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MCDR INSPECTION REPORT

Date of Inspection: 28.06.2024 General

S. N.	Particulars	Details	
1	Name of the Mine	Gandhamardan Iron Ore Mine, (Block-A)	
		Lease area: 618.576 Ha.	
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	Forest area: 519.7472 Ha.	
		Non Forest: 98.8288 Ha.	
3	Minecode	30ORI08016	
4	IBM Registration Number under rule 45 of MCDR, 1988	IBM/4269/2011	
		M/s The Odisha Mining Corporation Limited,	
5	Name of the lessee, Address, phone, email and fax number	A Govt. of Odisha undertaking,	
	number	OMC House, Unit 5, Post Box No.34,	
		Bhubaneswar-751001, Odisha.	
6	Village	Suakati, Daunla and Gandhamardan PRF	
7	Taluka/Mandal	Keonjhar Sadar	
8	District	Keonjhar	
9	Pincode	758018	
10	State	Odisha	
11	Post office	Suakati	
12	Nearest police station	Suakati	
13	Nearest Railway station	Kendujhargarh	
14	Date of Grant of Mining Lease	21.05.1963	
15	Date of Execution	21.05.1963	
16	Date of opening of Mine	21.05.1963	
17	Date of first Renewal, if applicable and its period & expiry	21.05.1993 to 20.05.2013	
18	Date of second Renewal, if applicable and its period & expiry	21.05.2013 to 20.05.2033	
19	Date of submission of renewal application if Mining Operations are continuing under deemed extension	1 st Renewal Application – 06.04.1992 2 nd Renewal Application – 01.05.2012	

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	20	Name of the Naminated Or may with Address phone	Shri Balwant Singh (IAS)
:	20	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	OMC House, Post Box No.34,
		• •	Bhubaneswar-751001, Odisha.
			Shri Anurag Ojha
	21	Name of the Mine Agent with Address, phone, email,	At/P.O Suakati, District - Keonjhar,
	21	fax number and date of appointment	State - Odisha, PIN - 758018
			Date of Appointment :19/06/2020
			Shri Anil Kumar Sahoo
	22	Name of the Mines Manager with Address, phone,	At/P.O Suakati, District - Keonjhar,
		email, fax number and date of appointment in mines	State - Odisha, PIN - 758018
			Date of Appointment :02/04/2021
			Shri Bibhisan Majhi
	23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	B. Tech in Mining Engineering
:			At/P.O Suakati, District - Keonjhar,
			State - Odisha, PIN - 758018
			Date of Appointment :22/06/2021
	24		Mrs. Nilu Iraqi
		Name of the Geologist, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	M. SC. Applied Geology
			At/P.O Suakati, District - Keonjhar,
			State - Odisha, PIN - 758018
			Date of Appointment :12/08/2023
			Mining Engineer:
			Shri Bibhisan Majhi
			B.Tech in Mining Engineering
			At/P.O Suakati, District - Keonjhar,
			State - Odisha, PIN - 758018
	D.F.	Whether Geologist and Mining Engineer appointed	Date of Appointment :22/06/2021
	25	in mines satisfy the rule 55& carrying out their duties as per rule 56 & 57.	Geologist:
			Mrs. Nilu Iraqi
			M. SC. Applied Geology
			At/P.O Suakati, District - Keonjhar,
			State - Odisha, PIN - 758018
			Date of Appointment :12/08/2023
	26	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in	14.02.2023

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24	approval letter, if any.	
27	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	Nil
28	Mineral(s) granted in lease and proved for mining	Iron
29	Method of Mining(Opencast, Underground)	Opencast
30	Category (Fully Mechanised, Others or Manual)	Fully Mechanized
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	73 no of borehole	73 nos of bore hole were from the remaining proposal of the previous year i.e. 2022-23
1b	Exploration over lease area for Geological axis 1 or 2.	Nil	80 Ha in G1	
1c	Exploration Agency & Expenditure in lakh Rupees during the year		M/s. Maheswari Mining Pvt. Ltd Rs.10340077.	
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	Nil	
1e	Balance reserves as per latest approved document		23.501 Million Tonnes	
1f	General remarks of inspecting officer on geology, exploration etc.	There was no propose year. However, the learner remaining exploration reporting year and coexploration.	ssee has drilled 7 n from the FY	3 no of bore hole i.e. 2022-23 during this

Development

S.N.	Item	Proposals for, 2023- 24	Actual work during 2023- 24	Remark
2a	Location of development w.r.t. lease area	Float Quarry N 2390418- N2391118/ E	Float Quarry N 2390458- N2390969/ E	Hill top Quarry couldn't be worked due to want of FC.

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			Hill Top Quarry N 2392226- N2392362/ E 345164- E 345277	344159- E 344477 Hill Top Quarry No Working	
	2b	Separate benches in topsoil, overburden and mineral (Rule 15)	No of Benches. Top Soil- 0 Overburden-2 Mineral- 2	No of Benches. Top Soil- 0 Overburden-1 Mineral- 1	
	2c	Stripping ratio or ore to OB ratio	Float Quarry: 1:1.332 Hill Top Quarry 1:0.145	Float Quarry: 1:0.839 Hill Top Quarry: Nil	
	2d	Quantity of topsoil generation in m3	Nil	Nil	
	2e	Quantity of overburden generation in m3	228196 Cum	53656.255 Cum	Hill top Quarry couldn't be worked due to want of FC. So there was less production resulting in less OB generation.
	2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	There was proposal for 2 quarries i.e. Float Quarry a Top quarry for development and production durreporting year. However, the lessee could car development and production from Float Quarry of Hill top Quarry couldn't be worked due to want of clearance. Further the lessee has submitted modificate approved review of mining plan to this office with a proposal for its approval and the same is under process.		oduction during the see could carry out pat Quarry only and sue to want of forest itted modification of office with a revised

Exploitation

S.N.	Item	Proposals for, 2023- 24	Actual work during 2023-24	Remark
3a	Number of pits proposed for production	02	01	Hill top Quarry couldn't be worked due to want of FC.
3b	Quantity of ROM mineral production proposed	350000 Tons	45000 Tons	The shortfall of 2,00,000 tons was proposed from Hill top Quarry which couldn't be worked due to want of FC.
3c	Recovery of salable/usable mineral from ROM production	226626.67 Tons	45000 Tons	
3d	Quantity of mineral reject generation	123373.33 Tons	Nil	

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2 4				
3e	Grade of mineral reject generation and threshold value declared	45-55 Fe%, Threshold Value of Fe- 45%	45-55 Fe%, Threshold Value of Fe- 45%	
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	Mechanized	Mechanized	
3i	Any analysis or beneficiation study proposed & carried out for subgrade mineral and reject	Nil	Nil	
3j	Provision of drilling & blasting in mineral benches	115mm dia deep hole drilling and blasting using NONEL	115mm dia deep hole drilling and blasting using NONEL	
3k	Provision of mining machineries in mineral benches	Excavator and Dumper combination.	Excavator and Dumper combination.	
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Float Quarry Height: 6Mtr Width: 10Mtr Hill Top Quarry Height: 10 Mtr Width: 15Mtr	Float Quarry Height: 6Mtr Width: 8Mtr Hill Top Quarry No Working	Hill top Quarry couldn't be worked due to want of FC.
3m	Total area covered under excavation/pits	62.48 Ha	61.61 Ha	Hill top Quarry couldn't be worked due to want of FC.
3n	Ore to OB ratio for the pit/mine during the year	Float Quarry 1:1.332 Hill Top Quarry 1:0.145	Float Quarry 1:0.839 Hill Top Quarry NA	Hill top Quarry not working due to want of FC
30	Total area put in use under different heads at the end of year	159.56 Ha	111.35 Ha	Hill top Quarry couldn't be worked due to want of FC.

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		FY 2018-19:	FY 2018-19:	Ì

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3	p	Production of ROM mineral during last six-year period, as applicable 2017-18 2018-19 2019-20 2020-21 2021-22 2022-23	FY 2018-19: 350000 MT FY 2019-20: 350000 MT FY 2020-21: 350000 MT FY 2021-22: 350000 MT FY 2022-23:	FY 2018-19: 179000 MT FY 2019-20: 220900 MT FY 2020-21: 155800 MT FY 2021-22: 164700 MT FY 2022-23:		
			350000 MT	45000 MT		
36	q	General remarks of inspecting officer on method of	The lessee has carried out the production and development proposal within the proposal but could not carried out as per the proposal and could not achieved the proposed production target. There was proposal for 2 quarries i.e. Float Quarry and Hill Top quarry for development and production during the reporting year. However, the lessee could carry out development and production from Float Quarry only and Hill top Quarry couldn't be worked due to want of forest clearance. Further the lessee has submitted modification of approved review of mining plan to this office with a revised proposal for its approval 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)	No Such Proposal	Carried out as per the proposal during the reporting year.	
4b	Location of topsoil, OB & mineral reject dumps	No Such Proposal	Carried out as per the proposal during the reporting year.	
4c	Number of dumps within lease area and outside lease area	Within Lease: 02 Outside of Lease Area: Nil	Within Lease: 02 Outside of Lease Area: Nil	
4d	Location of dumps w.r.t. ultimate pit limit	Outside UPL	Outside UPL	
4e	Number of active & alive dumps	Nil	Nil	
4f	Number of dead dumps	02	02	

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4g	Number of dumps stabilished	Nil	Nil		
4h	Whether Retaining wall or garland drain all along dumps are there	Retaining wall of 283 mtr. and garland drain of 281 mtr. Have been proposed.	Retaining wall of 100 mtr. and garland drain of 90 mtr. Have been carried out during the reporting year.	As Hill top Quarry couldn't be worked due to want of FC, the proposal could not be achieved during the reporting year.	
4i	Length of Retaining wall or garland drain all along dump	Retaining wall of 283 mtr. and garland drain of 281 mtr. Have been proposed.	Retaining wall of 100 mtr. and garland drain of 90 mtr. Have been carried out during the reporting year.	As Hill top Quarry couldn't be worked due to want of FC, the proposal could not be achieved during the reporting year.	
4j	Number of settling ponds	Nil	17 Nos.		
4k	Specific comments of inspecting officer on waste dump management	The lessee could not carried out retaining wall and garland drain as per the proposal and could not achieved the proposed target. There was proposal for 2 quarries i.e. Float Quarry and Hill Top quarry for development and production and allied activities during the reporting year. However, the lessee could carry out development and production and allied activities from Float Quarry only and Hill top Quarry couldn't be worked due to want of forest clearance. Further the lessee has submitted modification of approved review of mining plan to this office with a revised proposal for its approval 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	Float Quarry: 3.871 Ha proposed	Float Quarry: 0.90 ha. carried out	Partially carried out. Due to less production, Less waste generated.	
5b	Area under backfilling of mined out area	Float Quarry: 3.871 Ha proposed	Float Quarry: 0.90 ha. carried out	Partially carried out. Due to less production, Less waste generated.	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 36)	No Such Proposal	Nil	Hill top Quarry not working due to want of FC	
5d	Total area fully reclaimed & rehabilitated	No Such Proposal	Nil		
5e	General remarks of inspecting officer on backfilling, reclamation etc	~ nronosal during the renorting year - There was nronosal to			

1/36623/2024	reporting year and generated waste have to backfilled in
	Float Quarry. However, the lessee could carry out
	development and production and allied activities from Float
	Quarry only and Hill top Quarry couldn't be worked due to
	want of forest clearance. Hence could not able to achieved
	the proposed backfilling. Further the lessee has submitted
	modification of approved review of mining plan to this
	office with a revised proposal for its approval and the same

is under process.

Progressive Mine Closure Plan

S.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. 28.06.2024.	
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) No such Proposal ii) No such Proposal iii) No such Proposal iv) No such Proposal v) No such Proposal vi) No such Proposal vi) No such Proposal	i) Nil ii) Nil iii) Nil iv) Nil v) Nil vi) Nil	
6c	Compliance on reclamation and rehabilitation by backfilling i) Voids available for 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	i) 3.871 Ha ii) Waste material iii) Nil iv) Nil v) Nil	i) 0.90 Ha ii) Waste material iii) Nil iv) Nil v) Nil	
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha)	i) Nil ii) Nil iii) Nil	i) 4612 no of saplings ii) 3.283 Ha. iii) 95% of survival rate	

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2	1	iii) Method of rehabilitation			
	6e	Compliance of Environmental monitoring (core zone & buffer zone)	Air, Noise and Water quality monitoring will be done during the year within the lease area.	Water quality monitoring will	
	6f	General remarks of inspecting officer on PMCP compliance & progressive closure operations	the proposal during also been carried or lessee has not carried reporting year. Only Float Quarry. There was proposal Top quarry for deactivities during the have to backfilled it could carry out de	the reporting year ut within the leased out the backfilling partially carried of for 2 quarries i.e. It welopment and preserved proporting year at a Float Quarry.	tal monitoring as per r and plantation has a area. However, the g proposal during the out the backfilling of Float Quarry and Hill roduction and allied and generated waste However, the lessee roduction and allied allied and allied and allied allied all allied and allied allied all allied allied all all all allied allied all all allied all all all all all all al
			couldn't be worked could not able to Further the lessee h	due to want of for achieved the p as submitted modi an to this office wi	nd Hill top Quarry rest clearance. Hence roposed backfilling. fication of approved th a revised proposal process.

Mineral Conservation

S.N.	Item	Proposals for, 2023- 24	Actual work during 2023-24	Remark		
		Saleable Ore: +55 %	Saleable Ore:+55 %			
	ROM Mineral dispatch or	Fe,	Fe, Mineral Reject:-			
7a	grade-wise sorting within	Mineral Reject: - +45	+45 to 55% Fe are			
	lease area	to 55% Fe were	being carried out.			
		proposed.				
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Mechanized	Mechanized			
		Saleable Ore: +55 %	Saleable Ore: +55 %			
7c	Different grade of mineral	Fe,	Fe,			
/ (sorted out at mines	Mineral Reject: - +45	Mineral Reject: - +45			
		to 55% Fe	to 55% Fe			
		Nil	Nil	No Such		
	Any beneficiation process at			proposal		
7d	mines			during the		
				reporting		
				year.		
		Saleable Ore: +55 %	Fe, Mineral Reject: - +	45 to 55% Fe		
	General remarks of inspecting officer on Mineral	stocks are being pract	iced. Further no benefic	ciation process		
7e	conservation & beneficiation	was proposed. Only crushing and screening are being carried				
	issues	out during the reportin	g year. However, the le	year. However, the lessee could not		
		carry out the proposal for the reporting year. As there was				

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	, ,	v	v		,,	_	v	4	

proposal for 2 quarries i.e. Float Quarry and Hill Top quarry for development and production and allied activities during the reporting year. However, the lessee could carry out development and production and allied activities from Float Quarry only and Hill top Quarry couldn't be worked due to want of forest clearance. Further the lessee has submitted modification of approved review of mining plan to this office with a revised proposal for its approval and the same is under process.

Environment

S.N.	Item	Proposals for, 2023- 24	Actual work during 2023-24	Remark
8a	Separate removal and utilization of topsoil (Rule 36)	No such proposal for the reporting year.	Nil	
8b	Concurrent use or storage of topsoil	No such proposal for the reporting year.	Nil	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 37)	Separate dumps for overburden and mineral reject stacks, waste rocks are proposed and subsequently OB will be backfilled in the exhausted part of Float Quarry.	Separate dumps for Over-burden and mineral stacks and other waste rocks are being practiced and partially backfilled over 0.90 Ha. area in the exhausted part of Float Quarry.	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Separate dumps for overburden and mineral reject stacks, waste rocks are proposed and subsequently OB will be backfilled in the exhausted part of Float Quarry.	Separate dumps for Over-burden and mineral stacks and other waste rocks are being practiced and partially backfilled over 0.90 Ha. area in the exhausted part of Float Quarry.	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Backfilling of 3.871 ha area in Float quarry over the exhausted part has been proposed	Backfilling of only 0.90 ha area in Float quarry over the exhausted part has been carried out during the reporting year.	
8f	Baseline information on existence of plantation & additional Plantation done	No Such Proposal	4612 Nos of saplings have been planted over 3.283 Ha area with a survival rate of 95% within the lease area during the reporting	

1/36623/202	4		year.			
			4612	Nos	of	
			caplinge	havo	hoon	

٦	T			year.			
	8g	Survival rate	No Such Proposal	4612 Nos of saplings have been planted over 3.283 Ha area with a survival rate of 95% within the lease area during the reporting year.			
	8h	Water sprinkling on roads to control airborne dust	Regular sprinkling of water on Haul roads and transport roads using Water tanker to suppress the dust.	Regular sprinkling of water on Haul roads and transport roads using mobile water tanker (10 KL capacity: 2 nos. & 9 KL Capacity: 1 no.) to suppress the dust are in practice.			
	8i	General remarks of inspecting officer on aesthetic beauty in and around mines area					

Compliance of Rule 45

S.N.	Item	COM	IMENTS	Remarks
9a	Status of submission of Monthly and Annual returns	M.R. Submitted up to A.R. Submitted up to		
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	Although the reporting year has been completed, the lessee has not submitted the AR for the reporting year and schedule date for submission for annual return is awaited till the date of inspection i.e. 28.06.2024.

1/36623/202	4	Cametines of	NIA	NIA	Although the venerting week
., 33323, 232	9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	NA	NA	Although the reporting year has been completed, the lessee has not submitted the AR for the reporting year and schedule date for submission for annual return is awaited till the date of inspection i.e. 28.06.2024.
	9d	Scrutiny of Annual return on afforestation	NA	NA	Although the reporting year has been completed, the lessee has not submitted the AR for the reporting year and schedule date for submission for annual return is awaited till the date of inspection i.e. 28.06.2024.
	9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	NA	NA	Although the reporting year has been completed, the lessee has not submitted the AR for the reporting year and schedule date for submission for annual return is awaited till the date of inspection i.e. 28.06.2024.
	9f	Scrutiny of Annual return on ROM stock and/or graded ore	NA	NA	Although the reporting year has been completed, the lessee has not submitted the AR for the reporting year and schedule date for submission for annual return is awaited till the date of inspection i.e. 28.06.2024.
	9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	NA	NA	Although the reporting year has been completed, the lessee has not submitted the AR for the reporting year and schedule date for submission for annual return is awaited till the date of inspection i.e. 28.06.2024.
	9i	Scrutiny of Annual return on fixed assets	NA	NA	Although the reporting year has been completed, the lessee has not submitted the AR for the reporting year and schedule date for submission for annual return is awaited till the date of inspection i.e. 28.06.2024.
	9k	Scrutiny of Annual return on mining machineries	NA	NA	Although the reporting year has been completed, the lessee has not submitted the

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			and schedule date for
			submission for annual return
			is awaited till the date of
			inspection i.e. 28.06.2024.