#### INDIAN BUREAU OF MINES MINERALS DEVELOPMENT AND REGULATION DIVISION MCDR INSPECTION REPORT BHUBANESWAR REGIONAL OFFICE

### General:

SL. No.	Particulars	Details
1	Name of the Mine	Kurmitar Iron Ore Mine
2	Date of inspection	13/03/2024
3	Name of inspecting officer	Prashant S Hegde, RMG
4	Name accompanying mine officials	S/Shri Pradyumna Kumar Nayak, Agent, Pradip Kumar Sahoo, Sr. Manager (Mining), Arun Balabantaroy, Mines Manager, Sanjib Kumar Pradhan, Mining Engineer, Dileswar Kishan, Geologist and other mine officials
5	Last date of Inspection & Officer	10/02/2023 Shri V.P. Deshpande, ACOM
6	Total Lease Area (Ha) with breakup of Non-forest and forest land	651 Ha. (Under Forest )
7	Minecode	30ORI13009
8	IBM Registration Number under rule 45 of MCDR, 2017	IBM/4269/2011
9	Name of the lessee, Address, phone, email and fax number	M/s Odisha Mining Corporation Ltd. A Govt. of Odisha Undertaking OMC House,Unit-5, Post Box No34,Bhubaneswar Phone No-06742392778 Email: info@odishamining.in Fax No-06742396889
10	Village	Rantha
11	Taluka/Mandal	Bonaigarh
11	District	Sundargarh
13	Pincode	770041
13	State	Odisha
15	Post office	Barsuan
16	Nearest police station	Lahunipara
10	Nearest Railway station	Barsuan
18	Date of Grant of Mining Lease	29.04.1965
10	Date of Execution	29.04.1965
20	Date of opening of Mine	29.04.1965
20	Date of opening of white Date of expiry	28.04.2035
22	Name of the <b>Nominated Owner</b> with	Shri Balwant Singh, IAS,
22	Address, phone, email, fax number and date of appointment	Managing Director & Nominated Owner of M/s Odisha Mining Corporation Limited OMC HOUSE, POST BOX NO-34, BHUBANESWAR, ODISHA-751001 PH:06742377401, E-Mail: md@odishamining.in D.O.A-08.01.2021
23	Name of the <b>Mine Agent</b> with Address, phone, email, fax number and date of appointment	Sri Pradyumna Kumar Nayak Regional Office, Odisha Mining Corporation Ltd. P.O Koira, Dist Sundargarh

		DIN 770040
		PIN - 770048
		MOB NO - 9437795039
		E-MAIL: pradyumna.nayak@odishamining.in
		Date of Appointment :30.09.2022
24	Name of the Mines Manager with	Sri Arun Balabantaroy
	Address, mobile no, email, fax	Office of Mines Manager,
	number and date of appointment in	P.O Barsuan, Dist Sundargarh
	mine	PIN – 770041
		Mobile No: 9438045844
		Email:- abalabantaroy@odishamining.in
		Date of Appointment :- 30.09.2022
25	Name of the <b>Mining Engineer</b> ,	Sri Sanjib Kumar Pradhan
	Qualification and total experience	B. Tech. in Mining Engineering
	with Address, mobile no, email,	At - Khandadhar
	fax/phone number and date of	P.O Barsuan, Dist Sundargarh
	appointment in mine	PIN – 770041
		Mobile No: 7327961430
		Email:- sanjib.pradhan@odishamining.in
		Date of Appointment :- 10.07.2021
26	Name of the <b>Geologist</b> , Qualification	Sri Dileswar Kishan
20	and total experience with Address,	M.Sc (Geology)
	mobile no, email, fax number and	At - Khandadhar
	date of appointment in mine	P.O Barsuan, Dist Sundargarh
		PIN - 770041
		Mobile No: 8280050076
		Email:- Dileswar.kishan@odishamining.in
0.7		Date of Appointment :- 21.08.2023
27	Date of Approval of Mining	Approved Modified Review of Mining Plan
	Plan/Review of Mining Plan/ their	Letter No.
	modifications with five-year period	MRMP/A/30-ORI/BHU/2021-22/1410 dtd.
	and specific condition in approval	06.01.2022 for period 2021-22 to 2024-25.
	letter, if any.	(2145)
28	Mineral (s) granted in lease and	Iron ore & Mn-ore ( Mining of Iron ore
	proved for mining	proposals only)
29	Method of Mining(Opencast,	
	Underground)	Opencast
30	Category (Fully Mechanised, Others	
	or Manual)	Fully Mechanized
31	Captive/Non Captive	Non-Captive
32	Present EC Capacity	6 MTPA
52	Fresent EC Capacity	UWIIFA

## OBSERVATIONS/COMMENTS OF INSPECTING OFFICER:

## 1)Exploration:---

SL.No	Item	Proposals (FY 2022-23)	Actual work	Remarks
1a	Backlog of previous year	FY         21-22:         24           Nos of core BHs;         FY         22-23:         18           Nos of core BHs;         FH         FH         FH         FH	Nos of core BHs with 1592	drilled was due to

1b	Exploration over lease area for Geological axis 1 or 2.	FY 23-24: NIL; (100mX 100M grid with each 100 m depth) Conversion of entire area under G-1	FY 22-23: 20 Nos of core BHs with 731 total meterage; G-1: 239.714 Ha; Proved Non- Mineralized area area (under-G2 / G- 3): 411.286 Ha	Potentially mineralized area explored in G-1 level (239.7 Ha)
1c	Exploration Agency & Expenditure in lakh Rupees during the year	NA	M/s Maheswari Mining Pvt. Ltd. Expenditure during the year 39.70 Lakhs	NIL
1d	Balance area to be explored to bring Geological axis in 1 or 2	NA	NIL; Potentially mineralized area already explored in G-1 level.	
1e	Balance reserves as on 01.04.2023	NA	Iron Ore (+45 % Fe) reserves (111+122) : 170.9 million tonnes	Based on approved Modified RMP dated 06/01/2022.
1f:	General remarks of inspecting Officer on Geology, exploration etc.	The lease area is a part of major Horse-shoe shaped Singhbhum-Bonai-Keonjhar iron ore belt/series/formation. The deposit forms a northerly plunging synclinorium. The litho-unit observed at ML as follows: Laterite, Iron ore (HLO, SLO, HMO & blue dust), BHJ/BHQ,Shale. Based on exploration data, the configuration of ore body as follows. 2700m X 950m X 70m Potentially mineralized area already explored in G-1 level.		

## 2)Development:--

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SL.	Item	Proposals (FY 2022-23)	Actual work	Remarks
No.				
2a	Location of developme nt w.r.t. lease area	QUARRY-II: 2406275 N to 2407250 N, 309350 E to 310155 E	QUARRY-II: 2406280 N to 2407240 N, 309358 E to 310149 E (Broadly as per the proposals)	
2b	Separate benches in topsoil, overburden and mineral	Separate benches in overburden and minerals ; No top-soil generation;	As per proposals	
2c	Stripping	1:0.12	1:0.10	Ratio in

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	ratio or ore to OB ratio			tonnes/m3 BD:2;
2d	Quantity of topsoil generation in m3	No proposals	Nil	
2e	Quantity of overburden generation in m3	700,000 m3	323,236 m3	NIL
2f	General remarks of inspecting Officer on developme nt of pit w.r.t. type of deposit etc	Development is being carried o RMP.	ut within the limit as per approv	ed Modified

# 3)Exploitation:--

SL.No.	Item	Proposals (FY 2022-23)	Actual work	Remarks
За	Number of pits proposed for production	Quarry-II (01 no. of pit)	Quarry-II (01 no. of pit)	NIL
3b	Quantity of ROM mineral production proposed	6,000,000 Tonnes (In-situ) + Dump-Handling : 2,000,000 tonnes (WD-1 & WD-2)	3,226,000 Tonnes (In-situ) + Dump-Handling : 785,000 tonnes (WD-1 & WD-2) = 4,011,000 Tonnes	As reported Less production was due to local labour problem/issue
3с	Recovery of salable/usab le mineral from ROM production	94 % i.e. 5,650,000 Tonnes (+ Dump-Handling : 70 % 1,400,000 tonnes (WD-1 & WD-2)	3,844,100 Tonnes (95.8 %)	NIL
3d	Quantity of mineral reject generation	350,000 Tonnes	166,900 Tonnes (51-55 % Fe)	NIL
Зе	Grade of mineral reject generation and threshold value	MR: 45 to 55 % Fe	MR: 45 to 55 % Fe	Threshold value of Iron Ore : +45 % Fe

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	declared			
3f	Quantity of sub-grade mineral generation	Same as para 3d		Utilization of Sub-grade mineral / mineral reject
3g	Grade of sub-grade mineral generation	Same as para 3e		During FY- 2022-23:NIL
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized	Mechanized	
3i	Any analysis or beneficiatio n study proposed & carried out for sub- grade mineral and reject	Nil	NIL	
Зј	Provision of drilling & blasting in mineral benches	Deep hole drilling blasting of 115mm-150 mm dia. with emulsion/slurry/SME. Initiation by nonel/detonating fuse.	As per proposals.	NIL
3k	Provision of mining machineries in mineral benches	Yes, mining by Excavators & Dumpers Combination.	As per proposals.	
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	10m bench height with 10- 15 m width.	As per proposals.	
3m	Total area covered under excavation/ pits	76.871 Ha.	71.09 Ha.	
3n	Ore to OB ratio for the pit/mine during the	1:0.12	1:0.10	Ratio in tonnes/m3 BD:2;

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	year						
30	Total area put in use under	Particulars	Total Area(Ha) at the end of Plan period	Particula	rs Tota Area(Ha the end FY 202	a) at l of	NIL
	different heads at the end of year	Area under Mining	76.871	Area und Mining	1 710	9	
		Overburden/ Waste dumping	77.380	Overburd Waste dumping	46.09	)7	
		Mineral Storage	35.065	Minera Storage	1050	)1	
		Area Occupied Infrastructure, plants, buildings, roads etc	24.947	Area Occuj Infrastruct plants, buildings roads et	ure, 22.72 S,	24	
Зр	Production	2018-19: 6.97		2018-19:	2.399		Unit: In
	of ROM	2019-20: 6.27		2019-20:	2.399		Million
	mineral	2020-21:6		2020-21:			tonnes;
	during last	2021-22: 7.4		2021-22:			
	five-years	2022-23: 7.4		2022-23:			(Inclusive of
	period, as	2023-24: 7.4			4.66 (Up to		dump
	applicable	(Unit: In Milli		Feb-2024	.)		working)
		Inclusive of du working)	ımp				
3q	General rema method of m	arks of inspectir ining etc	ng Officer on	modified	is being car RMP. Du	mp w	nized mining s per approved orking is also the proposal
				within p	evailing EC	limit.	

# 4)Solid Waste Management-Dumping:--

SL.No	Item	Proposals (FY 2022-23)	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject	No Top soil Generation; Separate stacking/dumping Mineral reject; OB Dumping proposed at new waste dump-WD-3 at North Eastern side ML	Broadly as per the proposals. Violation pointed out for not proper development of terraces at OB waste Dump (WD-3).	

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4b	Location of topsoil, OB & mineral reject dumps	Top Soil- NIL OB:-2405988 N to 2406516 N 311099 E to 312044 E Mineral Reject:-2405820 N to 2406288N 311045 E to 310180E	Location broadly as per the proposals. Violation pointed out for not proper development of terraces at OB waste Dump (WD-3).	NIL
4c	Number of dumps within lease area and outside lease area	Within lease-3 Nos Out-side lease-NIL	Within lease-3 Nos Out- side lease-NIL	NIL.
4d	Location of dumps w.r.t. ultimate pit limit	Proposed Out-side UPL (WD-3)	As per the proposals.	NIL.
4e	Number of active & alive dumps	One active dump (WD-3) only. Remaining two Dumps (WD-1 & WD-2) proposed for dump working	As per the proposals.	NIL
4f	Number of dead dumps	NIL	NIL	NIL
4g	Number of dumps stabilished	No such proposals	NIL	
4h	Whether Retaining wall or garland drain all along dumps are there	Yes; Retaining wall or garland drain all along dump	Constructed Retaining wall or garland drains all along dump were not adequate. Violation pointed out.	
4i	Length of Retaining wall or garland drain all along dump	Retaining wall: 1735 m Garland drain :1370 m	Retaining wall: 260 m Garland drain :260 m (along Toe of dumps & stocks)	Violation pointed out for deviation.
4j	Number of settling ponds	NIL	NIL	
4k	Specific	Overburden wastes manag	ement is not being carried out	as per the

comments of inspecting Officer on waste dump managemen	approved proposals. Violation pointed out for deviation in development of terraces for dump as well as deviation in constructions of retaining wall & garland drain at toe of dumps/stocks against the proposals.
t	

## 5)Solid Waste Management-Backfilling:--

SL.No	Item	Proposals (FY 2022-23)	Actual work	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	No such proposals.	NIL	
5b	Area under backfilling of mined out area	NA	NIL	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area	NA	NIL	
5d	Total area fully reclaimed & rehabilitated	NA	NIL	
5e	General remarks of inspecting Officer on backfilling and reclamation etc	Existing pits w ore/mineral not e	vere not matured by exhausted.	v backfilling as

## 6)Progressive Mine Closure Plan:---

SL.N.	Item	Proposals (FY 2022-23)	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly - Rule 26(2). (Hard copy same provided)	Before 1 <sup>st</sup> July 2023	Submitted on time	NIL
6b	Management of worked/ mined out benches/dumps 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	i)Nil ii) 3 Ha iii) 3600 nos iv) NA v)Plantation vi) NA	i) Nil ii) 4.0 Ha. iii) 1200 nos. (Safety zone plantation) + 3600 nos. (Outside Lease area) iv) 16,000 nos. (Within lease area) v) Plantation vi) Rs. 16,76,400	NIL

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	watch & care during the year			
6с	Compliance on reclamation and rehabilitation by	i)NIL	i)NIL	No such reclamation and
	backfilling i) Voids available for backfilling (L X B X D)	ii) NIL	ii) NIL	rehabilitation by backfilling proposals.
	ii) Void filled by waste/tailings	iii)NIL	iii)NIL	
	iii) Afforestation on the backfilled area	iv)NIL	iv)NIL	
	<ul><li>iv) Rehabilitation by</li><li>making water reservoir</li><li>v) Any other specific</li><li>means</li></ul>	v)NIL	v)NIL	
6d	Compliance of Rehabilitation of waste land within lease	i)NIL	i)NIL	
	<ul><li>i) Afforestation</li><li>ii) Area rehabilitated</li><li>(ha)</li><li>iii) Method of</li><li>rehabilitation</li></ul>	ii)Nil iii)Nil	ii)Nil iii)Nil	NIL
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Environmental monitoring in Core zone and buffer zone will be as per MOEF &CC and SPCB guidelines.	Environmental monitoring in Core zone and buffer zone was carried out as per the proposals and parameters are within the limit.	NIL
6f	General remarks of inspecting Officer on PMCP compliance & progressive closure operation etc	0	nenting PMCP proposal	s as per

## 7)Mineral Conservation:---

SL.No	Item	Proposals ((FY 2022-23)	Actual work	Remark
•				S
7a	ROM Mineral dispatch or	Grade wise sorting to Fines		NIL
-	grade-wise sorting within	& CLO by crushing and	As per proposals	
	lease area	screening within lease area.		
7b	Method of grade-wise			NIL
	mineral sorting i.e.	Mechanical	Mechanical	
	manual or mechanica			
	1			
7c	Different grade of	Iron Ore of different size	As per proposals	

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	mineral sorted out at mines	(Fines & CLO) and Grade wise sorting and dispatched (Fine Iron Grade range- 55 to 65% Fe) and CLO (5-18 mm &10-40 mm size)	(Fine Iron Grade range- 51 to 55 % Fe (MR) and 60- below 62% Fe) and CLO 62 to 65 % Fe (10-40 mm size)	Violation pointed for deviation in Lumps and fines ratio as against the proposals
7d	Any beneficiation process at mines	None Except dry crushing & screening	As per proposals.	NIL
7e	General remarks of inspecting Officer on mineral conservation & beneficiation issues	Grade-wise soring to fines/CLO & dispatches of ore/mineral as per the proposals and there is no mineral conservation issue. The construction of closed belt conveyor system (pipeline) ore transport system (outside ML) was under progress. The violation pointed for deviation in generation of lumps. The 17 % lumps generated during FY 2022-23 against the proposals of 39 % Lumps from In-situ ore and 11 % from waste dump re-handlings.		

## 8)Environment:--

SL.No.	Item	Proposals (FY 2022-23)	Actual work	Remarks
8a	Separate removal and utilization of topsoil	No such proposals.	Nil	
8b	Concurrent use or storage of topsoil	No such proposals.	Nil	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines	Separate dumping of OB wastes & mineral rejects proposed	Carried out as per approved proposals.	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No such proposals	NIL	Nil
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No such proposals	NIL	Nil
8f	Baseline information on existence of plantation & additional plantation done	Plantation of 3600 Nos of saplings proposed.	1200 nos saplings planted within ML and 3600 nos outside ML area during year 22-23 with cumulative 16,000 nos of saplings.	
8g	Survival rate	NA	94%	
8h	Water sprinkling on roads to control airborne	Regular sprinkling of	Carried out as per the proposals.	

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	dust	water on Haul roads, crushing & screening plant site and dump location etc using Water tanker to suppress the dust.
8i	General remarks of inspecting Officer on aesthetic beauty in & around mines area.	Aesthetic beauty in & around mines area is good as lessee implementing the PMCP proposal and carried out plantation as per the proposals.

# 9)Compliance of Rule 45

SL.No.	Item	COMMENTS	Remarks.	
9a	Status of submission of Monthly and Annual returns	Regularly submitting the MRs/ARs on-time.		Nil
S.N.	Item	Details GIVEN in A.R.	Actual in field	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mines Manager: Arun Balabantaroy Mining Engineer: Sri Sanjib Kumar Pradhan Geologist: Shri Dharanidhar Naik	Actual also the same. (geologist changed subsequently)	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	<ol> <li>Covered under current (O/C) Workings- 71.09 Ha</li> <li>Used for Waste Disposal- 46.097 Ha</li> <li>Occupied by plant, buildings, residential, welfare, buildings and roads- 22.724 Ha</li> <li>Other Purpose (including Mineral Storage)- 10.501 Ha</li> </ol>	Actual also as per AR.	
9d	Scrutiny of Annual return on afforestation	1200 nos (WML) + 3600 nos (OML)	Actual also as per AR	
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	During year-22-23 (Generated)IronIronUnprocessedNILOre (45-55 %Fe)IronIronProcessed Ore166900 tonnes(45-55 % Fe)Image: Colored state s	Actual also as per AR .	
9f	Scrutiny of Annual return on ROM	As on 31.03.2023 tonnes Stock Iron ROM: NIL	Appear to be correct.	Lessee has advised to

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	stock and/or graded				enter the
	ore	Lumps closing stock in			production
		tonr	-		proposals
		51%- below 55 % Fe	100,000		at MRs/AR.
		Fines closin	g stock in		
		tonr	-		
		51%- below 55 % Fe	166,947		
		55%- below 58%Fe	22,663		
		58%- below 60%Fe	86,295		
		60%- below 62%	1,986,676		
		62%- below 65%Fe	6814		
		65%Fe and above	NIL		
		CLO stock	in tonnes		
		below 62%			
		Fe (any size)	16,376		
		62%- below			
		65% Fe (10-	208,459		
0~	Constinue of Americal	40 mm)		Arrear to be	
9g	Scrutiny of Annual	Cost of production	on: RS-2822.86	Appear to be	
	return on sale value,	per tonne;		correct.	
	Ex. Mine price & production cost	Ex-mine price: Ex-mine Price	of Ivon ovo		
	production cost	Fines in Rs			
		60%- below	-		
		62% Fe	4066.09		
		Ex-mine Price			
		in Rs per	r tonne		
		62%-65%			
		Fe (10-40 mm Size)	6497.42		
0:					
9i	Scrutiny of Annual return on fixed assets	Fixed Value of <i>A</i> 32,19,54,234	Assets: Rs	Appear to be correct.	
9k	Scrutiny of Annual	Back Hoe: 19 no	s;	Observed to be	
	return on mining	Wheel Loader:12		correct.	
	machineries	Dumpers: 52 nos			
		Rock Drill (110			
		Water tanker: 6 nos; Crusher: 3 nos;			
		Dozer: 3 nos	-,		
		Motor Grader: 2	nos.		

(10)Violation observed during current inspection and compliance position of earlier violation pointed out:

(a)Compliance position of earlier violation pointed out: During last inspection dated 10/02/23, the violation of rule 34A of MCDR 2017 was pointed out and subsequently, said rule complied on 30/03/23.

(b)During current inspection: The violation of Rule 11(1) of MCDR 2017 has been observed and the violation letter issued on 9/04/2024.

(11) On-line validation of star rating of templates submitted under rule 35 (FY-2022-23) has been made on 19/3/24 for Four star at RO level.

(12)The lessee was submitted DAI/drone survey data under rule 34A for FY 22-23 on 21/06/2023.

Date: 09/04/2024

(Prashant S. Hegde) Regional Mining Geologist