

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

MCDR INSPECTION REPORT

Bhubaneshwar regional office

Mine file No : ORI/IRON/KJR/MCDR-55/BBS

Mine code : 30ORI08069

- (i) Name of the Inspecting : **SKM1**) **SANJIB KUMAR MOHAPATRA**
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Sri Umesh Chandra Mohanta (Mines Manager)
Official with
Designation
- (iv) Date of Inspection : 24/06/2022
- (v) Prev.inspection date : 22/09/2021

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **DEOJHAR**
- (b) **Registration NO.** : **IBM/5262/2011**
- (c) **Category** : **A Fully Mechanised**
- (d) **Type of Working** : **Opencast**
- (e) **Postal address**
- State : **ORISSA**
- District : **KEONJHAR**
- Village : **DEOJHAR**
- Taluka : **BARBIL**
- Post office : **DEOJHAR**
- Pin Code : **758038**
- FAX No. : **06767-272304**
- E-mail : **diom.tmp1@gmail.com**
- Phone : **06767-272304,273448**
- (f) **Police Station** : **Joda**
- (g) **First opening date** : **04/10/1995**
- (h) **Weekly day of rest** : **SUN**
2. **Address for correspondance** : **DEOJHAR IRON MINE, DISTRICT KEONJHAR**
ORISSA, PIN: 758 038.
3. (a) **Lease Number** : **ORI0721**
- (b) **Lease area** : **34.37**
- (c) **Period of lease** : **50**
- (d) **Date of Expiry** : **04/09/2044**
4. **Mineral worked** : **IRON ORE** Main

5. Name and Address of the

Lessee : TARINI MINERALS (P) LTD.
 AT/PO-BONEIKALA JODA
 KEONJHAR KEONJHAR ORISSA
 Phone:
 FAX :

Owner : TARANI MINERALS(P) LTD
 BONEIKALA JODA KEONJHAR
 ORISSA
 Phone: 72304
 FAX : 72304

Mining Engineer

Name : SHRI VASANTHKUMAR SELVARAJ, Full Time
 Qualification : B E MINING ENGG
 Appointment/ : 25/03/2019
 Termination date

Geologist

Name : SHRI YASWANT KUMAR, Full Time
 Qualification : M.SC GEOLOGY
 Appointment/ : 25/03/2019
 Termination date

Manager

Name : SHRI VASANTHAKUMAR SELVARAJ
 Qualification : B E MINING ENGG
 Appointment/ : 01/07/2019
 Termination date

6. Date of approval of Mining	:	Mining Scheme rule 12 MCDR1988	09/04/2002
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	17/03/2008
		Modif.approved Mining Scheme	24/10/2008
		Modif.approved Mining Scheme	28/10/2010
		Renewal under rule 24 MCR1960	05/12/2014
		MP review under 17(1) MCR 2016	25/01/2019

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Nil	Nil	Nil
1b	Exploration over lease area for geological axis 1 or 2	Nil	Nil	Entire lease hold area (34.365 Ha.) has been already explored under G1 category.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Nil	Nil	NA, No proposal for exploration during the reporting year.
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	Nil	Entire lease hold area (34.365 Ha.) has been already explored under G1 category.
1e	Balance reserve as on 01/04/20		436990 tonnes as on 01/04/2022	436990 tonnes as on 01/04/2022
1f	General remarks of inspecting officers on geology, exploration etc		Entire lease hold area (34.365 Ha.) has been already explored under G1 category. A violation letter has been issued for contravention of rule 12(4B) of MCDr 2017, i.e. submission of geological report prepared in the manner specified in the Minerals (Evidence of Mineral Contents) Rules, 2015 vide letter dated 07/07/2022.	Entire lease hold area (34.365 Ha.) has been already explored under G1 category. A violation letter has been issued for contravention of rule 12(4B) of MCDr 2017, i.e. submission of geological report prepared in the manner specified in the Minerals (Evidence of Mineral Contents) Rules, 2015 vide letter dated 07/07/2022.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	E341796- E342096 to N2445120- N244532	E341796-E342096 to N2445120-N244532	The lessee has carried out the development as per the proposal during the reporting year. however could not achieved the proposed target production.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	No proposal for development of top soil benches during the reporting year.	No proposal for development of top soil benches during the reporting year.	No proposal for development of top soil benches during the reporting year.
2c	Stripping ratio or ore to OB ratio	1:1.0404	1: 0.88	As the evelopment proposal could not achieved 100% , according the there is adeviation in stripping ratio.
2d	Quantity of topsoil generation in m3	Nil	Nil	No proposal during the reporting year.
2e	Quantity of overburden generation in m3	42500 Cum	27615 Cum	There was a proposal for rehandling of mineral reject dump during the reporting year, But the leseee could not carried out the rehandling completely. In this regard a violation letter has been issued vide letter dated 07.07.2022.

2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	There was a proposal to rehandling of mineral reject dump for retrieving 51240 tonnes of iron ore during FY 2021-22, whereas the lessee has carried out only 9500 tons mineral reject were retrieving from mineral reject dump during FY 2021-22. in this regard, aviolation letter for contravention of rule 11(1) of MCDr has been issued vide letter dated 07/07/2022.	There was a proposal to rehandling of mineral reject dump for retrieving 51240 tonnes of iron ore during FY 2021-22, whereas the lessee has carried out only 9500 tons mineral reject were retrieving from mineral reject dump during FY 2021-22. in this regard, aviolation letter for contravention of rule 11(1) of MCDr has been issued vide letter dated 07/07/2022.
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Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One	One	One
3b	Quantity of ROM mineral production proposed	81700 tonnes	62700 tones	The lessee could not achieved targeted production, as the rehandling of mineral reject dump could not carried out as per the proposal.
3c	Recovery of sailable/usable mineral from ROM production	62700 tons	43700 tons	The lessee could not achieved targeted production, as the rehandling of mineral reject dump could not carried out as per the proposal.

3d	Quantity of mineral reject generation	23700 tons	9500 tons	The lessee could not achieved targeted production, as the rehandling of mineral reject dump could not carried out as per the proposal.
3e	Grade of mineral rejects generation and threshold value declared.	+45 % Fe to 58 % Fe	+45 % Fe to 58 % Fe	+45 % Fe to 58 % Fe
3f	Quantity of sub grade mineral generation.	Nil	Nil	Nil
3g	Grade of sub grade mineral generation	NA	NA	NA
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized	Mechanized	Mechanized
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Nil	Nil	Nil
3j	Provision of drilling and blasting in mineral benches	Yes, Jack Hammer 115 mm dia Drills. Blasting proposed with LD explosives of 25mm dia. & 83mm dia. with detonating cord & milli second delay detonators.	Yes, Jack Hammer 115 mm dia. Drills. Blasting proposed with LD explosives of 25mm dia. & 83mm dia. with detonating cord & milli second delay detonators.	Yes, Jack Hammer 115 mm dia. Drills. Blasting proposed with LD explosives of 25mm dia. & 83mm dia. with detonating cord & milli second delay detonators.
3k	Provision of mining machineries in mineral benches	Yes, Shovel and Dumper combination.	Yes, Shovel and Dumper combination carried out.	Yes, Shovel and Dumper combination carried out.

3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	The height of the bench proposed is 10m.	The height of the bench is suitable for the method of mining proposed in mining plan.	The height of the bench is suitable for the method of mining proposed in mining plan.
3m	Total area covered under excavation/pits	8.7132 Ha.	8.7132 Ha.	8.7132 Ha.
3n	Ore to OB ratio for the pit/mine during the year.	1:1.0404	1:0.88	The ROM production was less than proposed. Hence, subsequent could not be achieved.
3o	Total area put in use under different heads at the end of year	As per the review of mining plan approved dated 03.08.2020, the total area under different heads at the end of plan period will be 28.397 Ha.	Area under different heads at the end 2021-22 is 23.0758 ha.	Area under different heads at the end 2021-22 is 23.0758 ha.
3p	Production of ROM mineral during the last five year period as applicable	2017-18- 862906 mt. 2018-19- 500398.25 mt. 2019-20- 71678 mt. 2020-21- 81225 mt. 2021-22- 81700 mt.	2017-18- 862715 mt. 2018-19- 400535 mt. 2019-20- 27388 mt. 2020-21- 80770 mt. 2021-22- 62700 mt.	2017-18- 862715 mt. 2018-19- 400535 mt. 2019-20- 27388 mt. 2020-21- 80770 mt. 2021-22- 62700 mt.

3q	General remarks of inspecting officers on method of mining etc.	The ROM production has been carried out in one pit as proposed. However the lessee could not achieved 100% of the proposed production target, as the rehandling of mineral reject dump could not carried out as per the proposal. In this regard a violation letter has been issued to the lessee vide letter dated 07/07/2022.	The ROM production has been carried out in one pit as proposed. However the lessee could not achieved 100% of the proposed production target, as the rehandling of mineral reject dump could not carried out as per the proposal. In this regard a violation letter has been issued to the lessee vide letter dated 07/07/2022.
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Solid Waste Management - Dumping:

Sl.No.	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Yes, proposed	Yes, carried out.	The lessee has carried out dumping as per the proposal during the reporting year.
4b	Location of topsoil, OB and mineral reject dumps	N 2444430-N2444625 to E341735 - E341941- OB dump	N 2444430-N2444625 to E341735 - E341941- OB dump	N 2444430-N2444625 to E341735 - E341941- OB dump
4c	Number of dumps within lease area and outside of lease area	One- within the ML area	One- within the ML area	One- within the ML area
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside of UPL	Outside of UPL	Outside of UPL
4e	Number of active and alive dumps.	One active	One active	One active
4f	Number of dead dumps.	Nil	Nil	Nil
4g	Number of dumps established.	Nil	Nil	Nil

4h	Whether Retaining wall or garland drain all along dumps are there.	Yes, Retaining wall-300m. Garland Drain- 345 m	Yes, Retaining wall-300m. Garland Drain- 345 m	Yes, Retaining wall-300m. Garland Drain- 345 m
4i	Length of Retaining wall or garland drain all along dumps	Yes, Retaining wall-300m. Garland Drain- 345 m	Yes, Retaining wall-300m. Garland Drain- 345 m	Yes, Retaining wall-300m. Garland Drain- 345 m
4j	Number of settling ponds	2	2	2
4k	Specific comments of inspecting officer on waste dump management		The lesee has carried out dumping as per the proposed location, safety measures like retaining wall and grland drains are done as per the proposal during the reporting year.	The lesee has carried out dumping as per the proposed location, safety measures like retaining wall and grland drains are done as per the proposal during the reporting year.

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.	0.20 Ha of area to be backfilled after full extraction of mineral.	Not carried out	A violation letter in this regard has been issued vide letter dated 07/07/2022 in this regard.
5b	Area under backfilling of mined out area	0.20 Ha	Nil	A violation letter in this regard has been issued vide letter dated 07/07/2022 in this regard.
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Nil	Nil	generation of top soil during the reporting year was nil.

5d	Total area fully reclaimed and rehabilitated	No proposal	Nil	
5e	General remarks of inspecting officers on backfilling and reclamation etc.		There was a proposal of 70940 cum of waste for backfilling over 0.20 ha area, but the lessee has not carried out the backfilling till the date of inspection. In this regard a violation letter has been issued vide letter dated 07/07/2022.	There was a proposal of 70940 cum of waste for backfilling over 0.20 ha area, but the lessee has not carried out the backfilling till the date of inspection. In this regard a violation letter has been issued vide letter dated 07/07/2022.

Progressive Mine Closure Plan:

Sl.No.	Item	Proposals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	As per Rule 26(2) Annual PMCP report to be submitted before 1st day of July of Every Year	Submitted within the stipulated time period for the reporting year.	Submitted within the stipulated time period for the reporting year.
6b	Area available for rehabilitation (ha) .	0.20 Ha	Nil	There was a proposal of 70940 cum of waste for backfilling over 0.20 ha area, but the lessee has not carried out the backfilling till the date of inspection. In this regard a violation letter has been issued vide letter dated 07/07/2022.
6c	afforestation done (ha).	0.20 Ha	0.93 Ha	0.93 Ha

6d	No. of saplings planted during the year	500 sapplings	3500 sapplings	3500 sapplings
6e	Cumulative no .of plants		31610 sapplings	31610 sapplings
6f	Any other method of rehabilitation	Nil	Nil	Nil
6g	Cost incurred on watch and care during the year	Nil	Nil	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	0.20 Ha	Nil	There was aproposal of 70940 cum of waste for backfilling over 0.20 ha area, but the leseee has not carried out the backfilling till the date of inspection. In this regard aviolation letter has been issued vide letter dated 07/07/2022.
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	0.20 Ha	Nil	There was aproposal of 70940 cum of waste for backfilling over 0.20 ha area, but the leseee has not carried out the backfilling till the date of inspection. In this regard aviolation letter has been issued vide letter dated 07/07/2022.
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on on backfilled area	Nil	Nil	Nil

6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Nil	Nil	Nil
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	Plantation	Plantation	Plantation
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	0.20 Ha	0.93 Ha	0.93 Ha
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	0.20 Ha	0.93 Ha	0.93 Ha
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	Plantation	Plantation	Plantation
6p	Compliance of environmental monitoring (core zone and buffer zone)	Air, Noise and Water quality monitoring will be done during the year within the lease area	Air, Noise and Water quality monitoring carried out as per the proposal during the reporting year.	Air, Noise and Water quality monitoring carried out as per the proposal during the reporting year.

6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	The lessee has carried out afforestation and environmental monitoring as per the proposal during the reporting year. There was a proposal of 70940 cum of waste for backfilling over 0.20 ha area, but the lessee has not carried out the backfilling till the date of inspection. In this regard a violation letter has been issued vide letter dated 07/07/2022.	The lessee has carried out afforestation and environmental monitoring as per the proposal during the reporting year. There was a proposal of 70940 cum of waste for backfilling over 0.20 ha area, but the lessee has not carried out the backfilling till the date of inspection. In this regard a violation letter has been issued vide letter dated 07/07/2022.
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Mineral Conservation:

Sl.No.	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Saleable Ore:+58 % Fe, Mineral Reject:- +45 to 58% Fe was proposed.	Saleable Ore:+58 % Fe, Mineral Reject:- +45 to 58% Fe sorting is being practiced.	Saleable Ore:+58 % Fe, Mineral Reject:- +45 to 58% Fe sorting is being practiced.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanised	Mechanised	Mechanised method of sorting is being practiced.
7c	Different grade of mineral sorted out at mines.	Saleable Ore:+58 % Fe, Mineral Reject:- +45 to 58% Fe was proposed.	Saleable Ore:+58 % Fe, Mineral Reject:- +45 to 58% Fe sorting is being practiced.	Saleable Ore:+58 % Fe, Mineral Reject:- +45 to 58% Fe sorting is being practiced.

7d	Any beneficiation process at mines	Nil	Nil	No beneficiation process was proposed. Only crushing and screening is being carried out.
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues		No beneficiation process was proposed. Only crushing and screening is being carried out.	No beneficiation process was proposed. Only crushing and screening is being carried out.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal for generation of top soil.	Nil	Nil
8b	Concurrent use or storage of topsoil	NA	Nil	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumping for overburden/waste and mineral reject was proposed	Separate dumping for overburden/waste and mineral reject are being practiced.	Separate dumping for overburden/waste and mineral reject are being practiced.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	0.20 Ha	Nil	There was aproposal of 70940 cum of waste for backfilling over 0.20 ha area, but the leseee has not carried out the backfilling till the date of inspection. In this regard aviolation letter has been issued vide letter dated 07/07/2022.

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	0.20 Ha	Nil	There was a proposal of 70940 cum of waste for backfilling over 0.20 ha area, but the lessee has not carried out the backfilling till the date of inspection. In this regard a violation letter has been issued vide letter dated 07/07/2022.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	500 sapplings	3500 sapplings	3500 sapplings
8g	Survival rate	Not proposed	82% survival rate	82% survival rate
8h	Water sprinkling on roads to control airborne dust	Water Sprinkling on haul road were proposed.	Water sprinkling by water tanker over haul roads has been carried out.	Water sprinkling by water tanker over haul roads has been carried out.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		Lessee has planted 3500 no of sapling within the lease area and water sprinkling by water tanker over haul roads to minimize the fugitive dust emission. This sustains the aesthetic beauty of the mine area.	Lessee has planted 3500 no of sapling within the lease area and water sprinkling by water tanker over haul roads to minimize the fugitive dust emission. This sustains the aesthetic beauty of the mine area.

Compliance of Rule 45:

Sl.No.	Item	Proposals	Actual work	Remarks
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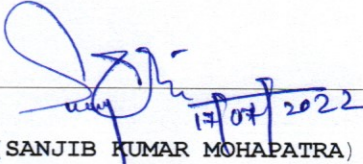
9a	Status of submission of Monthly and Annual returns	Monthly return for the month of May 2022 has been submitted. Annual return for FY 2021-22 is due for for submission and yet to be submitted.	Monthly return for the month of May 2022 has been submitted. Annual return for FY 2021-22 is due for for submission and yet to be submitted.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Annual return for Fy 2021-22 has not been submitted till the date of inspection and yet to be submitted within the scheduled time period.	Annual return for Fy 2021-22 has not been submitted till the date of inspection and yet to be submitted within the scheduled time period.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Annual return for Fy 2021-22 has not been submitted till the date of inspection and yet to be submitted within the scheduled time period.	Annual return for Fy 2021-22 has not been submitted till the date of inspection and yet to be submitted within the scheduled time period.
9d	Scrutiny of Annual return on afforestation	Annual return for Fy 2021-22 has not been submitted till the date of inspection and yet to be submitted within the scheduled time period.	Annual return for Fy 2021-22 has not been submitted till the date of inspection and yet to be submitted within the scheduled time period.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Annual return for Fy 2021-22 has not been submitted till the date of inspection and yet to be submitted within the scheduled time period.	Annual return for Fy 2021-22 has not been submitted till the date of inspection and yet to be submitted within the scheduled time period.

9f	Scrutiny of Annual return on ROM stock and/or graded ore	Annual return for Fy 2021-22 has not been submitted till the date of inspection and yet to be submitted within the scheduled time period.	Annual return for Fy 2021-22 has not been submitted till the date of inspection and yet to be submitted within the scheduled time period.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Annual return for Fy 2021-22 has not been submitted till the date of inspection and yet to be submitted within the scheduled time period.	Annual return for Fy 2021-22 has not been submitted till the date of inspection and yet to be submitted within the scheduled time period.
9h	Scrutiny of Annual return on fixed assets	Annual return for Fy 2021-22 has not been submitted till the date of inspection and yet to be submitted within the scheduled time period.	Annual return for Fy 2021-22 has not been submitted till the date of inspection and yet to be submitted within the scheduled time period.
9k	Scrutiny of Annual return on mining machineries	Annual return for Fy 2021-22 has not been submitted till the date of inspection and yet to be submitted within the scheduled time period.	Annual return for Fy 2021-22 has not been submitted till the date of inspection and yet to be submitted within the scheduled time period.

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)	07/07/2022			
MCDR17	Rule 12(4)(B)	07/07/2022			

Date :


 (SANJIB KUMAR MOHAPATRA)

Indian Bureau of Mines