TATA

Letter No. FAMD/FAPG/ENV/20/FY21

Date: 26/09/2020

The Member Secretary
State Pollution Control Board, Odisha,
Paribesh Bhawan,
A/118, Nilakanthanagar, Unit VIII,
Bubaneswar – 751 012

Subject: Submission of Environment Statement (Form-V) of High Carbon Ferro Chrome plant, (2X18) MVA Furnace for the financial year 2019-20.

Ref.: Environmental Clearance letter no. J-11011/55/2011-IA-II (I) dated 14th August 2012.

Dear Sir,

In line with compliance of above reffered EC letter point no. xiv of general condition, please find attached herewith the Environmental Statement of financial year 2019-20for your kind cosideration.

Thanking You,

Yours faithfully,
for TATA Steel Limited

(B Srinivas)
Head & Factory Manager

Encl.: a/a

CC:

The Regional Manager
State Pollution Control Board, Odisha
Berhampur

TATA STEEL LIMITED
Project Gopalpur Gajapati Nagar Main lane Berhampur 760010 Dist. Ganjam odisha India
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Registered Office Bombay House 24 Homi Mody Street Fort Mumbai 400 001
Tel 91 22 66658282 Fax 91 22 66657724
Corporate Identity Number L27100MH1907PLC000260 Website www.tatasteel.com

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FORM – V

ENVIRONMENTAL STATEMENT FOR THE FINANCIAL YEAR ENDING 31ST MARCH 2020

PART – A

Name & address of the owner/ occupier of the industry, operation or process	T V Narendran CEO & Managing Director Tata Steel Limited Chamakhandi, Chatrapur Tehsil, Ganjam, Odisha
Industry categories	Large Scale Industry
Production Capacity	High Carbon Ferro Chrome (HCFC) 2X18 MVA Furnace – 55000 MTPA
Year of Establishment	2016-17
Date of last environmental statement submitted	28 September 2019

PART – B

WATER AND RAW MATERIAL CONSUMPTION

I. Water Consumption (for 2X18 MVA): (M^3 / Day)

Process : Nil

Cooling : Recycled water through cooling tower

Domestic : 39.1 m^3/day average

SN	Name of Product	Process water consumption per unit of product output (Cum/Ton)	
1	High Carbon Ferro Chrome	During the previous financial year	During the current financial year
		Water is not used in the process	Water is not used in the process

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II. Raw Material Consumption:

SN	Name of Product	Name of Raw Material	Consumption of raw material per unit of output	
			During the previous financial year 2018-19 (Tonnes)	During the current financial year 2019-20 (Tonnes)
1	High Carbon Ferro Chrome (HCFC)	Chrome Ore	41087.02	20631
		Coke	8828.76	2169.58
		Quartzite	2551.77	596.09
		Bauxite	2.00	0.00
		Magnesite	497.45	140.78
		Molasses	2263.67	1082.33
		Lime	1244.45	444.704
		Carbon Paste	242.00	69
		Fluorite	2	0

PART – C

POLLUTION DISCHARGED TO ENVIRONMENT PER UNIT OF OUTPUT

(Parameters as specified in the consent issued)

SN	Pollutants	Quantity of pollutants discharged (Ton/Day)	Concentration of pollutants in discharges (mg/NM^3)	Percentage of variation from prescribed standard with reason
A	Water	0.00	0.00	Zero discharge
B	Air: PM	0.03	34.5	Within the standard
	SOx	-	-	-
	NOx	-	-	-

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PART – D

HAZARDOUS WASTES

AS SPECIFIED UNDER HAZARDOUS WASTES (MANAGEMENT, HANDLING AND TRANSBOUNDARY MOVEMENT) RULES, 2008 AND AMENDMENT THEREOF

Hazardous Wastes	Total Quantity	
	During the previous financial year 2018-19	During the current financial year 2019-20
a) From process	Used Oil / Spent Oil – 0.00 KL Waste / Residues Containing oil – Oil filter 04 KG	Used Oil / Spent Oil – Nil Waste / Residues Containing oil – Nil
b) From pollution control facility	Flue dust from GCP of ferro Alloys Furnace – 320 MT (Recycled)	Flue dust from GCP of ferro Alloys Furnace – 125 MT (Recycled)

PART-E

SOLID WASTES

Sl. No.	Solid Waste	Total Quantity	
		During the previous financial year 2018 - 19 (Tonne)	During the current financial year 2019-20 (Tonnes)
a)	From process	16140.267	5763.530
b)	From Pollution Control facility	NA	NA
c)	i. Quantity recycled or reutilized within the unit	16875.267	5763.530 (Used in filling low lying areas inside plant premise)
	ii. Sold	NA	NA
	iii. Disposed	00	00

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PART – F

PLEASE SPECIFY THE CHARACTERIZATION (IN TERMS OF COMPOSITION OF QUANTUM) OF HAZARDOUS WASTE AS WELL AS SOLID WASTE AND INDICATE DISPOSAL PRACTICE ADOPTED FOR BOTH THESE CATEGORIES OF WASTES

A. **Hazardous Waste:** As plant was not in operation for more than nine months of that financial year, no used oil and residue containing oil was generated. The GCP residue which is generated from the process is 100% recycled in briquette production.

B. **Characteristics (in terms of concentration and quantum) of solid waste**

Ferro chrome slag which is in lumpy form dumped in dump yard designated inside plant premises.

Characteristics of Ferro Chrome Slag	
Parameter	**Result (in %)**
Cr_2O_3	10-13
SiO_2	27-30
MgO	25-27
FeO	3-5
Al_2O_3	22-25
CaO	5-7

PART – G

IMPACT ON THE POLLUTION ABATEMENT MEASURES TAKEN ON CONSERVATION OF NATURAL RESOURCES AND ON THE COST OF PRODUCTION

- Full-fledged Morden Dry Gas Cleaning Plant with Air Pulse Jet Bag Filter Technology (BFT) has been installed to clean process gas generated from furnace. Bag filters are also installed at briquetting plant to control dust emission during operation.
- Final dust of GCP is collected from silo in silo bags to control fugitive emission and the chrome dust is again reused 100% for briquette making.
- In plant control measures and, dust extraction system, fume extraction system, dry fog dust suppression system has been installed at vulnerable areas to reduce fugitive emission.

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- Waste water utilization is continuing in regular activities like metal and slag cooling, road sprinkling, will be used in jigging plant, dust suppression and gardening.
- Cooling tower is completely recycled and cooling tower's blow down is treated in ETP and recycled.
- Maintenance of tree saplings is being carried out to ensure more than 90% survival rate.
- All internal roads inside the plant are made pucca to reduce dust emission.
- Side sheeting are given on sheds like bin building and briquetting plant to control cross wind and fugitive emission.
- A total of at least 28 MH and fluorescent lights replaced with LEDs for energy conservation of approx. 1.05 KW/hour.
- At-least 2800 forestry saplings planted inside the plant premise. Approx. 49000 forest trees planted at a survival rate more than 90%.
- Four numbers of ambient air quality monitoring stations installed to monitor air quality parameters and to take corrective action in-case of deviation from prescribed standard.
- Single use plastic is not used
- Weather monitoring station is also installed for temperature, humidity, wind speed etc.
- Steel water bottles instead of plastic water s are in use to avoid plastic usage.

PART – H

Additional measures / investment proposal during 2020-21 for environmental protection including abatement of pollution and prevention of pollution

- Phase wise installation of LED lights in place of MH/HPSV lights for energy conservation.
- Green belt development over the year.
- Replacement in-case of old and damaged bags of GCP bag house with new ones to improve emission control.
- Waste water utilization in jigging plant.
- Continuing environmental monitoring.

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- Celebrating World Environment Day
- Training on EMS to create awareness

PART – I

Miscellaneous

Any other particulates in respect of environment protection and abatement of pollution

- Only PUC certified vehicles are engaged inside plant premise.
- World environment day celebrated.
- Monitoring of stack for measuring SOx, NOx and SPM.
- Adoption of good housekeeping practices in which proper and systematic stacking and movement of materials is ensured.
- ETP and STP has been installed to treat domestic and industrial wastewater.

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