

MCDR INSPECTION REPORT

Date of Inspection: 05/11/2024

General

S. N.	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	Mine code	30ORI13024
4	IBM Registration Number under rule 45 of MCDR, 1988	IBM/45759/2023
5	Name of the lessee, Address, phone, email and fax number	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
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 first Renewal, if applicable and its period & expiry	1 st Renewal deed was granted on dt.18.07.2003 w.e.f. 10.09.2000 to 09.09.2020 Supplementary lease deed was granted on dt.19.05.2021 & valid up to dt.09.09.2030
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	N.A.
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	N.A.
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Sachikanta Behera, Diploma(Mining), FCC(METAL) At – Sanindpur, Po – Patmunda, Distt. – Sundargarh (Onitsha), Mob. – 09437824433, E-mail: sachikanta.behera425@gmail.com Date of appointment in mines – 22.12.2021
23	Name of the Mining Engineer, Qualification and	Sri Suryalok Sahoo, BE(Mining),

	total experience with Address, phone, email, fax number and date of appointment in mine	Experience:05Years, At/Radhaballavpur,Po:- Banhatia Distt.: Bhadrak, Odisha,756117. Mobile: 8895947032 Date of appointment: 05.11.2021
24	Name of the Geologist, Qualification and total experience with Address, phone, 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
25	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 55& carrying out their duties as per rule 56 & 57.	Yes, <u>Mining Engineer:</u> Sri Suryalok Sahoo, BE(Mining), Experience:05Years, At/Radhaballavpur,Po:- Banhatia Distt.: Bhadrak, Odisha,756117. Mobile: 8895947032 Date of appointment: 05.11.2021 <u>Geologist:</u> 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
26	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	Approval of Mining Plan vides Letter No. BBS/SG/Fe & Mn/MP dated 27.02.2001 for 2000-01 to 2004-05 Approval of Review of Mining Plan vide Letter No. RMP/A/24- ORI/BHU/2019-20 on 14.11.2019for 2020-21 to 2024- 25 Approval of Modification of Review of Mining Plan vides Letter No. MRMP/A/36-ORI/BHU/2021-22 on 23.03.2022 for 2022-23 to 2024-25
27	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	1 st Scheme of Mining vide Letter No.314(3)/2007/MCCM/(CZ)/MS -26 Dt. 20.12.2007for 2005-06 to 2009-10 2 nd Scheme of Mining vide Letter No.MS/OTF.MECH/13-ORI/BH U/2010-11 Dt. 08.06.2010 for 2010-11 to 2014-15 Modification of Approved Scheme of Mining vide Letter No. MSM/OTFM/16-ORI/BHU/2011-

		12 Dt. 08.07.2011 for 2011-12 to 2014-15 3 rd Scheme of Mining vide Letter No. MS/FM/25-ORI/BHU/2014-15 Dt. 15.05.2015 for 2015-16 to 2019-20
28	Mineral(s) granted in lease and proved for mining	Iron Ore
29	Method of Mining(Opencast, Underground)	Opencast
30	Category (Fully Mechanized, 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	Nil	Lessee has already carried out G1 level of exploration within the lease area.
1b	Exploration over lease area for Geological axis 1 or 2.	Nil	Nil	Lessee has already carried out G1 level of exploration within the lease area.
1c	Exploration Agency & Expenditure in lakh Rupees during the year	Nil	Nil	Lessee has already carried out G1 level of exploration within the lease area.
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	Nil	Lessee has already carried out G1 level of exploration within the lease area.
1e	Balance reserves as per latest approved document		14.835(Mil.T.)	As on 31.03.2024
1f	General remarks of inspecting officer on geology, exploration etc.	There is no such proposal for exploration during the FY 2023-24, as the entire potential mineralized area have been explored under G1 level of exploration. eted in FY 2024-25 prior to the inspection. As per submitted AR of 2023-24 about 14.835million tonnes of reserve available in the mine.		

Development

S.N.	Item	Proposals for, 2023-24	Actual work during 2023-24	Remark
2a	Location of development w.r.t. lease area	<u>UTM</u> <u>Pradhan pit & Hutting pit</u> 325800-2424863 326000-2424628 <u>Crusher pit</u> 325400-2424943 325400-2424856	<u>UTM</u> <u>Pradhan pit & Hutting pit</u> 325700-2424663 325000-2424500 <u>Crusher pit</u> 325325-2424825 325325-2424700	
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	Width-8 Length- 8	Width-8 Length- 8 There are no Top soil benches. Separate benches in overburden and minerals has been developed as per development program during 2023-24	
2c	Stripping ratio or ore to OB ratio	1:0.155 (T/m ³)	1:0.157 (T/m ³)	
2d	Quantity of topsoil generation in m3	Nil	Nil	
2e	Quantity of overburden generation in m3	379800.000 m ³	129210.000 m ³	
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc	The lessee has carried out the development and production partially within the proposal but the lessee could not able to achieve the proposal during the reporting year due to obtaining the statutory clearances during the last quarter of the FY 2023-24. However, a violation letter under rule 11(1) of MCDR 2017 vide dated 28.11.2024 has been issued to the lessee in this regard.		

Exploitation

N.	Item	Proposals for, 2023-24	Actual work during 2023-24	Remark
3a	Number of pits proposed for production	3 nos.	2 nos.	
3b	Quantity of ROM mineral production proposed	2218790.000	409815.000	
3c	Recovery of salable/usable mineral from ROM production	1783740.000	409815.000	
3d	Quantity of mineral reject generation	435050.000	Nil	

3e	Grade of mineral reject generation and threshold value declared	55%	55%	
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	Deep hole drilling and blasting	Deep hole drilling and blasting	
3k	Provision of mining machineries in mineral benches	Backhoe, Rock breaker, drill machine & Dumpers	Backhoe, Rock breaker, drill machine & Dumpers	
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 more or less in order as per the proposal of the approved document.	
3m	Total area covered under excavation/pits	31.196 ha	30.223 ha	
3n	Ore to OB ratio for the pit/mine during the year	1:0.155 (T/m ³)	1:0.157 (T/m ³)	
3o	Total area put in use under different heads at the end of year	Mining- 31.196 Mineral storage- 14.957 Infrastructure Workshop, administrative Building, Roads etc.- 3.722 OB dump- 6.618 Total area put to use- 56.493	Mining- 30.223 Mineral storage- 14.957 Infrastructure Workshop, administrative Building, Roads etc.-2.152 OB dump- 6.618 Total area put to use- 53.950	
3p	Production of ROM mineral during last six-year period, as applicable (MT) 2019-2020 2020-2021 2021-2022 2022-2023	2019- 2020-:4100012MT 2020- 2021-:410001 MT 2021-	2019-2020-: Nil 2020-2021-: Nil 2021-2022-: Nil 2022- 2023-:409822 MT 2023- 2024 :409847 MT	

	2023-2024 2024-2025	2022-:413532 MT 2022- 2023-:413917 MT 2023-2024-: 1136135MT		
3q	General remarks of inspecting officer on method of	The lessee has carried out the development and production partially within the proposal but the lessee could not able to achieve the proposal during the reporting year due to obtaining the statutory clearances during the last quarter of the FY 2023-24.However, a violation letter under rule 11(1) of MCDR 2017 vide dated 28.11.2024 has been issued to the lessee in this regard.		

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)	Separate dumps for overburden and mineral reject stacks, waste rocks are proposed. OB Dump-III	Separate dumps for Over-burden and mineral stacks and other waste rocks are being practiced and mineral rejects are being blended with high grade ore to make it suitable grade based on the requirement of buyers. OB Dump-III	
4b	Location of topsoil, OB & mineral reject dumps	N-2424120 E-325930 N-2423900 E-326160	N-2424120 E-325930 N-2423900 E-326160	
4c	Number of dumps within lease area and outside lease area	3 OB dump Within lease area	3 OB dumps Within lease area	
4d	Location of dumps w.r.t. ultimate pit limit	N-2424120	N-2424120	

		E-325930 N-2423900 E-326160	E-325930 N-2423900 E-326160	
4e	Number of active & alive dumps	One	One	
4f	Number of dead dumps	02	02	
4g	Number of dumps stabilized	Nil	Nil	
4h	Whether Retaining wall or garland drain all along dumps are there	Yes, about 45 mtr of retaining wall and 45 mtr of garland drains have been proposed to construct around the waste dumps and subgrade stacks during the FY 2023-24.	Yes, about 50 mtr. And cumulatively 1375 mtr of retaining wall and 50mtr & cumulatively 100mtr of garland drains have been constructed around the waste dumps and subgrade stacks till the FY 2023-24.	
4i	Length of Retaining wall or garland drain all along dump	Yes, about 45 mtr of retaining wall and 45 mtr of garland drains have been proposed to construct around the waste dumps and subgrade stacks during the FY 2023-24.	Yes, about 50 mtr. And cumulatively 1375 mtr of retaining wall and 50mtr & cumulatively 100mtr of garland drains have been constructed around the waste dumps and subgrade stacks till the FY 2023-24.	
4j	Number of settling ponds	Nil	Total 03 nos of Settling pond around the waste dump & 02 nos of Settling pond around sub grade stacks already exists within the ML area till FY 2023-24.	

4k	Specific comments of inspecting officer on waste dump management	The lessee has carried out the development and production partially within the proposal but the lessee could not able to achieve the proposal during the reporting year due to obtaining the statutory clearances during the last quarter of the FY 2023-24. The lessee has constructed about 50mtr of retaining wall and garland drains against a proposal of 50mtr of retaining wall and garland drains during the reporting year. However, a violation letter under rule 11(1) of MCDR 2017 vide dated 28.11.2024 has been issued to the lessee in this regard.
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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	Nil	
5b	Area under backfilling of mined out area	Nil	Nil	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 36)	Nil	Nil	
5d	Total area fully reclaimed & rehabilitated	Nil	Nil	
5e	General remarks of inspecting officer on backfilling, reclamation etc	As the mine is not mature enough for backfilling and there was no such proposal for backfilling during the reporting year, hence the management of waste under Backfilling is nil. The lessee has also carried out as per the proposal i.r.o. waste management under Backfilling.		

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.	The lessee has submitted Annual PMCP report as per Rule 26(2) of MCDR 2017 within the stipulated period during the reporting year FY 2023-24.	
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	i. Nil ii. Nil iii. Nil iv. Nil	i. Nil ii. Nil iii. Nil iv. Nil	

	iv) Cumulative no. of plants v) Any other specific method of rehabilitation vi) Cost incurred on watch & care during the year	v. Nil vi. 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. Nil ii. Nil iii. Nil iv. Nil v. Nil	i. Nil ii. Nil iii. Nil iv. Nil v. Nil	
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	i) 800 nos of saplings ii) 2023-24= 0.50 Ha. iii) Plantation with 80% survival	i) 3000 nos of saplings till date of inspection ii) 2023-24= 0.50 Ha. & gap plantation iii) Plantation with 60% survival	
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Environmental monitoring in Core zone and buffer zone will be as per MOEFCC and SPCB guidelines.	Environmental monitoring in Core zone and buffer zone were carried out as per MOEFCC and SPCB guidelines during the reporting year FY 2023-24.	
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. As the mine is not enough mature during the reporting year, there was no such proposal of backfilling during the reporting year. The lessee has planted about 3000 no of saplings over 0.50 Ha. area & gap plantation with a survival rate of about 60% carried out within the lease area. The lessee has carried out the PMCP proposal and are more or less in order w.r.o. the proposals.		

Mineral Conservation

S.N.	Item	Proposals for, 2023-24	Actual work during 2023-24	Remark
7a	ROM Mineral dispatch or	Saleable Ore:	Saleable Ore:+55	

	grade-wise sorting within lease area	+55 % Fe, Mineral Reject: - +45 to 55% Fe were proposed.	% Fe, Mineral Reject:- +45 to 55% Fe are being carried out.	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Mechanical	Mechanical	
7c	Different grade of mineral sorted out at mines	Saleable Ore: +55 % Fe, Mineral Reject: - +45 to 55% Fe were proposed.	Saleable Ore:+55 % Fe, Mineral Reject:- +45 to 55% Fe are being carried out.	
7d	Any beneficiation process at mines	Nil	Nil	No Such proposal during the reporting year.
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 crushing and screening are being 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)	No such proposal for the reporting year.	Incidental occurrence of very small amount of clay soil have been generated and concurrently utilized for plantation purpose till the date of inspection during the reporting year.	
8b	Concurrent use or storage of topsoil	No such proposal for the reporting year.	Incidental occurrence of very small amount of clay soil have been generated and concurrently utilized for plantation purpose till the date of	

			inspection during the reporting year.	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 37)	Nil	Nil	There was no such proposal for generation of top soil and waste during the reporting year.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Nil	Nil	There was no such proposal for generation of top soil and waste during the reporting year.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Nil	Nil	There was no such proposal for generation of top soil and waste during the reporting year.
8f	Baseline information on existence of plantation & additional Plantation done	800 Nos of saplings will be planted over 0.50 Ha area with a survival rate of 80% within the lease area.	300 Nos of saplings have been planted over 0.50 Ha area and gap plantation with a survival rate of 60% within the lease area during the reporting year.	
8h	Water sprinkling on roads to control airborne dust	Water sprinkling by water tanker over haul roads has been carried out during the reporting year.	Water sprinkling by water tanker and mobile water sprinklers over haul roads has been carried out by using 2 nos of water tankers having 12 KL capacity during the reporting year.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	The lessee could not achieve the targeted proposal during the reporting year, due to obtaining the statutory clearances during the last quarter of the FY		

		2023-24. However, the lessee has planted 3000 no of saplings over 0.50 Ha area and gap plantation with a survival rate of 60% within the lease area and water sprinkling by water tanker and mobile water sprinklers over haul roads to control the airborne dust and to minimize the fugitive dust emission. This sustains the aesthetic beauty of the mine area.
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Compliance of Rule 45

S.N.	Item	COMMENTS		Remarks
9a	Status of submission of Monthly and Annual returns	M.R. Submitted upto September 2024 A.R. Submitted upto FY 2023-24		
S.N.	Item	Details given in A.R. for the year 2023-24	Observation of I/Officer 2023-24	Remarks
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Monthly returns and annual return for the reporting year have been submitted within the stipulated time period.	Monthly returns and annual return for the reporting year have been submitted within the stipulated time period.	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	1. Sri Sachikanta Behera - Mines Manager 2. Sri Suryalok Sahoo – Mining Engineer 3. Sri Bikram Kumar swain - Geologist. were present during the inspection.	1. Sri Sachikanta Behera - Mines Manager 2. Sri Suryalok Sahoo – Mining Engineer 3. Sri Bikram Kumar swain - Geologist. were present during the inspection.	
9d	Scrutiny of Annual return on afforestation	800 Nos of saplings have been planted over 0.50 Ha area with a survival rate of 80% within the lease area during the reporting year.	3000 Nos of saplings have been planted over 0.50 Ha area & gap plantation with a survival rate of 60% within the lease area during the reporting year.	
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	Generation of mineral reject is Nil during FY 2023-24.	Generation of mineral reject is Nil during FY 2023-24.	
9f	Scrutiny of Annual return on ROM stock and/or	Opening Stock: 1375.000 tons	Opening Stock: 1375.000 tons	

	graded ore	Production: 409815.000 tons Closing Stock : 170 tons	Production: 409815.000 tons Closing Stock : 170 tons	
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Cost of production Rs. 2222.60/- furnished in submitted Annual Return for FY 2023-24.	Cost of production Rs. 2222.60/- furnished in submitted Annual Return for FY 2023-24.	
9i	Scrutiny of Annual return on fixed assets	Fixed Asset: Rs.1264350093/-, furnished in the annual return of the reporting year.	Fixed Asset: Rs. 1264350093/-, furnished in the annual return of the reporting year.	
9k	Scrutiny of Annual return on mining machineries	SHOVEL (MECHANICAL) 0.900 CUM 4 Non Electrical Opencast BACK HOE 1.700 CUM 2 Non Electrical Opencast DUMPER 20.000 TONNE 10 Non Electrical Opencast WATER TANKER 10000.000 LITRE 1 Non Electrical Opencast GENERATOR (DIESEL) 125.000 KWH 2 Non Electrical Opencast AIR COMPRESSOR 450.000 CUM/MN 1 Non Electrical Opencast CRUSHER 150.000 T/H 1	SHOVEL (MECHANICAL) 0.900 CUM 4 Non Electrical Opencast BACK HOE 1.700 CUM 2 Non Electrical Opencast DUMPER 20.000 TONNE 10 Non Electrical Opencast WATER TANKER 10000.000 LITRE 1 Non Electrical Opencast GENERATOR (DIESEL) 125.000 KWH 2 Non Electrical Opencast AIR COMPRESSOR 450.000 CUM/MN 1 Non Electrical Opencast CRUSHER 150.000 T/H 1 Non Electrical Opencast OTHERS (NON-ELEC.) 150.000 1 Non-Electrical Opencast	

