

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

**MCDR INSPECTION REPORT**

**Bhubaneshwar regional office**

**Mine file No :** ORI/MN/SNG/MCDR-27/BBS

**Mine code :** 40ORI13052

- (i) Name of the Inspecting : **SKM** ) **SANJAY KUMAR MAHAPATRA**  
Officer and ID No.
- (ii) Designation : Assistant Mining Engineer
- (iii) Accompanying mine : Shri Atmesh Kumar Sharma, Mine Manager  
Official with  
Designation
- (iv) Date of Inspection : 23/09/2021
- (v) Prev.inspection date : 24/12/2020

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **BANDHAL**
- (b) **Registration NO.** : **IBM/630/2011**
- (c) Category : B Manual
- (d) Type of Working : Opencast
- (e) Postal address
- State : ORISSA
- District : SUNDARGARH
- Village : BANDHAL
- Taluka : BONAI
- Post office : DUNGULA
- Pin Code : 770048
- FAX No. : 275605
- E-mail : kankadhara.mining@gmail.com
- Phone : 276186
- (f) Police Station : Koira
- (g) First opening date : 09/06/2003
- (h) Weekly day of rest : SAT
2. Address for : BANDHAL MN ORE MINES  
correspondance : K.M& M P LTD  
AT/PO-KOIRA,SUNDERGARH
3. (a) Lease Number : ORI1005
- (b) Lease area : 28.02
- (c) Period of lease : 20
- (d) Date of Expiry : 13/03/2022
4. Mineral worked : MANGANESE ORE Main

## 5. Name and Address of the

Lessee : KANAKDHARA MINING & MINERAL (P) LTD  
 AT/PO-KOIRA SUNDERGARH  
 SUNDARGARH ORISSA  
 Phone:27686  
 FAX :27686

Owner : GHANASHYAM SHARMA  
 AT/PO-BARBIL KEONJHAR  
 ORISSA  
 Phone: 276186,276712  
 FAX : 276186

## Geologist

Name : SHRI RANJEET ROUT,Full Time  
 Qualification : M.sc (Geology)  
 Appointment/ : 01/04/2015  
 Termination date

## Manager

Name : SHRI AMESH KUMAR SHARMA  
 Qualification : Diploma (Mining)  
 Appointment/ : 05/06/2003  
 Termination date

6. Date of approval of Mining	:	Modif.of approved Mining Plan	18/02/2009
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	19/02/2009
		Mining Scheme rule 12 MCDR1988	09/04/2013
		MP review under 17(1) MCR 2016	10/11/2017

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

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	NIL	07	
1b	Exploration over lease area for geological axis 1 or 2	NIL	07	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	NIL	V K S MINING SERVICES 1.16 LAKH	
1d	Balance area to be explored to bring Geological axis in 1 or 2	NIL	NIL	
1e	Balance reserve as on 01/04/20	Reserve as on 01.09.2017 is 103068 T Resources 54113 T	99693 METRIC TONNE as on 01.04.2021 Resources 54113 T	

## Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	development is proposed in main pit during the year 2020-21	Development is carried out in main pit.	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	no topsoil generation is envisaged and separate benches in Ob and mineral are proposed.	seperate benches in OB and mineral are mainatined.	
2c	Stripping ratio or ore to OB ratio	1:4.18 t/cu	1:4.81 t/cu	
2d	Quantity of topsoil generation in m3	Not applicable	NIL	

2e	Quantity of overburden generation in m3	25100 cu.m. during the year 2019-20.	3360 cu.m	Due to less production of ore. Less OB generated.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc		development is carried out by opencast mining method as proposed.	

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Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	01	01	
3b	Quantity of ROM mineral production proposed	6000 METRIC TONNE DURING 2020-21	697.59 METRIC TONNE	LESS PRODUCTION DUE TO COVID AND LESS MARKET DEMAND
3c	Recovery of sailable/usable mineral from ROM production	6000 TONNE ORE AND 600 TONNE REJECT	697.599 TONNE ORE AND 101 TONNE REJECT	
3d	Quantity of mineral reject generation	600T	101T	
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.	NIL		NIL
3j	Provision of drilling and blasting in mineral benches	occasional short hole drilling and blasting is proposed.		short hole drilling and blasting is carried out.
3k	Provision of mining machineries in mineral benches	manual mining is proposed.		MANUAL MINING IS CARRIED
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	3M		MINTAINED
3m	Total area covered under excavation/pits	3.5 HA	TILL	2.8 HA
		THE END		
3n	Ore to OB ratio for the pit/mine during the year.	1:4.18 T/CUM		1:4.81 T/CUM
3o	Total area put in use under different heads at the end of year	toata area put under different heads at the end of plan period i.e. 2021-22 is 8.32 ha		6.606 ha
3p	Production of ROM mineral during the last five year period as applicable	2016-17:7463 T 2017-18: 8001 T 2018-19: 4000 T 2019-20: 5000 T 2020-21: 6000 T		2016-17: 837.083 T 2017-18: 896.516 T 2018-19: 1243.059 T 2019-20: 741.376 T 2020-21: 697.599 T

3q General remarks of inspecting officers on method of mining etc. MANUAL METHOD OF WORKING MANUAL METHOD OF WORKING B CATOGRY MANUAL MINES

### Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	no topsoil generation is envisaged. seperate dumping of OB and mineral rejects are propsoed.	seperate dumping of OB and mineral rejects are carried out.	Seperate dumping of OB and mineral rejects are carried out.
4b	Location of topsoil, OB and mineral reject dumps	DUMP-I IS PROPOSED S170 TO S230 W260 TO W360	DUMP-I IS IN BETWEEN S170 TO S230 W260 TO W360	DUMP ASA PER PROPOSAL
4c	Number of dumps within lease area and outside of lease area	WITHIN LEASE AREA ONE	WITHIN LEASE AREA ONE	NO OUT SIDE DUMPING
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Out side UPL	Out side UPL	
4e	Number of active and alive dumps.	ONE	ONE	
4f	Number of dead dumps.	NOT APPLICABLE	NOT APPLICABLE	
4g	Number of dumps established.	NOT APPLICABLE	NIL	
4h	Whether Retaining wall or garland drain all along dumps are there.	YES	YES	FOUND IN ORDER
4i	Length of Retaining wall or garland drain all along dumps	NOT APPLICABLE	NOT APPLICABLE	
4j	Number of settling ponds	NOT APPLICABLE	NIL	NO SETTLING POND

4k Specific comments of inspecting officer on waste dump management WASTE DUMP MANAGENT IS CARRIED OUT AS PROPOSED.

#### 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 BACK FILLING	NOT APPLICABLE	
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.	NOT APPLICABLE	NIL	AREA NOT MATURED FOR BACKFILLING HENCE NO PROPOSAL

#### 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 SUBMITTED BEFORE 1ST JULY	SUBMITTED	

6b	Area available for rehabilitation (ha) .	NOT APPLICABLE	NIL
6c	afforestation done (ha).	0.2 HA	0.2HA
6d	No. of saplings planted during the year	500	800
6e	Cumulative no .of plants		9560 NOS
6f	Any other method of rehabilitation	NOT APPLICABLE	NIL
6g	Cost incurred on watch and care during the year		NOT AVAILABLE
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx 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 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	500 NOS	800 NOS		
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	500	800		
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 ENVIRONMENTAL MONITERING	BEING CARRIED OUT		
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.		PMCP MEASURES WERE CARRIED AS PER PROPOSAL.		PMCP MEASURES WERE CARRIED AS PER PROPOSAL.

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Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	GRADE WISE SORTING OF ORE	GARDE WISE SORTING OF MINERAL IS CARRIED MANUALLY.	MANNUALLY GRADEWISE SORTING CARRIED

7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	MANUAL	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 APPLICABLE	NIL	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues		GRADEWISE SORTING OF MINERAL IS CARRIED OUT MANNUALLY.	GRADEWISE SORTING OF MINERAL IS CARRIED OUT MANNUALLY.

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**Environment:**

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	NOT APPLICABLE	NIL	
8b	Concurrent use or storage of topsoil	NOT APPLICABLE	NIL	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	SEPARATE DUMP FOR WASTE AND MINERAL	SEPARATE DUMP FOR WASTE AND MINERAL	SEPARATE DUMP FOR WASTE AND MINERAL
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)	DUMP PLANTATION PROPOSED	DUMP PLANTATION CARRIED OUT.	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	500	800 NOS	
8g	Survival rate		62 %	
8h	Water sprinkling on roads to control airborne dust	water sprinkling on haul raods for dust suppression is proposed.	water sprinkling on haul raods for dust supression is carried out.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		Aesthetic beauty in and around the mines area is maintained.	Aesthetic beauty in and around the mines area is 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	Graduate Mining Engineer 1 (partly employed), Diploma Mining Engineer 1, Geologist 1 (partly employed)	Found to be in order
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Covered under current (O/C) Workings: 2.800 ha, Used For waste disposal: 1.200 ha, etc.,	Found to be in order
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	101 tonne	101 tonne
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM closing stock is Nil	ROM closing stock is Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Production Cost- Rs 9790/-	Production Cost- Rs 9790/-
9h	Scrutiny of Annual return on fixed assets	Rs 1243193/-	Rs 1243193/-
9k	Scrutiny of Annual return on mining machineries	tipper 6 cu.m. lno.	found to be in order.

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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
MCDR17	Rule 35(2)	29/09/2021			
MCDR17	Rule 45(5)(c)	29/09/2021			

**Date :**

**(SANJAY KUMAR MAHAPATRA)**

Indian Bureau of Mines