

MCDR INSPECTION REPORT

Date of Inspection: 16.05.2024**General**

S. N.	Particulars	Details
1	Name of the Mine	Bhanjapali Iron Ore Mines
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	Total lease -18 hect. Non forest -5.435 hect. Forest -12.565 hect.
3	Minecode	30ORI13043
4	IBM Registration Number under rule 45 of MCDR, 1988	IBM/8414/2011
5	Name of the lessee, Address, phone, email and fax number	Bhanjapali Iron Ore Mines of Shri J.N. Patanaik At/Po:- Baneikala Dist:- Keonjhar State:- Odisha (758038)
6	Village	Bhnajapali
7	Taluka/Mandal	
8	District	Sundargarh
9	Pincode	770048
10	State	Odisha
11	Post office	Koira
12	Nearest police station	Koira
13	Nearest Railway station	Barsuan
14	Date of Grant of Mining Lease	01.04.1997
15	Date of Execution	01.04.1997
16	Date of opening of Mine	01.04.1997
17	Date of first Renewal, if applicable and its period & expiry	N.A
18	Date of second Renewal, if applicable and its period & expiry	N.A
19	Date of submission of renewal application if Mining Operations are continuing under deemed extension	N.A
20	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Jitendranath Patnaik, At-Boneikela, Po-Joda, Dist-Keunjhar, Phone No-06767-270106
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Shri Soumya Patnaik At/Po:- Baneikala Dist:- Keonjhar State:- Odisha (758038)
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Sri Sudhakar Sahoo At-Kalindrabad,Po-Adanga purussottampur, Jajpur,

I/35758/2024

		Mob-9348969829
23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Shri Sudhakar Sahoo Bhanjipali Iron Ore Mine of Shri J.N. Patanaik At/Po-Koira, Dist:- Sundargarh State:- Odisha (770048) Email:- sudhakarsahoo1947@gmail.com Date of Appointment:- 20.02.21 Qualification:- B.Tech (Mining) Experience-12 Yrs Mob-9437462008
24	Name of the Geologist, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Shri Amiya Kumar Baral
25	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 55& carrying out their duties as per rule 56 & 57.	Mining Engineer: Shri Sudhakar Sahoo Geologist: Shri Amiya Kumar Baral
26	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	2022-23 to 2026-27 (22.11.2021)
27	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	Review of the Mining Plan vide letter No. RMP/A/23-OR11/BHU/2021-22, dated: 22.11.2021, Five year plan period is (2022-23 to 2026-27)
28	Mineral(s) granted in lease and proved for mining	Iron
29	Method of Mining(Open cast, Underground)	Open cast
30	Category (Fully Mechanised, Others or Manual)	A (OTFM)
31	Captive/Non Captive	Non-Captive

Scientific Mining: Compliance of proposals of approved mining plan/scheme of mining. (Duplication of information in existing TMIS data sheets and draft write up has been avoided.)

Exploration

S.N.	Item	Proposals for,2023-24	Actual work during 2023-24	Remark
1a	Backlog of previous year	Nil	Nil	
1b	Exploration over lease area for Geological axis 1 or 2.	Nil	Nil	
1c	Exploration Agency & Expenditure in lakh Rupees during the year	Nil	Nil	
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	Nil	Entire area has already been explored under

I/35758/2024

				G1 level of exploration
1e	Balance reserves as per latest approved document	---	4355962.00 MT.	As on 31.03.2024
1f	General remarks of inspecting officer on geology, exploration etc.	The entire area has already been explored under G1 level of exploration. Hence, there was no proposal for exploration during the reporting year.		

Development

S.N.	Item	Proposals for, 2023-24	Actual work during 2023-24	Remark
2a	Location of development w.r.t. lease area	3 nos of Quarries; i.e. Q-1, Q-2 & Q-3: N-2424000-2424690 /E-319080 to 319350	3 nos of Quarries; i.e. Q-1, Q-2 & Q-3: N-2424030-2424600 /E-319100 to 319330	The lessee has carried out development within the proposed area but could not able to achieved the targeted production and development proposal. Because the lessee could not obtained the environmental clearance for the proposed production target.
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	Topsoil-Nil Overburden-4 Mineral-3	Topsoil-Nil Overburden-4 Mineral-3	
2c	Stripping ratio or ore to OB ratio	1:0.251	1:0.230	
2d	Quantity of topsoil generation in m ³	Nil	Nil	
2e	Quantity of overburden generation in m ³	1,26,189	60,583	
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc	The lessee has carried out development within the proposed area but could not able to achieved the targeted production and development proposal. Because the lessee could not obtained the environmental clearance for the proposed production target. However, the lessee has submitted a revised proposal of the review of mining plan and the same is under process.		

Exploitation

S.N.	Item	Proposals for, 2023-24	Actual work during 2023-24	Remark
------	------	------------------------	----------------------------	--------

I/35758/2024

3a	Number of pits proposed for production	3	3	
3b	Quantity of ROM mineral production proposed	5,02,091 tons	2,59,970 tons	
3c	Recovery of salable/usable mineral from ROM production	4,13,487 tons	2,59,970 tons	
3d	Quantity of mineral reject generation	88604 tons	Nil	
3e	Grade of mineral reject generation and threshold value declared	45 % to 55 % Fe	45 % to 55% Fe	
3f	Quantity of sub-grade mineral generation	Nil	Nil	
3g	Grade of sub-grade mineral generation	Nil	Nil	
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized	Mechanized	
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	Nil	Nil	
3j	Provision of drilling & blasting in mineral benches	Yes, proposed	Yes, Carried out	
3k	Provision of mining machineries in mineral benches	Excavator and Dumper combination.	Excavator and Dumper combination.	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes, it is proposed to keep the bench height up to 6 mtr for both Ore & OB benches.	Height and width of benches were in order as per the proposal of the approved document.	
3m	Total area covered under excavation/pits	7.635 Ha.	7.630 Ha.	
3n	Ore to OB ratio for the pit/mine during the year	1:0.138	1:0.138	
3o	Total area put in use under different heads at the end of year	15.743 Ha	12.03 Ha	
3p	Production of ROM mineral during last Five-year period, as applicable	2018-19= 66640 tons 2019-20= 259935 tons 2017-18 2018-19 2019-20 2020-21= 4,64,171 tons 2021-22= 4,99,997 tons 2021-22	2018-19= 65100 tons 2019-20= 251100 tons 2020-21= 229740 tons 2021-22=	

I/35758/2024

	2022-23	2022-23= 3,62,932 tons	2,60,000 tons 2022-23= 2,59,970 tons	
3q	General remarks of inspecting officer on method of	Lessee has carried out the development and production well within the proposal in the mining lease area, whereas the lessee could not have achieved the proposed target for production during the reporting year due want of environment clearance. However, the lessee has submitted a revised proposal of the review of mining plan and the same is under process.		

Solid Waste Management-Dumping

S.N.	Item	Proposals for, 2023-24	Actual work during 2023-24	Remark
4a	Separate dumping of topsoil, OB & mineral reject (Rule 33, 37)	Top soil: - Nil OB: - Over existing OB dump Mineral Reject:- Separate stack for Mineral reject is Proposed	Top soil: - Nil OB: - Over existing OB dump & Backfilled over Quarry-3 Mineral Reject: - Separate stack for Mineral reject are being carried out as Proposed	
4b	Location of topsoil, OB & mineral reject dumps	Top Soil: - No Proposal OB: - N-2424620-2424680 /E-319220 to 3193360 Mineral Reject: - N-2424031 to 2424385 E-319308 to 319372	Top Soil: - Nil OB: N-2424470-2424650 /E-319260 to 319360 Mineral Reject: - N-2424181 to 2424276 E-319309 to 319384	The lessee has not carried out the waste dumping as per the proposal. The lessee has carried out backfilling in Q-3 area which was not in the proposal in the approved document.
4c	Number of dumps within lease area and outside lease area	Within Lease Area: - 1 No. Outside Lease Area:- Nil	Within Lease Area: - 1 No. Outside Lease Area:- Nil	
4d	Location of dumps w.r.t. ultimate pit	Outside Ultimate Pit Limit	Outside Ultimate Pit	

I/35758/2024

	limit		Limit	
4e	Number of active & alive dumps	1 Nos of active dump	1 Nos of active dump	
4f	Number of dead dumps	Nil	Nil	
4g	Number of dumps stabilised	Nil	Nil	
4h	Whether Retaining wall or garland drain all along dumps are there	About 200m of retaining wall and 200m of garland was proposed.	Around 200m of both retaining wall and garland drain were carried out during the reporting year.	
4i	Length of Retaining wall or garland drain all along dump	About 200m of retaining wall and 200m of garland was proposed.	Around 200m of both retaining wall and garland drain were carried out during the reporting year.	
4j	Number of settling ponds	2 Nos	2 Nos	
4k	Specific comments of inspecting officer on waste dump management	The lessee has not carried out the solid waste management as per the proposal. The lessee has carried out backfilling in Q-3 area which was not in the proposal in the approved document. However, the lessee has submitted a revised proposal to this office for rectification of the same and the same is under process.		

Solid Waste Management-Backfilling

S.N.	Item	Proposals for, 2023-24	Actual work during 2023-24	Remark
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	Nil	About 0.90 ha area was backfilling during the reporting year over Quarry-3	
5b	Area under backfilling of mined out area	Nil	About 0.90 ha area was backfilling during the reporting year over Quarry-3	
5c	Concurrent use of topsoil for restoration	Nil	Nil	

I/35758/2024

	or rehabilitation of mined out area (Rule 36)			
5d	Total area fully reclaimed & rehabilitated	Nil	Nil	
5e	General remarks of inspecting officer on backfilling, reclamation etc	The lessee has carried out back filling over 0.90 ha area in quarry-3, which was not in the proposal. To rectify the same the lessee submitted a revised proposal and the same is under process.		

Progressive Mine Closure Plan

N.	Item	Proposals for, 2023-24	Actual work during 2023-24	Remark
6a	Whether Annual report on PMCP submitted on time and correctly - Rule 26(2).	As per Rule 26(2) Annual PMCP report to be submitted before 1st day of July of Every Year.	As the reporting year is yet to be completed and schedule date for submission for annual return is awaited till the date of inspection i.e. 16.05.2024.	
6b	Management of worked/mined out benches i) Area available for rehabilitation (ha) ii) Afforestation done (ha) iii) No. of saplings planted during the year iv) Cumulative no. of plants v) Any other specific method of rehabilitation vi) Cost incurred on watch & care during the year	i. Nil ii. Nil iii. Nil iv. Nil v. Nil vi. Nil	i. Nil ii. Nil iii. Nil iv. Nil v. Nil vi. Nil	
6c	Compliance on reclamation and rehabilitation by backfilling i) Voids available for	i. Nil ii. Nil iii. Nil	i. 0.90 ha in Q-3 carried out ii.waste material	The lessee has carried out back

I/35758/2024

	backfilling (L X B X D) ii) Void filled by waste/tailings iii) Afforestation on the backfilled area iv) Rehabilitation by making water reservoir v) Any other specific means	iv. Nil v. Nil	iii. Nil iv. Nil v. Nil	filling over 0.90 ha area in quarry-3, which was not in the proposal.
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	i) 2810 nos of saplings ii) 2023-24= 0.281 Ha. with 80% survival rate iii) Plantation	i) 2805 nos of saplings ii) 2023-24= 0.281 Ha. with 65% survival rate iii) Plantation	
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Air, water and Noise monitoring is proposed both in core and buffer zone.	Air, water and Noise monitoring has been carried out both in core and buffer zone	
6f	General remarks of inspecting officer on PMCP compliance & progressive closure operations	The lessee has carried out afforestation and environmental monitoring as per the proposal during the reporting year. The lessee has carried out back filling over 0.90 ha area in quarry-3, which was not in the proposal. To rectify the same the lessee submitted a revised proposal and the same is under process.		

Mineral Conservation

S.N.	Item	Proposals for, 2023-24	Actual work during 2023-24	Remark
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Separate stack yard is proposed for Saleable ore and Mineral Reject. Saleable Ore: +55 % Fe, Mineral Reject: - +45 to 55% Fe were proposed.	Separate stack yard for Saleable ore and Mineral Reject is maintained. Saleable Ore:+55 % Fe, Mineral Reject:- +45 to 55% Fe are being carried out.	
7b	Method of grade-wise mineral sorting i.e. manual	Mechanical	Mechanical	

1/35758/2024

	or mechanical			
7c	Different grade of mineral sorted out at mines	Saleable Ore: - +55% Fe Mineral Reject: - 45 to 55 % Fe	Saleable Ore: +55 % Fe, Mineral Reject: - +45 to 55% Fe.	
7d	Any beneficiation process at mines	Not proposed. Only dry beneficiation by means of Screening and Crushing units.	Not carried out. Only dry beneficiation by means of Screening and Crushing is carried out.	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	Saleable Ore: +55 % Fe, Mineral Reject: - +45 to 55% Fe stocks are being practiced. Further no beneficiation process was proposed. Only dry beneficiation by means of Screening and Crushing is carried out during the reporting year.		

Environment

S.N.	Item	Proposals for, 2023-24	Actual work during 2023-24	Remark
8a	Separate removal and utilization of topsoil (Rule 36)	Nil	Nil	
8b	Concurrent use or storage of topsoil	Nil	Nil	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 37)	Separate dumps for Overburden, waste rock, Rejects and fines is proposed	Generated Overburden, waste rock, Rejects and fines dumped separately at earmarked location as per proposal	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Nil	Nil	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Nil	The lessee has carried out back filling over 0.90 ha area in quarry-3, which was not in the proposal.	
8f	Baseline information on existence of plantation &	2810 nos of saplings will be planted over 0.281 Ha area with a survival rate of 80% within the lease area.	2805 nos of saplings have been planted over 0.281 Ha area with a survival rate of 65% within the lease area during the	

I/35758/2024

	additional Plantation done		reporting year.	
8g	Water sprinkling on roads to control airborne dust	Water Sprinkling is proposed on haul road to control airborne dust	As per the proposal Water sprinkling is carried out on haul road to control airborne dust.	
8h	General remarks of inspecting officer on aesthetic beauty in and around mines area	The lessee could not achieve the proposed production target during the reporting year and the lessee has carried out back filling over 0.90 ha area in quarry-3, which was not in the proposal. However, the lessee has planted 2805 no of saplings over 0.281 Ha area with a survival rate of 65% within the lease area and water sprinkling by water tanker over haul roads to control the airborne dust and to minimize the fugitive dust emission. This sustains the aesthetic beauty of the mine area.		

Compliance of Rule 45

S.N.	Item	COMMENTS		Remarks
9a	Status of submission of Monthly and Annual returns	M.R. Submitted upto..... Apr 2024 A.R. Submitted upto..... Not submitted for the current reporting year.		
S.N.	Item	Details given in A.R. for the year 2023-24	Observation of I/Officer	Remarks
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	NA	NA	As the reporting year is yet to be completed and schedule date for submission for annual return is awaited till the date of inspection i.e. 16.05.2024.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	NA	NA	As the reporting year is yet to be completed and schedule date for submission for annual return is awaited till the date of inspection i.e. 16.05.2024.
9d	Scrutiny of Annual return on afforestation	NA	NA	As the reporting year is yet to be completed and schedule date for submission for annual return is awaited till the date of inspection i.e. 16.05.2024.
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	NA	NA	As the reporting year is yet to be completed and schedule date for submission for annual

I/35758/2024

				return is awaited till the date of inspection i.e. 16.05.2024.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	NA	NA	As the reporting year is yet to be completed and schedule date for submission for annual return is awaited till the date of inspection i.e. 16.05.2024.
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	NA	NA	As the reporting year is yet to be completed and schedule date for submission for annual return is awaited till the date of inspection i.e. 16.05.2024.
9i	Scrutiny of Annual return on fixed assets	NA	NA	As the reporting year is yet to be completed and schedule date for submission for annual return is awaited till the date of inspection i.e. 16.05.2024.
9k	Scrutiny of Annual return on mining machineries	NA	NA	As the reporting year is yet to be completed and schedule date for submission for annual return is awaited till the date of inspection i.e. 16.05.2024.