INDIAN BUREAU OF MINES MINERALS DEVELOPMENT AND REGULATION DIVISION

MCDR INSPECTION REPORT

Bhubaneshwar regional office

Mine file No : ORI/IRON/KJR/MCDR-18/BBS Mine code : 300RI08018

(i) Name of the Inspecting : ${\tt U11}$) ${\tt DAYANAND}$ ${\tt UPADHYAY}$

Officer and ID No.

(ii) Designation : Sr. Asst. Contrl. Mines

(iii) Accompaning mine : Shri Ravi Narayan Kar, Geologist

Official with Designation

(iv) Date of Inspection : 04/11/2017
(v) Prev.inspection date : 11/09/2014

PART-I : GENERAL INFORMATION

1. (a) Mine Name : GUALI

(b) Registration NO. : IBM/5306/2011

(c) Category : A Fully Mechanised

(d) Type of Working : Opencast

(e) Postal address

State : ORISSA
District : KEONJHAR
Village : GUALI
Taluka : BARBIL
Post office : GUALI

Pin Code

FAX No. : 06767-272503 E-mail : tpsao@sify.com

Phone : 06767-272363, Mobile- 94370

(f) Police Station : GUALI

(g) First opening date : 07/06/1953

(h) Weekly day of rest : TUE

2. Address for : VII&PO.GUALI

correspondance POLICE STATION . BARBIL

DIST.KEONJHAR, ORISSA, PIN. 758035

3. (a) Lease Number : ORI0092 (b) Lease area : 365.03

(c) Period of lease :

(d) Date of Expiry : 31/03/2020

4. Mineral worked : IRON ORE Main

5. Name and Address of the

Lessee : RAMESH PRASAD SAO

NEAR GANDHI PARK

AT/PO.CHAIBASA

DIST.SINGHBHUM(W) SINGHBHUM

(WEST) JHARKHAND

Phone: 56268

FAX :

Owner : RAMESH PRASAD SAO

NEAR GANDHI PARK

AT/PO.CHAIBASA SINGHBHUM

(WEST) JHARKHAND Phone: 56268

FAX :

Agent : ABHISHEK SAO

NEAR GANDHI PARK AT/PO: CHAIBASA SINGHBHUM WEST DIST, JHARKHAND SINGHBHUM

(WEST) JHARKHAND Phone: 06767-272363 FAX : 06767-272503

Mining Engineer

Name : S K MUKHARJEE, Full Time Qualification : DEGREE IN MINING ENGG

Appointment/ : 20/06/2013

Termination date

Geologist

Name : SHRI D. DAS, Full Time

Qualification : M.SC GEOLOGY Appointment/ : 20/06/2008

Termination date

6. Date of approval of Mining : Renewal under rule 22 MCR1960 15/03/2005 Plan/Scheme of Mining Modif.of approved Mining Plan 11/12/2007

Mining Scheme rule 12 MCDR1988 22/05/2009
Modif.approved Mining Scheme 27/10/2010
Renewal under rule 24 MCR1960 14/09/2012

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PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	101 bore holes were proposed in approved scheme of mining for the period 2013-14 to 2017-18.	Proposed bore holes have not been commenced due to suspension of mining operation with effect from 27.06.2013 by State Govt. vide letter no. 2150/mines, dated 24/06/2013.	has been suspended since 27.06.2013 by DDM, Joda vide
1b	Exploration over lease area for geological axis 1 or 2	101 bore holes were proposed in G1/G2 level of exploration in approved scheme of mining for the period 2013-14 to 2017-18.	Proposed bore holes have not been commenced due to suspension of mining operation with effect from 27.06.2013 by State Govt. vide letter no. 2150/mines, dated 24/06/2013.	area covered G1 level and 103.796 ha area covered
1c	Exploration Agencies and Expenditure in lakh rupees during the year		Proposed bore holes have not been commenced due to suspension of mining operation with effect from 27.06.2013 by State Govt. vide letter no. 2150/mines, dated 24/06/2013.	
1d	Balance area to be explored to bring Geological axis in 1 or 2	Balance 161.601 ha was proposed for exploration by 101 nos. of bore holes.	Proposed bore holes have not been commenced due to suspension of mining operation with effect from 27.06.2013 by State Govt. vide letter no. 2150/mines, dated 24/06/2013.	About 99.629 ha area covered G1 level and 103.796 ha area covered under G2 level by 72 nos. of bore holes drilled in the lease area covering total meterage of 3431.60m.

1e Balance reserve as on 01/04/20

Balance reserve as on 01/10/2017 as per approved review of mining plan is:
Iron ore under proved & probable category:
104.933 Million tonnes,
Remaining resources:
6.30 Million tonnes.

1f General remarks
 of inspecting
 officers on
 geology,
 exploration etc

About 99.629 ha area covered G1 level and 103.796 ha area covered under G2 level by 72 nos. of bore holes drilled in the lease area covering total meterage of 3431.60m. Mining operation is suspended with effect from 27.06.2013 by State Govt. vide letter no. 2150/mines, dated 24/06/2013.

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	lies between grid 212N-566S and 131E-620E and Baliasahi quarry lies between grid	There are 02 quarries in the lease area. Topadih quarry lies between grid 212N-566S and 131E-620E and Baliasahi quarry lies between grid 562S-86S and 1060W-1433W.	The mine is not under operation as working operation has been suspended since 27.06.2013 by DDM, Joda vide letter no. 2150, dated 24/06/2013.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	bench height 12m and in Baliasahi pit	The mine is not under operation since 27/06/2013. The existing bench height in OB and ore are 10-12m.	

2c	Stripping ratio or ore to OB ratio	1:0.045	The mine is not under operation as working operation has been suspended since 27.06.2013 by DDM, Joda vide letter no. 2150, dated 24/06/2013.	
2d	Quantity of topsoil generation in m3	Not Proposed.	The mine is not under operation as working operation has been suspended since 27.06.2013 by DDM, Joda vide letter no. 2150, dated 24/06/2013.	
2e	Quantity of overburden generation in m3	293840 cu.m OB in 2016-17.	The mine is not under operation as working operation has been suspended since 27.06.2013 by DDM, Joda vide letter no. 2150, dated 24/06/2013.	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			The mine is not under operation as working operation has been suspended since 27.06.2013 by DDM, Joda vide letter no. 2150, dated 24/06/2013.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	02 pits, Topadih pit and Baliasahi pit.	The mine is not under operation as working operation has been suspended since 27.06.2013 by DDM, Joda vide letter no. 2150, dated 24/06/2013.	
3b	Quantity of ROM mineral production proposed	6.59 million tonnes of ROM for the year 2016-17.	Nil. The mine is not under working as mining operation has been suspended since 27.06.2013 by DDM, Joda vide letter no. 2150, dated 24/06/2013.	

3c	Recovery of sailable/usable mineral from ROM production	75%	Nil. The mine is not under working as mining operation has been suspended since 27.06.2013 by DDM, Joda vide letter no. 2150, dated 24/06/2013.
3d	Quantity of mineral reject generation	893526 tonnes	Nil. The mine is not under working as mining operation has been suspended since 27.06.2013 by DDM, Joda vide letter no. 2150, dated 24/06/2013.
3e	Grade of mineral rejects generation and threshold value declared.	45 to 58% of Fe.	Nil. The mine is not under working as mining operation has been suspended since 27.06.2013 by DDM, Joda vide letter no. 2150, dated 24/06/2013.
3f	Quantity of sub grade mineral generation.	893526 tonnes.	Nil. The mine is not under working as mining operation has been suspended since 27.06.2013 by DDM, Joda vide letter no. 2150, dated 24/06/2013.
3g	Grade of sub grade mineral generation	45 to 58% of Fe.	Nil. The mine is not under working as mining operation has been suspended since 27.06.2013 by DDM, Joda vide letter no. 2150, dated 24/06/2013.
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised	Nil. The mine is not under working as mining operation has been suspended since 27.06.2013 by DDM, Joda vide letter no. 2150, dated 24/06/2013.
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Not Proposed.	Not applicable.

3 j	Provision of drilling and blasting in mineral benches	115mm dia.	Nil. The mine is not under working as mining operation has been suspended since 27.06.2013 by DDM, Joda vide letter no. 2150, dated 24/06/2013.
3k	Provision of mining machineries in mineral benches	115 mm dia. wagon drill, excavator-4.3 cu.m, 2.1 cu.m, & 0.9 cu.m & trippers of 25T, 35T & 85T capacity.	Nil. The mine is not under working as mining operation has been suspended since 27.06.2013 by DDM, Joda vide letter no. 2150, dated 24/06/2013.
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	In topadih pit bench height 12m and in Baliasahi pit bench height 10m.	Nil. The mine is not under working as mining operation has been suspended since 27.06.2013 by DDM, Joda vide letter no. 2150, dated 24/06/2013.
3m	Total area covered under excavation/pits	93.36 ha during scheme period for the year 2013-14 to 2017-18.	At present the area covered under excavation pits is about 77.9 ha.
3n	Ore to OB ratio for the pit/mine during the year.	1:0.45	Nil. The mine is not under working as mining operation has been suspended since 27.06.2013 by DDM, Joda vide letter no. 2150, dated 24/06/2013.
30	Total area put in use under different heads at the end of year		Total area covered under different head mining and allied activities is about 109.615 ha. The mine is not under working as mining operation has been suspended since 27.06.2013 by DDM, Joda vide letter no. 2150,

dated 24/06/2013.

Production of 2013-14: 2013-14: 0.12MT 3p ROM mineral 6.76MT 2014-15:Nil during the last 2014-15:6.54M 2015-16: Nil five year period T 2016-17: Nil as applicable 2015-16: 2017-18: Nil 6.60MT 2016-17: 6.58MT 2017-18: 6.66MT General remarks 3q

of inspecting officers on method of mining etc.

The mine is not under working as mining operation has been suspended since 27.06.2013 by DDM, Joda vide letter no. 2150, dated 24/06/2013.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Separate dump for OB and mineral reject.	Nil. The mine is not under operation as working operation has been suspended since 27.06.2013 by DDM, Joda vide letter no. 2150, dated 24/06/2013.	
4b	Location of topsoil, OB and mineral reject dumps	17, between grid 730W-430W and 500N-265N,		

4c	Number of dumps within lease area and outside of lease area	01 OB dump, 410W- 730W/ 265N-520N and 02 mineral reject dump between grid 13W- 400E/ 318N- 523N and 490W-780W/ 385N-100N respectively.	Nil. The mine is not under operation as working operation has been suspended since 27.06.2013 by DDM, Joda vide letter no. 2150, dated 24/06/2013.	There are 05 nos. of mineral reject/sub grade dump of total quantity 2.543 million cu.m and one 0B dump between grid 265N-477N/695W-375W in the lease area.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	One OB dump between grid 265N-477N/695W-375W.	The mine is not under operation since 27.06.2013 . OB dump in the lease area is outside the UPL.	
4e	Number of active and alive dumps.	the year 2016- 17, between grid 730W-430W	Nil. The mine is not under operation as working operation has been suspended since 27.06.2013 by DDM, Joda vide letter no. 2150, dated 24/06/2013.	One OB dump lies between grid 265N-477N/695W-375W in the lease area.
4f	Number of dead dumps.	Not proposed.	Not applicable.	
4g	Number of dumps established.	Not proposed.	Not applicable.	
4h	Whether Retaining wall or garland drain all along dumps are there.	of 500mX1.5mX1m and garland drain of 300mX1mX0.5m	Nil. The mine is not under operation as working operation has been suspended since 27.06.2013 by DDM, Joda vide letter no. 2150, dated 24/06/2013.	
4i	Length of Retaining wall or garland drain all along dumps	of 500mX1.5mX1m and garland drain of 300mX1mX0.5m	Nil. The mine is not under operation as working operation has been suspended since 27.06.2013 by DDM, Joda vide letter no. 2150, dated 24/06/2013.	
4j	Number of settling ponds	Not proposed.	Not applicable.	

4k Specific comments of inspecting officer on waste dump management

The mine is not under operation as working operation has been suspended since 27.06.2013 by DDM, Joda vide letter no. 2150, dated 24/06/2013.

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.	Backfilling was proposed in southern part of the Topadih block.	Nil. The mine is not under operation as working operation has been suspended since 27.06.2013 by DDM, Joda vide letter no. 2150, dated 24/06/2013.	
5b	Area under backfilling of mined out area	4.03 ha area.	Nil. The mine is not under operation as working operation has been suspended since 27.06.2013 by DDM, Joda vide letter no. 2150, dated 24/06/2013.	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Not proposed.	Not applicable.	
5d	Total area fully reclaimed and rehabilitated	4.03 ha area of southern part of Topadih block was proposed to backfilling and reclaimation.	Nil. The mine is not under operation as working operation has been suspended since 27.06.2013 by DDM, Joda vide letter no. 2150, dated 24/06/2013.	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			Nil. The mine is not under operation as working operation has been suspended since 27.06.2013 by DDM, Joda vide letter no. 2150, dated 24/06/2013.

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Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
ба	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).		The mine is not under operation since 27/06/2013. Annual report of PMCP has been submitted to this office.	
6b	Area available for rehabilitation (ha) .	was proposed	Nil. The mine is not under operation as working operation has been suspended since 27.06.2013 by DDM, Joda vide letter no. 2150, dated 24/06/2013.	
6c	afforestation done (ha).	In 0.77 ha 1540 nos. of tree along dump and nallah was proposed for the year 2016- 17.	Nil. The mine is not under operation as working operation has been suspended since 27.06.2013 by DDM, Joda vide letter no. 2150, dated 24/06/2013.	
6d	No. of saplings planted during the year	1540 nos. of tree along dump and nallah for the year 2016-17.	Nil. The mine is not under operation as working operation has been suspended since 27.06.2013 by DDM, Joda vide letter no. 2150, dated 24/06/2013.	
бе	Cumulative no .of plants		The mine is not under operation since 27/06/2013.	Total 4067 nos. of trees have been planted in the lease area.
6f	Any other method of rehabilitation	Backfilling in 2016-17 & 2017-18.	Nil. The mine is not under operation as working operation has been suspended since 27.06.2013 by DDM, Joda vide letter no. 2150, dated 24/06/2013.	
6g	Cost incurred on watch and care during the year		The mine is not under operation as working operation has been suspended since 27.06.2013 by DDM, Joda vide letter no. 2150, dated 24/06/2013.	

6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	4.03 ha area of southern part of Topadih block was proposed to backfilling and reclaimation.	The mine is not under operation as working operation has been suspended since 27.06.2013 by DDM, Joda vide letter no. 2150, dated 24/06/2013.
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	4.03 ha area of southern part of Topadih block was proposed to backfilling and reclaimation.	The mine is not under operation as working operation has been suspended since 27.06.2013 by DDM, Joda vide letter no. 2150, dated 24/06/2013.
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on on backfilled area		The mine is not under operation as working operation has been suspended since 27.06.2013 by DDM, Joda vide letter no. 2150, dated 24/06/2013.
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	4.03 ha area of southern part of Topadih block was proposed to backfilling and reclaimation.	The mine is not under operation as working operation has been suspended since 27.06.2013 by DDM, Joda vide letter no. 2150, dated 24/06/2013.
61	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	4.03 ha area of southern part of Topadih block was proposed to backfilling and reclaimation.	The mine is not under operation as working operation has been suspended since 27.06.2013 by DDM, Joda vide letter no. 2150, dated 24/06/2013.
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	Not proposed.	Not applicable.

6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	Not proposed.	Not applicable.	
60	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Not proposed.	Not applicable.	
бр	Compliance of environmental monitoring (core zone and buffer zone)	Qarterly monitoring.	The mine is not under operation as working operation has been suspended since 27.06.2013 by DDM, Joda vide letter no. 2150, dated 24/06/2013.	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			The mine is not under operation as working operation has been suspended since 27.06.2013 by DDM, Joda vide letter no. 2150, dated 24/06/2013.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Gradewise sorting.	Nil. The mine is not under operation as working operation has been suspended since 27.06.2013 by DDM, Joda vide letter no. 2150, dated 24/06/2013.	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical.	Nil. The mine is not under operation as working operation has been suspended since 27.06.2013 by DDM, Joda vide letter no. 2150, dated 24/06/2013.	

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7c	Different grade of mineral sorted out at mines.		Nil. The mine is not under operation as working operation has been suspended since 27.06.2013 by DDM, Joda vide letter no. 2150, dated 24/06/2013.	
7d	Any beneficiation process at mines .	Crushing and screening.	Nil. The mine is not under operation as working operation has been suspended since 27.06.2013 by DDM, Joda vide letter no. 2150, dated 24/06/2013.	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			The mine is not under operation as working operation has been suspended since 27.06.2013 by DDM, Joda vide letter no. 2150, dated 24/06/2013.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Not proposed.	Not applicable.	
8b	Concurrent use or storage of topsoil	Not proposed.	Not applicable.	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dump for OB and mineral reject.	Nil. The mine is not under operation as working operation has been suspended since 27.06.2013 by DDM, Joda vide letter no. 2150, dated 24/06/2013.	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	4.03 ha area of southern part of Topadih block was proposed to backfilling and reclaimation.	Nil. The mine is not under operation as working operation has been suspended since 27.06.2013 by DDM, Joda vide letter no. 2150, dated 24/06/2013.	

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	4.03 ha area of southern part of Topadih block was proposed to backfilling and reclaimation.	Nil. The mine is not under operation as working operation has been suspended since 27.06.2013 by DDM, Joda vide letter no. 2150, dated 24/06/2013.	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	In 0.77 ha 1540 nos. of tree along dump and nallah was proposed for the year 2016- 17.	Nil. The mine is not under operation as working operation has been suspended since 27.06.2013 by DDM, Joda vide letter no. 2150, dated 24/06/2013.	Total 4067 nos. of trees have been planted in the lease area.
8g	Survival rate	Not specified.	Nil. The mine is not under operation as working operation has been suspended since 27.06.2013 by DDM, Joda vide letter no. 2150, dated 24/06/2013.	
8h	Water sprinkling on roads to control airborne dust	water	Nil. The mine is not under operation as working operation has been suspended since 27.06.2013 by DDM, Joda vide letter no. 2150, dated 24/06/2013.	
8i 	General remarks of inspecting officer on aesthetic beauty in and around mines area			Nil. The mine is not under operation as working operation has been suspended since 27.06.2013 by DDM, Joda vide letter no. 2150, dated 24/06/2013.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns		Annual return for the year 2016-17 has been submitted by lessee.	

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer-3, Geologist-1, Surveyor-1.	Mining Engineer-3, Geologist-1, Surveyor-1.	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	44.90 ha, waste dump- 2.830 ha,	As per revised AR area covered under pit-44.90 ha, waste dump- 2.830 ha, Infra structure-38.585 ha, Others-19.308 ha.	In the field annual return submitted for the year 2016-17 scrutinised and shortcommings has been observed in land use pattern as furnished by lessee. On the basis of scrutiny lessee has submitted the revised return to this office vide letter no. RPS/JODA/OUT/17-18/123, dated 15/11/2017.
9d	Scrutiny of Annual return on afforestation	308 nos. of trees.	308 nos. of trees.	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	Nil	
9f	Scrutiny of Annual return on ROM stock and/or graded ore		ROM production- Nil	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Nil	Nil.	
9h	Scrutiny of Annual return on fixed assets	Rs 1562451597		

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9k Scrutiny of Nil Nil Annual return on mining

machineries

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Details of violations observed during current inspection and compliance position of violation pointed out				
Violat	cion observed	Show couse position		
Rule NO.	Issued on Compliance on	Rule NO.	Issued on Compliance on	

Date : (DAYANAND UPADHYAY)

Indian Bureau of Mines