

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

MCDR INSPECTION REPORT

Bhubaneshwar regional office

Mine file No : ORI/MN/MCDR-9/BBS

Mine code : 40ORI08023

- (i) Name of the Inspecting : **RAM**) **RAMKISHAN R**
Officer and ID No.
- (ii) Designation : Sr. Asst. Contrl. Mines
- (iii) Accompanying mine : Shri H.S.Biswal, Sr.Manager (Geology)
Official with
Designation
- (iv) Date of Inspection : 22/12/2019
- (v) Prev.inspection date : 19/08/2019

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **KATASAI**
- (b) **Registration NO.** : **IBM/4585/2011**
- (c) Category : A Manual
- (d) Type of Working : Opencast
- (e) Postal address
- State : ORISSA
- District : KEONJHAR
- Village : KATASAI
- Taluka : BARBIL
- Post office : CHORMALDA
- Pin Code :
- FAX No. : 91 6767 276161
- E-mail : rungta_bbl@yahoo.co.in
- Phone : 06767 275221 / 275481
- (f) Police Station : Barbil
- (g) First opening date : 13/02/1957
- (h) Weekly day of rest : TUE
2. Address for : KATASAI MANGANESE MINE, M/S RUNGTA SONS (P) LTD
correspondance P.O.CHORMALDA, DIST :KEONJHAR
ORISSA-758035
3. (a) Lease Number : ORI0185
- (b) Lease area : 196.86
- (c) Period of lease :
- (d) Date of Expiry : 31/03/2020
4. Mineral worked : MANGANESE ORE Main

5. Name and Address of the

Lessee : M/s Rungta Sons (P) Ltd
 Rungta House P.O.
 Chaisabasa SINGHBHUM
 (WEST) JHARKHAND
 Phone:(06582) 56861/56761
 FAX :91 6582 56442

Owner : RUNGTA SONS (P) LTD.
 RUNGTA HOUSE CHAIBASA
 SINGHBHUM (WEST) JHARKHAND
 Phone: 06582-56861,567
 FAX : 91-6582-56442

Agent : D.R.OJHA
 C/O BICO LTD AT O.P.BARBIL
 KEONJHAR ORISSA
 Phone: 06596-62321,62221
 FAX :

Geologist

Name : SHRI TANMAYA PANDA,Full Time
 Qualification : MSC GEOLOGY
 Appointment/ : 01/11/2015
 Termination date

Manager

Name : SHRI SUNIL KUMAR
 Qualification : DIPLOMA IN MINING ENGG
 Appointment/ : 22/03/2017
 Termination date

6. Date of approval of Mining	:	Renewal under rule 22 MCR1960	19/09/2000
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	06/07/2010
		Mining Scheme rule 12 MCDR1988	07/04/2015
		MP modif under 17(3) MCR 2016	06/09/2016
		MP modif under 17(3) MCR 2016	08/02/2018
		MP modif under 17(3) MCR 2016	18/07/2018
		FMCP under 23C(1)	27/09/2018

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	
1b	Exploration over lease area for geological axis 1 or 2	78 nos of boreholes were proposed during the year 2018-19 for exploring the lease area under G1/G2 level.	26 nos of boreholes were drilled during the year.	
1c	Exploration Agencies and Expenditure in lakh rupees during the year		M/s SPS geomining Solutions (p) Ltd carried out the exploration.	
1d	Balance area to be explored to bring Geological axis in 1 or 2	78 nos of boreholes were proposed during the year 2018-19 for exploring the lease area under G1/G2 level.	26 nos of boreholes were drilled during the year.	
1e	Balance reserve as on 01/04/20	As per the approved mining plan 18.07.2018 the managanese reserves are under category 111: 0.344 million tonnes, 122: 8855 t and resources under category 211: 10800 t, 333: 415030 t.	due to addition/depletion of reserves and resources during the time period the manganese reserves as on 01.04.2019 are under category 111: 0.342 million tonnes, 122: 8855 t and resources under category 211: 10800 t, 333: 290521 t.	

1f	General remarks of inspecting officers on geology, exploration etc	The manganese deposit of the area forms a part of the Horse-shoe shaped geosynclines otherwise known as Singhbhum-Bonai-Keonjhar belt.
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Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	5 nos of pits called GS pit, Nala pit, Quarry 6&7, Rola & Central pit, Bottom pit are proposed for development for the year 2018-19.	3 nos of pits called Quarry 6&7, Rola & Central pit, Bottom pit are developed during the year.	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	seperate benches in OB and mineral are proposed, no top soil bench is proposed.	seperate benches in mineral and OB are maintained.	
2c	Stripping ratio or ore to OB ratio	1: 10.11 t/cu.m.	1: 24.75 t/cu.m.	the stripping ratio is high due to more generation of waste due to poor recovery of mineral.
2d	Quantity of topsoil generation in m3	Not applicable	Nil	
2e	Quantity of overburden generation in m3	195104 cu.m.	46738 cu.m.	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc		development is carried out by openacast mining method.	

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	5	3	
3b	Quantity of ROM mineral production proposed	19291 tonnes during the year 2018-19	1888.129 t	
3c	Recovery of sailable/usable mineral from ROM production	saleable ore production is 15433 t	1874.129 t	
3d	Quantity of mineral reject generation	3858 t	14 t	
3e	Grade of mineral rejects generation and threshold value declared.	+10%-25% Mn	+10%-25% Mn	
3f	Quantity of sub grade mineral generation.	Not applicable	Nil	
3g	Grade of sub grade mineral generation	Not applicable	Nil	
3h	Manual / Mechanised method adopted for segregating from ROM	Manual	Manual	
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Not proposed.	Nil	
3j	Provision of drilling and blasting in mineral benches	shot hole drilling and blasting is propsoed for mineral benches.	carried out	

3k	Provision of mining machineries in mineral benches	excavator and dumper combination is proposed for excvaion and hauling of material.	excavator and dumper combination is deployed for excvaion and hauling of material.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	3 m	maintained.
3m	Total area covered under excavation/pits	50.606 ha at the end of plan period i.e. 2019-20.	44.486 ha
3n	Ore to OB ratio for the pit/mine during the year.	1: 10.11 t/cu.m.	1: 24.75 t/cu.m.
3o	Total area put in use under different heads at the end of year	mining: 50.606 ha, waste dumping: 8.679 ha, mineral storage: 7.09 ha, infra&Roads: 5.696 ha till the ned of mining plan period i.e. 2019-20.	mining: 44.486 ha, waste dumping: 7.0391 ha, mineral storage: 7.09 ha, infra&Roads: 3.22 ha
3p	Production of ROM mineral during the last five year period as applicable	2014-15: 19291 t 2015-16: 13469 t 2016-17: 19291 t 2017-18: 19291 t 2018-19: 19291 t	2014-15: 317.626 t 2015-16: 112.136 t 2016-17: 241.596 t 2017-18: 895.293 t 2018-19: 1888.129 t
3q	General remarks of inspecting officers on method of mining etc.		production is carried out by opencast mining method.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	no genreation of top soil is proposed and seperate dumping of OB and mineral reject are proposed.	seperate dumping of OB and mineral reject are carried out.	
4b	Location of topsoil, OB and mineral reject dumps	No top soil generation is envisaged. two nos of dumps called D1 and D2 are propsoed. mineral rejct stacking is proposed.	carried out accordingly.	
4c	Number of dumps within lease area and outside of lease area	2	2	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside UPL	Outside UPL	
4e	Number of active and alive dumps.	2	2	
4f	Number of dead dumps.	Not proposed.	Nil	
4g	Number of dumps established.	Not applicable	Nil	
4h	Whether Retaining wall or garland drain all along dumps are there.	retaining wall and garland drain proposed.	Nil	
4i	Length of Retaining wall or garland drain all along dumps	330 m of reataining wall and 250 m garland drain.	Not carried out.	violation observed and comunicated to lessee letter dated 07.01.2020
4j	Number of settling ponds	Not applicable	Nil	
4k	Specific comments of inspecting officer on waste dump management		waste dumping is carried out as propsoed.	

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.	Area not matured for reclmation and rehabilitation .	Nil	
5b	Area under backfilling of mined out area	Not applicable	Nil	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Not applicable	Nil	
5d	Total area fully reclaimed and rehabilitated	Not applicable	Nil	
5e	General remarks of inspecting officers on backfilling and reclamation etc.		Area not matured for reclmation and rehabilitation.	

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).	PMCP report to be subitted before 1 st July.	submitted.	
6b	Area available for rehabilitation (ha) .	Not applicable	Nil	
6c	afforestation done (ha).	1 ha during the year 2018-19.	1 ha	
6d	No. of saplings planted during the year	2500 nos	4000 nos	
6e	Cumulative no .of plants		83652 nos	

6f	Any other method of rehabilitation	Not applicable	Nil
6g	Cost incurred on watch and care during the year		Rs.0.3 lakhs
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (L x B x D	Not applicable	Nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Not applicable	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	Not applicable	Nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Not applicable	Nil
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	Not applicable	Nil
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	1 ha	1 ha

6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	Not applicable Nil	
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	plantation	plantation
6p	Compliance of environmental monitoring (core zone and buffer zone)	Periodical Monitoring as stipulated in Environment Clearance granted by MoEF & CC and Consent to Operate granted by SPCB.	Periodical Monitoring as stipulated in Environment Clearance granted by MoEF & CC and Consent to Operate granted by SPCB is carried out.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.		plantation is carried out as proposed in the PMCP

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	grade wise sorting of mineral is proposed.	carried out	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	manual	manual	
7c	Different grade of mineral sorted out at mines.	+10-25% Mn and +25% Mn	+10-25% Mn and +25% Mn	

7d	Any beneficiation process at mines .	Not proposed.	Nil
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues		different grades of mineral sorting is carried out.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No generation of top soil is proposed.	Nil	
8b	Concurrent use or storage of topsoil	Not applicable	Nil	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	sperate dumps for OB, mineral rejects and fines are proposed.	mainatined.	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Not applicable	Nil	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not applicable	Nil	

8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	2500 nos	4000 nos
8g	Survival rate		65%
8h	Water sprinkling on roads to control airborne dust	water sprinkling on haul road is proposed for dust suppression.	carried out.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		aesthetic beauty in and around the mine area are maintained

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Monthly and annual returns are to be submitted as per rule 45 of MCDR, 2017	submitted.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	diploma mining engineer: 1, Geologist: 1, Surveyor: 1	diploma mining engineer: 1, Geologist: 1, Surveyor: 1	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Covered under current (O/C) Workings 44.486 ha, Used for waste disposal 7.039 ha etc.,	found to be in order.	
9d	Scrutiny of Annual return on afforestation	4000 nos	4000 nos	

9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	14 t	14 t
9f	Scrutiny of Annual return on ROM stock and/or graded ore	closing stock of ROM : Nil	closing stock of ROM : Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	production cost Rs 11017 per t	production cost Rs 11017 per t
9h	Scrutiny of Annual return on fixed assets	Rs. 1067300	Rs. 1067300
9k	Scrutiny of Annual return on mining machineries	BACK HOE 0.900 found to be in order. CUM 1 No. BLAST HOST DRILL 110.000 MM 1 No. JEEP/TRACTOR 45.000 HP 1 No. DUMPER 20.000 TONNE 3 nos. etc.,	

Details of violations observed during current inspection and compliance position of violation pointed out

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

Date :

(RAMKISHAN R)

Indian Bureau of Mines