

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

MCDR INSPECTION REPORT

Bhubaneshwar regional office

Mine file No : ORI/IRON/SNG/MCDR-13/BBS

Mine code : 30ORI13025

- (i) Name of the Inspecting : **M007**) **SHRI HARKESH MEENA**
Officer and ID No.
- (ii) Designation : Regional Controller Mines
- (iii) Accompanying mine : **SHRI C S MISHRA, MINE MANAGER**
Official with
Designation
- (iv) Date of Inspection : 04/10/2021
- (v) Prev.inspection date : 06/04/2021

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **TANTRA**
- (b) **Registration NO.** : **IBM/6694/2011**
- (c) Category : A Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
- State : ORISSA
- District : SUNDARGARH
- Village : TANTRA
- Taluka : BONAI
- Post office : TENSA
- Pin Code : 770042
- FAX No. : 06625-236305
- E-mail : onkargroup@hotmail.com
- Phone : 06625-236305
- (f) Police Station : Koira
- (g) First opening date : 01/09/1986
- (h) Weekly day of rest : SUN
2. Address for : AT/PO-KOIRA
correspondance DIST- SUNDERGARH
ORISSA-770042
3. (a) Lease Number : ORI0132
- (b) Lease area : 72.56
- (c) Period of lease : 20
- (d) Date of Expiry : 21/11/2005
4. Mineral worked : BAUXITE Associated
IRON ORE Main

5. Name and Address of the

Lessee : M/S KORP RESOURCES PVT LTD
 161, RABINDRA SARANI, PS-
 BURRA BAZAR KOLKATTA
 KOLKATA WEST BENGAL
 Phone:03322683832
 FAX :03322683832

Owner : SHRI PRAHLAD ROY GOENKA
 161, RABINDRA SARANI, PS-
 BURRA BAZAR KOLKATA KOLKATA
 WEST BENGAL
 Phone: 9831094640
 FAX : 03322683832

Mining Engineer

Name : SHRI RUDRA MOHAN NAYAK, Full Time
 Qualification : B E MINING (AMIE)
 Appointment/ : 01/03/2019
 Termination date

Geologist

Name : SHRI P K PATHAK, Full Time
 Qualification : MSC (GEOLOGY)
 Appointment/ : 05/07/2012
 Termination date

Manager

Name : SHRI CHANDRA SEKHAR MISHRA
 Qualification : MSC GEOLOGY (FIRST CLASS MINES MANAGER C
 Appointment/ : 15/03/2016
 Termination date

6. Date of approval of Mining	:	Existing rule 11 MCDR1988	29/03/2004
Plan/Scheme of Mining		PMCP under 23B(2) for Existing	22/10/2007
		Mining Scheme rule 12 MCDR1988	11/12/2008
		Modif. approved Mining Scheme	03/03/2010
		Mining Scheme rule 12 MCDR1988	19/04/2013
		MP review under 17(1) MCR 2016	18/05/2018
		MS modif under MCR 1960	04/08/2021

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No proposal in 2020-21	However, 16 nos. of boreholes have been drilled in 2020-21	Total 32.50 Ha. area has been explored under G1 level
1b	Exploration over lease area for geological axis 1 or 2	Not proposed in the year 2020-21	However 16 nos. of boreholes have been drilled in 2020-21. Total 32.50 Ha area has been explored under G1 level.	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not proposed in 2020-21	Rs 3455208/- + Others 4 lakhs.Total-Rs 3955208/- Asia Pacific Drilling Services, Barbil, Rs 30 Lakhs	towards 16 boreholes drilled in 2020-21.
1d	Balance area to be explored to bring Geological axis in 1 or 2	Not proposed in the year 2020-21	Total 32.50 Ha. area explored under G1 level and 25.635 Ha. area has been explored under G2 level.	
1e	Balance reserve as on 01/04/20	As per review of mining plan approved on 18.05.2018, the reserve is 3.918 MT and the resource is 1.01 MT. Thus, the total reserve and resource is 4.928 MT.	As per the approved modified review of mining plan dated 04.08.2021, the current reserve is 2.055 MT and the remaining resource is 2.005 MT.	
1f	General remarks of inspecting officers on geology, exploration etc	Not proposed 2020-21	16 nos of boreholes were drilled the year 2020-21	To explore the balance area under G1 level, the lessee has proposed exploration in the year 2021-22 as per the modified review of mining plan.

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	2020-21 (311970-311700-E, & 2421070-2420550-N) 2021-22(311762 - 2421070-2420550-N) 2021-22(311762 - 311955 E & 2421005-2420600 N)	2020-21 (311970-311700-E, & 2421070-2420550-N) 2021-22(311762 - 311955 E & 2421005-2420600 N)	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate Bench Proposed for each Litho unit.	Separate Bench Proposed for each Litho unit.	
2c	Stripping ratio or ore to OB ratio	2020-2021-1:0 .04	2020-2021- 1:0.116	No waste generatiojn in the year 2020-21
2d	Quantity of topsoil generation in m3	Nil	Nil	There was no generation nof top soil in the year 2020-21
2e	Quantity of overburden generation in m3	There was no proposal of overburden generation in 2020-21	Nil	Also no intercalculated waste has been generated in 2020-21
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Developement work has been carried out in the North-East side of the quarry.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One pit	One pit	
3b	Quantity of ROM mineral production proposed	ROM Proposed : 240000 Tonne	ROM achieved : 119100 Tonne	Lesser production due to low grade generation

3c	Recovery of sailable/usable mineral from ROM production	240000 Tonne was proposed in the year 2020-21	119100 Tonne was achieved below 58% Fe in the year 2020-21	
3d	Quantity of mineral reject generation	2020-21-239992 Tonne	2020-21-119100 Tonne	Due to low grade mineral
3e	Grade of mineral rejects generation and threshold value declared.	2020-21- (-) 45 %	2020-21- (-) 45 %	
3f	Quantity of sub grade mineral generation.	Nil	Nil	
3g	Grade of sub grade mineral generation	45-58 % Fe	45-58 % Fe	Total ROM production is below 58 % Fe
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised	Mechanised	
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	Yes, massive iron Ore benches are being excavated through drilling and blasting.	Yes, massive iron Ore benches are being excavated through drilling and blasting.	
3k	Provision of mining machineries in mineral benches	Excavator and dumber combination have been proposed	Excavator and dumber combination have been deployed	

3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes, proposed	Width of the benches are not maintained in north side of the quarry	Violation letter was issued under rule MCDR, 2017.
3m	Total area covered under excavation/pits	Area under at the end of the plan period was 10.800 Ha	Area under mining at the end of the year is 7.85 Ha.	
3n	Ore to OB ratio for the pit/mine during the year.	1:0.1	1:0.1	Due to no waste generation in the year 2020-21
3o	Total area put in use under different heads at the end of year	25.325 Ha	25.325 Ha.	
3p	Production of ROM mineral during the last five year period as applicable	2016-17 : 240000 Tonne 2017-18 : 240000 Tonne 2018-19 : 240000 Tonne 2019-20 : 240000 Tonne 2020-21 : 240000 Tonne	2016-17 : 119300 Tonne 2017-18 : 106200 Tonne 2018-19 : 118700 Tonne 2019-20 : 117500 Tonne 2020-21 : 119100 Tonne	ROM productions are within EC limit
3q	General remarks of inspecting officers on method of mining etc.			Violation under rule 11(1) of MCDR, 2017 has been issued.

Solid Waste Management - Dumping:

Sl.No.	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Separate dumps were proposed	Separate dumps are Maintained.	

4b	Location of topsoil, OB and mineral reject dumps	No proposal for generation of top soil, waste	In the year 2020-21, there was no generation of top soil and waste. Mineral reject after dry processing solding out to market as per requirement.
4c	Number of dumps within lease area and outside of lease area	one	There was one waste dump in the lease area
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Beyond UPL	Beyond UPL
4e	Number of active and alive dumps.	Topsoil- One OB -One Waste-One	Topsoil- One OB -One Waste-One
4f	Number of dead dumps.	Nil	Nil
4g	Number of dumps established.	Nil	Nil
4h	Whether Retaining wall or garland drain all along dumps are there.	Not proposed in the year 2020-21	Garland drains are maintained
4i	Length of Retaining wall or garland drain all along dumps	No proposal	Garland drains and retaining walls are maintained along with the Waste dump
4j	Number of settling ponds	No proposal	Nil
4k	Specific comments of inspecting officer on waste dump management		In the year 2020-21, there was no generation of waste and top soil.

Solid Waste Management - Backfilling:

Sl.No.	Item	Propasals	Actual work	Remarks
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5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	No proposal	Pit is not matured for backfilling and reclamation	
5b	Area under backfilling of mined out area	Not proposed in the year 2020-21 for backfilling area	Pit is not mature for back filling	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No proposal	There was no top soil generation in the year 2020-21	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			There was no top soil generation in the year 2020-21

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).	Annual Report is to be submitted on or before 1st July of every year	The lessee has not submitted the PMCP Report	Violation letter was submitted for not submitting the PMCP Report under rule 26(2) of MCDR, 2017.
6b	Area available for rehabilitation (ha) .	No proposal	Pit is not matured for reclamation and rehabilitation	
6c	afforestation done (ha).	No proposal	Nil	
6d	No. of saplings planted during the year	No proposal	Nil	
6e	Cumulative no .of plants	No proposal	Nil	
6f	Any other method of rehabilitation	No proposal	Nil	

6g	Cost incurred on watch and care during the year	No proposal	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No proposal	Nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No proposal	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	No proposal	Nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal	Nil
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No proposal	Nil
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	Waste land 0.2 Ha. by 500 no. of plantation	Waste land 0.2 Ha. by 2500 no. of plantation

6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	Waste land 0.2 Ha. by 500 no. of plantation	Waste land 0.2 Ha. by 500 no. of plantation	
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	By plantation	2500 no. of plantation	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Monitoring of environmental parameters proposed	Monitoring of environmental parameters are done as per proposal	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			Violation letter was issued for non-compliance of rule 26(2) of MCDR, 2017

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade wise sorting within lease area	Grade wise sorting within lease area	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical	Mechanical	
7c	Different grade of mineral sorted out at mines.	45% Fe to -58% Fe and +58% Fe	45% Fe to -58% Fe and +58% Fe	
7d	Any beneficiation process at mines	Existing beneficiation plant	Existing beneficiation plant	

7e General remarks
of inspecting
officer on
Mineral
conservation and
beneficiation
issues

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal	Nil	
8b	Concurrent use or storage of topsoil	No proposal	Nil	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	No proposal	Nil	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	Nil	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not proposed	Pit is not matured for reclamation and rehabilitation	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	plantation register Maintained	plantation register Maintained	

8g	Survival rate	75%	75%	
8h	Water sprinkling on roads to control airborne dust	By water tanker	water sprinkled on roads by water tanker	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Plantations are being done and maintained

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Monthly return submitted up to October, 2021 Annual Return is not submitted for the year 200-21	Violation letter has been issued under rule 45 of MCDR, 2017	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Annual return not submitted for the year 2020-21	avaiolation has been issued under rule 45 of MCDR, 2017	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Annual return not submitted		
9d	Scrutiny of Annual return on afforestation	Annual return not submitted		
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Annual return not submitted for 2020-21		

9f	Scrutiny of Annual return on ROM stock and/or graded ore	Annual return not submitted for 2020-21
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Annual return not submitted for 2020-21
9h	Scrutiny of Annual return on fixed assets	Annual return not submitted for the year 2020-21
9k	Scrutiny of Annual return on mining machineries	Annual return not submitted for the year 2020-21

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)	02/11/2021	24/02/2022				
MCDR17	Rule 26(2)	02/11/2021	24/02/2022				
MCDR17	Rule 35(2)	02/11/2021	24/02/2022				
MCDR17	Rule 45(5)(c	02/11/2021	24/02/2022				
MCDR17	Rule 47(a)	02/11/2021	24/02/2022				
MCDR17	Rule 48	02/11/2021	24/02/2022				
MCDR17	Rule 55(1)(3)	02/11/2021	24/02/2022				

Date :

(SHRI HARKESH MEENA)

Indian Bureau of Mines