

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

MCDR INSPECTION REPORT

Bhubaneshwar regional office

Mine file No : ORI/IRON/KJR/MCDR-54/BBS

Mine code : 30ORI08050

- (i) Name of the Inspecting : **CHHA**) **SHRI L H CHHANGTE**
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine :
Official with
Designation
- (iv) Date of Inspection : 06/06/2015
- (v) Prev.inspection date : 06/02/2014

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **THAKURANI**
- (b) Category : A Mechanised
- (c) Type of Working : Opencast
- (d) Postal address
State : ORISSA
District : KEONJHAR
Village : DALKI
Taluka : BARBIL
Post office : THAKURANI
Pin Code : 758035
FAX No. : 06767 270049
E-mail : kjsahluwalia@rediffmail.cor
Phone : 06767-270048
- (e) Police Station :
- (f) First opening date : 15/12/1953
2. Address for : AT/PO: THAKURANI
correspondance VIA BARBIL, DIST: KEONJHAR
ORISSA PIN: 758035
3. (a) Lease Number : ORI0072
(b) Lease area : 228.04
(c) Period of lease : 20
(d) Date of Expiry : 31/12/2002
4. Mineral worked : IRON ORE Main

5. Name and Address of the

Lessee : M/S KAY PEE ENTERPRISES
 PO BOX No : 3 AT/PO:
 BARBIL, KEONJHAR ORISSA
 Phone:06767- 75348,75659
 FAX :

Owner : P.K.AHLUWALIA
 P.K.AHLUWALIA, MINE OWNER
 P.B.NO.3, POST:BARBIL
 KEONJHAR ORISSA
 Phone:
 FAX :

Agent : SHRI S.C. MANDAL
 M/S KAYPEE ENTERPRISES
 AT/PO: BARBI, DIST:
 KEONJHAR ORISSA (Thakurani
 iron ore mines) SUNDARGARH
 ORISSA
 Phone: 06625-211327
 FAX : 06625-235272

Mining Engineer

Name : ABHISHEK PANDA,Full Time
 Qualification : BE MINING
 Appointment/ : 01/11/2011
 Termination date

Geologist

Name : AMIYA KUMAR NAIK,Full Time
 Qualification : MSC GEOLOGY
 Appointment/ : 10/01/2011
 Termination date

Manager

Name : RABINDRANATH MONDAL
 Qualification : DIPLOMA MINING WITH 1ST CLASS CERTIFICATE
 Appointment/ : 01/08/2011
 Termination date

6. Date of approval of Mining :
 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	9	305
Supervisory	23	305
CONTRACT		
Workers	50	305
Others	183	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					
Sanitation				0.80	
Water supply				5.00	
Health				1.50	
Housing				4.50	
Sub total				11.80	
Infrastructure					
Sub total					
Environment management				4.20	
Training				1.25	
Total				17.25	

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

Rule 13(1) was found violated during the inspection and accordingly Violation letter was issued to the Lessee on 16/06/2015 itself

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
-------	----------	------------------	---------

A. Exploration (Rule 13)

- a.Type of prospecting : 18 bore holes and exploration i.e. pitting, drilling NIL
- b.Total area covered : 10 ha None as above

B. Working (Rule 13)

- a.Number and size of each pit (LxWxH) : Lucky Pit : 650m x 400m x233m
DN pit : 370m x370m x 171m
Actual development was : Lucky Pit 560m x 380m x 240m
DN pit : 360m x 340m x 164m
- b.Bench size(LxWxH)length can be defined as regular/irregular : Lucky pit : 650m long x 6m high x 12m wide
DN pit : 370m long x 6m high x 12m wide
Regular in shapes and sizes
Actual development was : Lucky pit : 560m long x 6m high x 12m wide
DN pit : 360m long x 6m high x 12m wide
Regular in shapes and sizes
- c.Ore to waste ratio pit wise if possible otherwise for mine : Lucky pit 1:0.17 , DN pit 1: 0.09
Actual turned out to be Lucky pit 1:0.12 , DN pit 1: 0.1
- d.Total area covered under excavation/pits : 67.195 for all the pits
Lucky pit covers 21.28 hactares and DN pit covers 12.5 hactares only

C. Waste disposal (Rule 13)

- a.Location of dumps : Dump 3 for DN pit at 574 x 367 coordinates and Dump 4 for Lucky pit at 711 x 1363 coordinates
Developed as proposed viz Dump 3 for DN pit at 574 x 367 coordinates and Dump 4 for Lucky pit at 711 x 1363 coordinates
- e.Yearly generation of waste quantity. : 7,35,280 CuM for 2014-15
Actual generation was to the tune of 11,556 CuM
- b.Method of dumping whether advancing/retreat : Retreating method
Actual is also Retreating method
- c.Total area covered under waste dump. : Dump 3 to be 350m x 200m whereas Dump 4 was to be 250m x 200m
Actual sizes turned out to be Dump 3 as 225m x200m and Dump 4 turned out to be 250m x 200m
- d.No.and size of each waste dump with No of steps/lift/bench : 2 dumps proposed as Dump 3 to be 350m x 200m whereas Dump 4 was to be 250m x 200m
Actually 2 dumps were also developed and their sizes turned out to be Dump 3 as 225m x200m and Dump 4 turned out to be

250m x 200m

D. Production

b. Year wise : For 2014-15 was Actual was 0.158 MMT
 production of last 3.89 MMT only
 five year.

D. Reserve

a. Reserve position as : Proved 111, 121, At the time of
 per latest MP/MS and 122 was 55.77 inspection , 55.61 MMT
 at the time of MMT
 inspection.

RESERVE POSITION AS ON 01/04/2015**IRON ORE**

Category	Quantity in Tonnes	Grade
Proved	55.61	+45% Fe
Probable	12.09	+ 45% Fe
Possible	8.83	+ 45% Fe
Total	76.53	+ 45% Fe

PRODUCTION FOR THE PREVIOUS YEAR 2014 - 2015

Mineral	Production	Unit
IRON ORE	158235	TON

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

Efforts for improving low grade and sub grade mineral. : No mechanical beneficiation has been installed in this mine as on date

Efforts for improving percentage of recovery of ore. : Except screening , none to improve the ore recovery

Mineral Rule 15

Percentage of recovery of ore : 90% in LUCKY pit and 98% in DN pit of the total ROM pitwise w.r.t. ROM and total material

Number of benches in ore and waste. : Lucky pit has 36 benches in Ore and 3 OB benches , DN pit has 24 benches in Ore and NO bench in OB

Sub/grade mineral/fines (Rule16)

Qty of yearly generation and total qty available during inspection with grade : Stackings was to the tune of 139050 CuM during inspection

Number and size of each stack : Only one stack of 7.5 hectares

Location of stacking. : One large stacking at the NW part of Lucky pit

Separate stacking from waste : Yes there are separate stackings of ore from wastes

Total area covered for stacking : 8.0 hectares approximately

Exploration data as on 31/03/ 2015

No. of Boreholes	No. of Pits	No. of Trenches
119		

OVERBURDEN HANDLED DURING PREVIOUS YEAR 2014 - 2015

Overburden/waste removed (in m3) :	5778
------------------------------------	------

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. : Has been affected to the extent of mining activities. However, various mitigations have been carried out , espicially in dump areas
- b. Aesthetic environment : Aesthetic beauty also has been affected to certain extent but considered not detrimental at this stage
- c. Soil and land use pattern : Top soil is euther minimal or nil, hence no significant effect on top soil
- d. Agriculture : No agricultural activity in and around the ML
- e. Forest(flora and fauna) : Not affected significantly, compensatory afforestation is in vague in this area
- f. Vegetation : There are scattered vegetation which are not affected in the nearby areas
- h. Public building, places and monuments (protected, historical), placec of worship and places of tourist : There is reportedly no public building or monument that needs special protection in this area

B Water environment.

- a. Surface water : Regular monitoring of surface water is being carried out and natural drainage system is not affected
- b. Ground water : Ground water has not ben affected due to this mining
- c. Quality of water : Potable as found in the nearby areas

C. Air environment

- a. Noise : Well within permissible limit
- b. Air : Reguar monitoring carried out and found to be wll within permissible limits
- c. Climatic condition : Not affected in any way

D. Socio economic environment

- a. Social and demographic profile. : All the 5 nearby villages are either directly or indirectly dependent on mining and its allied activities. The local area economy has been positively affected
- b. Recommending health and safety. : No healt hazard reported till date
- c. Human settlement : Not affected in any adverse manner
- d. Recreational facility. : Mininmal infrastructures have been provided to the local populace

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.

Season	Station type	Station name	Water Management	
			Parameter	Value Actual Excess

Air data for excess parameters

Season	Station name	Type of area	Parameter	Value	
				Actual	Excess

PLANTATION DURING THE PREVIOUS YEAR 2014 - 2015

Area in Hect.

TOP SOIL MANAGEMENT

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 year 2014-15 production was at 158235 MT only, closing stocks at 99313 MT (Lumps) , 634678 MT (Fines), PMV for Lumps was Rs 5120 per MT and that of Fines was Rs 2075 only

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.

Found satisfactorily complied with

b. Compliance of the provisions of MCDR, 88 and advise given.

Rule 13(1) was found violated during the inspection and accordingly Violation letter was issued to the Lessee on 16/06/2015 itself.

c. Conduct with regard to adoption of safety measures and forest wealth, ecology and environment in the mining lease area.

Best possible efforts have been given by the lessee in this regard as well.

d. Whether the mine owner has carried out exploration and exploitation on the basis on surface mapping, pitting, trenching and core drilling taking in to consideration the mode of occurrences of mineral deposit.

Enough exploration couldnot be carried out in recent years due to non availability of FC and subsequent closure of the mine by the Court order

e. Whether production from mining area is commensurate with the reserves and the long term progress of utilization of mineral.

Production has been found to be commensurate with the reserves and conservation of the mineral

f. Whether adequate investment has been made by the lessee on the development of mine on mining machinery, operational and administrative building, residential accommodation for the employees.

Not invested by the lessee due to various legal and financial constraints

g. Measures taken by the lessee for protection of environment and ecology.

Plantation, water sprinkling , dumps stabilisation etc

PART - IV : PROPOSALS FOR FURTHER ACTION FOR :

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

Violation letter issued

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

None

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

None

Date :

(SHRI L H CHHANGTE)

Indian Bureau of Mines