

TSL/FAMD/SAR/FY25/1399 Date: 26-09-2024

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

Subject: Submission of Environmental statement in FORM-V for the year ending 31st March 2024 in respect of Saruabil Chromite Block of M/S Tata Steel Ltd.

Reference: Rule-14 under Environmental (Protection) Amendment Rule, 1993 (G.S.R 386, 22.04.1993)

Dear Sir,

We are hereby submitting the Annual Environmental Statement in "FORM-V" prescribed under the provisions of above referenced statute, in respect of Saruabil Chromite Block of M/s Tata Steel Ltd., At – Saruabil, Po- Kalarangiatta, Dist- Jajpur, Odisha, for the year ending 31st March 2024. A copy of the annual return (annual return submitted to IBM, Govt. of India/Directorate of Mines, Govt. of Odisha) is also attached as Annexure-I.

This is for your kind information and perusal please. Receipt of the same may please be acknowledged.

Thanking You.

Yours faithfully, f: Tata Steel Limited

Mines Manager.

Saruabil Chromite Block

 Copy to: 1. Regional Officer, SPCB, Kalinganagar, Dhabalagiri Chowk, Jajpur Road (Odisha)
 2. Integrated Regional Office, MoEF&CC, A/3, Rail Vihar, Chandrasekharpur, Bhubaneswar 751023

TATA STEEL LIMITED

Ferro Alloys & Minerals Division Kamarda Chromite Mine Kansa Jajpur Odisha 755 028 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 L27100MH1907PL C000260



Environmental Statement

Form - V (FY - 2023 - 24)

For Saruabil Chromite Block

Submitted By:

Saruabil Chromite Block

M/s. Tata Steel Limited

At: Saruabil, Po: Kalarangiatta, Block-Sukinda District- Jajpur, Odisha -755028

FORM-V

(See Rule 14)

ENVIRONMENTAL STATEMENT FOR THE FINANCIAL YEAR ENDING THE 31st MARCH, 2024 SARUABIL CHROMITE BLOCK, M/s. TATA STEEL LIMITED.

<u>Part A</u>

i.	Name and address of the owner /	:	Shri T V Narendran (Managing Director)	
	occupier of the industry		M/s. Tata Steel Limited,	
	operation or process.		Plot No. N3/24, IRC Village, Nayapalli,	
			Bhubaneswar, Odisha – 751 015	
ii.	Industry category Primary – (STC	:	Primary (SIC): 1000 (Metal Mining)	
	code) Secondary – (SIC Code)		Secondary (SIC): 1060 (Ferro Alloy Ore)	
iii.	Production capacity – Units.	:	0.35 MTPA (Chromite Ore)	
iv.	Year of establishment.		2020	
v.	Date of the last Environmental	:	28.09.2023	
	Statement submitted.			

PART-B Water and Raw Material Consumption

A. Water Consumption for FY 2023-24 (April 2023 to March 2024)

Process	Cooling	Domestic
239.07 m3/day	NA	29.5 m3/day

B. Specific Water Consumption – (April'2023 to March 2024)

(i) **Process water consumption per unit of product output**

Name of	the	Production	Water
Product		(MT)	consumption
			per unit of
			production*
Chrome	0re	299996.66	0.29 KL/MT
(ROM)			

*Note: In case of mining operation, the water requirement is for dust suppression, plantation & washing of vehicle which has been taken as process consumption of water, which was consumed from ETP treated water.

(ii) Raw Material Consumption

The materials consumed during the previous and current financial year are in consumable and supportive ads in nature. The materials which are required to produce Chrome ore from mine quarry are given below:

Name of	Name of	Consumption of material per unit of output	
material	products	During previous During financial year	
		financial year (2022-23)	(2023-24)
Diesel		5.12 Ltrs./ MT	5.51 Ltrs./ MT
Gas (LPG)		Nil	Nil
Lubricant oil	Chrome Ore	0.116 Ltrs./ MT	0.05 Ltrs./ MT
Grease	(ROM)	0.009 Kg/ MT	0.0027 Kg/ MT
Electricity		5.51 KWH/ MT	9.98 KWH/ MT
Explosives		0.24 Kg/MT	0.019 Kg/MT

PART-C {POLLUTION DISCHARGED TO ENVIRONMENT/UNIT OF OUTPUT}

(Parameters as specified in the consent issued)

a. Water

SI. No.	Parameters	Unit	Result Average	Maximum Permissible Standard	Variation from the prescribed standard (%)	Quantity (Kg/day)	Remarks for the deviations if any
2.	Suspended Solids	mg/ltr	18.33	100	-81.17	99	Within the prescribed limit
3.	Oil & Grease	mg/ltr	1.93	10	-80.67	10.19	Not Detected in any of the samples.
4.	BOD (3) days at 270c	mg/ltr	ND	30	BDL	NA	Below detection limit.
5.	COD	mg/ltr	ND	250	BDL	NA	Below detection limit
6.	Hexavalent Chromium as Cr +6	mg/ltr	BDL	0.1	BDL	NA	Below detection limit
7.	Total Chromium as Cr	mg/ltr	BDL	2.0	BDL	NA	Detected only in few samples
8.	Nickel as Ni	mg/ltr	BDL	3	BDL	NA	Below detection limit
9.	Iron as Fe	mg/ltr	0.3125	3	-89.58	1.64	Below detection limit

BDL: Below Detection Limit

b. Air

There is no such point source of emission from the mine. Major source of air pollutants is fugitive dust generated mainly due to the movement of vehicles/HEMMs in the haul roads, drilling/blasing activities etc, which is fugitive in nature and thus has not been quantified (mass/day).

PART-D

HAZARDOUS WASTAGES (As specified under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016)

	Total Quantity	
Hazardous Waste	During previous financial	During the current
	year	financial year
(a) From process		
Used/Waste Oil	13.026 KL	14.95 KL
Oil Contamination Waste	48.9 Kg	59 Kg
Oil Filters & filter Materials	442 Nos	569 Nos
ETP Sludge	14.67 Ton	22.5 Ton
(b) From pollution	Nil	Nil
control facilities		

PART-E Solid Waste

		bona mabte	
		Total Qı	uantity (MT)
	Solid Waste	During the previous financial year (2022- 23)	During the current financial year (2023-24)
(a)	From process (Overburden)	4534454.6	3594753
(b)	From pollution control facility	Nil	Nil
(c)	(1) Quantity recycled or re- utilized within the unit	Nil	Nil
	(2) Sold	Nil	Nil
	(3) Disposed	Nil	Nil

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.]

The details composition and characteristics of solid and hazardous waste are given below:

	Environmental Statement of Saruabil Chromite Block for the FY 2023-24					
Sl. No	Waste Descriptio n	Nature of Waste	Composition/ Characteristics	Quantity (2023- 24)	Management (Methods of collection and Disposal)	
1	Overburden Material	Non- Hazardous (Solid waste)	Quartzite, Laterites, Lateritic soil, Talc schist and serpentine, Nickeliferous limonite	3594753 MT	The waste material is dumped in non- mineralized area approved by IBM with all environmental protection measures	
2	Used /Waste oil	Hazardous Waste (HW-5.1)	Lead, Arsenic, Cadmium, Chromium, Nickel, PAHs etc.	14.95 KL	Collected and securely stored inside 200Ltr MS Barrels and stored above concrete flooring. Sold to SPCB, Odisha Authorized recycler/ disposer	
3	Oil contamin ated waste	Hazardous waste (HW-5.2)	Consists of oil contaminated cotton, Jute, soaked sand etc.	59 Kg (Cotton), 569 nos (Oil Filter)	Collected and stored in MS Barrels above concrete flooring for large quantity disposal to authorized agency	
4	ETP sludge	Hazardous Waste (HW-34.3)	Composition of Cr, Fe, Al, Si etc.	22.55 Ton	ETP sludge will be disposed through Re- Sustainability limited, Mangalapur, Jajpur (known as CHWTSDF)	

PART-G

[Impact of the pollution measures taken on conservation of natural resources and on the cost production]

a) Dust Suppression

- Regular water spraying is being carried out on mine haul road, working site, waste dump yard, ore stack yard loading and unloading points by water tankers to reduce the dust levels.
- > About 500mtrs of fixed water sprinkling was installed in the main haul road.
- Regular water sprinkling on mineral transportation roads passing through the habitation area as well as other strategic points is being done regularly.
- > Wet drilling is a common practice during drilling operation to reduce air pollution.
- Pre- wetting of blasting site and controlled blasting is being practiced reducing dust generation.
- The mineral transportation is being carried out by trucks covered with tarpaulin and properly sealed.

- No trucks are being overloaded at any point of time to avoid spillage of ore and OB in haul road.
- b) Management of surface run off & mine discharge water
 - All the surface run-off water from non-mineralized during rainy seasons is allowed to channelize through well maintained garland drains having sedimentation pits. Finally, the surface run-off accumulated at Quarry "A" for storage. Water from the quarry is then pumped to ETP (380 KL/Hr) for treatment and processes use.
 - Further, at the other side of the quarry the surface run-off has been properly channelized to a big sump from where the whole water has been diverted to Quarry B.
 - From the quarry, water is pumped to an effluent treatment plant for detoxification of Cr⁺⁶ and reduces the Total Suspended Solids (TSS) before any use or discharge.

c) Solid waste management

- Overburden/waste rock is being dumped in the earmarked dump area approved by IBM with suitable terracing. The terraces are stabilized and rehabilitated by massive plantation.
- Retaining walls have been constructed at the toe of various OB dumps to arrest the flow solid material. Garland drains are constructed in and around the OB dumps for drainage of surface run-off.
- Settling pits and check dams inside the garland drain have been constructed to arrest the slit/ soil particles in the water. Yearly twice, the settling pits and garland drains have been desilted.

d) Environmental monitoring.

- ✓ Regular monitoring of ambient air quality is being carried out at four appropriate locations in core zone and in four locations in buffer zone as per statue.
- ✓ Regular monitoring of Ground water level is being carried out by the Piezometric wells in side mine lease area.

e) Afforestation

During FY 2023-24, plantation has been carried out on 2.0 ha of waste dump area with 5956 numbers (at a density of 2500 plants per ha) of local saplings for better survival.

f) Noise reduction

- Heavy vehicles operating in mines have good noise control system. Silencers are maintained in good conditions.
- Regular maintenance of the vehicles/ machines is carried out to reduce the noise pollution.
- Controlled blasting is generally practiced minimizing the noise.
- Regular noise level monitoring is being done on monthly basis and the results are found below permissible limit.

g) Medical facilities and health monitoring

- ◆ All the employees undergo periodical medical checkup like IME & PME.
- M/s. Utkal polytechnic an occupational checkup health center at Bhubaneswar is periodically conducting initial and periodical examination of the persons working in the project regularly which is recognized by DGMS, Dhanbad.

h) Environmental Expenditure Made During April 2023 to March 2024

Sl. No.	Expenditure	Amount (In Lakh)
	ETP operation cost	
	a) Manpower	28.01
1	b) ETP Electricity cost	10.88
	c) Chemical & maintenance cost	14.36
	d) ETP sludge disposal	1.34
2	Water sprinkling cost for haul road management	50.8
3	Display of Board (Env. Management)	0.7
4	Monitoring & Analysis cost of Air, Water & Noise	33.24
5	Plantation expenditure	11.03
6	EQMS Online Analysis	3.54
7	EQMS Online Data Transmission	1.66
	Total	155.56

PART-H

[Additional measures/investment proposal for environmental protecting including abatement of pollution, preservation of pollution]

- 1. Regular maintenance of retaining wall around the foot of the dumps will be provided.
- 2. More garland drain shall be constructed and maintained all along the dump to channelize the water in a single point of storage.
- 3. One CETP (1200m3/hr) is under construction at Saruabil mines to crater mine seepage and surface run-off of two mines.
- 4. More fixed sprinklers will be provided in haul roadside to control the dust.
- 5. For the stability of the dumps regular slope monitoring is being done by précised Total Station Equipment.
- 6. We are engaging consultant from premier institute to study the dump and mines slope stabilities.

PART-I

Any other particular for improving the quality of the environment:

The management of Tata Steel Mining is committed for prevention of the pollution inside and surrounding the lease hold area. Environmental monitoring is being done in core & buffer zones of the lease area to ascertain & to take preventive measure to keep the parameters within stipulated norms.

Environmental Management Practices



Fully Reclaimed OB Dump



Dump runoff management



Garland drain with settling pin & Check dam



Garland drain with retaining wall cleaned



Mines haul road water sprinkling



Effluent Quality Monitoring System with RT-DAS



Air Monitoring Station



Vehicle washing with Oil & Grease separation pit

Hazardous storage area



Dump Plantation during FY 2023-24



Roof top rainwater harvesting structure



Piezometers installed for Ground water level monitoring.

Mines Manager Saruabil Chromite Block M/s. Tata Steel Limited.



TSL/FAMD/SAR/FY25/870 Date: 28-06-2024

То

The Regional Controller of Mines, Indian Bureau of Mines, Bhubaneswar Region Plot No. 149, Pokhariput Bhubaneswar- 751020.

Sub: Submission of Annual Return in Form – G1 along with Surface Plan and Geological Plan & Sections for the Financial Year 2023-24 in respect of Saruabil Chromite Block, M/s Tata Steel Limited.

Dear Sir,

We are submitting herewith the Annual Return in Form – G1 along with Surface Plan and Geological Plan & Sections for the Financial Year 2023-24 in respect of Saruabil Chromite Block, M/s Tata Steel Limited.

This is for your kind information & needful Please.

Thanking you, Yours Sincerely,

Mine Manager Saruabil Chromite Mine M/s Tata Steel Limited.

Encl: As above.

TATA STEEL LIMITED

Ferro Alloys & Minerals Division Saruabil Chromite Mine Kansa Jajpur Odisha 755 028 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

FORM G-1

[See rule 45(5)(c)(i)]

For the financial Year 1st April, 2023 to 31st March, 2024 ANNUAL RETURN

[To be used for minerals other than Copper, Gold, Lead, Pyrites, Tin, Tungsten, Zinc and precious and semiprecious stones]

То

(i) The Regional Controller of Mines
 Indian Bureau of Mines
 Bhubaneshwar Region,
 PIN:
 (Please address to Regional Controller of Mines in whose territorial jurisdiction the mines falls as notified from time to time by the Controller General, Indian Bureau of Mines under rule 66 of the Mineral Conservation and

(ii) The State Government of Odisha

Development Rules, 2017)

1. Details of Mine:	
(a) Registration number allotted by Indian Bureau of Mines (to give registration number of the Lessee-Owner)	IBM/4376/2011
(b) Mine Code (allotted by Indian Bureau of Mines)	110RI19030
(c) Name of the Mineral	CHROMITE
(d) Name of Mine	SARUABIL CHROMITE MINE
(e) Name(s) of other mineral(s), if any, produced from the same mine	
2. Location of the Mine :	
Village	SARUABIL
Post Office	KALARANGIATTA
Tahsil-Taluk	KALIAPANI
District	JAJAPUR
State	ODISHA
PIN Code	755028
Fax No. :	000000000
Phone No. :	8093038829
E-mail:	minemanager.saruabil@tatasteel.com
Mobile:	8093038829

PART - I (General)

3. Name and address of Lessee-Owner (along with few net and a with					
of runne and address of Lessee-Owner (along with	Tax no. and e-mail):				
Name of Lessee-Owner	M/s. Tata Steel Limited				
Address	Bombay House,24 Homi Modystreet Fort,, Mumbai				
District	MUMBAI SUBURBAN				
State	MAHARASHTRA				
PIN Code	400001				
Fax No. :	0000000000				
Phone No. :	06742551045				
E-mail:	gm.office@tatasteel.com				
Mobile:	8092084533				
4. Registered Office of the Lessee:	Bombay House, 24 Homi Mody Street Fort, Mumbai				
5. Director in charge :	Mr. T.V. Narendran (CEO & Managing Director)				
6. Agent :	Mr. Naveen Shrivastava				
7. Manager :	Mr. Priyadarsi Suvakant Padhi				
8. Mining Engineer in charge:	Mr. Priyadarsi Suvakant Padhi				
9. Geologist in charge :	Mr. Deepak Kumar Acharya				
10. Transferor (previous owner), if any, and date of transfer:	Misrilall Mines Private Limited 26/06/2020				

Uploaded Document		
Upload PMCP Table in Excel:	PMCP_Data_of_Saruabil_Chromite_Mine_for_2023-24.xlsx	
Upload UAV Survey (KML/KM	Z File) : <u>PMCP_Saruabil_fy-23-24.kmz</u>	

11. Particulars of area operated-Lease (Furnish information on items (i) to (vi) lease-wise in case mine workings cover more than one lease)

Lease - 1	
(i) Lease number allotted by the State Government	061304569301
(ii) Area under lease (hectares):	
Under Forest	241.770 hectares
Outside Forest	5.088 hectares
Total	246.858 hectares
(iii) Date of execution of mining lease deed	26/06/2020
(iv) Period of lease	50
(v) Area for which surface rights are held (hectares)	
Under Forest	238.865 hectares
Outside Forest	3.716 hectares
Total	242.581 hectares
(vi) Date and period of renewal (if applicable)	0

(vii) In case there is more than one mine in the same lease area, indicate name of mine and mineral produced

Mine Name	Mine Code	Mineral Name

12. Lease area (surface area) utilisation as at the end of year (hectares):	Under forest	Outside forest	Total
(i) Already exploited and abandoned by opencast (O-C) mining	0.000	0.000	0.000
(ii) Covered under current (O-C) Workings	57.083	0.000	57.083
(iii) Reclaimed-rehabilitated	0.000	0.000	0.000
(iv) Used for waste disposal	65.479	0.665	66.144
(v) Occupied by plant, buildings, residential, welfare buildings and roads	-26.251	3.051	29.302
(vi) Used for any other purpose (specify) Green Belt, Nala, Safety zone, etc.	92.957	1.372	94.329
(vii) Work done under progressive mine closure plan during the year 🛛 🦯	2.160	0.000	2.160
13. Ownership-exploiting Agency of the mine: (Public Sector-Private Sector-Joint Sector)		Private Sector	

PART-II (Employment and Wages)

1.Number of supervisory staff employed at the mine		
Description	Wholly employed	Partly employed
(i) Graduate Mining Engineer	12	0
(ii) Diploma Mining Engineer	11	0
(iii) Geologist	1	0
(iv) Surveyor	2	0
(v) Other administrative and technical supervisory staff	51	0
Total:	77	0
2. (i) Number of days the mine worked:	306	<u>3</u>
(ii) No. of shifts per day:	3	
(iii) Indicate reasons for work stoppage in the mine during the	Reasons	No. of days
transport bottleneck, lack of demand, uneconomic operations,	Weekly off	53
etc.) and the number of days of work stoppage for each of the factors separately .	Holidays	7

3. Employment and salary-wages paid #:

Maximum num	ber of persor	ns employed o	on any one da	y during the ye	ear:			
(i) In workings below ground on <i>(date)</i> (a) <i>(number)</i> 0								
(ii) In all in the	mine on	(date) ()7/03/2024	(a) (number)	632			
Classification Total number of man days worked during the year				No. of days worked	Average	daily number employed	Total Wages - Salary for the	
	Direct	Contract	Total	during the year	Male	Female Total		year (₹)
(1)	2(A)	2(B)	2(C)	(3)	4(A)	4(B)	4(C)	(5)
Below Ground	0	0	0	0	0	0	0	0.00
Opencast	10376	150355	160731	306	523	2	525	136355643.00
Above Ground	343	15698	16041	306	51	1	52	12044017.00
Total:	10719.0	166053.0	176772.0	306.000	574.0	3.0	577.0	148399660.00

To include all employees exclusive to the mine and attached factory, workshop or mineral dressing plant at the mine site

PART-II A (Capital Structure)

1. Value of Fixed Assets* (₹ 520256512)

(in respect of the mine, beneficiation plant, mine work-shop, power and water installation) In case this information is furnished as combined information in another mine's return please specify Mine Code-Mine Name:

	Mine Name	Mine Code			Mineral Name		
	Description	At the beginning of the year (₹)	Additions during the Year (₹)	Sold or discarded during the year (₹)	Depreciatio n during the year (₹)	Net closing Balance (₹) (2+3)-(4+5)	Estimated market value** (₹)
	1	2	3	4	5	6	7
	(i) Land***	0	0	0	0	0	0
	(ii) Building:		1880 - 1990 1				
	Industrial	15404474	0	0	658688	14745786	0
	Residential	3617112	0	0	30916	3586196	0
	iii)Plant and Machinery including transport equipment	51850001	0	0	3174128	48675873	0
(iv) Capitalised Expenditure such as pre-production exploration, development, major overhaul and repair to machinery etc. (As prescribed under Income Tax Act)	463066317		0	9817660	453248657	0
	Total:	533937904	0	0	13681392	520256512	0

* In case the fixed assets are common to more than one mine, furnish combined information for all such mines together in any one of the mine's return. In the returns for other mines, give only a cross reference to the particular mine's return where-in the information is included.

** Optional and may be furnished in respect of items (i), (ii) and (iii) if the mine owner desires.

*** Including any non-recurring expenditure incurred on the acquisition of land.

2. Source of Finance (at the end of the year) :				
(i) Paid up Share Capital (₹)		0		
(ii)Own Capital (₹)		0		
(iii)Reserve and Surplus (All Types)(₹)		0		
(iv)Long Term loans outstanding (#)(₹)		0		
Name of the Institution-Source	Amount of Loan (₹)	Rate of Interest		
Nil	0	0		

(#) Indicate the names of the lending institutions such as State Finance Corporation, Industrial Development and other Public Corporations, Co-operative Banks, Nationalised Banks and other sources along with the amount of loan from each source and the rate of interest at which loan has been taken.

3. Interest and Rent (₹)		
(i) Interest paid during the year	0	
(ii) Rents (excluding surface rent) paid during the year	0	

PART-III (Consumption of Materials)

1. Quantity and cost of material consumed during the year								
Description	Unit	Quantity	Value (₹)					
(i) Fuel		I						
(a) Coal	Tonnes	0	0					
(b) Diesel Oil	Ltrs.	1654943	147935750					
(c) Petrol	Ltrs.	0						
(d) Kerosene	Ltrs.	0						
(e) Gas	Cu.M	0	0					
(ii) Lubricant	(ii) Lubricant							
(a) Lubricant oil	Ltrs.	16700	5297072					
(b) Grease	Kgs.	810	188292					
(iii) Electricity								
(a) Consumed	Kwh	2996040	20431118					
(b) Generated	Kwh	0	0					
(c) Sold	Kwh 🦂		0					
(iv) Explosives (furnish full details in Part IV			5531905					
(v) Tyres	Nos.	422	11913826					
(vi) Timber and Supports	0							
(vii) Drill rods and kits	Nos.	0	0					
(viii) Other spares and stores	0							

2. Royalty, Rents and Payments made to DMF and NMET (₹):						
Á X V	Paid for current year	Paid towards past arrears				
(a) Royalty	553762569	0				
(b) Dead rent	248887	0				
(c) Surface rent	1502979	0				
(d) Payment made to DMF 56412622		0				
(e) Payment made to NMET	0					
3. Compensation paid for felling trees during t	1056938					
4. Depreciation on fixed assets (₹) 13681392						

5. Taxes and cesses				
	Amount in Rupees paid during the year to:			
	Central Govt.	State Govt.		
(i) Sales Tax	290180225	54206695		
(ii) Welfare cess	0	0		
(iii) Other taxes and cesses:-				
(a) Mineral cess	0	0		
(b) Cess on dead rent	0	0		
(c) Others (please specify) Electricity Duty, User fess, Application fees, Vehicle taxes, weighment Charges, etc.	0	3465232		
6. Other expenses (₹):	A			
(i) Overheads		42866008		
(ii) Maintenance		0		
(iii) Money value of other benefits paid to workmen		0		
(iv) Payment made to professional agencies		0		

PART-IV (Consumption of Explosives)

Licensed capacity of magazine: (specify unit separately in kg-			Item	Unit	Capacity
tomic, numbers, metres (Explosives	Kg.	0
			Detonators	No.s	0
			Fuses	Mts	0
Classification of Explosives	Classification of Explosives Unit Quantity consume			Estimated requirement during the next year	
		Small dia. (upto 32 mm)	Large dia. (above 32 mm)	Small dia. (upto 32 mm)	Large dia. (above 32 mm)
1. Gun Powder	Kg.	0)
2. Nitrate Mixture			()		
a. Loose ammonium nitrate	Kg.	0	0	0	0
b. Ammonium nitrate in cartridged form	Kg.	0	0	0	0
3. Nitro compound	Kg.	171	0	303	0
4. Liquid Oxygen soaked cartridges	Kg.	0	0	0	0
5. Slurry explosives (Mention different trade names) Solar Cartridge	Kg.	0 55550		0	99594
6. Detonators				L	
i) Ordinary	No.s	0		0	5
ii) Electrical	19				
(a) Ordinary	No.s	15	9	23	1
(b) Delay	No.s	380)4	4945	
7. Fuse					
(a) Safety Fuse	Mts	0		0	
(b) Detonating Fuse	Mts	0		0	
8. Plastic ignition cord	Mts	0		0	
9. Others (specify) SME	Kg	2700	00	560	21

Different sizes of soaked liquid oxygen cartridges to be reported in equivalent kg. as per manufacturer's instruction.

PART-V (General Geology & Mining)

(Items 2 and 3 to be submitted separately for each mineral)

1. Exploration

1(i) Exploration activities during the year:

		At the beginning of the year	During the year	Cumulative	Grid spacing- Dimension
Drilling	No of holes	19	8	27	100 m X 100 m
	Metrage	2630	1080	3710	100 m X 100 m
Pitting	No of pits	0	0	0	And
	Excavation (in m ³)	0	0	A 0	0
Trenching	No of trenches	0	0	0	0
	Excavation (in m ³)	0	0	0	0
	Length covered (in metre)	0	0	0	0
Expenditure on expl	oration (₹)	16792739 🧳	7047123	23839862	0

0

1(ii). Any other exploration activity during the year:

2. Reserves and Resources estimated (in tonnes) (CHROMITE).

Classification	Code	At the beginning of the year 1.4.2023 as per latest approved mining plan- scheme	Assessed during the year	Depletion of reserves during the year	Balance resources as on 31.3.2024
(1)	(2)	(3)	(4)	(5)	(6)= (3+4-5)
A. Mineral Reserve					
1. Proved Mineral Reserve	111	3539897	0	299997	3239900
2. Probable mineral Reserve	121	0	0	0	0
	122	0	0	0	0
3. Total Reserves		3,539,897.00	0.00	299,997.00	3,239,900.00
B. Remaining Resources					
1. Feasibility mineral Resource	211	0	0	0	0
2. Prefeasibility mineral resource	221	5738180	0	0	5738180
	222	0	0	0	0
3. Measured mineral resource	331	0	0	0	0
4. Indicated mineral resource	332	0	0	0	0
5. Inferred mineral resource	333	0	0	0	0
6. Reconnaissance mineral resource	334	0	0	0	0
7. Total remaining Resources		5,738,180.00	0.00	0.00	5,738,180.00
Total (A+B)		9,278,077.00	0.00	299,997.00	8,978,080.00

3. Subgrade-Mineral Reject (in tonnes) (CHROMITE)

(Information to be given in respect of mineral fractions generated and stacked- dumped below cut-off grade and above threshold value, if prescribed, having no immediate sale value)

Generation of subgrade-mineral reject (in tones)	At the beginning of the year	Generated during the year	Disposed during the year	Total stacked at the end of the year	Average grade of the mineral reject generated
from unprocessed ore	0	0	0	0	0
from processed ore	0	0	0	0	0

4. Overburden and Waste (in m³)

(Information to be given in respect of overburden- waste and mineral fractions generated below threshold value, if prescribed)

At the beginning of the year	Generated during the year	Disposed in dumps during the year	Backfilled during the year	Total at the end of the year
3993030	1562936.01	1562936.01	0	5555966.01

5. Trees planted- survival rate

Description	Within lease area	Outside lease area
i) Number of trees planted during the year	5956	0
ii) Survival rate in percentage	90	0
iii) Total no. of trees at the end of the year	11856	0

6. Type of Machinery: Give the following information for the types of machinery in use such as hoist, fans, drills, loaders, excavators, dumpers, haulages, conveyors, pumps, etc.

Type of machinery	Capacity of each type of machinery	Unit (in which capacity is reported)	No. of machinery	Electrical Non- electrical (specify)	Used in opencast underground (specify)
ROCK DRILL (NON-ELEC.)	110.000	MM	1	Non Electrical	Opencast
SHOVEL (HYDRAULIC)	3.200	CUM	3	Non Electrical	Opencast
SHOVEL (HYDRAULIC)	1.330	CUM	1	Non Electrical	Opencast
SHOVEL (HYDRAULIC)	1.800	CUM	1	Non Electrical	Opencast
SHOVEL (HYDRAULIC)	0.620	CUM	1	Non Electrical	Opencast
WHEEL LOADER	3.200	CUM	1	Non Electrical	Opencast
BACK HOE	0.320	CUM	1	Non Electrical	Opencast
TIPPER	20.500	CUM	19	Non Electrical	Opencast
MOTOR GRADER	196.000	HP	1	Non Electrical	Opencast
WATER TANKER	5000.000	LITRE	1	Non Electrical	Opencast
WATER TANKER	18000.000	LITRE	2	Non Electrical	Opencast
DOZER	200.000	HP	3	Non Electrical	Opencast
PUMPS (ELEC.)	15333.000	L/MN	6	Electrical	Opencast
ELEC. MOTOR	120.000	HP	2	Electrical	Opencast
ELEC. MOTOR	40.000	A HP	2	Electrical	Opencast
ELEC. MOTOR	175.000	HP	1	Electrical	Opencast

7(i) Details of mineral Treatment Plant, if any: Give a brief description of the process capacity of the machinery deployed and its availability. (Submit Flow Sheet and Material Balance of the Plant separately). Nil

(ii) Furnish following information:

Item Feed:		Tonnage	Average Grade	
		0.000	0.000	
Concentrates-processed products :	(mention name)	0.000	0.000	
By-products-Co-products:	(mention name)	0.000	0.000	
Tailings:		0.000	0.000	

PART-VI (PRODUCTION, DESPATCHES AND STOCKS) (CHROMITE)

(To be submitted separately for each mineral)

(Unit of Quantity in Tonnes)

1. Type of ore produced:

(Applicable for Iron ore only; tick mark whichever is applicable)

2. Production and Stocks of ROM ore at Mine-head

Category	Opening stock	Production	Closing stock	
(a) Open Cast workings	0.000	299996.660	0.000	
(b) Underground Workings	0.000	0.000	0.000	
(c) Dump workings	0.000	0.000	0.000	

3(i) Grade-wise ROM ore despatches from mine head (\$):

Grade of ROM	Despate	ches from mine-head	Ex-mine Price (₹)	
(a) Below 40% Cr2O3 ROM	0.000		0.00	
(b) 40% to below 52 % Cr2O3 ROM	0.000		0.00	
(c) 52% and above Cr2O3 ROM	0.000		0.00	

(\$): Applicable for iron ore and chromite only. For other minerals data of dispatches to be reported in 3(ii)

3(ii) Grade-wise Production, Dispatches, Stocks and Ex-mine prices:

Grades**	Opening stock at mine-head	Production	Despatches from mine- head	Closing stock at mine-head	Ex-mine price (₹-Tonne)
(i) Lumps					
(a) Below 40% Cr2O3	0.000	0.000	0.000	0.000	0.00
(b) 40% to below 52 % Cr2O3	0.000	0.000	0.000	0.000	0.00
(c) 52% and above Cr2O3	0.000	0.000	0.000	0.000	0.00
(ii) Fines					
(a) Below 40% Cr2O3	34335.071	37482.000	32707.500	39109.571	7559.17
(b) 40% to below 52 % Cr2O3	45329.527	52542.000	45154.120	52717.407	21301.11
(c) 52% and above Cr2O3	172641.044	209972.660	87289.680	295324.024	28192.99
(a) CONCENTRATES	0.000	0.000	0.000	0.000	0.00

3(iii) In case the mineral is being pulverized in own factory, please give the following particulars (*):

Grade**	Total quantity of mineral Pulverized	Total quantity of pulverized mineral produced (for each mesh size)		Total Quantity of pulverized mineral sold during the month		
	(in tonnes)	Mesh size	Quantity (tonne)	Mesh size	Quantity (tonne)	Ex-factory Sale value (₹)

3(iv) Average cost of pulverization (*) : \mathbf{E} per tonne

(*): Not applicable for Iron ore, Manganese ore, Bauxite and Chromite

4. Details of deductions made from sale value for computation of Ex-mine price (₹- Tonne)

Deduction claimed #	Amount (in ₹- Tonne)	Remarks
(a) Cost of transportation (indicate loading station and distance from mine in remarks)	0.00	NA
(b) Loading and unloading charges	0.00	NA
(c) Railway freight, if applicable (indicate destination and distance)	0.00	NA
(d) Port Handling charges- export duty (indicate name of port)	0.00	NA
(e) Charges for sampling and analysis	0.00	NA
(f) Rent for the plot at Stocking yard	0.00	NA
(g) Other charges (specify clearly)	0,00	NA
Total (a) to (g)	0.00	

Not applicable for captive dispatches and ex-mine sales

5. Sales- Despatches effected for Domestic Purposes and for Exports:

Grade	Nature of Despatch (indicate whether Domestic Sale or Domestic Transfer or Captive consumpti on or Export)	For Domestic Purposes				For export		
		Registrati on number as allotted by the Indian Bureau of Mines to the buyer ##	Consignee name ##	Quantity	Sale value (₹)	Country	Quantity	F.O.B Value (₹)
Below 40% Cr2O3,Fines	DOMESTIC SALE	IBM/22792/ 2019	A3 MINERALS AND METAL EXPORT PRIVATE LIMITED	993.810	5959053.56			
52% and above Cr2O3,Fines	DOMESTIC SALE	IBM/8555/2 012	ALCHROME CHEMICAL INDUSTRIES	203.000	6583298.99			
Below 40% Cr2O3,Fines	DOMESTIC SALE	IBM/4178/2 011	ANAND EXPORTS	769.220	9615849.98			
40% to below 52 % Cr2O3,Fines	DOMESTIC SALE	IBM/62/201 1	BALASORE ALLOYS LIMITED	499.770	9545861.84			
52% and above Cr2O3,Fines	DOMESTIC SALE	IBM/62/201 1	BALASORE ALLOYS LIMITED	7302.800	185213778. 60			
40% to below 52 % Cr2O3,Fines	DOMESTIC SALE	IBM/538/20 11	JAI BALAJI INDUSTRIES LIMITED	514.680	9963132.83			
52% and above Cr2O3,Fines	DOMESTIC SALE	IBM/538/20 11	JAI BALAJI INDUSTRIES	16129.780	503716145. 80			

			LIMITED	1	L	1	1	1
Below 40% Cr2O3,Fines	DOMESTIC SALE	IBM/20901/ 2016	JINDAL STAINLESS (HISAR) LIMITED	1229.110	7709752.24			
40% to below 52 % Cr2O3,Fines	DOMESTIC SALE	IBM/20901/ 2016	JINDAL STAINLESS (HISAR) LIMITED	2996.330	53971094.5 2			
40% to below 52 % Cr2O3,Fines	DOMESTIC SALE	IBM/1129/2 011	Jindal Stainless Limited	3051.370	46556980.7 4			
52% and above Cr2O3,Fines	DOMESTIC SALE	IBM/5110/2 011	KHEMKA REFRACTORIES PRIVATE LIMITED	495.120	13652899.3 6			
Below 40% Cr2O3,Fines	DOMESTIC SALE	IBM/5583/2 011	K L RESOURCES PVT. LTD.	6564.340	41279051.1 5			
52% and above Cr2O3,Fines	DOMESTIC SALE	IBM/6534/2 011	KALINGA FERRO ISPAT PVT. LTD.	294.510	8121092.65			
40% to below 52 % Cr2O3,Fines	DOMESTIC SALE	IBM/318/20 11	METSIL EXPORTS PRIVATE LIMITED	2000.000	40586201.1			
52% and above Cr2O3,Fines	DOMESTIC SALE	IBM/318/20 11	METSIL EXPORTS PRIVATE LIMITED	1494.260	45622850.9 0			
52% and above Cr2O3,Fines	DOMESTIC SALE	IBM/4386/2 011	MINERALS TRADE CORPORATION	99.940	3655039.65			
52% and above Cr2O3,Fines	DOMESTIC SALE	IBM/4197/2 011	Misrilall Mines Pvt. Ltd.	5885.850	138646514. 20			
Below 40% Cr2O3,Fines	DOMESTIC SALE	IBM/93/201 1	ORISSA CHROME EXPORT & MINING COMPANY LIMITED	5317.540	38314629.1 2			
Below 40% Cr2O3,Fines	DOMESTIC SALE	IBM/21253/ 2017	PJ MINERALS INTERNATIONA L PVT LTD	494.110	3122706.05			
Below 40% Cr2O3,Fines	DOMESTIC SALE	IBM/19350/ 2015	Prime Industries	1388.270	8942309.01			
52% and above Cr2O3,Fines	DOMESTIC SALE	IBM/19350/ 2015	Prime Industries	1000.000	25140779.9 6			
40% to below 52 % Cr2O3,Fines	DOMESTIC SALE	IBM/765/20 11	RASHMI CEMENT LIMITED	2092.590	51436410.4 0			
52% and above Cr2O3,Fines	DOMESTIC SALE	IBM/765/20 11	RASHMI CEMENT LIMITED	3492.220	101847026. 90			
40% to below 52 % Cr2O3,Fines	DOMESTIC SALE	IBM/4301/2 011	S.A.L. STEEL LIMITED	994.390	23795812.4 1			
52% and above Cr2O3,Fines	DOMESTIC SALE	IBM/4301/2 011	S.A.L. STEEL LIMITED	990.840	27206980.3 4			
40% to below 52 % Cr2O3,Fines	DOMESTIC SALE	IBM/6433/2 011	SONIC THERMAL Private LIMITED	281.000	7168717.45			
40% to below 52 % Cr2O3,Fines	DOMESTIC SALE	IBM/4563/2 011	RAJU	57.850	884716.25			
52% and above	DOMESTIC	IBM/4563/2	RAJU	297.280	5843225.67			

Cr2O3,Fines	SALE	011	I	1	1	1	1	I
52% and above Cr2O3,Fines	DOMESTIC SALE	IBM/14492/ 2012	TOTAL SOLUTIONS	599.970	22528699.5 3			
40% to below 52 % Cr2O3,Fines	DOMESTIC SALE	IBM/367/20 11	Visa Steel Limited	2985.390	45656405.2 4			
52% and above Cr2O3,Fines	DOMESTIC SALE	IBM/527/20 11	FACOR ALLOYS LTD	1000.000	22511109.9 9			
Below 40% Cr2O3,Fines	DOMESTIC TRANSFER	IBM/5307/2 011	AARTI STEELS LIMITED	4365.150	36204554.1 0			
40% to below 52 % Cr2O3,Fines	DOMESTIC TRANSFER	IBM/5307/2 011	AARTI STEELS LIMITED	9146.370	207164914. 60			
52% and above Cr2O3,Fines	DOMESTIC TRANSFER	IBM/5307/2 011	AARTI STEELS LIMITED	10353.610	291314451. 30			
40% to below 52 % Cr2O3,Fines	DOMESTIC TRANSFER	IBM/527/20 11	FACOR ALLOYS LTD	2144.840	48580540.2 1			
52% and above Cr2O3,Fines	DOMESTIC TRANSFER	IBM/527/20 11	FACOR ALLOYS LTD	2137.740	60148542.8 9			
52% and above Cr2O3,Fines	DOMESTIC TRANSFER	IBM/240/20 11	Shyam Metalics & Energy Limited	9024.740	253924687. 30			
Below 40% Cr2O3,Fines	CAPTIVE C ONSUMPTI ON	IBM/4376/2 011	Tata Steel Limited	5047.520	41864130.8 8			
40% to below 52 % Cr2O3,Fines	CAPTIVE C ONSUMPTI ON	IBM/4376/2 011	Tata Steel Limited	8101.000	183487326. 00			
52% and above Cr2O3,Fines	CAPTIVE C ONSUMPTI ON	IBM/4376/2 011	Tata Steel Limited	5593.480	157381006. 00			
Below 40% Cr2O3,Fines	CAPTIVE C ONSUMPTI ON	IBM/4376/2 011	Tata Steel Limited	2889.760	23967669.4 4			
40% to below 52 % Cr2O3,Fines	CAPTIVE C ONSUMPTI ON	IBM/4376/2 011	Tata Steel Limited	2409.250	54569416.1 3			
52% and above Cr2O3,Fines	CAPTIVE C ONSUMPTI ON	IBM/4376/2 011	Tata Steel Limited	2434.090	68486797.6 3			
Below 40% Cr2O3,Fines	DOMESTIC TRANSFER	IBM/4376/2 011	Tata Steel Limited	1873.470	15538560.1 8			
40% to below 52 % Cr2O3,Fines	DOMESTIC TRANSFER	IBM/4376/2 011	Tata Steel Limited	3426.430	77608502.4 4			
52% and above Cr2O3,Fines	DOMESTIC TRANSFER	IBM/4376/2 011	Tata Steel Limited	5116.860	143970582. 60			
52% and above Cr2O3,Fines	DOMESTIC TRANSFER	IBM/4376/2 011	Tata Steel Limited	5228.390	147108647. 50			
Below 40% Cr2O3,Fines	DOMESTIC TRANSFER	IBM/5771/2 011	Tirumala Balaji Alloys Private Limited	1775.200	14723508.8 0			
40% to below 52 % Cr2O3,Fines	DOMESTIC TRANSFER	IBM/5771/2 011	Tirumala Balaji Alloys Private Limited	4452.860	100857100. 90			
52% and above Cr2O3,Fines	DOMESTIC TRANSFER	IBM/5771/2 011	Tirumala Balaji Alloys Private Limited	8115.200	228333406. 00			

To indicate separately if more than one buyer.

NOTE:- Mine owners are required to substantiate domestic sale value- FOB value for each grade of ore quoted above with copy of invoices (not to be submitted with the return; to be produced whenever required)

6. Give reasons for increase-decrease in production-nil production, if any, during the year compared to the previous year.

a) Production as per Business plan within Environment Clearance and Mining Plan limit.
 b) Subgrade Production 2000.080 MT and the Quantity 1993.780 MT (5.41% Cr2O3 contain) sent to R & D Facility of Tata Steel Limited at Jamshedpur for testing purpose in the month of May 2023.

7. Give reasons for increase-decrease in grade wise ex-mine price, if any, during the year compared to the previous year.

a) Market price and weighted average price for the Financial Year 2023-24 is higher than that of previous year. Resulting increase in Ex-Mine Price of Below 40% Cr2O3 Fines, 40% to Below 52% Cr2O3 Fines and Above 52% Cr2O3 Fines.

PART-VII: COST OF PRODUCTION

Cost of production per tonne of ore-mineral produced

Sl. No.	Item	Cost per tonne (₹)
(i)	Direct Cost	1830.38
1	(a) Exploration	49.26
	(b) Mining	1781.12
	(c) Beneficiation(Mechanical Only)	0.00
(ii)	Over-head cost	142.89
(iii)	Depreciation	45.61
(iv)	Interest	0.00
(v)	Royalty	4564.39
(vi)	Payments made to DMF	456.44
(vii)	Payments made to NMET	91.29
(viii)	Taxes	0.00
(ix)	Dead Rent	0.00
(x)	Others (specify) Bid Premium	26929.89
	Total	34060.89

Note: Information given under Part VII will be kept confidential. The Government, however, will be free to utilize the information for general studies without revealing the identity of the firm.

Mineral Name	Production proposal for financial year 2023 - 2024	Production reported during the financial year 2023 - 2024	Difference
CHROMITE	700000	299996.66	400003

I Certify that the information furnished above is correct and complete in all respects.

Place: Sarhabil Dist: JAJAPUR, ODISHA Pin: 755028 Date: 27.06.24

Signature

Name in full: Porycolarsi Designation:

Owner-Agent-Mining Engineer-Manager Mine Manager Saruabil Chromite Blog

From: 136.226.232.92 at 2024-06-27 18:43:25 at Steel Limited



Suvalkant fadhi