### INDIAN BUREAU OF MINES MINERALS DEVELOPMENT AND REGULATION DIVISION

#### MCDR INSPECTION REPORT

#### Bhubaneshwar regional office

Mine file No : ORI/MN/MCDR-9/BBS Mine code : 400RI08023

Name of the Inspecting : RAM ) RAMKISHAN R

Officer and ID No.

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

(iii) Accompaning mine : Shri A.S.Mohapatra, Agent

Official with Designation

(iv) Date of Inspection : 19/08/2019

(v) Prev.inspection date : 14/04/2018

PART-I : GENERAL INFORMATION

1. (a) Mine Name : KATASAI

(b) Registration NO. : IBM/4585/2011

(c) Category : A Manual

(d) Type of Working : Opencast

Postal address (e) 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

First opening date : 13/02/1957

(h) Weekly day of rest : TUE

Address for : KATASAI MANGANESE MINE, M/S RUNGTA SONS (P) LTD

correspondance P.O.CHORMALDA, DIST : KEONJHAR

ORISSA-758035

(a) Lease Number : ORI0185

(b) Lease area

: 196.86 : 50 yrd As per selfer sh of MUDR Det 1957 (and ed yours) (c) Period of lease

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

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 : Renewal under 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. However 78 nos of boreholes were proposed during the year 2018-19.	NA	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	No spcific proposal.	M/s SPS geomining Solutions (p) Ltd carried out the exploration.	Nil
1d	Balance area to be explored to bring Geological axis in 1 or 2	As per the approved mining plan 65.36 ha needs to be explored.	65.36 ha	Nil
1e	Balance reserve as on 01/04/20	0.344 million tonnes, 122:	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.	Nil

of inspecting officers on geology, exploration etc

Violation issued for not Nil acheving the exploration target of 2018-19.

# Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	called GS pit, Nala pit,	3 nos of pits called Quarry 6&7, Rola & Central pit, Bottom pit are developed during the year.	the other pits couldnot be developed due to want of tree felling permission.
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.	Nil
20	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 genration of waste due to poor recovery of mineral.
2d	Quantity of topsoil generation in m3	No generation of top soil is proposed.		Ni
2e	Quantity of overburden generation in m3	195104 cu.m.	46738 cu.m.	due to less development.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc		only 3 pits are developed aginst the proposal of 5 nos of pits.	Nil

### Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Nala pit, Quarry 6&7,	Quarry 6%7, Rola & Central pit, Bottom pit are worked out for production during the year.	the other pits couldnot be developed due to want of tree felling permission.
3b	Quantity of ROM mineral production proposed	19291 tonnes	1888.129 t	the production was less due to poor market demand and lesse development.
Зс	Recovery of sailable/usable mineral from ROM production	production is	saleable ore production is 1874.129 t and mineral reject is 14 t	due to less development.
3d	Quantity of mineral reject generation	3858 t	14 t	due to less production due to less market demand.
3e	Grade of mineral rejects generation and threshold value declared.	+10%-25% Mn	+10%-25% Mn	Níl
3f	Quantity of sub grade mineral generation.	NA	NA	addressed under mineral reject
3g	Grade of sub grade mineral generation	NA	NA	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	Manual	Manual	Nil
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Not applicable	NA	Nil

3j	Provision of drilling and blasting in mineral benches	shot hole drilling and blasting is propsoed for mineral benches.	shot hole drilling and blasting is carried out for mineral benches.	Nil
3k	Provision of mining machineries in mineral benches	dumper	excavator and dumper combination is deployed for excvaion and hauling of material.	Nil
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	the hieght and width proposed are 3 m and 6 m.	maintained.	Nil
3m	Total area covered under excavation/pits	50.606 ha at the end of plan period i.e. 2019-20.	44.486 ha	Nil
3n	Ore to OB ratio for the pit/mine during the year.	1: 10.11 t/cu.m.	1: 24.75 t/cu.m.	the stripping ratio is high due to more genration of waste due to poor recovery of mineral.
30	Total area put in use under different heads at the end of year	ha, waste	mining: 44.486 ha, waste dumping: 7.0391 ha, mineral storage: 7.09 ha, infra&Roads: 3.22 ha	Nil

3p Production of 2014-15: 19291 2014-15: 317.626 t ROM mineral t 2015-16: 112.136 t deviation is due to less market during the last 2015-16: 13469 2016-17: 241.596 t demand. five year period t 2017-18: 895.293 t as applicable 2016-17: 19291 2018-19: 1888.129 t 2017-18: 19291 2018-19: 19291 3q General remarks 3 nos of pits are worked Nil of inspecting out for production due officers on to less market demand. method of mining etc.

### Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a			seperate dumping of OB and mineral reject are carried out.	Nil
4b	Location of topsoil, OB and mineral reject dumps	generation is envisaged. two nos of dumps	two nos of dumps called D1 and D2 are proposed and mineral reject is stacked in the designated area.	Nil
4c	Number of dumps within lease area and outside of lease area	2 nos of dumps	2 nos of dumps	Nil
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	beyond UPL	beyond UPL	Nil
4e	Number of active and alive dumps.	2 nos of dumps	2 nos of dumps	Nil

4 f	Number of dead dumps.	Nil	NA	Nil
4g	Number of dumps established.	Nil	NA	Nil
4h	Whether Retaining wall or garland drain all along dumps are there.	drain	mainatined.	Nil
4i	Length of Retaining wall or garland drain all along dumps	reataining	Nil	violation observed letter dated 06.09.2019
4 j	Number of settling ponds	Nil	NA	2 nos of settling ponds are already constrcuted and mainatined.
4k	Specific comments of inspecting officer on waste dump management		reatainging wall and garlanad drain needs to be constructed around waste dump so vioaltion issued.	Nil

# 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 proposal	Nil	Mineral not exhausted.
5b	Area under backfilling of mined out area	Nil	NA	Nil
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	NII	NA	Nil
5d	Total area fully reclaimed and rehabilitated	No proposal.	NA	Nil

5e General remarks of inspecting officers on backfilling and reclamation etc. Area not matured for Nil reclmation and rehabilitation.

# 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).	to be submitted before 1 st July	submitted.	Nil
6b	Area available for rehabilitation (ha) .	Nil	NA	Nil
6c	afforestation done (ha).	1 ha during the year 2018- 19.	1 ha	Nil
6d	No. of saplings planted during the year	2500 nos	4000 nos	Nil
6e	Cumulative no .of plants	48091 nos	83652 nos	Nil
5f	Any other method of rehabilitation	Nil	NA	Nil
6g	Cost incurred on watch and care during the year	0.3 lakhs	0.3 lakhs	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	Nil	NA	Area not matured for reclamtion and rehabilitation

6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Nil	NA	Níl
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestati on on backfilled area	Nil	NA	Nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	NA	Nil	Nil
61	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	NA	Nil	Nil
	rehabilitation (ha)			
60	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	NA	Nil	Nil

6р	Compliance of environmental monitoring (core zone and buffer zone)	quarterly monitoring of environmental parameters such as air, water quality and noise survey	quarterly monitoring of environmental parameters are carried out.	Nil
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.		PMCP measures are carried out except constrcution of retaining wall and garland drain	Nil

### Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	grade wise sorting os mineral area proposed.	grade wise sorintg of mineral is being carried out.	Nil
7b	Method of grade- wise mineral sorting i.e. manual or mechanical.	Manual	Manaul	Nil
7c	Different grade of mineral sorted out at mines.	Mn	(a) Below 25% Mn (b) 25% to below 35% Mn (c) 35% to below 46% Mn	Nil
7d	Any beneficiation process at mines	sorting by manual method	sorting by manual method.	Nil
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues		different grades of mineral sorting is carried out.	Nil

### Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	of top soil is		Nil
d8	Concurrent use or storage of topsoil	Not applicable	Nil	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)		maintained.	Níl
3d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Not applicable	Nil	Area not matured for reclamation and rehabilitation
8€	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not applicable	Nil	Nil
3f	Baseline information on existence of plantation and additional plantation done (Rule 41)	proposed for afforestation	4000 nos plantation carried out in waste land and dump management.	Nil
3g	Survival rate	65%	65%	Nil
3h	Water sprinkling on roads to control airborne dust	sprinkling on	carried out.	Nil

8i General remarks of inspecting officer on aesthetic beauty in and around mines area

environment protective Nil measures are carried out as per the proposals.

# Compliance of Rule 45:

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

9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	14 t	found to be in order.	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	of ROM : Nil (a) Below 25%	found to be in order.	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	cost Rs 11017	appears to be on higher side.	Nil
9h	Scrutiny of Annual return on fixed assets	Rs. 1067300	Rs 1067300	Nil
9k	Scrutiny of Annual return on mining machineries		found to be in order.	Nil

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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

MCDR17 Rule 11(1) 06/09/2019

MCDR17 Rule 55(1)(1 06/09/2019

Date : 95/10/19.

(RAMKISHAN R)

Indian Bureau of Mines