

**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 : **K013** ) **KEWAL KRISHAN**  
Officer and ID No.
- (ii) Designation : Regional Mining Geologist
- (iii) Accompanying mine : **S. Nayak, ME & S. Mishra, Mining Foreman**  
Official with  
Designation
- (iv) Date of Inspection : 09-JUL-22
- (v) Prev. inspection date : 04-OCT-21

**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-SEP-86
- (h) **Weekly day of rest** : SUN
2. **Address for correspondance** : AT/PO-KOIRA  
DIST- SUNDERGARH  
ORISSA-770042
3. (a) **Lease Number** : ORI0132
- (b) **Lease area** : 72.56
- (c) **Period of lease** : 20
- (d) **Date of Expiry** : 21-NOV-~~05~~ **2035**
4. **Mineral worked** :  **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-MAR-19  
 Termination date

## Geologist

Name : SHRI P K PATHAK, Full Time  
 Qualification : MSC (GEOLOGY)  
 Appointment/ : 05-JUL-12  
 Termination date

## Manager

Name : SHRI CHANDRA SEKHAR MISHRA  
 Qualification : MSC GEOLOGY (FIRST CLASS MINES MANAGER C  
 Appointment/ : 15-MAR-16  
 Termination date

6. Date of approval of Mining	:	Existing rule 11 MCDR1988	29-MAR-04
Plan/Scheme of Mining	:	PMCP under 23B(2) for Existing	22-OCT-07
	:	Mining Scheme rule 12 MCDR1988	11-DEC-08
	:	Modif.approved Mining Scheme	03-MAR-10
	:	Mining Scheme rule 12 MCDR1988	19-APR-13
	:	MP review under 17(1) MCR 2016	18-MAY-18
	:	MS modif under MCR 1960	04-AUG-21

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

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	no back log	no back log	
1b	Exploration over lease area for geological axis 1 or 2	33 nos of boreholes are proposed during the year 2021-22 to drilled the area under G1 level of exploration	drilled 14nos of boreholes	issued violation under rule 11(1) of MCDR 2017
1c	Exploration Agencies and Expenditure in lakh rupees during the year	name of agency and expenditure not proposed	M/s Asia pacific Drilling Services	
1d	Balance area to be explored to bring Geological axis in 1 or 2	about 14 ha area is yet to be explored under G1/G2 level of exploration	about 14 ha area is yet to be explored under G1/G2 level of exploration	
1e	Balance reserve as on 01/04/20		as on 1/2/2022 reserves 2005995 T resources 2005905 T	based on the document approved on 4/8/2021 and production made during the year 2021-22.
1f	General remarks of inspecting officers on geology, exploration etc			Hematite variety of iron ore occurs in the area.,the iron ore and shale are exposed in eastern side of the M.L .Area exhibit the strike along N-S direction at 35 to 45 degree dips towards east. The entire is yet to be explored under G1 level of exploration.

## Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	2421005 - 2420600 N / 311762 - 311955 E	broadly as per proposal broadly	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches in overburden and minerals are proposed	as per proposal	
2c	Stripping ratio or ore to OB ratio	1:0.44	1:0.59	
2d	Quantity of topsoil generation in m3	no such proposal	not applicable	
2e	Quantity of overburden generation in m3	37100	23500	OB produced less because of less ROM production
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc		mine development is carried out by opencast mining methods in quarry - 1 as proposed.	mine development is carried out by opencast mining methods in quarry - 1 as proposed

## Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	quarry 01	quarry 01	
3b	Quantity of ROM mineral production proposed	240000T	117200T	issued violation under rule 11(1) of MCDR 2017
3c	Recovery of sailable/usable mineral from ROM production	162000T	112700T	less production as compare to proposal
3d	Quantity of mineral reject generation	78000T	4500T	issued violation under rule 14(2) of MCDR 2017 .

3e	Grade of mineral rejects generation and threshold value declared.	45 to 50% Fe	45 to 50% Fe	threshold +45%Fe
3f	Quantity of sub grade mineral generation.	78000T	4500T	45 to 50% Fe
3g	Grade of sub grade mineral generation	45 to 50% Fe	45 to 50% Fe	
3h	Manual / Mechanised method adopted for segregating from ROM	mechanished	Mechanised	
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	proposed	not carried out	for want of EC
3j	Provision of drilling and blasting in mineral benches	drilling and blasting proposed	drilling and blasting as proposed	
3k	Provision of mining machineries in mineral benches	Excavator and Loader combination	Excavator and loader combination	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	6m height 9m (western side) & 6m (eastern side)	as per proposal . however at some place in eastern side , benches are found in collapsed position.	issued violation under rule 11(1) of MCDR 2017
3m	Total area covered under excavation/pits	8.051 Ha	8.80 as per AR submitted for the year 2021-22	issued violation under rule 45 of MCDR 2017
3n	Ore to OB ratio for the pit/mine during the year.	1:0.44	1:0.59	

3o Total area put in use under different heads at the end of year total area put to use under different heads is 25.863 as per approved document total area put to use as per the AR submitted for the year 2021-22 is 25.695ha

3p	Production of ROM mineral during the last five year period as applicable	2017-18 240000T 2018-19 240000T 2019-20 240000T 2020-21 240000T 2021-22 240000T	2017-18 106200T 2018-19 118700T 2019-20 117000T 2020-21 119100T 2021-22 117200T

3q General remarks of inspecting officers on method of mining etc.

The method of mining is A category and is mechanised. The ROM production is carried out by open cast mining methods.

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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 of OB and mineral reject is Proposed no proposal for general of top soil	as per proposal	
4b	Location of topsoil, OB and mineral reject dumps	no generation of top soil, waste generated to be dumped on Dump-1, MR with in laese	broadly as per the proposal	
4c	Number of dumps within lease area and outside of lease area	01 no	01 within the lease area	

4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	outside Ultimate Pit Limit	outside Ultimate Pit Limit	
4e	Number of active and alive dumps.	01 no	01 no	
4f	Number of dead dumps.	no such proposal	no such proposal	
4g	Number of dumps established.	no such proposal	no such proposal	
4h	Whether Retaining wall or garland drain all along dumps are there.	it is proposed to construct a retaining and garland drain of 233m	no constructed fully	issued violation under 11(1) of MCDR 2017
4i	Length of Retaining wall or garland drain all along dumps	Proposed 233 m	Not constructed fully	issued violation under rule 11(1) of MCDR 2017
4j	Number of settling ponds	no such proposal	not applicable	
4k	Specific comments of inspecting officer on waste dump management			waste dumping is carried out broadly in the proposed area. however retaining wall and garland drain have not been constructed as proposed. Issued violation under rule 11(1) of MCDR 2017.

#### 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.	no such proposal	not applicable	
5b	Area under backfilling of mined out area	no such proposal	not applicable	

5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	no such proposal	not applicable	
5d	Total area fully reclaimed and rehabilitated	no such proposal	not applicable	
5e	General remarks of inspecting officers on backfilling and reclamation etc.	no such proposal	not applicable	area not matured for backfilling and reclamation.

#### 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).	To be submitted on Ist july	submitted	
6b	Area available for rehabilitation (ha) .	0.20 ha	as per proposal	
6c	afforestation done (ha).	0.20 ha	as per proposal	
6d	No. of saplings planted during the year	not specified	3100 ( 2500no within lease , along the saftey zone ) 600 nos out side the lease area	
6e	Cumulative no .of plants		18500 nos	18500 nos
6f	Any other method of rehabilitation	no such proposal	not applicable	
6g	Cost incurred on watch and care during the year	not specified	Rs 1450000/ as informed by the party	Rs 1450000/ as informed by the party



6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	no such proposal	not applicable
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	no such proposal	not applicable
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	no such proposal	not applicable
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	no such proposal	not applicable
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	no such proposal	not applicable
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	no such proposal	not applicable
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	no such proposal	not applicable

6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	no such proposal	not applicable	
6p	Compliance of environmental monitoring (core zone and buffer zone)	periodical monitoring of environmental parameters are proposed in core and buffer zone	carried out	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			No specific proposal , in connection with PMCP. pit is not mature for reclamation/rehabilitation.

#### Mineral Conservation:

Sl.No.	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	grade-wise sorting	grade-wise sorting	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	mechanised	mechanised	
7c	Different grade of mineral sorted out at mines.	45 to 50% Fe +50%Fe	As per the AR submitted <55% Fe 55 to 58% Fe 58 to 60% Fe 60 to 62% Fe 62 to 65% Fe >65% Fe	
7d	Any beneficiation process at mines	proposed	not carried out	due to want of EC ,no beneficiation is carried out

7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	different grades are being sorted out . The lessee has proposed the beneficiation plant but that has not been commenced yet for want of EC.
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**Environment:**

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	no such proposal	no such proposal	
8b	Concurrent use or storage of topsoil.	no top soil generation	not applicable	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	provision for seperate dumping of overburden, waste rock is envisaged	as per proposal	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	no such proposal	not applicable	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	no such proposal	not applicable	

8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	no specific proposal	2500 nos of sampling within lease area and 600 nos of sampling out side the lease area.	
8g	Survival rate	not specified	72% within lease 30% out side the lease area	72% within lease 30% out side the lease area
8h	Water sprinkling on roads to control airborne dust	water sprinklers to suppress the dust in mine haul road to control airborne dust	water sprinklers to suppress the dust in mine haul road to control airborne dust	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		aesthetic beauty in and around the mine is good because of planation carriedout and by regular sprinkling of water on mine road to control the dust	aesthetic beauty in and around the mine is good because of planation carriedout and by regular sprinkling of water on mine road to control the dust

#### Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	as per MCDR 2017, the monthly return are to be submitted before 10th day of every month in respect of the proceeding month and AR shall be submitted before the 1st day of July each year for the proceeding fininicial year	submitted	

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Graduate Mining engineer: 2, geologist: 01 part time , diploma mining engineer: 1	During the inspection it is noticed that a whole-time geologist is not employed in the mine .	issued violation under rule 55(1) of MCDR 2017
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	as per the AR submitted area covered under OC working is 8.80 ha waste disposal 0.941 ha occupied by plat, building road etc 7.504 ha other purpose 8.450 ha	lease area put to use under open cast mining during the period is more than the approved area, as per FA table	issued violation under rule 45 of MCDR 2017
9d	Scrutiny of Annual return on afforestation	2500nos within lease 600 nos outside the lease	broadly correct information	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	4500	worng information furnished inrespect of grade Mineral reject registered not maintained	issued violation under rule 45 and 14(2) of MCDR 2017
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Lumps closing stock at mine head <55% Fe 55 to 58% Fe 58to 60%Fe 60to 62% Fe 62 to 65% Fe >65% Fe Fines closing stock at mine head stock at mine head <55% Fe 55 to 58% Fe 58to 60%Fe 60to 62% Fe 62 to 65% Fe	Lumps closing stock at mine head <55% Fe 55 to 58% Fe 58to 60%Fe 60to 62% Fe 62 to 65% Fe >65% Fe Fines closing stock at mine head <55% Fe 55 to 58% Fe 58to 60%Fe 60to 62% Fe 62 to 65% Fe	

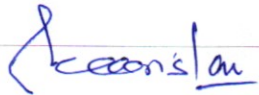
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex-mine price of Lumps against production and despatch <55% Fe 4336.66 55 to 58% Fe 4070.56 Ex-mine price Fines against production and despatch <55% Fe 1965.25 55 to 58 % Fe 2500.00	Ex-mine price of Lumps against production and despatch <55% Fe 4336.66 55 to 58% Fe 4070.56 Ex-mine price Fines against production and despatch <55% Fe 1965.25 55 to 58 % Fe 2500.00 information furnished on cost of production is wrong	issued violation under rule 45 of MCDR 2017
		cost of production 884/-		
9h	Scrutiny of Annual return on fixed assets	no information furnished	no information furnished	issued violation under rule 45 of MCDR 2017
9k	Scrutiny of Annual return on mining machineries	Dumper 25.00T BackHoe 2.0CUM Air compressor450.0 CUM/MN Crusher 60.0T/H	Dumper 25.00T BackHoe 2.0CUM Air compressor450.0 CUM/MN Crusher 60.0T/H	

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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 11(1)	15-JUN-22			
MCDR17	Rule 14(2)	15-JUN-22			
	Rule 45(1)	15-JUN-22			

Date : 3/8/22

  
(KEWAL KRISHAN)

Indian Bureau of Mines