

**INDIAN BUREAU OF MINES  
MINERALS DEVELOPEMMENT AND REGULATION DIVISION**

**MCDR INSPECTION REPORT**

**Bhubaneshwar regional office**

**Mine file No :** ORI/IRON/KJR/MCDR-13/BBS

**Mine code :** 30ORI08014

- (i) Name of the Inspecting : **S010** ) **SHRI G.C. SETHI**  
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : Shri H.S. Sarangi, Qualified Person  
Official with  
Designation
- (iv) Date of Inspection : 10/10/2017
- (v) Prev.inspection date : 17/05/2016

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **CHAMAKPUR**
- (b) **Registration NO.** :
- (c) Category : B Manual
- (d) Type of Working : Opencast
- (e) Postal address  
State : ORISSA  
District : KEONJHAR  
Village : CHAMAKPUR  
Taluka : CHAMPUIA  
Post office : CHAMAKPUR  
Pin Code : 758034  
FAX No. : 067671-272326  
E-mail :  
Phone : 06767-273338
- (f) Police Station :
- (g) First opening date : 30/01/1971
- (h) Weekly day of rest : THU
2. Address for : AT/PO. CHAMAKPUR  
correspondance DIST. KEONJHAR, ORISSA  
PIN. 758034, POLICE STATION. CHAMPUIA
3. (a) Lease Number : ORI0062  
(b) Lease area : 31.69  
(c) Period of lease : 19  
(d) Date of Expiry : 29/01/2021
4. Mineral worked : IRON ORE Main

## 5. Name and Address of the

Lessee : SRI K.C PRADHAN  
 PLOT-1262 ROAD UNIT -IX  
 BHUBANESWAR KHURDA ORISSA  
 Phone:(0674)402078, 402099  
 FAX :(0674)412794

Owner : M/S.K.C.Pradhan.  
 PLOT - 1262 ROAD -8 UNIT IX  
 BHUBANESWAR KEONJHAR ORISSA  
 Phone: (0674)402078. 4  
 FAX : (0674)412794

Agent : Sri Siddartha Pradhan  
 KHURDA ORISSA  
 Phone:  
 FAX :

Manager  
 Name : S.K.DAS  
 Qualification : DME(MINING)  
 Appointment/ : 01/03/1996  
 Termination date

6. Date of approval of Mining	:	Mining Scheme rule 12 MCDR1988	23/06/2004
Plan/Scheme of Mining	:	Mining Scheme rule 12 MCDR1988	05/05/2010
	:	Modif.of approved Mining Plan	06/05/2013
	:	MP modif under MCR 1960	05/01/2015

## PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	2014-15: 04 BH 2015-16: 04 BH	NIL.	Violation pointed out.
1b	Exploration over lease area for geological axis 1 or 2	A total of 22 Bh have been propped.	Nil	Nil
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No specific proposal.	Nil	Nil
1d	Balance area to be explored to bring Geological axis in 1 or 2	NIL.	As per MMP dated 05.01.2015, complete lease area is explored up to the G2 level of exploration. G1= 12.11 Ha and G2= 19.583 Ha. area.	Nil
1e	Balance reserve as on 01/04/20	As on 01/04/2016 reserve is:	622931.10 Tonnes.	Nil
1f	General remarks of inspecting officers on geology, exploration etc	Geology to be furnished.	Geology to be furnished.	Nil

## Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Lucky Pit, Department Pit, Pit-1 and Bolder pit.	As per proposal.	Nil
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	No proposal for OB generation for the year 2015-16..	Nil	Nil
2c	Stripping ratio or ore to OB ratio	2015-16 (t/M3) Float- 1:0.40 Insitu- 1:0.26	2015-16 (t/M3) (Float+Insitu)- 1: 0.10	Nil

2d	Quantity of topsoil generation in m3	No Proposal.	Not generated.	Nil
2e	Quantity of overburden generation in m3	2015-16: 17026 m3	180 m3	Due to less production, the overburden generation was in lower side.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	No comments.	The deposit is float in nature & the mining operations are restricted maximum upto 1.0m depth.	Nil

#### Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	4 nos. of pits.	4 nos. of pits.	Nil
3b	Quantity of ROM mineral production proposed	2015-16: 84559 Tonnes.	16635 tonnes.	The generation status of mineral rejects during 2016-17 is in lower side due to less production for lack of market demand for the iron ore produced from the mine.
3c	Recovery of sailable/usable mineral from ROM production	60% of the ROM.	60% of the ROM.	Nil
3d	Quantity of mineral reject generation	Nil	Nil	Nil
3e	Grade of mineral rejects generation and threshold value declared.	No such proposal.	Not applicable.	Nil
3f	Quantity of sub grade mineral generation.	2015-16: 4797.00 m3	16635.00 tonnes	Nil

3g	Grade of sub grade mineral generation	+45 fe to -55% Fe.	+45 fe to -55% Fe.	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	Mobile crushing and Screening of 100 TPH is proposed.	Manual sorting & screening.	Nil
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Mobile crushing and Screening of 100 TPH is proposed.	Not implemented due to lack of market demand for low grade iron ore.	Not implemented due to lack of market demand for low grade iron ore.
3j	Provision of drilling and blasting in mineral benches	No Proposal.	Not in practice.	Nil
3k	Provision of mining machineries in mineral benches	Not proposed.	Not deployed.	Nil
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes.	Yes.	Nil
3m	Total area covered under excavation/pits	19.742 Ha	19.742 Ha	Nil
3n	Ore to OB ratio for the pit/mine during the year.	2014-15: 68132.30 MT 2015-16: 78593.50 MT	2014-15: 47750.00 MT 2015-16: 16635.00 MT	Nil
3o	Total area put in use under different heads at the end of year	to be furnished.	to be furnished.	Nil
3p	Production of ROM mineral during the last five year period as applicable	2014-15: 68132.30 MT 2015-16: 78593.50 MT	2014-15: 47750.00 MT 2015-16: 16635.00 MT	Nil

3q General remarks No comments. to be furnished. Nil  
of inspecting  
officers on  
method of mining  
etc.

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Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Yes.	Stacked over non approved area.	Nil
4b	Location of topsoil, OB and mineral reject dumps	Proposed in Western and Northwestern part of the lease area.	As per proposal. However, some fines stack has been observed on non-approved area.	Nil
4c	Number of dumps within lease area and outside of lease area	Proposed in Western and Northwestern part of the lease area.	Located in Western and Northwestern part of the lease area.	Nil
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Within lease area.	Within lease area.	Nil
4e	Number of active and alive dumps.	Only one.	Only one.	Nil
4f	Number of dead dumps.	5 nos.	5 nos.	Nil
4g	Number of dumps established.	5 nos.	5 nos.	Nil
4h	Whether Retaining wall or garland drain all along dumps are there.	No such proposal.	Not constructed.	Nil
4i	Length of Retaining wall or garland drain all along dumps	Nil	Nil	Nil
4j	Number of settling ponds	2	2	Nil

4k	Specific comments of inspecting officer on waste dump management	No comments.	to be furnished.	Nil
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Solid Waste Management - Backfilling:

Sl.No.	Item	Propasals	Actual work	Remarks
5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	No such proposal.	Nil	Nil
5b	Area under backfilling of mined out area	No such proposal.	Nil	Nil
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No proposal of Top soil generation.	Nil	Nil
5d	Total area fully reclaimed and rehabilitated	No such proposal.	Nil	Nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.	No comments as no backfilling/reclamation was proposed in the mining plan.	No backfilling/reclamation was done in the mine.	Nil

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Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	Submitted on time.	Submitted on time.	Nil

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6b	Area available for rehabilitation (ha) .	No such proposal.	Nil	Nil
6c	afforestation done (ha).	0.150 Ha	0.150 Ha	Nil
6d	No. of saplings planted during the year	Only 240 nos. of saplings were proposed to be planted during 2016-17.	1000 nos. of saplings were planted during 2016-17.	Nil
6e	Cumulative no .of plants	No such proposal.	The commulative plantation figures are not available.	Nil
6f	Any other method of rehabilitation	No such proposal.	Nil	Nil
6g	Cost incurred on watch and care during the year	No such proposal.	Not available.	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	No such proposal.	Nil	Nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No such proposal.	Not applicable.	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	Not applicable.	Nil	Nil



6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No such proposal.	Nil	Nil
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.			
6m	Compliance of rehabilitation of waste land within lease (i)afforestation			
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)			
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation			
6p	Compliance of environmental monitoring (core zone and buffer zone)			
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			

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Mineral Conservation:

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Sl.No.	Item	Propasals	Actual work	Remarks
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7a	ROM Mineral dispatch or grade-wise sorting within lease area	Manual Sorting.	Manual Sorting.	Nil
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Manual.	Manual.	Nil
7c	Different grade of mineral sorted out at mines.	Yes.	Practised as per the proposal.	Nil
7d	Any beneficiation process at mines	Crushing and Screening by mobile units.	Not adopted due to lack of market demand for low grade iron ore.	Nil
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	No comments.	There is no mineral conservation problems in the mine.	Nil

#### Environment:

Sl.No.	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No top soil generation proposal.	Not generated during 2016-17.	Nil
8b	Concurrent use or storage of topsoil	No such proposal.	Not applicable.	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumps for OB & sub-grade has been proposed.	Separate dumps for OB & sub-grade are made as per the proposal.	Nil

8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No such proposal.	Not applicable.	Nil
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No such proposal.	Nil	Nil
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Only 500 nos. of saplings are proposed to be planted in 2016-17.	750 nos. of saplings were planted during 2016-17.	Nil
8g	Survival rate	No such proposal.	58% during 2016-17.	Nil
8h	Water sprinkling on roads to control airborne dust	No such proposal.	Water sprinkler is used.	Nil
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	No comments.	Even if, the mining operations are undertaken in small scale, the lease area is surrounded by forest area with green cover.	Nil

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Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	The party has to submit the monthly returns in F-1 & annual returns in H-1 for production of iron ore.	The party has submitted all the monthly & annual returns in the prescribed forms during the year 2016-17.	Nil

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9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	The employment status of mining engineer, geologist & mine manager have been furnished in the annual return submitted for the year 2016-17.	The mining engineer & mine manager have been employed in the mine.	Nil
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	As per the annual return 2016-17, an extent of 19.742ha of area has been covered by current opencast working, an extent of 6.290ha has been utilised for waste disposal, an extent of 3.530ha occupied by plant, building etc., and an extent of 1.751ha has been utilised for other purpose such as plantation.	The land use status furnished in the annual return 2016-17 is found to be in order.	The land use status furnished in the annual return 2016-17 is found to be in order.
9d	Scrutiny of Annual return on afforestation	During the year 2016-17, 215 nos. of saplings within & outside the lease area.	The status of plantation furnished in the annual return is in order.	Nil

9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	No mineral rejects generation was reported during the year 2016-17 as per the annual return.	Nil	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	During the year 2016-17, only 7277 tonnes of iron ore was produced as indicated in the above annual return.	The production figures furnished in the annual returns are found to be correct.	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	The grade wise ex-mine price for iron ore indicated in the annual return is as given below: (i) Grade(lumps) : Below 55%Fe (Rs. 894.95), 55-58% Fe (Rs. 831.92), 58-60%Fe (Rs.1448.00), 60-62%Fe (Rs. 1841.00) & +65%Fe (Rs.2343.00). (ii) Grade (fines): Below 55%Fe (Rs.399/-). The cost of production for iron ore is mentioned to be Rs. 830.00	The ex-mine price & cost of production furnished in the annual return is found to be in order.	Nil
9h	Scrutiny of Annual return on fixed assets	The total value of the fixed assets is mentioned to be for Rs. 9635682.00.	The same was not available for verification during the inspection.	Nil

9k	Scrutiny of Annual return on mining machineries	The mining machineries like Shovel (hydraulic) 0.90cum (1no.), Back Hoe 1.200cum. (1no.), Wheel loader 2.500 cum.91 no.), Crusher 20t/h (1 no.), Crusher 100t/h (1 no.), Water tanker 20,000 ltr. (1no.), Tipper 4.5 cum. (5 nos.), Generator 150kwh/350kwh (2 nos.), Air compressor 3.390 cum/mn (1 no.) & Rock drill 32mm (1 no.) are given in the annual return submitted for the year 2016-17.	The deployment status of the mining machineries & other machineries, equipments furnished in the annual return are appears to be correct.	Nil
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**Details of violations observed during current inspection and compliance position of violation pointed out**

Violation observed		Show cause position	
Rule NO.	Issued on Compliance on	Rule NO.	Issued on Compliance on

**Date :**

**(SHRI G.C. SETHI)**

Indian Bureau of Mines