. Further, the company must undertake socio economic development activities in the surrounding villages.

PPs Submission: Complied

Complied. All necessary environmental protection measures have been implemented at site. Socio economic activities are being carried out in the surrounding villages as part of CSR.

Date: 29/11/2024

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Corporate Environmental Responsibility

Requisite funds shall be earmarked towards capital cost and recurring cost/annum for environmental pollution control measures to implement the conditions stipulated by the ministry of Environment, Forest and Climate Change (MoEFCC) as well as the State Government. An implementation schedule for implementing all the stipulated conditions herein shall be submitted to the Regional Office of the Ministry at Bhubaneswar. The funds so provided shall not be diverted for any other purpose

PPs Submission: Complied

Complied The necessary pollution control equipment has been installed and is under regular maintenance for which funds has been earmarked in the annual budget. The expenditure incurred for environmental pollution control measures is attached as in Annexure-10.

Date: 29/11/2024

6 MISCELLANEOUS

A copy of clearance letter shall be sent by the proponent to the concerned Panchayat, Zila Parishad/municipal Corporation, Urban Local Body 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.

PPs Submission: Complied

Complied. A copy of clearance letter was forwarded to the concerned Panchayat, Zila Parishad/municipal Corporation, and Urban Local Body. A copy of the clearance letter has also been uploaded on the company's website of the company.

Date: 29/11/2024

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MISCELLANEOUS

The project proponent shall upload the status of compliance of the stipulated environmental clearance conditions including results of monitored data on their website and shall update the same periodically. It shall be simultaneously sent to the Regional Office of the MoEFCC at Bhubaneswar. The respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely PM10, SO2, NOX or critical sectorial parameters indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.

PPs Submission: Complied

Complied. Compliance report along with environmental monitoring reports are being submitted to OSPCB RO office, OSPCB Head office and RO -MOEFCC. The copy of the same is also being uploaded on Tata Steel's common website. Electronic display has been installed near to the main gate of plant showing the level of PM 10, SO2 and NOX, along with details of applicable statutory clearances.

Date: 29/11/2024

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MISCELLANEOUS

The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MoEFCC, the respective Zonal Office of CPCB and the SPCB. The Regional Office of the MoEFCC at Bhubaneswar shall monitor the stipulated conditions.

PPs Submission: Complied

Date:

OSPCI		ronmental monitoring reports are being submitted to RO -MOEFCC. The copy of the same is also being mexure 11	29/11/2024
9	Noise Monitoring & Prevention	The overall noise levels in and around the plant area well within the standards (85 dBA) by providing noise measures including acoustic hoods, silencers, enclosur sources of noise generation. Ambient noise levels show the standards prescribed under EPA Rules, 1989	e control res etc on the
Compl	Submission: Complied lied .It has been strictly adhered. Acoust oring report for this period is being attack.	tic enclosures are provided for DG sets. Noise shed in Annexure 8	Date: 29/11/2024
10	Statutory compliance	The project authorities must strictly adhere to the stip by the Orissa Pollution Control Board and the State Go	
Compl	Submission: Complied ied .All the stipulations made by the Ochment are strictly followed.	lisha Pollution Control Board and the State	Date: 29/11/2024
11	MISCELLANEOUS	No further expansion or modification in the plant sha out without prior approval of the Ministry of Environn Climate Change(MoEFCC)	
	Submission: Complied lied .Acknowledged and status quo main	ntained.	Date: 29/11/2024
12	AIR QUALITY MONITORING AND PRESERVATION	At least four Ambient Air Quality monitoring station established in the downward direction as well as where ground level concentration of PM10, PM2.5, SO2 and anticipated in consultation with the SPCB. Data on Arr Quality and stack emission shall be regularly submitte Ministry including Regional Office at Bhubaneswar aronce in six months	e maximum Nox are nbient Air d to this
Compl	Submission: Complied lied .Regular monitoring is being carried oring at 4 locations and noise monitoring	d out at 4 AAQ monitoring stations ,Fugitive dust g at 22 locations. Annexure 8	Date: 29/11/2024
13	Statutory compliance	The environmental Statement for each financial year March in Form V as is mandated to be submitted by T proponent to the concerned State Pollution Control Bo prescribed under Environmental (Protection) Rules, 19 subsequently shall also be put on the website of the co with the status of compliance of Environmental Condi also be sent to the respective Regional Office of the M Bhubaneswar by e-mail	he project ard as 986 as amende mpany along tions and shal
Compl		was submitted to SPCB and RO of MoEF and CC as submission is attached In Annexure 12.	Date: 29/11/2024
14	PUBLIC HEARING	The project proponent shall inform the public that the been accorded environmental clearance by the Ministry the clearance letter are available with the SPCB and meat the website of the Ministry of Environment, Forests Change at http://envfor.nic.in. This shall be advertised days from the date of issue of clearance letter at least in	y and copies of ay also be see and Climate within seven

		newspaper that are widely circulated in the region of v be in vernacular language of the locality concerned an same should be forwarded to the Regional Office at B	d a copy of the
Compli		C due advertisement were published with intimation to essary information and record keeping.	Date: 29/11/2024
15	MISCELLANEOUS	Project authorities shall inform the Regional office a Ministry the date of financial closure and final approvable by the concerned authorities and the date of commence development work.	al of the project
Compli	ubmission: Complied ed. The expansion project has been drund CC vide letter no. J-11011/43/201	opped and accordingly the amended EC obtained from 1-IA.II(I) dt:17.07.2019 .	Date: 29/11/2024
		Visit Remarks	
Last Site	Visit Report Date:	N/A	
Addition	al Remarks:		
Note:	This acknowledgement is as per the de	tails submitted by project proponent. In no way is this do	ocument to be

Note: This acknowledgement is as per the details submitted by project proponent. In no way is this document to be considered as conclusion on any action on the compliance of the project. This is strictly for the project proponent's reference purpose.

	Specific Conditions										
Sr. No.	Conditions		Compliances								
1	Prior clearance from standing committee for national board of wild life(NBWL) shall be obtained before commencement of any work at the site for the proposed expansion project	Trnrome/cilico manganece/Herro manganece									
2	The project proponent should install 24 X 7 air monitoring devices to monitor air emission, as provided by CPCB and submit report to ministry and its regional office	Complied. We have four stations instructions within the premises and the Ambient Quality Monitoring Report is attached Annexure#2									
3	The loss of chromium shall be further reduced	been taken the existin	Production of Ferro chrome 2753.00 2949.00 3925.00 4098.00	ry of Chromi lant. If any ilable in fut	Slag Generation 2478.00 2654.00 3533.00 3688.00 3940.00 19833.00						
4	Measures shall be taken to reduce PM levels in the ambient air. Stack of adequate height and diameter with continuous stack monitoring facilities for all stacks shall be provided and sufficient air pollution control devices viz. Electronic precipitator (ESO), bag house, bag filters etc shall be provided to keep the emission levels below 50 mg/Nm3 and installing energy efficient technology	consistent	efficie monitorin	ency	ontained for 95%. As per the Qty of Flue Gas Handled (m³/hr) 240000 22000						

Sr. No.	Conditions	Compliances			
5	The national ambient air quality emission standard assured by the ministry vide G.S.R. no 826(E) dated 16th November, 2009 shall be followed	Complied. Regular Monitoring results indicate that the AAQ results are very much within the NAAQS limit during the operation along with the pollution control equipment. Ambient Air Quality results for last six months attached as Annexure #2			
		Complied .Inside the plant ambient air quality results indicate the control of emission from secondary sources as on date .The various control measures taken for secondary emission sources are:			
	Gaseous emission levels including secondary fugitive emissions from all the sources shall be	Source of Secondary Control Measures			
6	controlled within the latest permissible limits issued by the Ministry and regularly monitored. Guidelines/code of practice issued by the CPCB should be followed. New standards for the sponge iron plant issued by the ministry vide G.S.R. 414(E) dated 30thmay, 2008 should be followed	Road Road			
		Tapping Hood and collection system which is routed through GCP.			
		Feeding All Feeding points are installed with water fogging system.			
		Raw material In conveyer nodes intermittent Conveyers water sprinkling is practise.			
7	Dust extraction system comprising of pulse jet type bag filter, centrifugal fan and motors, dust work including suction hoods, dust supports , stack dust hoppers, rotary air lock , valves etc should be installed	of fugitive dust as mentioned in sl. no. 6 abov			
8	Water sprinkling arrangements as well as dry fog system to control fugitive emission shall be undertaken	Complied .Dry Fog system is installed at Ground Hopper 1 & 2 at Raw Material feeding System. Water Sprinkling is being carried out in Jigging Plant area as well.			
9	Tap hole emissions shall be taken to GCP system by providing proper hood and suction system.	Complied .Tap hole emissions are taken to GCP through covered hoods and appropriate suction System.			
10	Water sprinkling at the raw material stock yard to control fugitive emissions	Complied .This is being carried out by mobile sprinkler.			
11	Driver system shall be provided at feeding point, transfer point at proportioning system to control fugitive dust emission	Complied .The system is fully mechanized and driver system has been provided at feeding and transfer points.			

Sr. No.	Conditions	Compliances
12	Dust suppression system and bag filters shall be installed to control the fugitive emissions at conveyor and transfer points, product handling, loading and unloading points.	Complied .Suitable arrangement has been made to control the fugitive emissions.
13	The water consumption shall not exceed as per the standard prescribed for the steel plants.	Complied .Flow meter data for this period is provided in Annexure#5. Our Monthly water consumption is well within the permissible drawl limit.
14	Efforts shall be further made to use maximum water from the rain water harvesting sources. If needed, capacity of the reservoir shall be enhanced to meet the maximum water requirement. Only balance water requirement shall be met from other sources. Use of air cooled condensers shall be explored and closed circuit cooling system shall be monitored accordingly	Complied .The rain water from surrounding catchment areas are isolated by boundary wall on all four side of the plant premises and therefore 12No's of water recharge pits are available to handle the runoff water from the plant premises for ground water Recharge controlled by local control gradient.
15	All the effluent shall be treated and used for ash handling, dust suppression, and green belt development. No effluent shall be discharged and Zero Discharge shall be adopted. Sanitary sewage shall be treated in septic tank followed by soak pit	Complied .Zero discharge has been adopted and effluent is being treated by ETP and reused in the plant itself. The office premises and ancillary facilities are connected to a STP whose overflow is used for green belt development.
16	Regular monitoring of influent and effluent surface, sub surface and ground water shall be ensured and treated waste water shall meet the norms prescribed by the SPCB or described under the E(P) Act whichever are more stringent.	Complied .Regular monitoring is carried out as per the CPCB norms and related Water analysis report is attached as in Annexure#6
17	Slag produced in ferro manganese production shall maybe used in manufacture of Silicomanganese. The other Ferro alloy slag shall be used in the preparation of building materials.	Complied .Right now the ferro chrome slag is being stacked within the premises in an identified area and some of the slag is being sold to vendor as alternate building material.
18	Risk and Disaster Management Plan along with the mitigation measures shall be prepared and a copy submitted to the Ministry's Regional Office at Bhubaneswar, SPCB and CPCB within 3 months of issue of Environment Clearance letter.	Complied .The approved DMP has already been prepared &duly submitted to regional office MOEF &CC, BBSR. Annexure#7
19	As proposed green belt shall be developed in 33 % of the plant area. Selection of plant species shall be as per CPCB guidelines in consultation with the DFO.	Complied .Green belt development with plantation record for this period is given in Annexure#4

Sr. No.	Conditions	Compliances
20	All the recommendations made in the Charter on Corporate Responsibility for Environment Protection for the steel plants shall be implemented	made in the charter on Corporate
21	At least 5 % of the total project cost shall be earmarked towards Enterprise Social Commitment based on local needs. The proponent shall prepare a detailed CSR plan for every next 5 years for the existing -cum-expansion project which includes village wise ,sector wise (Health requirements, sanitation, health skill development and infrastructure requirements such as strengthening of village roads, avenue plantation etc.). The CSR plan will include the amount of 2 % retain annual profits as provided in Companies Act, 2013 which provides for 2% of the average net profits of previous 3 years towards CSR activities for life of the project.	1.The expansion project has been dropped and accordingly the amended EC obtained from MoEF & CC vide letter no. J-11011/43/2011-IA.II(I) dt:17.07.2019. 2. A minimum of 2% of average profit of previous 3 years is being spent by Tata Steel in the nearby villages through Tata Steel Foundation.
22	The concrete drains shall be de-silted and regular supervision of the areas shall be carried out so that blocking of the drains may be avoided for quick discharge of rainwater	Complied .Storm water drains are provided and maintained before rainy season.
23	Rainwater harvesting scheme shall be prepared so that the rainwater can be collected, reused and may be used for ground water recharge	Complied .The rain water from surrounding catchment area are isolated by boundary wall on all 4 sides of the plant premises and therefore 12 no's of water recharge pits are available to handle the run of water from the plant premises for ground water recharge controlled by local control gradient.
24	Monitoring report on Ambient Air Quality, fugitive dust and noise levels inside the plant shall be submitted along with the 6 monthly compliance reports	Complied .Regular monitoring is being carried out at 4 AAQ monitoring stations, Fugitive dust monitoring at 4 locations and noise monitoring at 22 locations.
25	Environmental Management Cell shall be established immediately and shall be headed by a Senior Officer and the mandate of the Cell shall be defined for effective Management of environment control measures.	Complied .Environment management cell is present consisting of manager environment and headed by the plant head. The plant head is reporting to MD.

Sr.		1 to sept 202 1)			
No.	Conditions	Compliances			
26	The project shall develop its own website to upload compliance measure taken to reduce pollution and to ensure implementation of transparency with general public.	Complied .The environmental statement and compliance are regularly uploaded on company's common website. https://www.tatasteel.com/corporate/our-organisations/environmentenvironment-compliance-reports/			
	EC- General Conditions				
1	The project authorities must strictly adhere to the stipulations made by the Orissa Pollution Control Board and the State Government	Complied .All the stipulations made by the Odisha Pollution Control Board and the State Government are strictly followed.			
2	No further expansion or modification in the plant shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change(MoEF &CC)	Complied .Acknowledged and status quo maintained.			
3	At least four Ambient Air Quality monitoring stations should be established in the downward direction as well as where maximum ground level concentration of PM10, PM2.5, SO2 and Nox are anticipated in consultation with the SPCB. Data on Ambient Air Quality and stack emission shall be regularly submitted to this Ministry including Regional Office at Bhubaneswar and the SPCB once in six months	Complied .Regular monitoring is being carried out at 4 AAQ monitoring stations ,Fugitive dust monitoring at 4 locations and noise monitoring at 22 locations. Annexure #8			
4	Industrial waste water shall be properly collected treated so as to conform to the standards prescribed under GSR 422(E) dated 19th May, 1993 and 31st December, 1993 or as amended from time to time.	Complied .Effluent generated from the industry is being collected & treated in the ETP for reuse in the plant. Zero effluent discharge is being maintained.			
5	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 the sources of noise generation. Ambient noise levels should conform to the standards prescribed under EPA Rules, 1989	Complied .It has been strictly adhered. Acoustic enclosures are provided for DG sets. Noise monitoring report for this period is being attached in Annexure#8			
6	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	Complied .Occupational health surveillance of workers is being done as per the Factories' Act in every 3rd Quarter of a Financial Year. The records of the same are being maintained in Form 31A. Copy of the same is attached as Annexure#9 .			

Sr. No.	Conditions	Compliances
7	The company shall develop rain water harvesting structure to harvest the rain water for utilization in the lean season besides recharging the ground water table	Complied .12Nos of water recharge pits are constructed and in operation along the contour slopes for ground water recharge as a measure of rain water harvesting.
8	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report. Further, the company must undertake socio economic development activities in the surrounding villages.	Complied. All necessary environmental protection measures have been implemented at site. Socio economic activities are being carried out in the surrounding villages as part of CSR.
9	Requisite funds shall be earmarked towards capital cost and recurring cost/annum for environmental pollution control measures to implement the conditions stipulated by the ministry of Environment, Forest and Climate Change (MoEF&CC) as well as the State Government. An implementation schedule for implementing all the stipulated conditions herein shall be submitted to the Regional Office of the Ministry at Bhubaneswar. The funds so provided shall not be diverted for any other purpose	Complied The necessary pollution control equipment has been installed and is under regular maintenance for which funds has been earmarked in the annual budget. The expenditure incurred for environmental pollution control measures is attached as in Annexure-10.
10	A copy of clearance letter shall be sent by the proponent to the concerned Panchayat, Zila Parishad/municipal Corporation, Urban Local Body 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.	Complied. A copy of clearance letter was forwarded to the concerned Panchayat, Zila Parishad/ municipal Corporation, and Urban Local Body. A copy of the clearance letter has also been uploaded on the company's website of the company.
11	The project proponent shall upload the status of compliance of the stipulated environmental clearance conditions including results of monitored data on their website and shall update the same periodically. It shall be simultaneously sent to the Regional Office of the MoEF&CC at Bhubaneswar. The respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely PM10, SO2, NOX or critical sectorial parameters indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	Complied. Compliance report along with environmental monitoring reports are being submitted to OSPCB RO office, OSPCB Head office and RO - MOEFCC. The copy of the same is also being uploaded on Tata Steel's common website. Electronic display has been installed near to the main gate of plant showing the level of PM 10, SO2 and NOX, along with details of applicable statutory clearances.

	(1 criou nom nprn 202	T to bept 2021)			
Sr. No.	Conditions	Compliances			
12	The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MoEF&CC, the respective Zonal Office of CPCB and the SPCB. The Regional Office of the MoEF&CC at Bhubaneswar shall monitor the stipulated conditions.	Complied. Compliance report along with environmental monitoring reports are being submitted to OSPCB RO office, OSPCB Head office and RO - MOEFCC. The copy of the same is also being uploaded on Tata Steel's common website. Annexure#11			
13	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 Environmental (Protection) Rules, 1986 as amended subsequently shall also be put on the website of the company along with the status of compliance of Environmental Conditions and shall also be sent to the respective Regional Office of the MoEF&CC at Bhubaneswar by e-mail	Complied. The last Environmental statement was submitted to SPCB & RO of MoEF&CC as per EC condition & EP Rule 1986, Proof of submission is attached In Annexure#12 .			
14	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 SPCB and may also be seen at the website of the Ministry of Environment, Forests and Climate Change at http:/envfor.nic.in. This shall be advertised within seven days from the date of issue of clearance letter at least in two local newspaper that are widely circulated in the region of which one shall be in vernacular language of the locality concerned and a copy of the same should be forwarded to the Regional Office at Bhubaneswar.	-			
15	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.	Complied. The expansion project has been dropped and accordingly the amended EC obtained from MoEF & CC vide letter no. J-11011/43/2011-IA.II(I) dt:17.07.2019.			

F. No. J-11011/43/2011-IA.II(I) Government of India

Ministry of Environment, Forest and Climate Change (Impact Assessment Division)

Indira Paryavaran Bhawan Jor Bagh Road, Aliganj, New Delhi - 110003 E-mail: dirind-moefcc@gov.in

Tel: 011-24695368 Dated: 17.07.2019

To

Shri. Bibhudutta Nanda, Managing Director M/s T.S. Alloys Ltd, N3/24, IRC Village, Bhubaneswar, Odisha - 751015

Subject: Ferro-Alloys Plant with addition of 4X16.5 MVA SAF by M/s T S Alloys Limited at Village Ananthapur; Tehasil Athagarh; District Cuttack; Odisha – Amendment of Environmental Clearance for existing 2x16.5 SAF (i.e., production capacity of 59,400 TPA) regarding.

Sir,

This has reference to your online application vide proposal no. IA/OR/IND/26031/2010 dated 17th August 2017 seeking amendment in Environmental Clearance granted on 22nd June 2015. The proposed project activity is listed at SI. No. 3(a) Metallurgical Industries (Ferrous and Non-ferrous) under Category "A" EIA Notification, 2006 and the project is appraised at the Central level.

- M/s TS Alloys Ltd. (Formerly Rawmet Ferrous Industries Ltd.) is operating Ferro Alloy Plant since 2007 at village Anantapur under Athagarh block, district Cuttack of Odisha. Presently it is operating with 2 nos. of Submerged Electric Arc Furnace (SAF) of 16.5 MVA each, with a total production capacity of 59,400 TPA Ferro Chrome and a Briquetting plant having 1,00,000 TPA net Briquette production capacity within the existing premises of 83.50 Acres.
- 3. M/s TS Alloys Ltd. was accorded Environmental Clearance (EC) for expansion of production vide File No. J-11011/43/2011-IA II (I) dated 22.06.2015 for 4x16.5 MVA SAF with projected production quantity of 120000 TPA Ferro-Chrome/Ferro-Manganese / Silico –Manganese.
- 4. Due to the steel market situation in the world and company financial constraints, M/s TS Alloy Limited could not go for the proposed expansion project to add 2x16.5 MVA SAF as approved in the EC. Further the Company's Board took a decision to drop the expansion project in view of the uncertainty in both supply of raw material and market demand.
- 5. Therefore, the Project proponent has requested to amend the Environmental Clearance for original production levels only.
- 6. The proposal was considered in the 22nd EAC (Industry-1) meeting held during 11th -13th September 2017. After detailed deliberations, the

- committee recommended for modification of Environmental Clearance as requested.
- 7. The Ministry considered aforementioned recommendation of the EAC and here by decided to amend the Environmental Clearance to reduce the production capacity to the existing 59,400 TPA of production with the following condition, at para 8 below.
- 8. Further, the Project Proponent should restrict to the following quantities with respect to raw materials, facilities, waste generation and Electricity as given below.
 - i. Raw materials:

S.No.	Material	Quantity (TPA)
1	Chrome Ore Fines	129000
2	Chrome Ore hard lumps	32400
3	Friable lumps	6170
4	Manganese Ore	153400
5	Ferro manganese slag	7005
6	Lam coke	36000
7	Coal	3600
8	Quartzite	18000
9	Dolamite/Magnasite	16000
10	Electrode carbon paste	900
11	Hydrated Lime	4000
12	Molasses	6000

ii. Facilities:

S.No.	S.No. Furnaces		
1	16.5 Sub-merged Arc Furnace (SAF)	2	

iii. Waste Generation:

S.No.	Waste	Quantity/ Annum			
1	Used Oil	1.2 KL			
2	Waste containing Oil	0.24 Tonnes			
3	Flue Gas Cleaning Residue	1440 Tonnes			
4	Slag	54750 Tonnes			
5	Domestic Effluent (STP)	150 KLD			

- iv. Water 2446.56 KLD from Mahanadi River and Electricity 34 MW (from state grid and open access)
- v. Production of Ferro-chrome or Ferro-manganese or Silico Manganese to 59,400 TPA and briquetting plant to 100000 TPA.
- 9. All other terms and conditions in the Environmental Clearance vide letter No. F. No. J-11011/43/2011-IA.II(I) dated 22.06.2015 shall remain the same.

This issues with the approval of Competent Authority.

(A.K.Agrawal) Director

Copy to:-

- (i) Secretary, Department of Forests, Government of Odisha, Secretariat, Bhubaneswar.
- (ii) Additional Principal Chief Conservator of Forests (C), Ministry of Environment, Forest and Climate Change, Regional Office (EZ), A/3, Chandersekharpur, Bhubaneswar 751023.
- (iii) **Chairman**, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
- (iv) Chairman, Odisha State Pollution Control Board, Parivesh Bhawan, A/118 Nilakantha Nagar, Unit-VIII, Bhubaneshwar-751012.
- (v) **Member Secretary**, Central Ground Water Authority, 18/11 Jamnagar House, Mansingh Road, New Delhi-110011.
- (vi) District Collector, Cuttack District, Odisha
- (vii) Guard File / Record file / Monitoring file.
- (viii) MOEF&CC Website.

(A.K.Agrawal) Director



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Ref:Envlab/24-25/TR-12745

Date:21.11.2024

SIX MONTHLY COMPLIANCE REPORT APRIL 2024 TO SEPTEMBER 2024 AAQ MONITORING REPORT

1. Name of Industry	:	M/s. Tata Steel Ltd(Formerly Known as Tata Steel Mining Ltd) Anantpur, Dhurusia, Cuttack
2. Sampling Location	:	AAQMS-1: Near Substation
3. Monitoring Instruments	:	RDS (APM 460 BL), FPS (APM 550) Envirotech, CO Monitor, VOC Sampler.
4. Sample collected by	:	VCSPL Representative

	PARAMETERS											
Date	PM ₁₀ (μg/m ³)	PM _{2.5} (μg/m ³)	SO ₂ (µg/m ³)	NO _x (μg/m ³)	NH ₃ (μg/m ³)	Ο ₃ (μg/m ³)	CO (mg/m³)	Pb (μg/m³)	Ni (ng/m³)	As (ng/m³)	C_6H_6 ($\mu g/m^3$)	BaP (ng/m³)
APR 24	65.0	34.3	13.0	23	25.6	13.6	0.81	BDL	BDL	BDL	BDL	BDL
MAY 24	65.8	34.8	11.8	21.4	24.2	11.2	0.8	BDL	BDL	BDL	BDL	BDL
JUN 24	64.0	31.8	11.8	21.1	24.6	10.9	0.8	BDL	BDL	BDL	BDL	BDL
JUL 24	59.5	30.6	10.6	17.3	22.5	8.6	0.6	BDL	BDL	BDL	BDL	BDL
AUG 24	60.8	29.8	10.0	16.8	22.7	9.4	0.7	BDL	BDL	BDL	BDL	BDL
SEP 24	59.6	29.3	10.1	18.3	24.5	9.3	0.7	BDL	BDL	BDL	BDL	BDL
Average	62.5	31.8	11.2	19.7	24.0	10.5	0.74	BDL	BDL	BDL	BDL	BDL
NAAQ Standard	100	60	80	80	400	180	04	01	20	06	05	01
Testing method	Gravimetric	Gravimetric	Improved West and Gaeke method	Modified Jacob & Hochheiser (Na- Arsenite)	Chemical Method	NDIR Spectro scopy	Indo phenol blue method	Absorption & Desorption followed by GC analysis	Solvent extraction followed by Gas Chromatogra phy analysis	AAS method after sampling	AAS method after sampling	AAS method after sampling

BDL Values: PM10<20 μg/m3, PM2.5<10 μg/m3S02< 4 μg/m³, NO_X< 6 μg/m³, O₃<4 μg/m³, CO-<0.1 mg/m³, NH₃ <20 μg/m³, C₆H₆<4 μg/m³, BaP<0.5 ng/m³, Ni<2.5 ng/m³, Pb<0.02μg/m³, As < 1 ng/m³.

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Reviewed by:

P. Pati.
Approved by:

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Ref:Envlab/24-25/TR-12746

SIX MONTHLY COMPLIANCE REPORT APRIL 2024 TO SEPTEMBER 2024 AAQ MONITORING REPORT

1. Name of Industry	:	M/s. Tata Steel Ltd(Formerly Known as Tata Steel Mining Ltd) Anantpur, Dhurusia, Cuttack
2. Sampling Location	:	S2: Near Canteen Site
3. Monitoring Instruments	:	RDS (APM 460 BL), FPS (APM 550) Envirotech, CO Monitor, VOC Sampler.
4. Sample collected by	:	VCSPL Representative

_						PARA	METERS					
Date	PM ₁₀ (μg/m ³)	PM _{2.5} (μg/m ³)	SO ₂ (μg/m ³)	NO _x (μg/m ³)	NH ₃ (μg/m ³)	Ο ₃ (μg/m ³)	CO (mg/m³)	Pb (μg/m³)	Ni (ng/m³)	As (ng/m³)	C_6H_6 $(\mu g/m^3)$	BaP (ng/m³)
APR 24	64.8	33.6	12.6	22.5	24.2	12.3	0.79	BDL	BDL	BDL	BDL	BDL
MAY 24	64.1	32.4	12.3	22.4	25.1	11.1	0.78	BDL	BDL	BDL	BDL	BDL
JUN 24	63.7	32.2	12.1	20.5	25.1	11.2	0.77	BDL	BDL	BDL	BDL	BDL
JUL 24	58.8	29.5	11.1	22.6	23.3	11.1	0.62	BDL	BDL	BDL	BDL	BDL
AUG 24	58.2	28.4	9.8	19.3	22.4	9.2	0.63	BDL	BDL	BDL	BDL	BDL
SEP 24	55.5	26.8	9.1	16.4	22.1	9	0.62	BDL	BDL	BDL	BDL	BDL
Average	60.9	30.5	11.2	20.6	23.7	10.7	0.70	BDL	BDL	BDL	BDL	BDL
NAAQ Standard	100	60	80	80	400	180	04	01	20	06	05	01
Testing method	Gravimetric	Gravimetric	Improved West and Gaeke method	Modified Jacob & Hochheiser (Na- Arsenite)	Chemical Method	NDIR Spectro scopy	Indo phenol blue method	Absorption & Desorption followed by GC analysis	Solvent extraction followed by Gas Chromatogra phy analysis	AAS method after sampling	AAS method after sampling	AAS method after sampling

BDL Values: PM10<20 μg/m3, PM2.5<10 μg/m3SO2< 4 μg/m³, NO_X< 6 μg/m³, O₃<4 μg/m³, CO-<0.1 mg/m³, NH₃ <20 μg/m³, C₆H₆<4 μg/m³, BaP<0.5 ng/m³, Ni<2.5 ng/m³, Pb<0.02μg/m³, As < 1 ng/m³.

Reviewed by:

P. Pati.
Approved by:

Date: 21.11.2024

Plot No.- M-22 & 23, Chandaka Industrial Estate, Patia, Bhubaneswar, Khurda, Odisha-751024, India Tel.: 0674-3511721 E-mail: visiontek@visiontek.org, visiontekin@gmail.com

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Ref:Envlab/24-25/TR-12747

SIX MONTHLY COMPLIANCE REPORT APRIL 2024 TO SEPTEMBER 2024 AAO MONITORING REPORT

Name of Industry	:	M/s. Tata Steel Ltd(Formerly Known as Tata Steel Mining Ltd) Anantpur, Dhurusia, Cuttack
2. Sampling Location	:	S3: Near Workshop
3. Monitoring Instruments	:	RDS (APM 460 BL), FPS (APM 550) Envirotech, CO Monitor, VOC Sampler.
4. Sample collected by	:	VCSPL Representative

						PARA	METERS					
Date	PM ₁₀ (μg/m ³)	PM _{2.5} (μg/m ³)	SO ₂ (μg/m ³)	NO _x (μg/m ³)	NH ₃ (μg/m ³)	Ο ₃ (μg/m ³)	CO (mg/m³)	Pb (μg/m³)	Ni (ng/m³)	As (ng/m³)	C_6H_6 (µg/m ³)	BaP (ng/m³)
APR 24	64.3	33.2	12.1	22.2	24.1	12.8	0.8	BDL	BDL	BDL	BDL	BDL
MAY 24	64.9	33.6	12.7	21.1	23.5	11.6	0.77	BDL	BDL	BDL	BDL	BDL
JUN 24	65.0	32.7	13.2	21.6	25	11.2	0.76	BDL	BDL	BDL	BDL	BDL
JUL 24	59	30.9	12.7	22.2	23.8	12.3	0.6	BDL	BDL	BDL	BDL	BDL
AUG 24	57.9	27.8	11	19.6	22.2	10.4	0.64	BDL	BDL	BDL	BDL	BDL
SEP 24	56.9	28.0	9.5	16.7	22.0	10.0	0.65	BDL	BDL	BDL	BDL	BDL
Average	61.3	31.0	11.9	20.6	23.4	11.3	0.70	BDL	BDL	BDL	BDL	BDL
NAAQ Standard	100	60	80	80	400	180	04	01	20	06	05	01
Testing method	Gravimetric	Gravimetric	Improved West and Gaeke method	Modified Jacob & Hochheiser (Na- Arsenite)	Chemical Method	NDIR Spectro scopy	Indo phenol blue method	Absorption & Desorption followed by GC analysis	Solvent extraction followed by Gas Chromatogra phy analysis	AAS method after sampling	AAS method after sampling	AAS method after sampling

BDL Values: PM10<20 μg/m3, PM2.5<10 μg/m3SO2< 4 μg/m³, NO_X< 6 μg/m³, O₃<4 μg/m³, CO-<0.1 mg/m³, NH₃ <20 μg/m³, C₀H₆<4 μg/m³, BaP<0.5 ng/m³, Ni<2.5 ng/m³, Pb<0.02μg/m³, As < 1 ng/m³.

Reviewed by:

P. Paty.
Approved by:

Date: 21.11.2024

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Ref:Envlab/24-25/TR-12748

SIX MONTHLY COMPLIANCE REPORT APRIL 2024 TO SEPTEMBER 2024 AAQ MONITORING REPORT

Name of Industry	:	M/s. Tata Steel Ltd(Formerly Known as Tata Steel Mining Ltd) Anantpur, Dhurusia, Cuttack
2. Sampling Location	:	S4: Near Dispatch Yard
3. Monitoring Instruments	:	RDS (APM 460 BL), FPS (APM 550) Envirotech, CO Monitor, VOC Sampler.
4. Sample collected by	:	VCSPL Representative

						PARA	METERS					
Date	PM ₁₀ (μg/m ³)	PM _{2.5} (μg/m ³)	SO ₂ (μg/m ³)	NO _x (μg/m ³)	NH ₃ (μg/m ³)	Ο ₃ (μg/m ³)	CO (mg/m³)	Pb (μg/m³)	Ni (ng/m³)	As (ng/m³)	C ₆ H ₆ (μg/m ³)	BaP (ng/m³)
APR 24	65.1	33.8	13.6	23.3	24.9	12.1	0.79	BDL	BDL	BDL	BDL	BDL
MAY 24	64.8	32.5	11.4	21.4	24.7	11.8	0.76	BDL	BDL	BDL	BDL	BDL
JUN 24	64.1	33.1	11.9	19.3	24.6	12.0	0.75	BDL	BDL	BDL	BDL	BDL
JUL 24	61.8	32.9	11.7	19.1	23.7	11.2	0.74	BDL	BDL	BDL	BDL	BDL
AUG 24	61.0/	31.1	11.4	18.0	24.5	11.3	0.74	BDL	BDL	BDL	BDL	BDL
SEP 24	60.1	30.5	10.7	20.5	24	9.6	0.76	BDL	BDL	BDL	BDL	BDL
Average	62.8	32.3	11.7	20.3	24.4	11.2	0.76	BDL	BDL	BDL	BDL	BDL
NAAQ Standard	100	60	80	80	400	180	04	01	20	06	05	01
Testing method	Gravimetric	Gravimetric	Improved West and Gaeke method	Modified Jacob & Hochheiser (Na- Arsenite)	Chemical Method	NDIR Spectro scopy	Indo phenol blue method	Absorption & Desorption followed by GC analysis	Solvent extraction followed by Gas Chromatogra phy analysis	AAS method after sampling	AAS method after sampling	AAS method after sampling

BDL Values: PM10<20 μg/m3, PM2.5<10 μg/m3SO2< 4 μg/m³, NO_X< 6 μg/m³, O₃<4 μg/m³, CO-<0.1 mg/m³, NH₃ <20 μg/m³, C₀H₆<4 μg/m³, BaP<0.5 ng/m³, Ni<2.5 ng/m³, Pb<0.02μg/m³, As < 1 ng/m³.

Reviewed by:

P. Paty.
Approved by:

Date: 21.11.2024

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Ref:Envlab/24-25/TR-12749

Date: 21.11.2024

SIX MONTHLY COMPLIANCE REPORT APRIL 2024 TO SEPTEMBER 2024 STATIONARY EMISSION MONITORING REPORT

1.Name of Industry

: M/s. Tata Steel Ltd(Formerly Known as Tata Steel Mining Ltd) $\,$

Anantpur, Dhurusia, Cuttack

2.Monitoring Instrument

: Vayubodhan Stach Sampler VSS 1

				S	tack A	Attach	ed to	Furnac	e-1				
Parameters	Prescrib ed Standar d as per CTO	API	R 24	MA	Y 24	JUN	N 24	JUL	. 24	AU	G 24	SEP 24	Average
Stack Temperature 0C		121	130	123	126	126	124	123	122	120	124	112	122.8
Velocity of Flue Gas m/sec		19.2	16.8	17.5	14.9	19.6	17.2	19.2	18.2	14.8	16.7	14.6	17.2
Concentration of Carbon Monoxide (as CO) PPM		12.3	10.2	10.6	9.7	11.2	10.2	13.6	12.5	14.5	16.2	12.3	12.1
Concentration of Carbon dioxide (as CO ₂) %		14.5	13.6	12.8	14.3	13.6	15.2	15.7	18.7	17.3	19.1	16.1	15.5
Concentration of Sulphur dioxide (as SO ₂) mg/Nm ³		58.4	56.1	49.6	52.3	52.2	55.3	57.4	56.9	55.4	57.3	47.1	54.4
Concentration of Oxides of Nitrogen (as NO _X) mg/Nm ³	-1	29.1	30.8	25.4	28.5	27.3	29.6	26.3	30.1	24.5	29.6	22.6	27.6
Concentration of Particulate Matter (as PM) mg/Nm³	100	42.9	41.5	41.8	43.2	43.6	45.8	40.2	38.1	40.2	38.1	31.5	40.5

Reviewed by:

P. Paty.
Approved by:



Visiontek Consultancy Services Pvt. Ltd.

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Ref:Envlab/24-25/TR-12750

Date: 21.11.2024

SIX MONTHLY COMPLIANCE REPORT APRIL 2024 TO SEPTEMBER 2024 STATIONARY EMISSION MONITORING REPORT

1.Name of Industry

: M/s. Tata Steel Ltd(Formerly Known as Tata Steel Mining Ltd)

Anantpur, Dhurusia, Cuttack

2.Monitoring Instrument

: Vayubodhan Stach Sampler VSS 1

			St	ack Atta	ached to	o Furn	ace-2				
Parameters	Prescrib ed Standar d as per CTO	APR 24	MAY 24	JUN	1 24	JUI	L 24	AUG	÷ 24	SEP 24	Average
Stack Temperature 0C		126	130	124	128	119	122	123	126	110	123.1
Velocity of Flue Gas m/sec		15.3	17.2	17.8	18.3	13.9	12.5	11.8	13.4	15.7	15.1
Concentration of Carbon Monoxide (as CO) PPM		11.6	12.4	10.5	12.3	10.2	11.3	11.3	13.5	13.4	11.8
Concentration of Carbon dioxide (as CO ₂) %		12.8	14.3	13.3	15.2	11.6	13.5	12.4	15.7	15.2	13.7
Concentration of Sulphur dioxide (as SO ₂) mg/Nm ³		55.1	47.5	45.2	50.6	33.6	39.4	32.1	35.4	31.6	41.2
Concentration of Oxides of Nitrogen (as NO _X) mg/Nm ³		31.6	26.1	30.2	28.4	28.1	26.3	27.9	25.4	25.4	27.7
Concentration of Particulate Matter (as PM) mg/Nm³	100	44.3	47.6	46.8	41.8	36.1	35.2	38.3	40.4	23.9	39.4

Reviewed by:

P. Pati.
Approved by:



Visiontek Consultancy Services Pvt. Ltd. (Committed For Better Environment)

(Committed For Better Environment)
ISO 9001:2015, ISO 14001:2015, ISO 45001:2018 (OH&S), ISO/IEC 17025:2017 Certified

Ref:Envlab/24-25/TR-12751

Date: 21.11.2024

SIX MONTHLY COMPLIANCE REPORT APRIL 2024 TO SEPTEMBER 2024 STATIONARY EMISSION MONITORING REPORT

1.Name of Industry

: M/s. Tata Steel Ltd(Formerly Known as Tata Steel Mining Ltd)

Anantpur, Dhurusia, Cuttack

2.Monitoring Instrument

: Vayubodhan Stach Sampler VSS 1

			S	Stack A	Attacl	ned to	Briq	uettin	g Plant	-			
Parameters	Prescrib ed Standar d as per CTO	API	R 24	MA	Y 24	JUN	N 24	JU	L 24	AUG	G 24	SEP 24	Average
Stack Temperature 0C		75.1	73.6	77.1	75.1	75.6	73.6	71.2	70.3	73.4	56.1	70.5	72.0
Velocity of Flue Gas m/sec		24.5	21.8	23.8	19.7	21.6	20.2	23.6	18.5	19.8	23.2	16.9	21.2
Concentration of Carbon Monoxide (as CO) PPM		11.8	12.5	12.4	14.3	11.6	12.5	13.6	11.2	11.4	13.7	13.2	12.6
Concentration of Carbon dioxide (as CO ₂) %		13.6	14.4	14.3	12.8	13.5	14.2	11.6	12.6	14.5	17.3	15.6	14.0
Concentration of Sulphur dioxide (as SO ₂) mg/Nm ³		40.5	37.8	38.7	35.4	36.2	37.2	37.4	35.4	33.7	36.5	35.6	36.8
Concentration of Oxides of Nitrogen (as NO _X) mg/Nm ³		27.3	25.9	25.6	24.5	24.9	26.1	23.6	24.8	25.1	26.7	28.3	25.7
Concentration of Particulate Matter (as PM) mg/Nm ³	100	72.6	74.2	77.3	80.1	75.9	77.1	72.6	74.1	74.3	73.8	73.5	75.1

Reviewed by:

P. Paty.
Approved by:

Plot No.- M-22 & 23, Chandaka Industrial Estate, Patia, Bhubaneswar, Khurda, Odisha-751024, India Tel.: 0674-3511721 E-mail: visiontek@visiontek.org, visiontekin@gmail.com

		P	lantation Pro	gramme			
Name of the Industry / Mines: Ferro Allo	ys Plant of N	l/s Tata Steel	Limited, Athag	garh	Annexur	e-3	For FY'25
Plantation achieved in	2023-24		Free Distribution	Proposed Plantation Pro during 20		e taken	Proposed Free
Name of the site	Area in Ha	No of of Seedlings in 2023-24 Planted		Name of the site	Area in Ha	No of Seedlings Planted	Distribution of Seedlings during 2024-25
Back side of Sand Jigging Plant	0.20	330		Back side of Breaking Yard	0.30	400	
Near JJ Associates workshop	0.01	100		Power plant Road side	0.01	100	
Near High Mast (Beside breaking Yard)	0.20	320	1050	Near High mast(Beside BQT plant)	0.10	100	1000
Avenue Plantation on New Ring Road(Power Plant)	0.30	400		Road PPE centre to Sand Jigging plant	0.40	500	
Total	0.71	1150		Total	0.81	1000	

Head, Ferro Alloys Plant
Athagarh, Cuttack
Tata Steel Limited

Water consumption Details from April-2024 to Sept-2024

Month	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24
Units	KL/M	KL/M	KL/M	KL/M	KL/M	KL/M
Water consumption or Intake from Rever	12655	15412	16504	14024	13466	13180
Sp.Water Consumption	4.60	5.20	4.20	3.42	3.08	3.35

Note: KL/M-Killo Litter Per Month

Head, Ferro Alloys Plant Athagarh, Cuttack Tata Steel Limited



Visiontek Consultancy Services Pvt. Ltd. (Committed For Better Environment)

ISO 9001:2015, ISO 14001:2015, ISO 45001:2018 (OH&S), ISO/IEC 17025:2017 Certified

Ref:Envlab/24-25/TR-12752

Date: 21.11.2024 SIX MONTH COMPLIANCE REPORT ETP WATER APR 2024 TO SEP 2024

1.	Name of Industry	:	M/s. Tata Steel Ltd(Formerly Known as Tata Steel Mining Ltd) Anantpur, Dhurusia, Cuttack
2.	Sample Collected By	:	VCSPL Representative

ETP-INLET									
Parameters	Standard (Inland Surface water) Part-A	Unit	APL 24	MAY 24	JUN 24	JUL 24	AUG 24	SEP 24	Average
pH value at 25°C	5.5-9.0		8.87	9.12	9.37	9.12	8.75	8.42	8.9
Iron as Fe	3.0	mg/l	2.8	2.15	3.16	4.56	3.89	4.15	3.5
Oil & grease	10.0	mg/l	6.8	8.4	9.3	8.4	7.7	6.8	7.9
Total Chromium (as Cr)	2.0	mg/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexavalent Chromium as (Cr ⁺⁶)	0.1	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chemical Oxygen Demand (as COD)	250	mg/l	43.8	47.2	52.8	53.1	49.2	48.6	49.1
Biochemical Oxygen Demand (as BOD),3 Days at 27°C	30	mg/l	14.8	16.3	18.2	17.5	15.1	16.5	16.4
Total Suspended Solids	100	mg/l	76.1	82.5	78.6	91.4	94.6	101.2	87.4

			ET	P-OUTLE	Γ				
Parameters	Standard (Inland Surface water) Part-A	Unit	APR 24	MAY 24	JUN 24	JUL 24	AUG 24	SEP 24	Average
pH value at 25°C	5.5-9.0		7.32	7.14	7.23	7.45	7.34	7.12	7.2
Iron as Fe	3.0	mg/l	0.87	0.76	0.68	0.54	0.44	0.47	0.62
Oil & grease	10.0	mg/l	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Total Chromium (as Cr)	2.0	mg/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexavalent Chromium as (Cr ⁺⁶)	0.1	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chemical Oxygen Demand (as COD)	250	mg/l	8.9	7.2	6.8	9.4	7.6	9.1	8.2
Biochemical Oxygen Demand (as BOD),3 Days at 27°C	30	mg/l	3.5	3.3	2.4	3.5	2.9	3.2	3.1
Total Suspended Solids	100	mg/l	11.4	10.5	9.6	5.7	7.1	10.3	9.1





Plot No.- M-22 & 23, Chandaka Industrial Estate, Patia, Bhubaneswar, Khurda, Odisha-751024, India Tel.: 0674-3511721 E-mail: visiontek@visiontek.org, visiontekin@gmail.com Visit us at: www.visiontek.org

T S ALLOYS LIMITED

Letter No: TSAL/SHE-20/LE-46/2017

Date: 26/05/2017

The Chief Conservator of Forests Ministry of Environment & Forests Regional Office (EZ), A/3, Chandrasekharpur, Bhubaneshwar - 751 023

Sub: Submission of approved copy of On-site Emergency Plan

Sir,

We are enclosing herewith please find Onsite Emergency Plan of our Company T S Alloys Limited located at Vill – Anantapur, Po-Dhurusia, Athagarh, Dist – Cuttack, Odisha.

Kindly acknowledge the receipt.

Thanking you. Yours Faithfully, For TS Alloys Limited

Tapas Ranjan Sahoo Safety & Environment

Enclosed: Onsite Emergency Plan

MoER & CC, Eastern R.O Bhillipaneswar-751023 9-MAY 2017 RECEIVED

T S Alloys Limited

(A 100% subsidiary of TATA STEEL LIMITED)

Registered Office: Plot No - N3/24, IRC Village, Nayapalli, Bhubaneswar, Odisha, Pin - 751 015
Ph : + 91 674 6628502 (O), Fax : +91 674 6628516

Works: Anantpur, P.O. Dhurusia, Athagarh, District : Cuttack, Odisha, Pin - 754 029, Tel : +91 671 6534413
CIN: U27109OR2004PLC009683 Website : www.tsalloys.com



Visiontek Consultancy Services Pvt. Ltd.

(Committed For Better Environment) ISO 9001:2015, ISO 14001:2015, ISO 45001:2018 (OH&S), ISO/IEC 17025:2017 Certified

Ref:Envlab/24-25/TR-12753

SIX MONTHLY COMPLIANCE REPORT APRIL 2024 TO SEPTEMBER 2024 NOISE LEVEL MONITORING REPORT

: M/s. Tata Steel Ltd (Formerly Known as Tata Steel Name & Address of the Client

Mining Ltd) Anantpur, Dhurusia, Cuttack

Instrument Used Noise Meter

Sample Collected By VCSPL Representative

SL. No.		JUN 24 Noise Level in dB(A)		SE	EP 24	AVG Noise Level in dB(A)	
	LOCATION			Noise Le	vel in dB(A)		
110.		DAY	NIGHT	DAY	NIGHT	DAY	NIGHT
1.	Cast House Area	62.8	56.9	61.5	54.6	62.2	55.8
2	MRSS Control Room	71.2	63.3	69.8	62.9	70.5	63.1
3	Electrical DG Room	73.8	65.1	71.2	63.3	72.5	64.2
4	Plant Medical	70.2	67.3	72.1	65.4	71.2	66.4
5	General Store Room	66.8	57.2	61.5	58.2	64.1	57.7
6	Pump House Area	72.5	68.1	70.6	67.1	71.5	67.6
7	QC Laboratory	64.2	60.3	66.9	59.6	65.6	59.9
8	Briquette Plant Control Room	70.5	62.9	68.2	61.2	69.4	62.1
9	Sampling Shade Room	74.1	67.9	72.1	66.3	73.1	67.1
10	Conveyor Feeding Site	73.3	66.4	70.6	64.8	71.9	65.6
11	Labour Rest Room	64.5	54.9	67.1	52.5	65.8	53.7
12	Weigh Bridge – I	72.5	56.3	71.5	55.6	72.0	55.9
13	Weigh Bridge – II	71.6	52.9	70.3	53.7	70.9	53.3
14	Mechanical Work Shop	68.6	54.3	66.9	52.6	67.7	53.5
15	Feeding Rest Room	64.2	56.1	66.8	55.1	65.5	55.6
16	Security Room	58.6	53.8	57.4	51.9	58.0	52.8
17	Jigging Plant-I	72.6	63.8	71.2	64.8	71.9	64.3
18	Jigging Plant-II	74.1	66.1	73.1	64.6	73.6	65.4
19	Furnace Control Room	72.3	64.2	67.9	62.9	70.1	63.5
20	Administrative Building (Sever Room)	69.3	59.1	64.2	58.4	66.8	58.7
21	Conference Room	57.2	55.3	56.1	52.6	56.6	53.9
22	Civil Room(Procurement)	55.3	54.8	52.8	55.1	54.1	54.9
Ambient air Quality Standards in respect of Noise for Industrial Area						75	70

Note: No deviation from the AAQ standard in respect of Noise is observed and the values are within the standard prescribed.

Reviewed By:

Approved By:

Date: 21.11.2024

Visit us at: www.visiontek.org

HEALTH RECORD

(Pre-employment/Periodical) (Prescribed under Rule 62 – J)

	-0.	
1. Name of the Factory: T.S. L-Athougarch	12. Cardiovascular system:	Pulse rate : 801 min
2. Name of the Employee: Jaladhare Beherea		B.P.: 164 168 mm/g Heart Sound: Normal
3. Employee Distinguishing No. : BTE-R-007	ECG:	Normal /Abnormal
4. Age of the Employee : 40	Remarks, if any : NO	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Identification mark: Cut march on NOSO	13. Abdomen Tenderness :	Yes /No
Nature of job: Sweeper	Liver :	Normal/Abnormal
5. Date of Employment :	Spleen :	Normal/Abnormal
6. Length of service in years :	14. Nervous System :	,
7. General Survey :	an managa ayatam i	
Health : Good/Fair/Poor	History of Fits :	Yes /No —
Height: \S\ Cms. Weight 40 Kg.	Epilepsy :	Yes /No
8. Blood Group: Br Rh Typing: POSHIVE	Remarks on Mental Health:	Wood
9. Eye Vision : Normal /Abnormal Use glass : Yes /No	15. Locomotors System :	Normal /Abnormal
	16. Skin condition :	Normal /Abnormal
10. Hearing : Normal /Abnormal Audiometry : Normal /Abnormal	Remarks on any skin conditio	n noticed :
11. Respiratory system & Chest Measurement Inspiration : Expiration : 84	17. Hernias :	Present / Absent
Respiration rate : 20 /min	18. Hydrocele :	Present / Absent
Chest X-Ray : NO+ domo	10 Present Complain if any	
P.F.T. : Normal /Abnormal	19. Present Complain, if any :	100
Remarks, if any :		
20. Summary of Findings :		
Heart Disease : No		
Hypertension : No		
Diabetes Mellitus :		
T.B. :		
Epilepsy : (Vo		
Poisoning : No		
Others : NO		
Occupational disease, if any :		
21. Recommendation, if any for any further investigation	on:	
10000000 1		P
Signature of the Employee	Signature of th	ne Medical Officer with Seal

FORM 25

Rule 96

Certificate of Fitness For Dangerous Operation

I certify that I have personally examined sri/smt. Jaladharc. Behave
S/O/D/O
Aini Beherra residing at
Who is desirous of being
employed asofof
Deptt. And that as nearly as can be ascertained from my
examination is Fit / unfit for employment in the above noted factory.
2. He is fit to be employed and may be employed on some other non-hazardous operation such as
3. He/she may be produced for further examination after a period of
4. He /She is advised following further examination
5. He/ She is advised following further treatment
6. The serial No. of the previous certificate is

Signature of person Examined

Signature of certifying surgeon

Dr.Pabitra Kumar Sethy Medical Officer Regd No. 34340

Ferro Alloys Plant of M/s Tata Steel Limited, Athagarh.

Exper	diture for Pollu	tion Control	Measure from	n April'24 to	o Sept' 20	24
MONTH	GCP SPARE CONSUMPTION COST	GCP CONTRACT COST	GCP Power Consumption Cost	Environment Monitoring	Water Sprinkling	Effluent Treatment Plant
April'24	1,66,953.36	3,48,472.34	3079920	70070.00	35250	3567
May'24	79990.33	3,48,472.34	2998045.68	95682.00	35250	3567
June'24	611726.33	3,48,472.34	2871735.35	78704.00	35250	3567
July'24	52523.38	3,48,472.34	3112792.34	70070.00	35250	3567
August'24	92108.51	3,48,472.34	2775359.94	83891.00	35250	3567
September'24	117511.53	3,48,472.34	2976902.14	121284.00	35250	3567
Total	11,20,813.55	20,90,834.04	17814755.44	519701.00	211500	21402
	2,17,79,006.03					

The total amount of expenditure towards pollution control measure from is RS 2,17,79,006.03 -Only

Head, Ferro Alloys Plant Athagarh, Cuttack Tata Steel Limited



Letter No: TSL/FAMD/FAPA/FY25/681

Date: 20.05.2024

To
The Director, MOEF & CC
Impact Assessment Division (EAC – Industry-I)
Ministry of Environment, Forest, and Climate Change
Indira Paryavaran Bhavan, Jor Bagh Road, Aliganj
New Delhi- 110003

Sub: Submission of Half Yearly EC Compliance Report for a period of Oct'2023 to March'2024 considering the financial year from 1st April 2023 to 31st March 2024.

Ref: EC Vide File No. J-11011/43/2011-IA II (I) dated: 17th July 2019.

Dear Sir.

With reference to the subject and reference no cited above, we are herewith submitting the "Half yearly Compliance of Environment clearance conditions for the period of Oct'2023 to Mar'2024 for your kind perusal.

With best regards.

For Tata Steel Limited.

Authorized Signatory

Head, Ferro Alloys Plant Alhegarh, Cultack Tata Steel Limited

Enclosure: As Enclosed

Copy to: The Regional Officer, Cuttack, MOEF & CC Regional office, Bhubaneswar State Pollution Control Board, Bhubaneswar

TATA STEEL LIMITED

Registered Office Bonicay House 24 Hamil Mody Street Fort Mumbal 400 301 India



Letter No: TSL/FAMD/FAPA/FY25/681

Date: 20.05.2024

To
The Director, MOEF & CC
Impact Assessment Division (EAC – Industry-I)
Ministry of Environment, Forest, and Climate Change
Indira Paryavaran Bhavan, Jor Bagh Road, Aliganj
New Delhi- 110003

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With best regards,

For Tata Steel Limited.

Authorized Signatory

Head, Ferro Alloys Plant Alhagarh, Cuttack Tata Steel Limited

Enclosure: As Enclosed

Copy to: The Regional Officer, Cuttack, MOEF & CC Regional office, Bhubaneswar State Pollution Control Board, Bhubaneswar 30 MAY 2024

S.P.C. BOARD
BHUBANESWAR-12

TATA STEEL LIMITED



Letter No: TSL/FAMD/FAPA/FY25/1112

Date: 23.07.2024

To The Member Secretary, State Pollution Control Board, A/118, Nilakantha Nagar, Bhubaneswar, Odisha-751012

Sub: Submission of Environment Statement of "Ferro Alloys Plant M/s Tata Steel Limited, Athagarh" (Formerly Known as Tata Steel Mining Limited), for the year ending 31st March 2024.

Dear Sir.

We are herewith Submitting the "Environmental Statement for the financial year 2023-2024 in Form-V as per rule-14 under Environment (Protection) Rules, 1986.

This is for your necessary reference & perusal.

With best regards,

For Tata Steel Limited.

Authorized Signatory

Factory Manager Ferro Alloys Plant, Athagarh Tata Steel Limited

Encl: Form-V

Copy to: The Regional Officer, Cuttack, State Pollution Control Board, Odisha,

The MOEF & CC, Bhubaneswar

TATA STEEL LIMITED

JBANESWAR-12



Letter No: TSL/FAMD/FAPA/FY25/1112

Date: 23.07.2024

To The Member Secretary, State Pollution Control Board, A/118, Nilakantha Nagar, Bhubaneswar, Odisha-751012

Sub: Submission of Environment Statement of "Ferro Alloys Plant M/s Tata Steel Limited, Athagarh" (Formerly Known as Tata Steel Mining Limited), for the year ending 31st March 2024.

Dear Sir,

We are herewith Submitting the "Environmental Statement for the financial year 2023-2024 in Form-V as per rule-14 under Environment (Protection) Rules, 1986.

This is for your necessary reference & perusal.

With best regards,

For Tata Steel Limited.

Authorized Signatory

Factory Manager
Ferro Alloys Plant, Athagarh
Tata Steel Limited

Encl: Form-V

Copy to: The Regional Officer, Cuttack, State Pollution Control Board, Odisha,

The MOEF & CC, Bhubaneswar



Registered Office Bombay House 24 Homi Mody Street Fort Mumbai 400 001 India Tel 91 22 6665 8282 Fax 91 22 6665 7724 Website www.tatasteel.com Corporate Identity Number L27100MH1907PLC000260



ENVIRONMENTAL STATEMENTS FORM-V

(See Rule 14)

The Ministry of Environment & Forest vide its notification dated March, 1992 directed all industries which need to have consent under Water (Prevention & Control of Pollution) 1974 and Air (Prevention & 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 31st March 2024.

PART - A

(i) Name and address of the Owner/occupier of the Industry operation or process : Shri T.V.Narendran (Managing Director) Ferro Alloys Plant of M/s Tata Steel Limited

Works: At-Anantapur P.O.-Dhurusia Tehsil-Athagarh

Dist: Cuttack-754029

(ii) Industry Category Primary – (STC code): Large Secondary – (SIC code)

(iii) Production Capacity-Units : 59, 400 MT/year

(iv) Year of establishment : 2004.

(v) Date of the last submission : 28/07/2023 with vide Letter No. TSML/FAPA/6305/FY24

PART - B Water and Raw Material Consumption

(i) Water consumption m3/d

Water consumption heads	Water consumption quantity in m ³ /day	Approval Quantity from Central Ground Water Authority, Ministry of Water Resources, Govt. of India
Process	260.28	The approved quantity for surface water withdrawal from river
Industrial Cooling	94.51	Mahanadi is 0.5 cusec
Domestic	251.87	(1224m³/day). The approval is accorded vide Letter No.
Total	606.66	11961/WR Dated: 13/05/2022.
Consumption/day		

Name of product	Process water consumption per unit of product output (M ³ /T).		
	During the previous financial year (2022-2023)		rrent financial 23-2024)
1	2		3
High Carbon Ferro Chrome.	3.80	3.	58
(ii)	Raw material consumption		
Name of raw material	Name of products	Consumption of raw material for unit of output. (For production of 1 MT of High Carbon Ferro Chrome).	
	High Carbon Ferro	During the previous financial year (2022-2023)	During the current financial year (2023-2024)
Chrome Ore		2350 Kgs	2363Kgs
Coke		500 Kgs	402.13Kgs
Quartz		160 Kgs	163Kgs
power		3.37 MW	3.407MW

^{*} F.C=Fixed Carbon

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

 $\underline{PART-C}$ Discharged to environment / unit of output specified if the consent issued.

Pollutants	Quantity of pollutants Discharged (mass/day)	Concentration of pollutions in discharges (mass / volume)	Percentage of variation from prescribed standards with reasons
a) Water	NIL	NIL	NA
b) Air			
Stack emission of furnace-1. Particulate Matter (PM) in mg/NM ³	-	*43.54 mg/NM ³	Within the prescribes standard
Stack emission Of furnace-2. Particulate Matter (PM) in mg/NM ³	: = :	*44.92 mg/NM ³	Within the prescribes standard
Stack emission Of Briquetting plant. Particulate Matter (PM) in mg/NM³	-	70.88mg/NM ³	Within the prescribes standard

^{*}Annual average data

1. Prescribed standard for Particulate matter emission from stack attached to furnace-1 & 2 is 100 mg/NM³.

PART - D
HAZARDOUS WASTES

(As specified under the hazardous wastes/management & handling rules, 1989)

Hazardous wastes	Total quantity (Kg)		
	During the current financial year (2022-2023)	During the current financial year (2023-2024)	
a) FROM PROCESS			
i) USED TRANSFORMER OIL	1.450 KL	0.840 KL	
ii) WASTE OIL	221 Ltr. (Used Gear Oil feed in the Briquette plant Dryer)	31 Ltr. (Used Gear Oil feed in the Briquette plant Dryer)	
iii) Waste Containing Oil	221 kg (Oil contaminated cotton waste)	0.61 MT (Oil contaminated cotton waste)	
b) FROM POLLUTION CONTROL FACILITY	1032.78 MT (GCP Dust)	797.65 MT (GCP Dust)	

PART - E SOLID WASTES

	Total quantity		
Sources	During the current financial year (2022- 2023)	During the current financial year (2023-2024)	
a. From Process			
i) Slag	48696 MT	49142.97 MT	
ii) Waste Batteries	Nil	NIL	
b. From Pollution Control Facility.	1032.78 MT (as dry)	797.65 MT (as dry)	
c. (1) Quantity recycled or reutilized within the unit	1032.78 MT (used in briquette making)	797.65 MT (used in briquette making)	
(2) Quantity sold	NIL	NIL	
(3) Quantity disposed	NA	NA	

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.

Characteristics of FeCr Slag	Characteristics of GCP Dust
Cr2O3 = 7% to 8%	Cr2O3 = 7% to 10%
SiO2 = 28% to 32%	SiO2 = 22% to 25%
FeO = 3.5% to 4.0%	FeO = 3% to 5%
CaO = 5.0% to 6.0%	CaO = 6% to 8%
MgO = 24% to 26%	MgO = 24% to 28%
A12O3 = 21% to 23%	A12O3 = 10% to 15%
S = 0.3 % to 0.5 %	C = 3% to 6%
	S = 0.6 % to 0.9 %

*LOI = Loss on ignition

The compositions of other hazardous wastes like Waste Oil & Waste Batteries are Hydrocarbons, lead and acids.

Disposal practice:

Slag:-

Furnace # 1 & Furnace # 2 produce Cr2O3 slag as a by – product. The slag is mostly utilised for road construction & development and the rest is dumped at earmarked site inside the factory premises.

GCP dust:-

Individual GCPs have been provided to Furnace I & II. Each GCP consists of gas cooler (air to air heat exchanger) and pulse jet bag filter with duct and ID fan of capacity 2, 40,000m3/hr and discharged through a stack of adequate height. The flue gas cleaning residue is properly collected with the help of pneumatic dust collection system provide with silo and stored on a concrete floor under shed and is used in briquette making process.

Waste oil:

The waste oil generated at various sources are collected in leak proof barrels and then are kept on a concrete floor with oil catch pit. It is also ensured that the caps of the barrels remain intact and in upright position. The storage area is properly fenced and caution board displayed. During transfer of waste oil to barrels, a trough is placed underneath in order to prevent land contamination due to oil spillage then at a fixed interval, these barrels are returned to stores for final disposal through authorized reprocessor.

Waste batteries:

Waste Batteries are generated in Electrical and IT section. These batteries with diluted acid and caps intact are kept under a shed having concrete floor. Then at a fixed interval, these batteries are returned to stores for final disposal. The UPS generated is kept inside the IT room and during purchase of new UPS it is handed over to the party under buy back policy.

Used cotton wastes:

The used cotton wastes generated at various locations are kept in designated barrels and at a fixed interval; these wastes are handed over to the Shift In-charge of the Furnace Section for incinerating in the Electric Arc Furnace at a temperature of more than 1700 degree C.

PART - G

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

M/s TATA STEE LIMITED has spearheaded the pursuit for Environmental Protection by implementing an effective environmental management system. To this effect, the Plant has undertaken the following measures: -

- Annual maintenance of both the GCPs including power consumption and GCP dust transportation is 4.37 Crores (Approx.).
- ii. Annual maintenance of dry fog systems including power consumption is 5 lacs (Approx.).
- iii. Misc. Contractual jobs for maintaining environmental management system was Rs.24.00 lakhs (approx.).

So the total annual expenditure incurred towards environmental protection = (4.37 Crores +5 lacs+24.00 lacs) = Rs 4.66 Crores (approx.)

Annual production of the plant during the year = 52741.48 MT

So, the impact of the pollution abatement measures on the cost of production shall be = Rs 4.66 Crores/52741MT = Rs 883.56/MT

Thus, the plant is incurring an additional expenditure of Rs 883.56/MT of finished product towards pollution control measures.

PART - H

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

The following measures have been planned to execute in the current year for environment protection and abatement of pollution.

- ➤ We have installed tractor mounted water sprinklers for raw material yard and planning for horizontal implementation at dispatch yard and hauling roads.
- ➤ Plantation of around 1000 seedlings inside the plant premises for green belt development.
- ➤ For energy conservation we have planned to be installed VVVF drive for Skip operation. The energy reduction will be Approx. 20%.

- > We have planned to install an automatic water sprinkling system through the piping.
- > We have constructed a deep burial and sharp pit for proper disposal of bio medical waste.

PART-I

Any other particular for improving the quality of the environment.

- > We have installed Dry Fog system at all the raw material feeding points and water sprinkling is being carried out throughout the plant to supress the dust.
- ➤ Individual GCPs have been provided to Furnace I & II. Each GCP consists of gas cooler (air to air heat exchanger) and pulse jet bag filter with duct and ID fan of capacity 2, 40,000m3/hr and discharged through a stack of adequate height.
- Fume collection system at secondary emission sources like at metal tapping points of Furnace I & II has been provided and are connected to their respective GCPs.
- ➤ Pneumatic collection system is provided for extraction of ash & dust from the SAF.
- ➤ We are having a Sewage Treatment Plant (STP) of capacity 150 KLD to treat the domestic sewage based on Activated Sludge process and also we have a Effluent Treatment Plant (ETP) of capacity 500 KLD to treat the Effluents.
- ➤ We are disposing all the slag materials in earmarked site inside the plant premises and utilizing it in road making.
- ➤ We have developed ground water recharge pits based on the contour gradient inside the plant premises.
- ➤ We have provided adequate measures for proper handling of hazardous waste in accordance with the provisions of Rules.
- > We are maintaining good housekeeping throughout the plant.
- ➤ We have adopted different energy conservation measures for conserving thermal & electrical energy.
- > 90 KW VVVF drive has been installed for power saving, approximately 65% of energy saved.

- ➤ 40 KW VVVF drive installed for skip application, approximately power consumption less by 20%.
- > Energy auditing to find out the losses and to take preventive measures.
- ➤ We have developed adequate green cover inside the plant & also carried out plantation drive in the periphery villages.
- ➤ We have carried out third party hazardous waste audit as per the guideline of Honorable Supreme Court of India.
- ➤ We have constructed garland drain around raw material yard for collection and treatment of surface runoff during monsoon period.
- ➤ Community awareness development programmes on environmental protection are also undertaken through celebration of World Environment Day.
- > We have undertaken extensive CSR activities.