



TSL/SAR/032/FY24
Date: 28-09-2023

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 2023 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 2022. 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 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
Corporate Identity Number L27100MH1907PLC000260 Website www.tatasteel.com



Environmental Statement

Form – V (FY - 2022 – 23)

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, 2023
SARUABIL CHROMITE BLOCK, M/s. TATA STEEL LIMITED.

PART-A

i.	Name and address of the owner / occupier of the industry operation or process.	:	Mr. Pankaj Kumar Satija (Managing Director) M/s. Tata Steel Mining Limited, Plot No. N3/24, IRC Village, Nayapalli, Bhubaneswar, Odisha - 751 015
ii.	Industry category Primary - (STC code) Secondary - (SIC Code)	:	Primary (SIC): 1000 (Metal Mining) 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 statement submitted.	:	29.09.2022

PART-B**Water and Raw Material Consumption****A. Water Consumption for FY 2022-23 (April 2022 to March 2023)**

Sl. No	Heads of Consumption		Water consumption (m ³)	Water consumption (m ³ /day)	Water consumption (m ³)	Water consumption (m ³ /day)
			2021-22	2021-22	2022-23	2022-23
01	Process	Water sprinkling in the mine pit and haul road	37236	122	85700	279.2
		Plantation	520	1.7	1613	0.005
		Equipment & Vehicle washing	80	0.26	562	0.002
02	Cooling		Nil	Nil	Nil	Nil
03	Domestic	Drinking Purpose	10300	28.22	10327	28.3
04	Total Consumption		48136	152.18	98202	307.45

**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.*

B. Specific Water Consumption - (April 2022 to March 2023)**(i) Process water consumption per unit of product output**

Name of the Product	Production	Water consumption per unit of production*
Chrome Ore (ROM)	349535.079	0.281 KL/MT

(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 material	Name of products	Consumption of material per unit of output	
		During previous financial year (2021-22)	During financial year (2022-23)
Diesel	Chrome Ore (ROM)	5.091 Ltrs./ MT	5.12 Ltrs./ MT
Gas (LPG)		Nil	Nil
Lubricant oil		0.018 Ltrs./ MT	0.116 Ltrs./ MT
Grease		0.005 Kg/ MT	0.009 Kg/ MT
Electricity		11.287 KWH/ MT	5.51 KWH/ MT
Explosives		0.126 Kg/MT	0.24 Kg/MT

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

(Parameters as specified in the consent issued)

a. Water

Sl. No.	Parameters	Unit	Result Average	Maximum Permissible Standard	Variation from the prescribed standard (%)	Remarks for the deviations if any
1.	pH	--	7.62	5.5 -9	0.0	Within the prescribed limit
2.	Suspended Solids	mg/ltr	30-40	100	-70 to -60	Within the prescribed limit
3.	Oil & Grease	mg/ltr	BDL	10	BDL	Not Detected in any of the samples.
4.	BOD (3) days at 270c	mg/ltr	ND	30	BDL	Below detection limit.
5.	COD	mg/ltr	ND	250	-100	Below detection limit
6.	Hexavalent	mg/ltr	BDL	0.1	BDL	Below detection limit

Environmental Statement of Saruabil Chromite Block for the FY 2022-23

	Chromium as Cr +6					
7.	Total Chromium as Cr	mg/ltr	0.020-0.028	2.0	-99 to - 98.6	Detected only in few samples
8.	Nickel as Ni	mg/ltr	BDL	3	BDL	Below detection limit
9.	Iron as Fe	mg/ltr	BDL	3	BDL	Below detection limit

BDL: Below Detection Limit

b. Air

Monitoring Locations	Parameters (Unit)	Results Annual Averages	Prescribed Standards Annual Average (NAAQS-2009)	Prescribed Standards 24hr Average (NAAQS-2009)	Variations from prescribed standards (%) (variation w.r.t annual average)	Reasons for variations from standard value
Office Top	PM ₁₀ (µg/m ³)	64.25	60	100	7.08% higher	Below the 24hr average, but higher than the annual average standard
	PM _{2.5} (µg/m ³)	36.15	40	60	9.62% lower	Below the annual prescribed standard
	SO ₂ (µg/m ³)	4.85	50	80	90.3% lower	
	NO _x (µg/m ³)	6.45	40	80	83.87% lower	
	CO (mg/m ³)	0.20	N/A	4	N/A	Annual average standard not prescribed in NAAQS-2009
ETP Top	PM ₁₀ (µg/m ³)	63.65	60	100	6.08% higher	Below the 24hr average, but higher than the annual average standard
	PM _{2.5} (µg/m ³)	35.23	40	60	11.93% lower	Below the annual prescribed standard
	SO ₂ (µg/m ³)	4.28	50	80	91.44% lower	
	NO _x (µg/m ³)	6.97	40	80	82.57% lower	
	CO (mg/m ³)	0.19	N/A	4	N/A	Annual average standard not prescribed in NAAQS-2009
Mechanical Garage	PM ₁₀ (µg/m ³)	64.42	60	100	7.37% higher	Below the 24hr average, but higher than the annual average standard
	PM _{2.5} (µg/m ³)	36.23	40	60	9.42% lower	Below the annual prescribed standard
	SO ₂ (µg/m ³)	4.61	50	80	90.78% lower	
	NO _x (µg/m ³)	7.22	40	80	81.95% lower	

Environmental Statement of Saruabil Chromite Block for the FY 2022-23

	CO (mg/m ³)	0.16	N/A	4	N/A	Annual average standard not prescribed in NAAQS-2009
Near Old Magazine	PM ₁₀ (µg/m ³)	63.11	60	100	5.2% higher	Below the 24hr average, but higher than the annual average standard
	PM _{2.5} (µg/m ³)	35.58	40	60	11.05% lower	Below the annual prescribed standard
	SO ₂ (µg/m ³)	3.95	50	80	92.1% lower	
	NO _x (µg/m ³)	6.5	40	80	83.75% lower	
	CO (mg/m ³)	0.17	N/A	4	NA	Annual average standard not prescribed in NAAQS-2009

PART-D

HAZARDOUS WASTAGES

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

Hazardous Waste	Total Quantity	
	During previous financial year	During the current financial year
(a) From process		
Used/Waste Oil	11.975 KL	13.026 KL
Oil Contamination Waste	32.1 Kg	48.9 Kg
Oil Filters & filter Materials	309 Nos	442 Nos
ETP Sludge	1.2 Ton	14.67 Ton
(b) From pollution control facilities	Nil	Nil

PART-E

Solid Waste

	Solid Waste	Total Quantity (MT)	
		During the previous financial year (2021-22)	During the current financial year (2022-23)
(a)	From process (Overburden)	4186020	4534454.6
(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

Sl. No	Waste Description	Nature of Waste	Composition/ Characteristics	Quantity (2022-23)	Management (Methods of collection and Disposal)
1	Overburden Material	Non-Hazardous (Solid waste)	Quartzite, Laterites, Lateritic soil, Talc schist and serpentine, Nickeliferous limonite	4534454.6 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.	13.026 KL	Collected and securely stored inside 200Ltr MS Barrels and stored above concrete flooring. Sold to SPCB, Odisha Authorized recycler/disposer
3	Oil contaminated waste	Hazardous waste (HW-5.2)	Consists of oil contaminated cotton, Jute, soaked sand etc.	48.9 Kg	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.	14.67 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 2022-23, plantation has been carried out on 2.0 ha of waste dump area with 5025 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 2022 to March 2023

Sl. No.	Expenditure	Amount (In Lakh)
1	ETP operation cost	
	a) Manpower	26.63
	b) ETP Electricity cost	8.45
	c) Chemical & maintenance cost	18.11
	d) ETP sludge disposal	0.34
2	Water sprinkling cost for haul road management	30.92
3	Display of Board (Env. Management)	0.645
4	Monitoring & Analysis cost of Air, Water & Noise	23.25
5	Plantation expenditure	9.49
6	EQMS Online Analysis	5.07
7	Ground Water Level Measurement & Data Transmission	1.64
8	EQMS Online Data Transmission	0.76
	Total	125.305

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

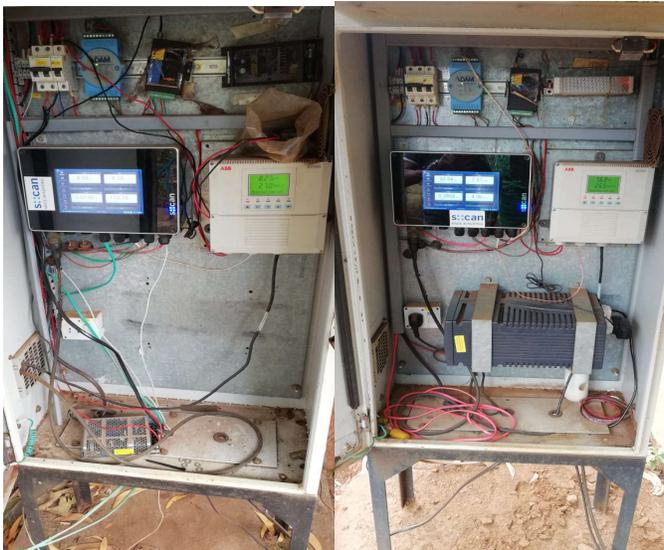


Garland drain with retaining wall cleaned

Environmental Statement of Saruabil Chromite Block for the FY 2022-23



Mines haul road water sprinkling



Effluent Quality Monitoring System with RT-DAS



Air Monitoring Station



Vehicle washing with Oil & Grease separation pit

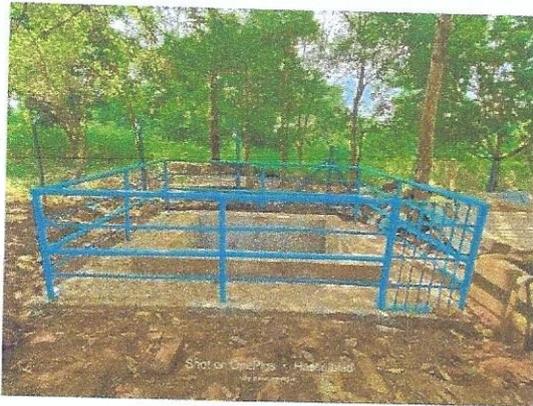


Hazardous storage area

Environmental Statement of Saruabil Chromite Block for the FY 2022-23



Dump Plantation during FY 2022-23



Roof top rainwater harvesting structure



Piezometers installed for Ground water level monitoring.



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



TSML/ SAR / 6139 / FY24

Date: 01-07-2023

To
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 2022-23 in respect of Saruabil Chromite Block, M/s Tata Steel Mining 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 2022-23 in respect of Saruabil Chromite Block, M/s Tata Steel Mining Limited.

This is for your kind information & needful Please.

Thanking you,
Yours Sincerely,

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

Encl: As above.

TATA STEEL MINING LIMITED

(Formerly known as T S Alloys Limited)

Registered Office Plot No N3/24 IRC Village Nayapalli Bhubneswar Odisha Pin 751015 Ph +91 674 2551045

Sukinda Chromite Mine PO Kalarangiatta District Jajpur Odisha Pin 755028

CIN U27109OR2004PLC009683 Website www.tsalloys.com

FORM G-1

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

For the financial Year 1st April, 2022 to 31st March, 2023**ANNUAL RETURN**

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

To

- (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 Development Rules, 2017)

- (ii) The State Government of Odisha

PART - I (General)

1. Details of Mine:	
(a) Registration number allotted by Indian Bureau of Mines (to give registration number of the Lessee-Owner)	IBM/5765/2011
(b) Mine Code (allotted by Indian Bureau of Mines)	11ORI19030
(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. :	0000000000
Phone No. :	6287090160
E-mail:	naveen@tatasteelmining.com
Mobile:	6287090160

3. Name and address of Lessee-Owner (along with fax no. and e-mail):	
Name of Lessee-Owner	M/s. Tata Steel Mining Limited
Address	N-3/24IRC VILLAGE, NAYAPALLI, Bhubaneswar
District	KHORDHA
State	ODISHA
PIN Code	751015
Fax No. :	00000000000
Phone No. :	06742551045
E-mail:	mdoffice@tatasteelmining.com
Mobile:	8092084533
4. Registered Office of the Lessee:	Plot No-N3/24, IRC Village, Nayapalli, Bhubaneswar-751015
5. Director in charge :	Mr. Pankaj Satija (Managing Director)
6. Agent :	Mr. Bibhudatta Mohanty
7. Manager :	Mr. Naveen Shrivastava
8. Mining Engineer in charge:	Mr. Naveen Shrivastava
9. Geologist in charge :	Mr. Dillip Kumar Tiwari
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_Saruabil.xlsx](#)

Upload UAV Survey (KML/KMZ File) : [PMCP_Landuse_Saruabil_Y2022-23.kml](#)

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	55.345	0.000	55.345
(iii) Reclaimed-rehabilitated	0.000	0.000	0.000
(iv) Used for waste disposal	66.000	0.665	66.665
(v) Occupied by plant, buildings, residential, welfare buildings and roads	21.598	3.051	24.649
(vi) Used for any other purpose (specify) Green Belt, Nala, Safety Zone, etc.	98.827	1.372	100.199
(vii) Work done under progressive mine closure plan during the year	2.000	0.000	2.000
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	13	0
(iii) Geologist	2	0
(iv) Surveyor	2	0
(v) Other administrative and technical supervisory staff	51	0
Total:	80	0
2. (i) Number of days the mine worked: 307		
(ii) No. of shifts per day: 3		
(iii) Indicate reasons for work stoppage in the mine during the year (due to strike, lockout, heavy rain, non-availability of labour, transport bottleneck, lack of demand, uneconomic operations, etc.) and the number of days of work stoppage for each of the factors separately .	Reasons	
	Weekly off	39
	Holidays	19

3. Employment and salary-wages paid #:

Maximum number of persons employed on any one day during the year:								
(i) In workings below ground on (date) _____ (a) (number) 0								
(ii) In all in the mine on (date) 04/12/2022 (a) (number) 533								
Classification	Total number of man days worked during the year			No. of days worked during the year	Average daily number of persons employed			Total Wages - Salary for the year (₹)
	Direct	Contract	Total		Male	Female	Total	
(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	10950	144264	155214	307	505.2	0.4	505.6	102901282.00
Above Ground	691	25609	26300	307	83.6	2.1	85.7	17614785.00
Total:	11641.0	169873.0	181514.0	307.000	588.8	2.5	591.3	120516067.00

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* (₹ 533937905)

(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 (₹)	Depreciation 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:						
Industrial	16063163	0	0	658688	15404475	0
Residential	3648028	0	0	30916	3617112	0
(iii) Plant and Machinery including transport equipment	55024128	0	0	3174128	51850000	0
(iv) Capitalised Expenditure such as pre-production exploration, development, major overhaul and repair to machinery etc. (As prescribed under Income Tax Act)	472883978	0	0	9817660	463066318	0
Total:	547619297	0	0	13681392	533937905	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	
0	0	0
Name of the Institution-Source	Amount of Loan (₹)	Rate of Interest
0	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			
(a) Coal	Tonnes	0	0
(b) Diesel Oil	Ltrs.	1789667	176986060
(c) Petrol	Ltrs.	0	0
(d) Kerosene	Ltrs.	0	0
(e) Gas	Cu.M	0	0
(ii) Lubricant			
(a) Lubricant oil	Ltrs.	40570	7174285
(b) Grease	Kgs.	3042	1042653
(iii) Electricity			
(a) Consumed	Kwh	1924711	13692486
(b) Generated	Kwh	0	0
(c) Sold	Kwh	0	0
(iv) Explosives (furnish full details in Part IV)			11074911
(v) Tyres	Nos.	389	10777622
(vi) Timber and Supports			0
(vii) Drill rods and kits	Nos.	8	464800
(viii) Other spares and stores			28261066

2. Royalty, Rents and Payments made to DMF and NMET (₹):		
	Paid for current year	Paid towards past arrears
(a) Royalty	582772259	15661094
(b) Dead rent	99555	0
(c) Surface rent	3433206	0
(d) Payment made to DMF	57275725	6950741
(e) Payment made to NMET	11455187	1390078
3. Compensation paid for felling trees during the year (₹)		0
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	658498228	490239835
(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) User fee, Surface Rent, Dead Rent, Application Fee, Weighment Charges, ED	0	4627076
6. Other expenses (₹):		
(i) Overheads		66814137
(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-tonne, numbers, metres)		Item	Unit	Capacity	
		Explosives	Kg.	0	
		Detonators	No.s	0	
		Fuses	Mts	0	
Classification of Explosives	Unit	Quantity consumed during the year		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		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.	0	83650	0	91474
4. Liquid Oxygen soaked cartridges	Kg.	0	0	0	0
5. Slurry explosives (Mention different trade names) SME	Kg.	282	62740	780	129934
6. Detonators					
i) Ordinary	No.s	0		0	
ii) Electrical					
(a) Ordinary	No.s	203		400	
(b) Delay	No.s	0		0	
7. Fuse					
(a) Safety Fuse	Mts	0		0	
(b) Detonating Fuse	Mts	0		0	
8. Plastic ignition cord	Mts	0		0	
9. Others (specify) NONEL	Meters	5785		7000	

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	2	17	19	100 x 100
	Metrage	210	2420	2630	100 x 100
Pitting	No of pits	0	0	0	0
	Excavation (in m ³)	0	0	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 exploration (₹)		1007520	15785219	16792739	0

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

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

Classification	Code	At the beginning of the year 1.4.2022 as per latest approved mining plan- scheme	Assessed during the year	Depletion of reserves during the year	Balance resources as on 31.3.2023
(1)	(2)	(3)	(4)	(5)	(6)= (3+4-5)
A. Mineral Reserve					
1. Proved Mineral Reserve	111	3889432	0	349535	3539897
2. Probable mineral Reserve	121	0	0	0	0
	122	0	0	0	0
3. Total Reserves		3,889,432.00	0.00	349,535.00	3,539,897.00
B. Remaining Resources					
1. Feasibility mineral Resource	211	5738180	0	0	5738180
2. Prefeasibility mineral resource	221	0	0	0	0
	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)		9,627,612.00	0.00	349,535.00	9,278,077.00

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 tonnes)	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
2021528	1971502	1971502	0	3993030

5. Trees planted- survival rate

Description	Within lease area	Outside lease area
i) Number of trees planted during the year	5025	0
ii) Survival rate in percentage	95	0
iii) Total no. of trees at the end of the year	5025	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	3.500	CUM	1	Non Electrical	Opencast
BACK HOE	0.320	CUM	1	Non Electrical	Opencast
TIPPER	20.500	CUM	19	Non Electrical	Opencast
WATER TANKER	8000.000	LITRE	1	Non Electrical	Opencast
WATER TANKER	18000.000	LITRE	2	Non Electrical	Opencast
DOZER	200.000	HP	3	Non Electrical	Opencast
PUMPS (ELEC.)	16666.000	L/MN	5	Electrical	Opencast
ELEC. MOTOR	120.000	HP	2	Electrical	Opencast
ELEC. MOTOR	40.000	HP	2	Electrical	Opencast
ELEC. MOTOR	175.000	HP	1	Electrical	Opencast

7(i) Details of mineral Treatment Plant, if any (CHROMITE): 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	Tonnage	Average Grade
Feed:	0	0
Concentrates-processed products :	(mention name)	0
By-products-Co-products:	(mention name)	0
Tailings:	0	0

PART-VI (PRODUCTION, DESPACHES 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	349535.079	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	Despatches 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 despatches 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	69241.056	20238.305	55144.290	34335.071	6295.15
(b) 40% to below 52 % Cr2O3	25589.866	78192.481	58452.820	45329.527	15963.11
(c) 52% and above Cr2O3	55996.971	251104.293	134460.220	172641.044	19556.32
(iii) CONCENTRATES					
(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 (in tonnes)	Total quantity of pulverized mineral produced (for each mesh size)		Total Quantity of pulverized mineral sold during the month		
		Mesh size	Quantity (tonne)	Mesh size	Quantity (tonne)	Ex-factory Sale value (₹)

3(iv) Average cost of pulverization (*) : ₹ 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)	2914.00	Saruabil Chromite Mine to Vizag 546 Kms.
(b) Loading and unloading charges	125.00	Loading charges Rs 125.00 per MT
(c) Railway freight, if applicable (indicate destination and distance)	0.00	NA
(d) Port Handling charges- export duty (indicate name of port)	7720.50	Port handling charges Rs 532.50 per MT and Export duty Rs 7188.00 per MT
(e) Charges for sampling and analysis	53.00	Container export charge Rs 53.00
(f) Rent for the plot at Stocking yard	0.00	Included in Port handling charges
(g) Other charges (specify clearly)	0.00	NA
Total (a) to (g)	10812.50	

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 consumption 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	1000.000	6251850.00			
52% and above Cr2O3, Fines	DOMESTIC SALE	IBM/8555/2012	ALCHROME CHEMICAL INDUSTRIES	468.000	8728895.73			

Below 40% Cr2O3,Fines	DOMESTIC SALE	IBM/4178/2011	ANAND EXPORTS	10624.360	60638993.62			
52% and above Cr2O3,Fines	DOMESTIC SALE	IBM/21641/2017	ARRK FERRO ALLOYS LLP	997.760	19600845.55			
40% to below 52 % Cr2O3,Fines	DOMESTIC SALE	IBM/62/2011	BALASORE ALLOYS LIMITED	499.760	9545670.85			
52% and above Cr2O3,Fines	DOMESTIC SALE	IBM/62/2011	BALASORE ALLOYS LIMITED	1983.890	42996245.50			
52% and above Cr2O3,Fines	DOMESTIC SALE	IBM/62/2011	BALASORE ALLOYS LIMITED	4994.190	110529670.20			
52% and above Cr2O3,Fines	DOMESTIC SALE	IBM/22632/2019	ELOQUENT STEEL PVT LTD	499.950	12287886.09			
Below 40% Cr2O3,Fines	DOMESTIC SALE	IBM/4200/2011	Indian Metals & Ferro Alloys Ltd	2396.210	18958669.79			
52% and above Cr2O3,Fines	DOMESTIC SALE	IBM/4796/2011	INDOTAN CHEMICALS LIMITED	427.790	10222708.44			
52% and above Cr2O3,Fines	DOMESTIC SALE	IBM/538/2011	JAI BALAJI INDUSTRIES LIMITED	4906.600	92147607.47			
Below 40% Cr2O3,Fines	DOMESTIC SALE	IBM/1129/2011	Jindal Stainless Limited	2289.100	13438669.20			
52% and above Cr2O3,Fines	DOMESTIC SALE	IBM/1129/2011	Jindal Stainless Limited	10868.190	192904151.00			
40% to below 52 % Cr2O3,Fines	DOMESTIC SALE	IBM/20901/2016	JINDAL STAINLESS (HISAR) LIMITED	881.300	13533260.43			
52% and above Cr2O3,Fines	DOMESTIC SALE	IBM/20901/2016	JINDAL STAINLESS (HISAR) LIMITED	4316.150	82455753.00			
52% and above Cr2O3,Fines	DOMESTIC SALE	IBM/5110/2011	KHEMKA REFRACTORIES PRIVATE LIMITED	999.930	17468327.13			
Below 40% Cr2O3,Fines	DOMESTIC SALE	IBM/5583/2011	K L RESOURCES PVT. LTD.	11459.750	76251368.69			
Below 40% Cr2O3,Fines	DOMESTIC SALE	IBM/318/2011	METSIL EXPORTS PRIVATE LIMITED	1493.190	8103751.19			
52% and above Cr2O3,Fines	DOMESTIC SALE	IBM/318/2011	METSIL EXPORTS PRIVATE LIMITED	9019.030	155478993.90			
52% and above Cr2O3,Fines	DOMESTIC SALE	IBM/4197/2011	Misrilal Mines Pvt. Ltd.	18117.330	402263650.20			
52% and above Cr2O3,Fines	DOMESTIC SALE	IBM/4197/2011	Misrilal Mines Pvt. Ltd.	1394.980	30467465.23			
Below 40% Cr2O3,Fines	DOMESTIC SALE	IBM/44290/2021	PRABAL	986.740	6167023.36			
Below 40% Cr2O3,Fines	DOMESTIC SALE	IBM/93/2011	ORISSA CHROME EXPORT & MINING COMPANY LIMITED	4446.640	27880898.16			

40% to below 52 % Cr2O3,Fines	DOMESTIC SALE	IBM/93/201 1	ORISSA CHROME EXPORT & MINING COMPANY LIMITED	993.830	19116002.0 1			
52% and above Cr2O3,Fines	DOMESTIC SALE	IBM/93/201 1	ORISSA CHROME EXPORT & MINING COMPANY LIMITED	708.380	15191457.0 7			
Below 40% Cr2O3,Fines	DOMESTIC SALE	IBM/21253/ 2017	PJ MINERALS INTERNATIONA L PVT LTD	3838.300	25756211.7 6			
Below 40% Cr2O3,Fines	DOMESTIC SALE	IBM/19350/ 2015	Prime Industries	1657.000	9824030.93			
52% and above Cr2O3,Fines	DOMESTIC SALE	IBM/19350/ 2015	Prime Industries	3999.390	79088318.8 6			
40% to below 52 % Cr2O3,Fines	DOMESTIC SALE	IBM/765/20 11	RASHMI CEMENT LIMITED	994.160	18917920.3 2			
52% and above Cr2O3,Fines	DOMESTIC SALE	IBM/765/20 11	RASHMI CEMENT LIMITED	1986.000	34214653.3 6			
Below 40% Cr2O3,Fines	DOMESTIC SALE	IBM/6211/2 011	Shree Monolithics Private Limited	1551.470	9778915.41			
40% to below 52 % Cr2O3,Fines	DOMESTIC SALE	IBM/4563/2 011	RAJU	291.430	5320255.75			
40% to below 52 % Cr2O3,Fines	DOMESTIC SALE	IBM/5771/2 011	Tirumala Balaji Alloys Private Limited	2248.550	40301233.8 9			
40% to below 52 % Cr2O3,Fines	DOMESTIC SALE	IBM/367/20 11	Visa Steel Limited	10059.570	163974841. 40			
52% and above Cr2O3,Fines	DOMESTIC SALE	IBM/367/20 11	Visa Steel Limited	5528.210	105478907. 20			
40% to below 52 % Cr2O3,Fines	EXPORT					CHINA P RP	1909.510	45754029.4 1
Below 40% Cr2O3,Fines	DOMESTIC TRANSFER	IBM/5307/2 011	AARTI STEELS LIMITED	1942.190	12186776.1 2			
40% to below 52 % Cr2O3,Fines	DOMESTIC TRANSFER	IBM/5307/2 011	AARTI STEELS LIMITED	7243.090	113760985. 57			
52% and above Cr2O3,Fines	DOMESTIC TRANSFER	IBM/5307/2 011	AARTI STEELS LIMITED	7620.500	146762828. 50			
40% to below 52 % Cr2O3,Fines	DOMESTIC TRANSFER	IBM/527/20 11	FACOR ALLOYS LTD	5097.920	80068645.2 3			
52% and above Cr2O3,Fines	DOMESTIC TRANSFER	IBM/527/20 11	FACOR ALLOYS LTD	4596.700	88527615.4 7			
Below 40% Cr2O3,Fines	DOMESTIC TRANSFER	IBM/5664/2 011	NAVA LIMITED	649.260	4073950.68			
52% and above Cr2O3,Fines	DOMESTIC TRANSFER	IBM/5664/2 011	NAVA LIMITED	1784.530	34368174.0 4			
40% to below 52 % Cr2O3,Fines	DOMESTIC TRANSFER	IBM/240/20 11	Shyam Metallics & Energy Limited	982.760	15435366.1 5			
52% and above Cr2O3,Fines	DOMESTIC TRANSFER	IBM/240/20 11	Shyam Metallics & Energy Limited	3734.000	71912919.3 0			
Below 40% Cr2O3,Fines	DOMESTIC TRANSFER	IBM/4376/2 011	Tata Steel Limited	5808.950	36449767.1 0			

40% to below 52 % Cr2O3,Fines	DOMESTIC TRANSFER	IBM/4376/2011	Tata Steel Limited	3564.990	55992232.04			
52% and above Cr2O3,Fines	DOMESTIC TRANSFER	IBM/4376/2011	Tata Steel Limited	12141.470	233831963.70			
Below 40% Cr2O3,Fines	DOMESTIC TRANSFER	IBM/4376/2011	Tata Steel Limited	1623.280	10185692.41			
40% to below 52 % Cr2O3,Fines	DOMESTIC TRANSFER	IBM/4376/2011	Tata Steel Limited	6369.040	100033033.90			
52% and above Cr2O3,Fines	DOMESTIC TRANSFER	IBM/4376/2011	Tata Steel Limited	7295.540	140504440.10			
Below 40% Cr2O3,Fines	DOMESTIC TRANSFER	IBM/5771/2011	Tirumala Balaji Alloys Private Limited	744.190	4669613.64			
40% to below 52 % Cr2O3,Fines	DOMESTIC TRANSFER	IBM/5771/2011	Tirumala Balaji Alloys Private Limited	3324.830	52220245.46			
52% and above Cr2O3,Fines	DOMESTIC TRANSFER	IBM/5771/2011	Tirumala Balaji Alloys Private Limited	6748.370	129966520.40			
Below 40% Cr2O3,Fines	CAPTIVE CONSUMPTION	IBM/5765/2011	Tata Steel Mining Limited	1310.380	8222320.01			
40% to below 52 % Cr2O3,Fines	CAPTIVE CONSUMPTION	IBM/5765/2011	Tata Steel Mining Limited	7968.410	125152963.00			
52% and above Cr2O3,Fines	CAPTIVE CONSUMPTION	IBM/5765/2011	Tata Steel Mining Limited	13027.660	250899052.60			
40% to below 52 % Cr2O3,Fines	DOMESTIC TRANSFER	IBM/4376/2011	Tata Steel Limited	0.600	9423.68			
Below 40% Cr2O3,Fines	CAPTIVE CONSUMPTION	IBM/5157/2011	ROHIT FERRO TECH LIMITED	1323.280	8303264.41			
40% to below 52 % Cr2O3,Fines	CAPTIVE CONSUMPTION	IBM/5765/2011	Tata Steel Mining Limited	11.880	186588.94			
52% and above Cr2O3,Fines	CAPTIVE CONSUMPTION	IBM/5765/2011	Tata Steel Mining Limited	1534.580	29554399.49			
40% to below 52 % Cr2O3,Fines	DOMESTIC TRANSFER	IBM/5157/2011	ROHIT FERRO TECH LIMITED	3282.500	51555404.55			
40% to below 52 % Cr2O3,Fines	CAPTIVE CONSUMPTION	IBM/5157/2011	ROHIT FERRO TECH LIMITED	2728.690	42857187.16			
52% and above Cr2O3,Fines	DOMESTIC TRANSFER	IBM/5157/2011	ROHIT FERRO TECH LIMITED	495.610	9544928.21			
52% and above Cr2O3,Fines	CAPTIVE CONSUMPTION	IBM/5157/2011	ROHIT FERRO TECH LIMITED	4265.490	82148858.64			

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. In Sales and Dispatches Quantity 0.6 MT of 40% to Below 52% Cr2O3 Fines has sent through Domestic Transfer towards self Testing to R & D Tata Steel Limited Jamshedpur for research and development purpose in the month of August 2022

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 sale price for the Financial Year 2022-23 is higher than that of previous year. Resulting increase in Ex-mine price of Below 40% Cr₂O₃ Fines and 52% Cr₂O₃ & Above Fines.

Final Submitted

PART-VII: COST OF PRODUCTION
Cost of production per tonne of ore-mineral produced

Sl. No.	Item	Cost per tonne (₹)
(i)	Direct Cost	1880.41
	(a) Exploration	45.16
	(b) Mining	1835.25
	(c) Beneficiation(Mechanical Only)	0.00
(ii)	Over-head cost	191.15
(iii)	Depreciation	39.14
(iv)	Interest	0.00
(v)	Royalty	2781.44
(vi)	Payments made to DMF	278.14
(vii)	Payments made to NMET	55.63
(viii)	Taxes	0.00
(ix)	Dead Rent	0.00
(x)	Others (specify) Bid Premium	16438.52
	Total	21664.43

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 2022 - 2023	Production reported during the financial year 2022 - 2023	Difference
CHROMITE	450000	349535.079	100465

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

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

Signature



Name in full:
Designation:
Owner-Agent-Mining Engineer-Manager
Manager

From: 165.225.121.1 at 2023-06-30 11:52:47

Saruabil Chromite Block
Tata Steel Mining Limited

Esigned by: 
Date: 30/06/2023 11:52:48 AM