1/29035/2024

#### MCDR INSPECTION REPORT BHUBANESWAR REGIONAL OFFICE

**MINE CODE: 300RI13024** 

#### Part-I: General

rait-i	General	
SL. No.	Particulars	Details
1	Name of the Mine	Sanindpur Iron &Mn. Mine
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	Total Lease Area – 70.917Ha, Forest land –54.399 Ha., Non-forest land – 16.518 Ha,
3	Minecode	30ORI13024
4	IBM Registration Number under rule 45 of MCDR, 2017	IBM/6072/2011
5	Name of the lessee, Address, phone, email and fax number	M/s Grewal Minerals & Metals LLP, Post Box No. 44, Barbil At/Po – Barbil, Distt. – Keonjhar (Odisha), Pin – 758035, Phone No. – 06767-275686, E-mail – gapl_sponge@yahoo.co.in, Fax No. – 06767-275631/6072/2011
6	Village	Sanindpur
7	Taluka/Mandal	Bonai
8	District	Sundargarh
9	Pincode	770048
10	State	Odisha
11	Post office	Patmunda
12	Nearest police station	Koira
13	Nearest Railway station	Barbil
14	Date of Grant of Mining Lease	24/04/1980
15	Date of Execution	10/09/1980
16	Date of opening of Mine	03/05/2021
17	Date of expiry	09/09/2030
18	Name of the <b>Nominated Owner</b> with	Shri Charanjit Singh Grewal
	Address, phone, email, fax number and	of M/s M/s Grewal Minerals & Metals
	date of appointment	LLP Post Box No-44, At/Po:- Barbil, Dist-Kendujhar Phone:-+91-6767-275686. Email-ne.minerals@gmail.com
19	Name of the <b>Mine Agent</b> with Address, phone, email, fax number and date of appointment	N A
20	Name of the <b>Mines Manager</b> with Address, mobile no, email, fax number and date of appointment in mine	Sachikanta Behera, BE(Mining), FCC(METAL) At – Sanindpur, Po – Patmunda, Distt. – Sundargarh (Odisha), Mob. – 09437824433, E-mail: sachikanta.behera425@gmail.com Date of appointment in mines – 22.12.2021
21	Name of the <b>Mining Engineer</b> ,	Suryalok Sahoo, BE(Mining),

1/29035/202	4	Qualification and total experience with Address, mobile no, email, fax/phone number and date of appointment in mine	Experience:05Years, At/P.O.: Jurudi Distt.: Keonjhar, Odisha, Mobile: 8895947032 Date of appointment: 05.11.2021
	22	Name of the <b>Geologist</b> , Qualification and total experience with Address, mobile no, email, fax number and date of appointment in mine	Bikram Kumar Swain, M. Sc. in Geology, Experience: 16 Years, At:Repurpatana Po:Borikhi Distt.:Jagatsinghpur (Odisha), Mob.: 07653007026 E-mail: bikramkumar2007@gmail.com Date of appointment in mines:10.01.2022
	23	Date of Approval of Mining Plan/Review of Mining Plan/ their modifications with five-year period and specific condition in approval letter, if any.	Approval of Review of Mining Plan vide Letter No. RMP/A/24-ORI/BHU/2019-20 on 14.11.2019 for 2020-21 to 2024-25  Approval of Modification of Review of Mining Plan vides Letter No. MRMP/A/36-ORI/BHU/2021-22 on Dt.23.03.2022 for 2022-23 to 2024-25
	24	Mineral(s) granted in lease and proved for mining	Iron Ore & Mn. Ore
	25	Method of Mining(Opencast, Underground)	Open Cast
	26	Category (Fully Mechanized, Others or Manual)	Fully Mechanized
	27	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:**

SL.No	Item	Proposals <b>(FY 2022-23)</b>	Actual work <b>(FY 2022-23)</b>	Remarks
1a	Backlog of previous year	06	06	
1b	Exploration over lease area for Geological axis 1 or 2.	No proposal	Nil	
1c	Exploration Agency & Expenditure in lakh Rupees during the year	Not specifically proposed	KRK Geo- ExplorationPvt.Ltd & World Class Services. Expenditure:- Rs.7591270.00	
1d	Balance area to be explored to bring Geological axis in 1 or 2	Total lease area 70.917ha has been explored in G1 level.	Total lease area 70.917ha has been explored in G1 level.	
1e	Balance reserves as per latest approved document	NA	Iron Ore Reserve:- 15.655Million Tones	Based on approved modified RMP

1/29035/2024	1			Resources:-	dated
1/23033/2024	т			16.287Million	23.03.2022
				Tones	
				Total Mineral	
				resources:-	
				31.942Million	
				Tones	
				Mn Ore	
				Reserve:-Nil	
				Resources:-	
				97000MT	
				Total Resources:-	
				97000MT	
	1f	General remarks of	The whole lease a	rea has been explored	l under G1
		inspecting officer on	level. The ore body strike NE-SW and strike length		
		geology, exploration etc.	523m.The dip ang	gle varies from 35-81	degree.

# **Development:**

SL.No	Item	Proposals <b>(FY 2022-23)</b>	Actual work	Remarks
2a	Location of development w.r.t. lease area	Pradhan pit & Hating Pit E-325800, N-2424857 To E-326000, N-2425062 Crusher pit E-325506 N-2425062 To E-325400, N-2424943	Mining Excavation is broadly carried out in Pradhan Pit	
2b	Separate benches in topsoil, overburden and mineral	Top soil-Nil OB-02 Mineral-12	Top soil- Nil OB -03 Mineral-06	
2c	Stripping ratio or ore to OB ratio (t/ m3)	1:0.178	1:0.33	
2d	Quantity of topsoil generation in m3	No proposal	Nil	
2e	Quantity of overburden generation in m3	198250 Cum	66770 Cum	
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc	_	is within the approved ding financial year.	l proposal

# **Exploitation:**

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SL.No	Item	Proposals <b>(FY 2022-23)</b>	Actual work	Remarks
3a	Number of pits proposed for production	Pradhan pit, Hating Pit & crusher pit ( 03 Nos)	Mining Excavation is broadly carried out in Pradhan Pit.	
3b	Quantity of ROM mineral production proposed	1136135 MT	409847 MT	
3c	Recovery of salable/usable mineral from ROM production	700560 MT	376236 MT	
3d	Quantity of mineral reject generation	435575 MT	33611 MT	
3e	Grade of mineral reject generation and threshold value declared	45-55%	Broadly as per proposal	
3f	Quantity of sub-grade mineral generation	No proposal	Nil	
3g	Grade of sub-grade mineral generation	No proposal	Nil	
3h	Manual / Mechanized method adopted for segregating from ROM	By Mechanized method	Adopted mechanized method for segregation	
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	No proposal	Nil	
3j	Provision of drilling & blasting in mineral benches	Blasting in mineral benches proposed	Followed drilling & blasting as per proposal.	
3k	Provision of mining machineries in mineral benches	Mining machineries in mineral benches were proposed	Mining machineries in mineral benches have been deployed.	
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	OB-6mtrs Ore-6mtrs	Broadly as per proposal.	In northside of Pradhan pit, height of the benches are not carried out as per proposal.
3m	Total area covered under excavation/pits	7.053Ha	2.351Ha	
3n	Ore to OB ratio for the pit/mine during the year	1:0.17	1:0.33	
30	Total area put in use under different heads at the end of year	Mine working:- 7.053Ha. Waste Dump-	Mine working :-2.351 ha. Waste Dump-0.5Ha	

1/29035/202	4 3p	Production of ROM mineral during <b>last five-years period</b> , as applicable	0.809Ha Roads-0.120Ha Others -0.510ha 2018-19: 4,10,001 MT 2019-20: 4,10,001 MT 2020-21: 4,13,532 MT 2021-22:4,13,917 MT 2022-23: 1136135 MT	Road-0.120Ha Others :-0.3Ha 2018-19:-Nil 2019-20:-Nil 2020-21:-Nil 2021-22: 4,09,822MT 2022-23: 409847.00MT	
	3q	The method of opencast mining by shovel-truck combination and deep hole drilling blasting and broadly as per proposal. In northside of Pradhan pit, height 8 width of the benches are not carried out as per proposal			

Solid W	aste Management-Dump	oing:		
SL.N o.	Item	Proposals <b>(FY 2022-23)</b>	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	Mineral Reject- 01 OB-01	There is no proposal for top soil generation. Dumping of mineral reject & waste have been carried out in the earmarked area as per proposal.	There is no proposal for top soil generation. Dumping of mineral reject & waste have been carried out in the earmarked area as per proposal.
4b	Location of topsoil, OB & mineral reject dumps	Top soil- Nil OB- 2424000,32600 0 2424100,32593 0 Mineral reject dump- 326100,242460 0 326200,242450 0	Within the approved proposal	
4c	Number of dumps within lease area and outside lease area	Within lease area- 01 No. of active dump proposed Outside lease area- Nil	Within lease area- 01 No. of active dump	
4d	Location of dumps w.r.t. ultimate pit limit	OB Dump 2424000,32600 0 2424100,32593 0	OB Dump 2424000,326000 2424070,325980	
4e	Number of active & alive dumps	Active dump:- 01	Active dump:-1Nos	

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2 <mark>4<sup>4f</sup></mark>	Number of dead dumps	02 nos.	02 nos.
4g	Number of dumps stabilized	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 dump	Retaining wall- Maintained of existing Retaining wall. Garland drain- 1000mtrs	maintained
4j	Number of settling ponds	No proposal	Nil
4k	Specific comments of inspecting officer on waste dump management	Waste manageme proposal.	ent has been carried out broadly as per

# 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 proposal	Nil		
5b	Area under backfilling of mined out area	No proposal	Nil		
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area	No proposal	Nil		
5d	Total area fully reclaimed & rehabilitated	No proposal	Nil		
5e	General remarks of inspecting officer on backfilling, reclamation etc	There was no proposal for backfilling in the reporting year. None of the areas of mined out pits were matured for backfilling due to occurrence of mineral			

# **Progressive Mine Closure Plan:**

SL.N.	Item	Proposals	Actual work	Remarks
		(FY 2022-23)		
6a	Whether Annual	As per MCDR,	Submitted in time	
	report on PMCP	2017		
	submitted on time			
	and correctly - Rule			
	26(2). (Hard copy			
	same provided)			
6b	Management of			

1/29035/202	4	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 proposal ii) 0.5Ha iii) 800 nos. iv) NA v) No proposal vi) NA	Nil 1.55Ha 5000Nos 26300Nos Nil Rs. 200000/-	
	6c	Compliance on reclamation and rehabilitation by backfilling i) Voids available for backfilling (L X B X D)	No proposal	Nil	
		,	No proposal	Nil	
		ii) Void filled by waste/tailings iii) Afforestation on	No proposal	Nil	
		the backfilled area iv) Rehabilitation by	No proposal	Nil	
		making water reservoir v) Any other specific means	No proposal	Nil	
	6d	Compliance of Rehabilitation of			
		waste land within lease	No Proposal	NIL	
		i) Afforestation ii) Area rehabilitated	No Proposal	NIL	
		(ha) iii) Method of rehabilitation	No Proposal	NIL	
	6e	Compliance of Environmental monitoring (core zone & buffer zone)	Ambient air, fugitive dust, Noise, Water, Soil, Free silica and ground vibration monitoring to be carried out have been proposed.	Quarterly report on Environmental monitoring has been received.	Environmental parameters within the permissible limits

1/29035/202	6f	General remarks of	PMCP activities were carried out as per the approved
1/29035/2024	7	inspecting officer on	proposal and plantation has been done.
		PMCP compliance	
		& progressive	
		closure operations	
	Mineral Co	onservation:	

SL.No.	Item	Proposals ((FY 2022- 23)	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade wise sorting within lease proposed	Carried out as per proposal	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Mechanical	Mechanical using crusher and screening	
7c	Different grade of mineral sorted out at mines	Proposed	as per proposal	
7d	Any beneficiation process at mines	No proposal	Nil	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	No beneficiation has been proposed except crushing and screening. Low grade ore is being blended with high grade ore to make the desired grade for sale.		

#### **Environment:**

SL.No.	Item	Proposals ((FY 2022-23))	Actual work	Remarks
8a	Separate removal and utilization of topsoil	No proposal	Nil	
8b	Concurrent use or storage of topsoil	No proposal	Nil	
8c	Separate dumps for overburden, waste rock, rejects and fines	Separate Dumps for OB, waste rock, reject & Fines	The OB, waste rock, rejects and fines have dumped separately in the earmarked area as per approved proposal.	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	Nil	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal	Nil	
8f	Baseline information on existence of	800 Nos	Total 26,300 Nos. of saplings have been	

1/29035/202	4	plantation & additional plantation done		planted in safety zone area, OB dump & waste land area including 5000 nos. saplings during the year.		
	8g	Survival rate	80 %	75%		
	8h	Water sprinkling on roads to control airborne dust	Dust suppression with 12Kl water tanker proposed	Water tanker having 12kl being sprinkled on haul road to control airborne dust.		
	8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		adverse impact observed during mine visit on thetic beauty in and around mines area.		

**Compliance of Rule 45:** 

S.N.	Item	Proposals	Actual Work	Remarks.
9a	Status of submission	As per MCDR,	Annual Returns	
	of Monthly and	2017	& Monthly	
	Annual returns		Returns submitted	
9b	Scrutiny of Annual	Mines Manager:-	Found in order	
	return for information	Sachikanta		
	on Mining Engineer,	Behera.		
	Geologist and	Mining Engneer:-		
	Manager	Suryalok sahoo		
		Geologist:-		
		Bikram kumar		
		swain.		
9c	Scrutiny of Annual	Pit-2.351Ha	Found in order	
	return on land use	Reclaimed area-		
	pattern for area under	Nil		
	pits, reclaimed area,	Dumps-0.5Ha		
	dumps etc.			
9d	Scrutiny of Annual	5000Nos	Found in order	
	return on afforestation			
9e	Scrutiny of Annual	Mineral Reject:-	Found in order	
	return on mineral	33611.00MT		
	reject generation	Grade-45-55%Fe		
	(Grade & quantity)			
9f	Scrutiny of Annual	Rom stock-	Found in order	
	return on ROM stock	1375.00MT with		
	and/or graded ore	+55%Fe		
9g	Scrutiny of Annual	Rs.2179.79	Found in order	
	return on sale value,			
	Ex. Mine price &			
	production cost			
9i	Scrutiny of Annual	1268979979.00	Detail given	
	return on fixed assets			
9k	Scrutiny of Annual	SHOVEL-4	Broadly found in	
	return on mining	BACK HOE-2 DUMPER- 10Nos	order	
	machineries	WATER TANKER-		

1,00005,0004		02Nos	
1/29035/2024	<del>!</del>	CRUSHER 150.000	
		T/H	

Date: 04.04.2024

Details of violations observed during current inspection and compliance position of						
violation pointed out						
Violatio	Violation observed Show cause position					
Rule No.	Issued on	Compliance	Rule	Issued on	Compliance on	
		on	No.			
11(1) of MCDR,						
2017						
12(4B) of MCDR,						
2017						

(Rajani Kanta Rautaray) INDIAN BUREAU OF MINES