

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

MCDR INSPECTION REPORT

Bhubaneshwar regional office

Mine file No : ORI/CR/JJP/MCDR-14/BBS

Mine code : 11ORI19015

- (i) Name of the Inspecting : **CMHA**) **SHRI L H CHHANGTE**
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : Sri S.K. Sahoo Mines Manager & S.K. Vaidya , Geologis
Official with
Designation
- (iv) Date of Inspection : 15/05/2013
- (v) Prev.inspection date : 16/11/2010

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **JINDAL KALIAPANI**
- (b) Category : A Mechanised
- (c) Type of Working : Opencast
- (d) Postal address
State : ORISSA
District : JAJPUR
Village : KALIAPANI
Taluka : JAJPUR ROAD
Post office : KALIAPANI
Pin Code :
FAX No. : 06726-268315
E-mail : jindal_mines@yahoo.com
Phone : 06726 -268315,268449
- (e) Police Station : Kaliapani
- (f) First opening date : 28/01/2002
2. Address for : POST&VIL: KALIAPANI
correspondance DIST:JAJPUR
P.S:TOMKA,ORISSA,PIN:755 047
3. (a) Lease Number : ORI0760
- (b) Lease area : 89
- (c) Period of lease : 20
- (d) Date of Expiry : 03/01/2022
4. Mineral worked : CHROMITE Main

5. Name and Address of the

Lessee : M/S JINDAL STAINLESS LTD.
KALINGA NAGAR JAJPUR
JAJPUR ORISSA
Phone:
FAX :

Owner : S S Virdi
Kalinganagar, Dangadi,
Jajpur JAJPUR ORISSA
Phone: 09777450572
FAX :

Agent : Kiran Goswami
M/S Jindal Stainless
Limited IDCO Tower, 6th
Floor, Bhubaneswar JAJPUR
ORISSA
Phone: 09938250089
FAX :

Mining Engineer

Name : S.MOHAPATRA, Full Time
Qualification : AMIE (MINING)
Appointment/ : 01/12/2002
Termination date

Geologist

Name : S.K.VAIDYA, Full Time
Qualification : MSC APPLIED GEOLOGY
Appointment/ : 12/05/2008
Termination date

Geologist

Name : P.S ACHARYA, Full Time
Qualification : M, SC (APPLIED GEOLOGY)
Appointment/ : 01/04/1995 11/05/2008
Termination date

Manager

Name : S.K. SAHOO
Qualification : Diploma IN MINING ENGINEERING, FCC
Appointment/ : 12/05/2008
Termination date

Manager

Name : V.N.DWIVEDI
Qualification : DIPLOMA IN MINING, FIRST CLASS MINES MAN
Appointment/ : 15/03/1994 12/05/2008
Termination date

6. Date of approval of Mining :
Plan/Scheme of Mining

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	7	303
Plant	19	
Supervisory	22	
CONTRACT		
Workers	128	

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
	<u>previous year</u>		<u>current year</u>		
	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.

Necessary violation letter issued on 9/10/2013 itself of rule 13(1). Party also ready replied and considered satisfactory compliance as on date.

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 AS OF NOW

5. Scientific Mining

Items	Proposal	Actual work done	Remarks
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A. Exploration (Rule 13)

a.Type of prospecting : None during last
and exploration i.e. year
pitting, drilling NIL

b.Total area covered : None NIL

B. Working (Rule 13)

a.Number and size of : 2 pits measuring
each pit (LxWxH) 600m x 300m x 70m
and 200m x 300m
x135m Actually developed 2
pits measuring 600m x
305m x 77m and 200m x
305m x116m

b.Bench : 6m high , 10m wide
size(LxWxH)length can ,regular
be defined as
regular/irregular Developed 6m high , 10m
wide ,regular as
proposed

c.Ore to waste ratio : 1:6.6
pit wise if possible
otherwise for mine Turned out to be 1:14

d.Total area covered : 25 ha
under excavation/pits 24.40 ha

C. Waste disposal (Rule 13)

a.Location of dumps : Dump 1 : near NW
corner of ML and
Dump 2 : Between
Quarry 1 & 2 Developed as proposed
.Dump 1 : near NW corner
of ML and Dump 2 :
Between Quarry 1 & 2

e.Yearly generation : 12,71,385 CuM
of waste quantity. during 2012-13 Actual generation was
7,02,000 CuM

b.Method of dumping : Advancing
whether
advancing/retreat Advancing

c.Total area covered : 30 ha
under waste dump. 25.90 ha

d.No.and size of each : Dump-1 & 2 , 15.00
waste dump with No of ha each
steps/lift/bench Dump 1 is 8.82 ha , 3
steps whereas Dump-2 is
17.08 ha , 2 steps

D. Production

b.Year wise : During 2012-13 :
production of last 97,719 MT
five year. Actual production during
the year was 96,022.622
MT only

D. Reserve

a.Reserve position as : 111 : 673000 MT as
per latest MP/MS and per MP
at the time of
inspection. During inspection same
at 673000 MT and total
of reserves and
resources being 6891000
MT

RESERVE POSITION AS ON 01/04/2013**CHROMITE**

Category	Quantity in Tonnes	Grade
Proved	673000	+10%
Probable	1901000	
Possible	2919000	
Total	5493000	

PRODUCTION FOR THE PREVIOUS YEAR 2012 - 2013

Mineral	Production	Unit
CHROMITE	96022.62	TON

6. Conservation of Mineral - both quantitative and qualitative

Beneficiation (Rule 20 and 26)

Efforts for improving low grade and sub grade mineral. : The party has installed Chrome Ore Beneficiation plant of 15tph capacity. Low grade feed of 28% Cr₂O₃ to an out put of 41% yield of concentrates between 46-47% Cr₂O₃ .. The lessee has also plans to install another COB plant for tailings grade of 16-18% Cr₂O₃ and is in the final stage of comissioning.

Efforts for improving percentage of recovery of ore. : Apart from Mechanical crushing and washing in their beneficiation plants Careful sorting and selection at the working faces itself, the lessee has got permission from the concerned DGMS for common boundary working with TISCO and ISPAT which will further improve ore recovery from the supposedly safety zones in the common boundaries.

Mineral Rule 15

Percentage of recovery of ore : 12% of ROM only
pitwise w.r.t. ROM and total material

Number of benches in ore and waste. : Quarry 1 has 13 benches in OB and 2 benches in Ore, Quarry 2 has 19 benches in OB and 3 benches in Ore respectively.

Sub/grd mineral/fines (Rule16)

Qty of yearly generation and total qty available during inspection with grade : Feed (28.67%) = 70320 MT, Concentrates (45.48%) = 28955 MT , Tailings (16.90%) = 41365 MT

Number and size of each stack : One only as stated above

Location of stacking. : North of their Quarry 1

Separate stacking from waste : Yes ores and wastes are being stacked seperately.

Total area covered for stacking : 1.35 ha

Exploration data as on 31/03/ 2013

No. of Boreholes	No. of Pits	No. of Trenches
20		

OVERBURDEN HANDLED DURING PREVIOUS YEAR 2012 - 2013

Overburden/waste removed (in m3) : 702000

Utilisation of Sub Grade Mineral and Mineral Rejects

Generated	Utilised	Stacked	(In Ton.)

7. Environment Management - both quantitative and qualitativ

A. Land environment

- a. Landscape. : Undulating slope , affected to the extent of exploitation due to mining activities only
- b. Aesthetic environment : Affected by the various mining activities
- c. Soil and land use pattern : Practically no top soil , land use pattern as per planned
- d. Agriculture : No significant agricultural activities to be found in the nearby areas
- e. Forest(flora and fauna) : Except scanty flora and fuana of local species no worth mentioning here
- f. Vegetation : Moderately thick vegetation here , not much affected by mining
- h. Public building, places and monuments (protected, historical), placec of worship and places of tourist : NO public building nearby

B Water environment.

- a. Surface water : Follows natural drainage , not much affected by mining
- b. Ground water : Not encountered so far
- c. Quality of water : Potable whe ever found

C. Air environment

- a. Noise : Well within permissible limits
- b. Air : No significant air pollution
- c. Climatic condition : Not much affected by mining activities

D. Socio economic environment

- a. Social and demographic profile. : Local populace depend directly or indirectly in this local mining industries
- b. Recommending health and safety. : No such problem reported as on date
- c. Human settlement : Not affected but rather contributed positively
- d. Recreational facility. : Limited facilities found in their mining colony

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>2012 - 2013</u>
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Area in Hect.

TOP SOIL MANAGEMENT

Quantity as on 31/03/2013

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

AR of 2012-13 scrutinised. Opening stock 137717.005 MT, Production 96022.622 MT and closing stock at 140320.467 MT Average PMV at Rs 3433 per tonne for grade less than 40% and for higher grade ores PMV was Rs 6226/- . Cost of production being worked out at Rs 2618/- per tonne.

PART - III : PERFORMANCE OF MINE OWNER

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

a. Compliance of terms and conditions of lease deed.

ML not expiring in next 2 years (expires on 03/01/2022 only)

PART - IV : PROPOSALS FOR FURTHER ACTION FOR :

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

Necessary violation already issued on 09/10/2013

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

NIL

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

NIL

Date :

(SHRI L H CHHANGTE)

Indian Bureau of Mines