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FACOR

OCM/ENV/ 767/2025 **Date: 20.09.2025**

To

The Member Secretary
State Pollution Control Board, Odisha
Paribesh Bhawan, Unit-VIII
BHUBANESWAR – 751 012

Sub: Submission of Environmental Statement in Form-V for the Year 2024-25 in respect of **Ostapal Chromite Mine M/s. FACOR Ltd.**

Respected Sir,

With reference to the captioned subject, we are herewith submitting the Environmental Statement in the prescribed format Form-V, duly filled in, for the year 2024-25 in respect of **Ostapal Chromite Mines** M/s. Ferro Alloys Corporation Limited for your kind perusal.

This is for your kind information & perusal please.

Thanking you,

Yours faithfully,
for Ferro Alloys Corporation Ltd

Mines Manager
Ostapal Chromite Mines

Enclosure: As above

Copy to: 1) The Regional Officer, OSPCB, Kalinganagar – Jajpur
2) The Scientist (E) , MoEF & CC, Regional Office, Chandrasekhar,Bhubaneswar, Odisha

M/s. Ferro Alloys Corporation Ltd. (A subsidiary of Vedanta Ltd.)
Registered Office:
D.P.Nagar, PO : Randia, Dist.: Bhadrak, Odisha, India - 756 135
T +91-6784 240320/240347, Email: facor.mines@vedanta.co.in / facor.ccp@vedanta.co.in
Website: www.facorgroup.in, CIN: U45201OR1955PLC008400.

FORM –V

ENVIRONMENTAL STATEMENT OF OSTAPAL CHROMITE MINES OF M/S.FACOR LTD., ENVIRONMENT STATEMENT FOR THE FINANCIAL YEAR ENDING ON 31ST MARCH 2025

(PART –A)

i)	Name & Address of the Owner/Occupier of the Industry operation or Process	Shri Ajay Kumar Patra Ostapal Chromite Mine M/s. FERRO ALLOYS CORPORATION LTD. Gurujanga, Kaliapani, Jajpur-755028
ii)	Industry Category	Open cast Chromite Mine Beneficiation plant and Dispatch facility.
iii)	Production Capacity – Unit	Mine: 3.0 Lakh TPA Chrome Ore Beneficiation Plant: 1.00 Lakh TPA Concentrate (As per approved CTO)
iv)	Year of Establishment	13th August, 1985
v)	Date of last Environmental Statement submitted	30.09.2024 (For the Financial Year 2023-24)

(PART – B)
WATER & RAW MATERIAL CONSUMPTION

(i) Water Consumption M^3/day:

A	**WATER CONSUMPTION: FY 2024-25**		
	Water Consumption M3/day	**Total In a Year (Cub Mt)**	**Per Day (Avg.) (Cub Mt)**
	a) Process (Beneficiation plant)	720322	1973
	b) Cooling, dust suppression, afforestation etc	35484	97
	c) Domestic	23130	63
	Total Consumption	**778963**	**2134**

B	**PROCESS WATER CONSUMPTION PER PRODUCT OUTPUT**		
	Name of the Products	Previous Financial Year 2023-24	Current Financial Year 2024-25
	a) Chrome ore Concentrate from COB Plant (Cub Mt /MT)	9.751	13.36
	b) Chrome ore from Mines (Cub Mt /MT)	2.30	3.12

ii) Raw Material Consumption:

FACOR is involved in extraction of Chrome Ore from Mine /quarry . Mining is not a Manufacturing Process thus there are no such raw materials involved in the process. However, there are number of Indirect raw materials/Consumables used to support the process of Mining & beneficiation of Ore. The details consumable raw materials as follows:

	Indirect Raw Materials /consumables		
Sl No.	**Name of the Raw material/Consumable**	**During Previous Year (2023-24)**	**During Current Year (2024-25)**
1	Disel (Liters)	1592060	1722501
2	Gas (Cu. M)	5.130	5.544
3	Lubricant Oil (Liters)	1140	1555
4	Grease (Kg)	1160	1220
5	Electricity (Consumed) (Kwh)	3021638	3337680
6	Electricity (Generated) (Kwh)	87042	114057
7	Explosive (Kg) (Detonator, Safety fuse)	3450	7150
8	Tyre Nos.	146	268

(PART – C)
POLLLUTION DISCHARGED TO ENVIRONMENT/UNIT OF OUTPUT
(PARAMETER AS SPECIFIED IN THE CONSENT ISSUED)

a)	Water *	Annual Avg. in Kg/day	Annual Avg. in mg/l	Annual Avg. (%)
1	Suspended Solids	48	25.5	Below prescribed standard
2	Oil & Grease	7	3.5	-do-
3.	B.O.D	13	7.05	-do-
4.	C.O.D	42	22	-do-
5.	Hexavalent Chromium (Cr^{+6})	0.025	0.013	-do-
6.	Total Chromium (Cr)	0.17	0.093	-do-

b) AIR ** - Not applicable. since it is a Mining Industry.

NOTE * All the analyzed parameters of Mines pumped out water are well within the prescribed limit except hexavalent Chromium, for which ETP has been commissioned. Analysis report of final discharge water (after treatment) is enclosed as **ANNEXURE – I**.

** Air quality analysis report of core & Buffer Zone is enclosed as **ANNEXURE – 2A & 2B**

(PART – D)
HAZARDOUS WASTES

AS SPECIFIED UNDER HAZARDOUS WASTES/MANAGEMENT & HANDLING RULES, 2008

Sl.No.	Hazardous Wastes	TOTAL QUANTITY (Kg.)	
		During the previous Financial Year 2023-24	During the Current Financial Year 2024-25
(a)	FROM PROCESS:		
I)	Filter & filter materials containing oil	205 Kg	570 Kg
II)	Used oil/waste oil from vehicles	772 Ltr.	1296 Ltr.
III)	Empty Barrel	70 Kg	110 kg
(b)	From Pollution Control facilities (ETP Sludge)	46470 Kg	9407 kg

(PART – E)
SOLID WASTES

Sl.No.	P A R T I C U L A R S	TOTAL QUANTITY	
		During the previous Financial Year 2023-24	During the Current Financial Year 2024-25
(a)	FROM PROCESS:		
I)	Overburden	4.17 Lac M^3	4.45 Lac M^3
II)	Tailings	0.738 Lac Tons	0.939 Lac Ton
(b)	Qnty. Recycled/or reutilized within the Unit		
(i)	Sold	Nil	NIL
(ii)	Disposed – Overburden	4.17 Lac M^3	4.45 Lac M^3
(iii)	Disposed - Tailings	0.738 Lac Tons	0.939 Lac Ton

(PART – F)

Please specify the characteristics (in terms of composition and quantity) of Hazardous as well as Solid wastes and indicate disposal practice adopted for both these categories of wastes.

Sl.No.	Name of Hazardous/ Solid Wastes	Composition	Quantity	Disposal Practice
a) i)	HAZARDOUS WASTES: Filter & filter materials containing oil	-	0.570 Tons	Filter materials generated during repair & maintenance of vehicles are being disposed of in an impervious lined pit for onward disposal to authorized agency by SPCB.
ii)	Used Oil/Waste oil	-	1.166 Tons	Used oil/waste oil from vehicles & transformers have been collected in barrels and kept under a covered shed & disposed to the Registered Authorized SPCB agency.
iii)	ETP Sludge	Clay soil	10.37 Tons	ETP sludge is being disposed of in impervious lined pit for onward disposed to authorized agency by SPCB.
IV	Empty Barrel	Plastic/Steel	110 Kg	Storage on Impervious floor under cover shed followed by Captive Use.
b) i)	SOLID WASTES: Overburden	Laterite & weathered ultra-basic rock	4.45 Lac M^3	The solid wastes are generated as overburden is dumped in specified area of non-mineralized zones as per approved Mining Plan. And part of the OB is used for backfilling the mine pit. After terracing and benching, massive afforestation is being carried out over these dumps.
ii)	Tailings	Sandy with Clay	0.939 Lac Tons	Tailings are being disposed of in Tailing Ponds then after disposed as per the approved Mining Plan.

(PART – G)
IMPACT OF THE POLLUTION ABATEMENT MEASURES TAKEN ON CONSERVATION OF NATURAL RESOURCES AND ON THE COST OF PRODUCTION

- Fully utilization of Low-Grade ore by Beneficiation, use of mine drainage water in beneficiation, recovery of tailing water & recirculation in beneficiation plant. Mine water is discharged to outside after proper treatment & gainful use inside mine for different industrial use.
- For conservation of natural resources, high efficiency HEMM are used with adequate maintenance to reduce the fuel consumption.
- Various Solar power-based illumination practices & other measures are made at mine such as solar streetlights, solar light used for offices & solar geezer etc.

(PART – H)
ADDITIONAL MEASURES/INVESTMENT PROPOSAL FOR ENVIRONMENTAL PROTECTION INCLUDING ABATEMENT OF POLLUTION, PREVENTION OF POLLUTION

- Ostapal Chromite Mine has installed & operated one ETP (600 KL/hr) & two STPs(30 KLD) in Mine as well as in office area as per requirement. The treated water is recycled & reused.
- Various projects related to water and environment conservation are in place.
- Geotextile & Silpauline are being used in dump to prevent Soil erosion as well as to stabilize the Overburden dump.
- Mobile water sprinkler facilities are engaged for dust suppression in mines & transporting road. Wheel washing system has been installed at the exit gate
- ETP has been provided for treatment of Effluents.
- Tailings pond is provided with impervious layer to avoid ground water contamination.
- For biodiversity conservation, various projects are implemented.
- Plantation is being carried out on dump areas and along the roads.

(PART – I)
ANY OTHER PARTICULARS FOR IMPROVING THE QUALITY OF THE ENVIRONMENT

1	Action taken for massive afforestation	Extensive plantation program has been done and shall be taken upon available spaces, on dumps, roads, and also surrounding areas
2	Measures taken to control of the fugitive emission at different places of Mines.	In order to suppress the airborne dust from the haulage roads and mine roads, there are arrangements for water spraying system through tankers and spraying of water is being done in regular intervals.
3	Action taken for disposal of the excavated material not required for industrial purpose	The overburden waste which are not required for industrial purpose are dumped within the leasehold area at the earmarked site and terraced by forming benches and reclaimed with different plant species.

4	Method adopted for controlling of dust pollution due to drilling	• Wet drilling is being practiced with a jet of water which is continuously directed at the cutting edge to suppress dust generation. • The cutting tools are being regularly grinded to maintain its sharpness by cross checking against gauges. • Compressed air pressure is being adequately supplied to the cutting tools. • Drill cutting are being regularly cleaned.
5	Method adopted for controlling dust pollution due to blasting	Water spraying before & after blasting is being practiced to reduce the possible dust generation.
6	Action taken to remove Cr^{+6} from Quarry pumped out water and surface runoff water.	An ETP having capacity 600 KL/Hr. is being operated to reduce Cr^{+6} from Quarry pumped out water and surface runoff water by dosing $FeSo_4$ solution. Scientific study has been conducted with NIT, Rourkela for reduction of Hexavalent Chromium in tailing pond through bacterial development & algal culture and Phyto remediation of Hexavalent Chromium study by IIMT, BBSR is being carried out.