

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

MCDR INSPECTION REPORT

Bhubaneshwar regional office

Mine file No : ORI/IRON-MN/SNG/MCDR-18/BBS

Mine code : 30ORI13024

- (i) Name of the Inspecting : **RKD**) **RAJESH KUMAR DAS**
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : Shri Sachikanta Behera, Mine Manager
Official with
Designation
- (iv) Date of Inspection : 06/03/2023
- (v) Prev.inspection date : 09/10/2021

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **SAN INDPUR**
- (b) **Registration NO.** : **IBM/6072/2011**
- (c) Category : A Manual
- (d) Type of Working : Opencast
- (e) Postal address
- State : ORISSA
- District : SUNDARGARH
- Village : SAN INDPUR
- Taluka : BONAI
- Post office : PATMUNDA
- Pin Code :
- FAX No. : 06767-75631
- E-mail : gapl_sponge@yahoo.co.in
- Phone : 06767-75321
- (f) Police Station :
- (g) First opening date : 02/12/1980
- (h) Weekly day of rest : SAT
2. Address for : SAN INDPUR IRON-MN MINE
correspondance PO: PATMUNDA; DIST: SUNDERGARH
ORISSA
3. (a) Lease Number : ORI0137
- (b) Lease area : 70.92
- (c) Period of lease :
- (d) Date of Expiry : 09/09/2020
4. Mineral worked : MANGANESE ORE Associated
IRON ORE Main

5. Name and Address of the

Lessee : M/S NATIONAL ENTERPRISES
 PO.BOX 44 BARBIL- 758035
 KEONJHAR ORISSA
 Phone:06767-275686
 FAX :06767-275631

Owner : NATIONAL ENTERPRISES
 PO BOX :44 BARBIL KEONJHAR
 ORISSA
 Phone: 06767-275686
 FAX : 06767-275631

Mining Engineer

Name : SHRI RUDRA MOHAN NAYAK,Full Time
 Qualification : DEGREE MINING (AMIE)
 Appointment/ : 28/09/2021
 Termination date

Geologist

Name : SHRI RAJESH KUMAR SHARMA,Full Time
 Qualification : MSC GEOLOGY
 Appointment/ : 16/03/2021
 Termination date

Manager

Name : SHRI BIMALESH KUMAR SHRIVASTAVA
 Qualification : BE MINING
 Appointment/ : 08/04/2021
 Termination date

6. Date of approval of Mining	:	Renewal under rule 22 MCR1960	27/02/2001
Plan/Scheme of Mining		FMCP under 23C(1)	20/12/2007
		Mining Scheme rule 12 MCDR1988	20/12/2007
		Mining Scheme rule 12 MCDR1988	08/06/2010
		Mining Scheme rule 12 MCDR1988	15/05/2015
		MP review under 17(1) MCR 2016	14/11/2019
		MS modif under MCR 1960	23/03/2022

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	30 Holes proposed	24 holes done	
1b	Exploration over lease area for geological axis 1 or 2	30 nos bore holes	24 bore holes drilled	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not mentioned specifically.	PS Brothers,KRK,Geo Exploration,expenditure reported Rs3455748/-	
1d	Balance area to be explored to bring Geological axis in 1 or 2	The Total unexplored area is 45.191 Ha	forest clearence not get for above mentioned area.	
1f	General remarks of inspecting officers on geology, exploration etc			In 2021-22 exploration not reported in G1 and 33.827 ha area reported in G2 balance in G3.The ore body strike NE-SW and strike length 523m.The dip angle varies from 35-81 degree.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	UTM Pradhan pit 325770-325910 2424580-2424620 Hutting pit 325770-325910 2424470-2424560 Crusher pit 325570-325630 2424860-2424970	Mining is broadly done in Crusher pit and pradhan pit	

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Yes proposed	There are no Top soil benches. Separate benches in overburden and minerals has been developed as per development program during 2021-22
2c	Stripping ratio or ore to OB ratio	1:0.19	1:0.16
2d	Quantity of topsoil generation in m3	Nil	Nil
2e	Quantity of overburden generation in m3	81350 Cum	65310 Cum
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc		The development are broadly as per proposals but many places it was observed bench height are not as per proposal.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	03	02	
3b	Quantity of ROM mineral production proposed	413917 MT	409822 MT	
3c	Recovery of sailable/usable mineral from ROM production	115752 MT	305212 MT	
3d	Quantity of mineral reject generation	298350 MT	104610 MT	
3e	Grade of mineral rejects generation and threshold value declared.	45-55%Fe	Broadly as per proposal	

3f	Quantity of sub grade mineral generation.	Nil	Nil
3g	Grade of sub grade mineral generation	NA	NA
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.	N.A.	N.A.
3j	Provision of drilling and blasting in mineral benches	Yes	Yes
3k	Provision of mining machineries in mineral benches	Yes	Yes
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes	Yes
3m	Total area covered under excavation/pits	specific yearwise proposals not given. land use given for five years upto 2024-25: Excavated area 26.66 ha.	The additional area have covered under excavation/pits during 2021-22 is 1.5Ha. Total area covered under O/C working is 20.660Ha.
3n	Ore to OB ratio for the pit/mine during the year.	1:0.19	1:0.16

3o	Total area put in use under different heads at the end of year	specific yearwise proposals not given. land use given for five years upto 2024-25: Excavated area 26.66 ha.,waste dump 6.06ha.,subgrade stack 3.830 ha., infrastructure 1.57 ha.	The additional area have covered under excavation/pits during 2021-22 is 1.5Ha. Total area covered under O/C working is 20.660Ha.,infrastructure 1.57 ha.,waste dump 5.06 ha.	
3p	Production of ROM mineral during the last five year period as applicable	2015-16: 410007 MT 2016-17: 409983 MT 2017-18: 4100012MT 2019-20: 410001 MT 2020-21:413532 MT 2021-22:413917 MT	Nil Nil Nil Nil 2021-22: 409822 MT	Due to want of Forest clearance & as per suspension order no Mining activity has beenreported.
3q	General remarks of inspecting officers on method of mining etc.			The method of mining is by opencast method by shovel-truck combination and deep hole drilling blasting broadly as per proposal.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Yes	There is no Top soil generation & Dumping. The OB & mineral reject have been dumped separately in the earmarked area as per approved Mining plan.	

4b	Location of topsoil, OB and mineral reject dumps	Top soil Nil,OB dump in southern side of ML between BP B1-B.Reject dump near pit area in many places.	Broadly as per proposal.
4c	Number of dumps within lease area and outside of lease area	Within lease 01 active dump proposed.	Within lease 01 active dump
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Top soil Nil,OB dump in southern side of ML between BP B1-B.Reject dump near pit area in many places.	Top soil Nil,OB dump in southern side of ML between BP B1-B.Reject dump near pit area in many places.
4e	Number of active and alive dumps.	01 nos	01 nos
4f	Number of dead dumps.	02 nos	02 nos
4g	Number of dumps established.	Nil	Nil
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes	Yes
4i	Length of Retaining wall or garland drain all along dumps	660 meter garland drain and retaining wall proposed.	600 meter garland drain and retaining wall done.
4j	Number of settling ponds	04 nos	Broadly as per proposal.
4k	Specific comments of inspecting officer on waste dump management		Broadly as per proposal except the garland drain and retaining wall not constructed as per proposal.

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

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).	As per MCDR, 2017	Submitted in time.	
6b	Area available for rehabilitation (ha) .	NA	NA	
6c	afforestation done (ha).	0.5 ha.	Broadly as per proposal.	
6d	No. of saplings planted during the year	800 nos saplings	2000 nos saplings	

6e	Cumulative no .of plants		Total 3000nos of samplings was planted around dump slopes & safety zone area but survival rate is only 65%.
6f	Any other method of rehabilitation	NA	NA
6g	Cost incurred on watch and care during the year	Nil	Rs 50000/-
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	NA	NA
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	NA	NA
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on on backfilled area	NA	NA
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	NA	NA
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	Nil	Nil

6m	Compliance of rehabilitation of waste land within lease (i)afforestation	NA	NA	
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	Nil	Nil	
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	NA	NA	
6p	Compliance of environmental monitoring (core zone and buffer zone)	As per MOEF and CC guide lines.	Monitoring of Air,Water,Noise,etc in core and buffer zone done as per guidelines.	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			Broadly complied.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Gradewise sorting within lease.	Gradewise sorting within lease.	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical	Mechanical	
7c	Different grade of mineral sorted out at mines.	Yes	Yes	

7d	Any beneficiation process at mines .	only crushing and screening.	only crushing and screening.	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			No beneficiation done except crushing and screening and blending of low grade and high grade to get desire grade.

Environment :

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Top soil generation Nil.	Top soil generation Nil.	
8b	Concurrent use or storage of topsoil	NA	NA	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes	Yes	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	NA	NA	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	NA	NA	

8f	Baseline information on existence of plantation and additional plantation done (Rule 41)		Total 3000nos of samplings was planted around dump slopes & safety zone area but survival rate is only 65%.	
8g	Survival rate	Not mentioned specifically.	65% reported	
8h	Water sprinkling on roads to control airborne dust	Dust suppression with 12Kl water tanker proposed.	Water tanker having capacity 12KL being sprinkling water on road, haul road to control the airborne dust.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			No adverse impact observed during mine visit on aesthetic beauty in and around mines area.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	As per Rule 45 of MCDR,2017.	AR and MR submitted.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Yes given	The notice of appointment not received in this office .	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Yes Given	Broadly as per actual.	
9d	Scrutiny of Annual return on afforestation	yes given	2000 nos reported and broadly as per actual.	

9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	Mineral reject information not furnished.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Yes given	ROM stock of 23747 tons and graded ore of various grade also given.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Yes given	Ex-mine prise varies from 1520 Rs to 9597 Rs of various grade in Lump and fines and same for sale price also varies gradewise and customer. Cost of production Rs 1685/-
9h	Scrutiny of Annual return on fixed assets	Yes given	Rs1277021814/-
9k	Scrutiny of Annual return on mining machineries	Yes given	List of machineries of Excavator, Dumper, water tanker, etc given only Drill m/c not reported.

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)	30/03/2023			
MCDR17	Rule 34(3)	30/03/2023			
MCDR17	Rule 46(a)	30/03/2023			

Date :

(RAJESH KUMAR DAS)

Indian Bureau of Mines