

**INDIAN BUREAU OF MINES
MINES CONTROL AND CONSERVATION OF MINERAL DIVISION**

MCDR INSPECTION REPORT

Bhubaneshwar regional office

Mine file No : ORI/CR/JJP/MCDR-9/BBS-8/3/2001

Mine code : 11ORI19009

- (i) Name of the Inspecting : **25**) **SHRI IBRAHIM SARIF**
Officer and ID No.
- (ii) Designation : Assistant Controller Mine
- (iii) Accompanying mine : J P MISHRA, MINES MANAGER, SUMANTA SAHOO, GEOLOGIST
Official with
Designation
- (iv) Date of Inspection : 19/03/2016
- (v) Prev.inspection date : 11/12/2014

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **TALANGI**
- (b) Category : A Other than Fully Mech.
- (c) Type of Working : Opencast
- (d) Postal address
- State : ORISSA
- District : JAJPUR
- Village : TALANGI
- Taluka : SUKINDA
- Post office : KANSA
- Pin Code :
- FAX No. : 0674-402218
- E-mail :
- Phone :
- (e) Police Station :
- (f) First opening date : 07/06/1993
2. Address for : TALANGI CHROMITE MINE, M/S IDCOL
correspondance P.O.KANSA, DIST:JAJPUR
ORISSA
3. (a) Lease Number : ORI0628
- (b) Lease area : 221.22
- (c) Period of lease : 0
- (d) Date of Expiry :
4. Mineral worked : CHROMITE Main

5. Name and Address of the

Lessee : M/S.IDCOL
 IDCOL House P.O. NO=78
 ,ASHOK NAGAR BHUBANESWAR
 KHURDA ORISSA
 Phone:
 FAX :0674-402218

Owner : THE I.D.C OF ORISSA LTD
 IDCOL HOUSE ,ASHOK NAGAR
 UNIT -II ,P.B.NO..78
 BHUBNESHWAR ORISSA
 Phone:
 FAX : 0674-402218

Agent : J.CHANDRA
 FERROCHROME PLANT M/S IDCOL
 JAJPUR ORISSA
 Phone:
 FAX :

Geologist

Name : P.C.NAIK,Full Time
 Qualification : M.Sc.Tech in Applied Geology
 Appointment/ :
 Termination date

Manager

Name : C.S.MISHRA
 Qualification : M.Sc (GEO) FIRST CLASS MINE MANAGER''S C
 Appointment/ :
 Termination date

Manager

Name : A.K.MISHRA
 Qualification : DIPLOMA IN MINING , 1ST CLASS MANAGER CE
 Appointment/ :
 Termination date

6. Date of approval of Mining : 24/04/2012
 Plan/Scheme of Mining

PART - II : TECHNICAL DETAILS/COMMENTS

1. Details about Average employment :

Maximum number of persons employed on any day during the year

Employment category	No.of employment	Av. yearly working days
DIRECT		
Managerial	2	305
Supervisory	18	305
Others	18	305
CONTRACT		
Others	27	305
Workers	167	305

2. Community Development Plan (in and around the mines) : Proposed action and expenditure towards socio-economic development.

Action during the year	Expenditure in Rs. Lakhs for				Remarks
	previous year		current year		
	Proposed	Incurred	Proposed	Incurred	
General					
Infrastructure					
Sub total					
Sub total					
Total					

3. Status of compliance of MCDR, 1988, including therewith the rectification of the outstanding violation of rules.

There was no outstanding violations. During current inspection violation of Rule 27(4), 33(2), 42 and 45(5)(b)(iv) of MCDR 1988 was pointed out on the spot.

4. A note on the justification in case of suspension of mining operation under rule 13(2) or prohibition of deployment of any person under rule 56 of MCDR, 1988, if recommended.

Not recommended.

5. Scientific Mining

Items	Proposal	Actual work done	Remarks
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B. Working (Rule 13)

a.Number and size of : each pit (LxWxH)		470m x 260m x 60m (Qr No. 2)	
b.Bench size(LxWxH)length can be defined as regular/irregular	: Regular10-15 m x 4-5m in waste Regular2.5 m x 1.5m in ore	Regular 4-10 m x 4-5m in waste Regular 2.5 m x 1.5m in ore	
d.Total area covered : under excavation/pits		12.7 Ha (Quarry-2)	

C. Waste disposal (Rule 13)

a.Location of dumps	: X 3100- Y1850 X 3400- Y 2250	X 3100- Y1850 X 3400- Y 2250 At present waste material is being backfilling in Quarry no.1	
b.Method of dumping whether advancing/retreat	: Advancing	Advancing	
e.Yearly generation of waste quantity.	: 375040.00 T		Backfilling in Quarry no.1
c.Total area covered under waste dump.	: 12.5 Ha	12.5 ha	
d.No.and size of each waste dump with No of steps/lift/bench		2 waste dump, 3 lifts, 12m & 55m Height	

D. Production

b.Year wise production of last five year.	: 2014-15 : 55952.00 T		
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D. Reserve

a.Reserve position as : per latest MP/MS and at the time of inspection.		Classification Code Quantity Grade Proved Mineral Reserve 111 403097.000 10-52% Probable Mineral Reserve 121 and 122 55952.000 10-52% Indicated Mineral Resource 332 238807.000 10-52%	
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RESERVE POSITION AS ON 01/04/2015**CHROMITE**

Category	Quantity in Tonnes	Grade
Proved	403097	10-52%
Probable	55952	55952.00
Possible	238807	238807.00
Total	697856	

PRODUCTION FOR THE PREVIOUS YEAR 2014 - 2015

Mineral	Production	Unit
CHROMITE	55952	TON

6. Conservation of Mineral - both quantitative and qualitative**Beneficiation (Rule 20 and 26)**

Efforts for improving low grade and sub grade mineral. : The sub-grade ore is blended with the high grade ore.

Efforts for improving percentage of recovery of ore. : The low-grade ore is processed in COB plant in the lease area & blended with the high-grade ore to obtain marketable ore.

Mineral Rule 15

Percentage of recovery of ore pitwise w.r.t. ROM and total material : 70% w r t ROM

Number of benches in ore and waste. : Ore 2 nos
Waste 10 nos.

Sub/grd mineral/fines (Rule16)

Total area covered for stacking : 11.37 Ha

Separate stacking from waste : Yes

Location of stacking. : Western side of the quarry.

Exploration data as on 31/03/ 2015

No. of Boreholes	No. of Pits	No. of Trenches
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OVERBURDEN HANDLED DURING PREVIOUS YEAR 2014 - 2015

Overburden/waste removed (in m3) :	375040
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Utilisation of Sub Grade Mineral and Mineral Rejects

Generated	Utilised	Stacked	(In Ton.)
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7. Environment Management - both quantitative and qualitativ

A. Land environment

- a. Landscape. : The lease area is barren & there is no cultivated land existing in the lease area, where mining is carried out.
- b. Aesthetic environment : The lease area was developed with a green cover of plantation
- c. Soil and land use pattern :
- | | | |
|---|-------|--|
| | Total | |
| (i) Already exploited & abandoned by opencast (O/C) mining | 8.75 | |
| (ii) Covered under current (O/C) workings | 12.7 | |
| (iii) Used for waste disposal | 12.5 | |
| (iv) Occupied by plant, buildings, residential, welfare buildings & roads | 3.91 | |
| (v) Used for any other purpose (specify) ORE STORING AND TOP SOIL | 11.37 | |
- d. Agriculture : There is no agriculture going inside the lease area.
- e. Forest(flora and fauna) : There is no specific flora or fauna exists within the lease area.
- f. Vegetation : There is no prominent vegetation cover existing inside the lease area except the greenery developed
- h. Public building, places and monuments (protected, historical), placec of worship and places of tourist : Not applicable

B Water environment.

- a. Surface water : Damsala nala is flowing on eastern side of the lease area. There is no surface water contamination observed as such.
- b. Ground water : Water table has be intersected by mining activity. water encountered is pumped out and subject to ETP before discharge to outside lease area.
- c. Quality of water : Potable

C. Air environment

- c. Climatic condition : One metrological station has been installed at the office building to record the temperature, pressure, rainfall, wind speed, direction, solar radiation etc. During summer from March to middle of June, the maximum temperature varies from 24 degree to 42.8 degree. During the rains i.e from mid-June to mid-October, south west rains cover the area with precipitation varying between 1200-1400mm. Autumn lasts from mid-November with pleasant weather having temperature between 180 to 330

D. Socio economic environment

- a. Social and demographic profile. : The area has primarily forest and fallow land. Most of the smaller villages and hamlets consist of a single tribe or caste population. The major scheduled tribes are Munda, Khadia, Ganda, Oroan, etc. however the scheduled caste communities are Hadi, Pana, Doma, Mochi, Chamara etc. The two communities together constitute approximately 40% of the total population of the Tahsil.
- c. Human settlement : IME & PME has been carried out of all workers & employees. Health camp checkup is being organised by the lessee, provision of supplying free medicines to the villagers (including employees) are provided
- d. Recreational facility. : There is no habitat in the core zone. however As per 2001 Census 74049 persons inhabited within buffer zone of mining lease area. The male and female contribute 51.0% and 49.0%.are

7.1 Comments on the steps taken by the lessee towards maintaining environment and monitoring of environmental parameters to ensure the qualitative improvement in the environment and ecology.

<u>Water Management</u>					
Season	Station type	Station name	Parameter	Value	
				Actual	Excess

<u>Air data for excess parameters</u>					
Season	Station name	Type of area	Parameter	Value	
				Actual	Excess

<u>PLANTATION DURING THE PREVIOUS YEAR</u>	<u>2014 - 2015</u>
	Area in Hect.

<u>TOP SOIL MANAGEMENT</u>
Quantity as on 31/03/2015

8. Scrutiny of annual returns on cost of production, reserve, production, pit mouth value, stock, land use pattern and fixed assets.

The party has submitted annual return for the year 2014-15, which was scrutinized & found that,

(1) Cost of operation: Rs. 3806.79/ton.

(2) Reserve:

Classification	Code	Quantity	Grade
Proved Mineral Reserve	111 403097.000	10-52%	
Probable Mineral Reserve	121 and 122 55952.000	10-52%	
Indicated Mineral Resource	332 238807.000	10-52%	

(3) Production: 55952 tonnes.

(4) Pit's Mouth Value (in Rs.):

Lumps : Below 40% Cr2O3: Rs. 3265.00

Fines : Below 40% Cr2O3 : Rs. 2155.00

40% to below 52% Cr2O3 : Rs. 12067.00

Concentrates : Rs. 10968.00

(5) Stock: ROM : 78431.352 T

Lumps : 531.108 T

Fines : 131853.857

Concentrate : 1359.76

(6) Land use pattern:

Total	Under forest	Outside forest
(i) Already exploited & abandoned by opencast (O/C) mining 8.75	6.3	2.45
(ii) Covered under current (O/C) workings 12.7	1.91	10.79
(iii) Used for waste disposal 0.825	11.67	12.5
(iv) Occupied by plant, buildings, residential, welfare buildings & roads 3.91	0.948	2.96
(v) Used for any other purpose (specify) ORE STORING AND TOP SOIL 5.61 5.76 11.37		

(7) Fixed assets (Rs.'000). Rs. 28255309.00

PART - III : PERFORMANCE OF MINE OWNER

(In case of lease expiring within 2 years - as per guidelines)

PART - IV : PROPOSALS FOR FURTHER ACTION FOR :

Indian Bureau of Mines (any issue related to CGPB, SGPB, Assistance, Consultancy, Annual Programme and studies, etc.)

None

State Government (Illegal mining, mining dispute, infrastructure, Mineral based industry, Mineral policy, etc.)

Safety zone of the lease area area has been disturbed by Waste dumping on Eastern side and by Quarry on North Western side.

The Central Government (Infrastructure, Development, Mineral policy and Legislation, Mineral based industry, etc.)

None

Date :

(SHRI IBRAHIM SARIF)

Indian Bureau of Mines