

INDIAN BUREAU OF MINES
MINERALS DEVELOPMENT AND REGULATION DIVISION

MCDR INSPECTION REPORT

Bhubaneswar regional office

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

Mine code : 30ORI08050

- (i) Name of the Inspecting : RAM) RAMKISHAN R
Officer and ID No.
- (ii) Designation : Sr. Asst. Contrl. Mines
- (iii) Accompanying mine : Shri R.N.Mondal, Mine Manager
Official with
Designation
- (iv) Date of Inspection : 22/08/2019
- (v) Prev.inspection date : 14/04/2018

PART-I : GENERAL INFORMATION

1. (a) Mine Name : THAKURANI
- (b) Registration NO. : IBM/5546/2011
- (c) Category : A Mechanised
- (d) Type of Working : Opencast
- (e) Postal address :
State : ORISSA
District : KEONJHAR
Village : DALKI
Taluka : BARBIL
Post office : THAKURANI
Pin Code : 758035
FAX No. : 06767 270049
E-mail : kjsahluwalia@rediffmail.com
Phone : 06767-270048
- (f) Police Station : Joda
- (g) First opening date : 15/12/1953
- (h) Weekly day of rest : SUN
2. Address for correspondence : AT/PO: THAKURANI
VIA BARBIL, DIST: KEONJHAR
ORISSA PIN: 758035
3. (a) Lease Number : ORI0072
- (b) Lease area : 228.04
- (c) Period of lease : *So up/As per section 8A of MMDR Act 1957 (amend, 2015)*
- (d) Date of Expiry : 31/03/2020
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 :

Mining Engineer

Name : Sri Suresh Choudhary, Full Time
 Qualification : BE Mining.
 Appointment/ : 21/11/2011
 Termination date

Geologist

Name : AMIYA KUMAR NAIK, Full Time
 Qualification : MSC GEOLOGY
 Appointment/ : 01/02/2011
 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	:	Renewal under rule 22 MCR1960	30/05/2003
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	06/02/2008
		Modif.approved Mining Scheme	16/10/2015
		MP modif under 17(3) MCR 2016	04/11/2016
		MP review under 17(1) MCR 2016	04/06/2018
		FMCP under 23C(1)	16/11/2018

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No such specific proposal.	Nil	Nil
1b	Exploration over lease area for geological axis 1 or 2	44 nos of boreholes were proposed during the year 2018-19 to brought area under G1/G2 level.	26 nos of boreholes were drilled during the year.	the remaining 18 nos were drilled during the year 2019-20 by June 2019 because of delay in getting forest clearance.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No such specific proposal.	M/s Gemco Kati Exploration is the agency and expenditure incurred is Rs. 9054022.	Nil
1d	Balance area to be explored to bring Geological axis in 1 or 2	Entire lease area has been explored under G1/G2 level of exploration.	Entire lease area has been explored under G1/G2 level of exploration.	Nil
1e	Balance reserve as on 01/04/20	As per the approved document on 04.06.2018, the iron ore reserves are 88.406 mil.t. and resources are 8.744 mil.t.	due to addition and depletion of reserves/resources over the period the iron ore reserves as on 01.04.2019 are 82.9 mil.t. and resources are 8.744 mil.t.	Nil
1f	General remarks of inspecting officers on geology, exploration etc		Entire lease area is explored under G1/G2 level.	Nil

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t. lease area	2 nos of pits called Lucky pit and DN pit are proposed for development during the year 2018-19.	development is carried out in Lucky pit and DN pit.	Nil
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	seperate benches in OB and mineral are proposed.	seperate benches in OB and mineral are maintained.	No top soil generation during excavation during the year 2018-19.
2c	Stripping ratio or ore to OB ratio	1:0.18 t/cu.m	1:0.07 t/cu.m	violation observed and communicated to the lessee dated 06.09.2019.
2d	Quantity of topsoil generation in m3	Not applicable	Nil	Nil
2e	Quantity of overburden generation in m3	1488502 cu.m.	389395 cu.m.	Nil
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc		development is carried out in 2 nos of pits as proposed in the mining plan.	Nil

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	2 nos of pits Lucy pit and DN pit are proposed for productin during the year 2018-19.	production is carried out from 2 nos of pits.	Nil
3b	Quantity of ROM mineral production proposed	7.99 mil.t.	5.49 mil.t.	due to non avaiability of EC for the proposed quantity the production could not be achieved.

3c	Recovery of saleable/usable mineral from ROM production	saleable ore 7.64 mil.t. and mineral rejects 0.35 mil.t.	saleable ore 5.49 mil.t. and mineral rejects Nil	the generated mineral rejects are blended with saleable ore.
3d	Quantity of mineral reject generation	353982 t.	Nil	the generated mineral rejects are blended with saleable ore.
3e	Grade of mineral rejects generation and threshold value declared.	+45%-55% Fe	+45%-55% Fe	Nil
3f	Quantity of sub grade mineral generation.	Not applicable	NA	addressed in mineral rejects.
3g	Grade of sub grade mineral generation	Not applicable	Nil	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanical	Mechanical	Nil
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Not applicable	Nil	Nil
3j	Provision of drilling and blasting in mineral benches	deep hole drilling and blasting is proposed.. blasting is proposed under 'V' type blasting pattern initiated by detonator & NONEL and safety fuse.	deep hole drilling and blasting is carried out. blasting is carried under 'V' type blasting pattern initiated by detonator & NONEL and safety fuse.	Nil

3k	Provision of mining machineries in mineral benches	shovel and dumper combination is proposed for excavation of material.	excavation of material is carried out by shovel and dumper combination.	Nil
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	10 m height bench is proposed.	found to be as per proposal.	Nil
3m	Total area covered under excavation/pits	79.25 ha till the end of plan period i.e. year 2019-20.	70 ha.	Nil
3n	Ore to OB ratio for the pit/mine during the year.	1:0.18 t/cu.m	1:0.07 t/cu.m	
3o	Total area put in use under different heads at the end of year	(i) Covered under current (O/C) Workings 79.25 ha (ii) Used for waste disposal 17.5 ha (iii) Occupied by plant, buildings, residential, welfare buildings & roads 7.5 ha at the end of plan period i.e. 2019-20.	(i) Covered under current (O/C) Workings 70 ha (ii) Used for waste disposal 13.0 ha (iii) Occupied by plant, buildings, residential, welfare buildings & roads 7.5 ha	Nil
3p	Production of ROM mineral during the last five year period as applicable	2014-15: 3891510 t 2015-16: 5288993 t 2016-17: 5500106 t 2017-18: 5500049 t 2018-19: 7999998 t	2014-15: 158235 t 2015-16: 2994070 t 2016-17: 5481286 t 2017-18: 5499506 t 2018-19: 5499050 t	Nil

3q	General remarks of inspecting officers on method of mining etc.	production is carried out from 2 nos of pits as proposed.	Nil
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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)	seperate dumping for OB and mineral rejects are proposed.	seperate dumping of OB is carried out. mineral rejects generated are blended with saleable ore.	No top soil generation is envisaged during the year 2018-19.
4b	Location of topsoil, OB and mineral reject dumps	Mineral rejects dump N-2446650 to 2446882 E-338310 to 338500 and OB material on dump-3. E-338650 to 338775	dumping of waste was done over dump-3 and the mineral rejects generated were blended with saleable ore.	Nil
4c	Number of dumps within lease area and outside of lease area	5 nos of waste dump within lease area and outside lease area Nil	5 nos of waste dump within lease area and outside lease area Nil	dump-4 has been converted to SG dump based on chemical analysis.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	outside UPL	outside UPL.	Nil
4e	Number of active and alive dumps.	1 no.	1 no.	Nil
4f	Number of dead dumps.	Not specified.	3 nos	Nil
4g	Number of dumps established.	Not specified.	3 nos.	Nil
4h	Whether Retaining wall or garland drain all along dumps are there.	retaining wall and garland drain were proposed.	garland drain was not constucted.	violation observed and communicated dated 06.09.2019.

4i	Length of Retaining wall or garland drain all along dumps	1340 m length retaining wall and 2650 m of garland drain has been proposed during the year 2018-19.	1400 m length retaining wall and No garland drain has been proposed during the year 2018-19.	violation observed and communicated to lessee dated 06.09.2019.
4j	Number of settling ponds	2 nos.	2 nos	Nil
4k	Specific comments of inspecting officer on waste dump management		garland drain needs to be constructed.	Nil

Solid Waste Management - Backfilling:

Sl.No.	Item	Proposals	Actual work	Remarks
5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	Not applicable	No area is exhausted of mineral.	Nil
5b	Area under backfilling of mined out area	Not applicable	Nil	Nil
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Not applicable	Nil	Nil
5d	Total area fully reclaimed and rehabilitated	Not applicable	Nil	Nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.		area not matured for backfilling.	Nil

Progressive Mine Closure Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	PMCP report to be submitted before 1 st July		Nil
6b	Area available for rehabilitation (ha) .	6.5 ha	6.5 ha	Nil
6c	afforestation done (ha).	6.29 ha	3 ha	violation observed and communicated to lessee dated 06.09.2019.
6d	No. of saplings planted during the year	11916 nos.	13700 nos.	Nil
6e	Cumulative no .of plants		13700 nos.	Nil
6f	Any other method of rehabilitation		Nil	Nil
6g	Cost incurred on watch and care during the year	Rs 70000	Rs 838920	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	Not applicable	Nil	Nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Not applicable.	Nil	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	Not applicable	Nil	Nil
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	Not applicable	Nil	Nil
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	1 ha	1 ha	Nil
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	1 ha	1 ha	Nil
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	plantation	plantation	Nil
6p	Compliance of environmental monitoring (core zone and buffer zone)	environmental monitoring of core zone and buffer zone.	monitroing of environmental parameters of core and buffer zone are being carried out.	Nil
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.		Area not matured for backfilling, so no reclamation measures envisaged.	Nil

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
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7a	ROM Mineral dispatch or grade-wise sorting within lease area	grade wise sorting with in lease area is proposed.	carried out.	Nil
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	mechanical	mechanical	Nil
7c	Different grade of mineral sorted out at mines.	a) Below 55% Fe (b) 55% to below 58% (c) 58% to below 60% (d) 60% to below 62% (e) 62% to below 65% (f) 65% and above	a) Below 55% Fe (b) 55% to below 58% (c) 58% to below 60% (d) 60% to below 62% (e) 62% to below 65% (f) 65% and above	Nil
7d	Any beneficiation process at mines	No specific proposal for beneficiation.	Nil	Nil
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues		different grade wise sorting of mineral is carried out.	Nil

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Not applicable	Nil	Nil
8b	Concurrent use or storage of topsoil	Not applicable	Nil	Nil

8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	seperate dumps for OB and rejects are proposed.	seperate dumping for OB is observed and mineral rejects generated are blended with saleable ore.	Nil
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Not applicable	Nil	Nil
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not applicable	Nil	Nil
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	11916 nos during the year 2018-19.	13700 nos	Nil
8g	Survival rate		70%	Nil
8h	Water sprinkling on roads to control airborne dust	water sprinkling on haaul roads for dust supression.	mobile water sprinklers are deployed for water sprikling on haul road for dust supression.	Nil
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		aesthetic beauty in and around mines area mainatined.	Nil

Compliance of Rule 45:

Sl.No.	Item	Proposals	Actual work	Remarks
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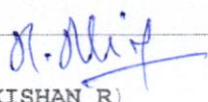
9a	Status of submission of Monthly and Annual returns	as per rule 45 submitted. of MCDR, 2017 monthyl and annual return are to be submitted.		Nil
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	(i) Graduate Mining Engineer 3 nos (ii) Diploma Mining Engineer 11 nos (iii) Geologist 1 no.	found to be in order.	Nil
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	(i) Covered area used for waste disposal is not in line with the pproved mining plan. (ii) Used for waste disposal 9.000 ha (iii) Occupied by plant, buildings, residential, welfare buildings & roads 0.025 ha (iv) Other Purpose (MINES ROAD) 7.090 ha		violatin oosberved and communicated to lessee dated 06.09.2019
9d	Scrutiny of Annual return on afforestation	13700 nos	13700 nos.	Nil
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	Nil	Nil

9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM closing stock is Nil (i) 60% to below 62% 26365.050 t (ii) 62% to below 65% 146631.672 t	found to be in order.	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	production cost is Rs.1291.88	production cost is Rs.1291.88	Nil
9h	Scrutiny of Annual return on fixed assets	fixed assests Rs.407275986	fixed assests Rs.407275986	Nil
9k	Scrutiny of Annual return on mining machineries	BLAST HOST DRILL 115.000 MM 1 no. AIR COMPRESSOR 450.000 CUM/MN 1 no. SHOVEL (HYDRAULIC) 4.300 CUM 1 no. SHOVEL (HYDRAULIC) 2.500 CUM 2 nos. SHOVEL (HYDRAULIC) 1.700 CUM 3 nos. SHOVEL (HYDRAULIC) 1.600 CUM 1 no. SHOVEL (HYDRAULIC) 0.800 CUM 2 nos. SHOVEL (HYDRAULIC) 0.370 CUM 3 nos. DUMPER 55.000 TONNE 4 nos	found to be in order.	Nil

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
MCDR17 Rule 11(1)	06/09/2019				
Rule 45(7)	06/09/2019				

Date : 25/10/19.


(RAMKISHAN R)

Indian Bureau of Mines