

MCDR-MIFLOFE/30/2023-BBS-IBM\_RO\_BBS  
INDIAN BUREAU OF MINES  
MINERALS DEVELOPEMMENT AND REGULATION DIVISION

1/27686/2024

MCDR INSPECTION REPORT

Bhubaneshwar regional office

Mine file No : ORI/IRON/KJR/MCDR-60/BBS

Mine code : 30ORI08013

- (i) Name of the Inspecting : SKM1 ) SANJIB KUMAR MOHAPATRA  
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Shri U. K. Bhasker, Mines Manager & Shri Harihara Sah  
Official with  
Designation
- (iv) Date of Inspection : 13/12/2023
- (v) Prev.inspection date : 19/02/2023

PART-I : GENERAL INFORMATION

1. (a) Mine Name : BOLANI
- (b) Registration NO. : IBM/1120/2011
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
- State : ORISSA
- District : KEONJHAR
- Village : BOLANI
- Taluka : BARBIL
- Post office : BOLANI
- Pin Code : 758037
- FAX No. : 06767-30246
- E-mail : rmdbom2016@gmail.com
- Phone : 06767-60207
- (f) Police Station : Bolani
- (g) First opening date : 12/04/1960
- (h) Weekly day of rest : SUN
2. Address for : BOLANI ORES MINES, AT/PO: BOLANI  
correspondance KEONJHAR DISTRICT  
ORISSA
3. (a) Lease Number : ORI0102
- (b) Lease area : 1321.45
- (c) Period of lease : 20
- (d) Date of Expiry : 09/04/2010
4. Mineral worked : IRON ORE Main

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## 5. Name and Address of the

Lessee : M/s Steel Authority of India Ltd (SAIL)  
Ispat Bhwan, Lodhi Road New  
Delhi DELHI DELHI  
Phone:011-24367481-86  
FAX :011-24367015/22467458

Owner : SHRI VIVEK GUPTA  
Isapt Bhwan, Lodhi Road New  
Delhi DELHI DELHI  
Phone: 9434776837  
FAX : 011-24367015

Agent : SHRI A K MISHRA  
KEONJHAR ODISHA KEONJHAR  
ORISSA  
Phone: 9437007518  
FAX : 06767-260172

## Mining Engineer

Name : SHRI RAJESH KUMAR,Full Time  
Qualification : B TECH MINING  
Appointment/ : 20/07/2019  
Termination date

## Geologist

Name : Joydev Chattopadhyay,Full Time  
Qualification : M.Sc.Tech in Applied Geology  
Appointment/ : 01/06/2016  
Termination date

## Manager

Name : SHRI KAMAL BHASKAR  
Qualification : B TECH MINING  
Appointment/ : 11/06/2018  
Termination date

6. Date of approval of Mining	:	Mining Scheme rule 12 MCDR1988	18/01/2001
Plan/Scheme of Mining	:	Mining Scheme rule 12 MCDR1988	25/10/2002
	:	Mining Scheme rule 12 MCDR1988	24/05/2007
	:	Renewal under rule 24 MCR1960	13/01/2010
	:	Mining Scheme rule 12 MCDR1988	03/08/2015
	:	MS modif under MCR 1960	06/08/2018
	:	MP review under 17(1) MCR 2016	13/11/2019
	:	MS modif under MCR 1960	08/09/2020
	:	MS modif under MCR 1960	05/08/2021

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## PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Nil	Nil	During the year 2022-23, i.e. as on 31.03.2023, total 215 no. of boreholes were drilled with cumulative meterage of 17940 meters which was proposed in the previous financial year.
1b	Exploration over lease area for geological axis 1 or 2	Nil	Nil	No proposal of exploration during the reporting year.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Nil	Nil	No proposal of exploration during the reporting year.
1d	Balance area to be explored to bring Geological axis in 1 or 2		Balance area to be explored to bring geological axis in G-1 is 431.45 ha. as on 31.03.2023.	Balance area to be explored to bring geological axis in G-1 is 431.45 ha. as on 31.03.2023.
1e	Balance reserve as on 01/04/20		Balance reserve as on 01.04.2023 is as below:  111 - 91.581 Mt. 121 - 18. 93 Mt. 122 - 180.21 Mt. ----- Reserve - 293.72 Mt.	Balance reserve as on 01.04.2023 is as below:  111 - 91.581 Mt. 121 - 18. 93 Mt. 122 - 180.21 Mt. ----- Reserve - 293.72 Mt.

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1f	General remarks of inspecting officers on geology, exploration etc	There was no proposal of exploration during the reporting year. During the year 2022-23, i.e. as on 31.03.2023, total 215 no. of boreholes were drilled with cumulative meterage of 17940 meters which was proposed in the previous financial year. Balance area to be explored to bring geological axis in G-1 is 431.45 ha. as on 31.03.2023.	There was no proposal of exploration during the reporting year. During the year 2022-23, i.e. as on 31.03.2023, total 215 no. of boreholes were drilled with cumulative meterage of 17940 meters which was proposed in the previous financial year. Balance area to be explored to bring geological axis in G-1 is 431.45 ha. as on 31.03.2023.
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Development :

Sl.No.	Item	Propasals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	<p>Developments are proposed in the following blocks:</p> <p>F-area 324410 - 324750/ 2443550-2444250</p> <p>G-area 324940 - 325300/ 2445410 - 2446030</p> <p>D-area 327910-328220/ 2447130-2447800</p> <p>Panposh: 327430-327670/ 2446300-2446660 (North pit) 327100-327340/ 2446130-2446460 (South Pit)</p> <p>B&amp;C area: 325630-326020/ 2445430-2445750</p>	<p>Development and excavation benches (bench nos, patterns &amp; location) of all quarries i.e. F-Area, G-Area, &amp; Panposh-Area quarries were not carried out in accordance to the proposals of the approved review of mining plan during the reporting year. Further no mining operation carried out in B &amp; C area. A violation letter under rule 11(1) vide dated 02.01.2024 has been issued to to the lesse in this regard.</p>	<p>Development and excavation benches (bench nos, patterns &amp; location) of all quarries i.e. F-Area, G-Area, &amp; Panposh-Area quarries were not carried out in accordance to the proposals of the approved review of mining plan during the reporting year. Further no mining operation carried out in B &amp; C area. A violation letter under rule 11(1) vide dated 02.01.2024 has been issued to to the lesse in this regard.</p>
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	<p>No separate bench for top soil. The topsoil layer is very thin and almost negligible. Separate benches for both overburden and minerals were proposed in all the five proposed quarries.</p>	<p>No separate bench for top soil. The topsoil layer is very thin and almost negligible. Separate benches for both overburden and minerals were proposed in four quarries. Further no mining operation carried out in B &amp; C area.</p>	<p>No separate bench for top soil. The topsoil layer is very thin and almost negligible. Separate benches for both overburden and minerals were proposed in four quarries. Further no mining operation carried out in B &amp; C area.</p>
2c	Stripping ratio or ore to OB ratio	1 : 0.077 Tonnes/ M3	1 : 0.17 Tonnes/ M3	1 : 0.17 Tonnes/ M3

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2d	Quantity of topsoil generation in m3	Nil	Nil	Nil
2e	Quantity of overburden generation in m3	997408 Cum.	1354498 Cum. Quantity of overburden is more than the proposal due to deviation in the development and production from the proposal during the reporting year. A violation letter under rule 11(1) vide dated 02.01.2024 has been issued to to the lesse in this regard.	1354498 Cum. Quantity of overburden is more than the proposal due to deviation in the development and production from the proposal during the reporting year. A violation letter under rule 11(1) vide dated 02.01.2024 has been issued to to the lesse in this regard.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc		Lessee has carried out production in Four no of pits: namely F-area, G-area, D-area, Panposh-area, Production from B & C-area could not carried out during the reporting year. The lessee has partially deviated from the proposed development and production proposals in F-area, G-area, D-area, Panposh-area pits. A violation letter under rule 11(1) vide dated 02.01.2024 has been issued to to the lesse in this regard.	Lessee has carried out production in Four no of pits: namely F-area, G-area, D-area, Panposh-area, Production from B & C-area could not carried out during the reporting year. The lessee has partially deviated from the proposed development and production proposals in F-area, G-area, D-area, Panposh-area pits. A violation letter under rule 11(1) vide dated 02.01.2024 has been issued to to the lesse in this regard.

## Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
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3a Number of pit proposed for production	Five No of Pits; namely F-area, G-area, D-area, Panposh-area, B&C-area.	Lesee has carried out production in Four no of pits: namely F-area, G-area, D-area, Panposh-area, Production from B & C-area could not carried out during the reporting year. The lessee has partially deviated from the proposed development proposal in F-area, G-area, D-area, Panposh-area pits and also not achieved the targeted production proposal during the reporting year. A violation letter under rule 11(1) vide dated 02.01.2024 has been issued to to the lesse in this regard.	Lesee has carried out production in Four no of pits: namely F-area, G-area, D-area, Panposh-area, Production from B & C-area could not carried out during the reporting year. The lessee has partially deviated from the proposed development proposal in F-area, G-area, D-area, Panposh-area pits and also not achieved the targeted production proposal during the reporting year. A violation letter under rule 11(1) vide dated 02.01.2024 has been issued to to the lesse in this regard.
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- 3b Quantity of ROM 11905806 tones 7202585 tones  
mineral  
production  
proposed
- Lessee has carried out production in Four no of pits: namely F-area, G-area, D-area, Panposh-area, Production from B & C-area could not carried out during the reporting year. The lessee has partially deviated from the proposed development proposal in F-area, G-area, D-area, Panposh-area pits and also not achieved the targeted production proposal during the reporting year. A violation letter under rule 11(1) vide dated 02.01.2024 has been issued to to the lesse in this regard.
- 3c Recovery of 11905806 tones 7202585 tones  
sailable/usable  
mineral from ROM  
production
- The lessee has partially deviated from the proposed development proposal and also not achieved the targeted production proposal during the reporting year. A violation letter under rule 11(1) vide dated 02.01.2024 has been issued to to the lesse in this regard.



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3d	Quantity of mineral reject generation	Nil	392662 tons of mineral rejects were generated during the reporting yaer. However the same have been belnded with high grade grade material and made it to saleable grade within the reporting year.	392662 tons of mineral rejects were generated during the reporting yaer. However the same have been belnded with high grade grade material and made it to saleable grade within the reporting year.
3e	Grade of mineral rejects generation and threshold value declared.	Mineral reject for the mine is +45-57% Fe, Threshold value is +45-55% Fe .	Mineral reject for the mine is +45-57% Fe, avg grade is 54.32 % Fe. Threshold value is +45-55% Fe .	Mineral reject for the mine is +45-57% Fe, avg grade is 54.32 % Fe. Threshold value is +45-55% Fe .
3f	Quantity of sub grade mineral generation.	Nil	Nil	Nil
3g	Grade of sub grade mineral generation	Nil	Nil	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized method of mining is proposed using drills, hydraulic shovels, dozers and dumper for segregation from ROM.	Mechanized method of mining is proposed using drills, hydraulic shovels, dozers and dumper for segregation from ROM.	Mechanized method of mining is proposed using drills, hydraulic shovels, dozers and dumper for segregation from ROM.

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- 3i Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.
- During the ensuing plan period, dry processing will be adopted to upgrade subgrade iron ore to suit the requirements of steel plants.
- Wet circuit in washing plant could not be operated since February 2017 due to statutory reasons. Only dry process is resorted by blending of sub-grade mineral/ mineral reject with higher grade ore.
- Only dry process is resorted by blending of sub-grade mineral/ mineral reject with higher grade ore during the reporting year. However work order has already placed to CSIR-IMMT Lab, Bhubaneshwar for carrying out R&D work such as Ore Characterization, Beneficiation and pelletization study of low grade iron ore alongwith development of process flow sheet vide WO Ref No. RSP/PROJ/CC/WO /18 of 2022-23 dated 17.02.2023.

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3j	Provision of drilling and blasting in mineral benches	Drilling in F & G area will be done by 150 mm dia IR/ Rotocol/IDM-30 E drills in square pattern with 4.0 -4.5m burden & 5.5-6.0m spacing. Similarly, D area, Panposh and B&C block, the mineral zones containing HLO/HMO, drilling will be carried out by 115mm dia drills.	Drilling & blasting carried out as per the proposal in the working pits during the reporting year. apart from the B & C area, where mining operations not yet started.	Drilling & blasting carried out as per the proposal in the working pits during the reporting year. apart from the B & C area, where mining operations not yet started.
		Subsequently, blasting will be done by charging the blast holes with cartridge slurry/ site mixed slurry explosive and blasted using either NONEL or denoting fuse.		
3k	Provision of mining machineries in mineral benches	Excavator and Dumper combination.	Excavator and Dumper combination carried out during the reporting year.	Excavator and Dumper combination carried out during the reporting year.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Average bench height in F &G area proposed is 10m where as in D area & Panposh mines, avg. bench height proposed to be kept 5-6m.	Yes. The bench height has been kept more or less as per the proposal for both Ore & OB benches, which are suitable for method of mining carried out.	Yes. The bench height has been kept more or less as per the proposal for both Ore & OB benches, which are suitable for method of mining carried out.

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3m	Total area covered under excavation/pits	290.80 Ha.	290.80 Ha.	290.80 Ha.
3n	Ore to OB ratio for the pit/mine during the year.	1 : 0.077 Tonnes/ M3	1 : 0.17 Tonnes/ M3	1 : 0.17 Tonnes/ M3
3o	Total area put in use under different heads at the end of year	520.08 Ha.	448.19 Ha. till end of the reporting year.	448.19 Ha. till end of the reporting year.
3p	Production of ROM mineral during the last five year period as applicable	Year ROM in MMT 2016-17 9.63 2017-18 10.05 2018-19 11.61 2019-20 11.62 2020-21 9.71 2021-22 10.70 MT	Year ROM in MT 2016-17 5681842 T 2017-18 5276946 T 2018-19 5654001 T 2019-20 6039265 T 2020-21 6320642 T 2021-22 7416717 T	Year ROM in MT 2016-17 5681842 T 2017-18 5276946 T 2018-19 5654001 T 2019-20 6039265 T 2020-21 6320642 T 2021-22 7416717 T

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3q	General remarks of inspecting officers on method of mining etc.	Lessee has carried out production in Four no of pits: namely F-area, G-area, D-area, Panposh-area, Production from B & C-area could not carried out during the reporting year. The lessee has partially deviated from the proposed development proposal in F-area, G-area, D-area, Panposh-area pits and also not achieved the targeted production proposal during the reporting year. A violation letter under rule 11(1) vide dated 02.01.2024 has been issued to to the lesse in this regard.	Lessee has carried out production in Four no of pits: namely F-area, G-area, D-area, Panposh-area, Production from B & C-area could not carried out during the reporting year. The lessee has partially deviated from the proposed development proposal in F-area, G-area, D-area, Panposh-area pits and also not achieved the targeted production proposal during the reporting year. A violation letter under rule 11(1) vide dated 02.01.2024 has been issued to to the lesse in this regard.
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Solid Waste Management - Dumping:

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Sl.No.	Item	Propasals	Actual work	Remarks
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4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Separate dump yard for OB and Mineral Reject proposed in the approved review of mining plan. No top soil will be generated during the ensuing plan period.	OB waste and some quantities of mineral rejects are dumped in the earmarked areas, as maximum quantity of mineral rejects produced concurrent to mining is utilized as ROM by blending with higher grade ore. However lessee has not carried out the waste dump in the southern side of the MRD / D-area quarry during the reporting year as per the proposal of the approved mining plan. A violation letter under rule 11(1) vide dated 02.01.2024 has been issued to to the lesse in this regard.	OB waste and some quantities of mineral rejects are dumped in the earmarked areas, as maximum quantity of mineral rejects produced concurrent to mining is utilized as ROM by blending with higher grade ore. However lessee has not carried out the waste dump in the southern side of the MRD/ D-area quarry during the reporting year as per the proposal of the approved mining plan. A violation letter under rule 11(1) vide dated 02.01.2024 has been issued to to the lesse in this regard.
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4b	Location of topsoil, OB and mineral reject dumps	Waste dumping proposed in the following blocks: F-area: 324490-324580/ 2444120- 2444400 (WDF- 2) 324210-324410/ 2443530- 2443810 (WDF- 1) G-area: 324390-324680/ 2444920- 2445120 (WDG) 326860-325060/ 2444950- 2445280 (WDG- 1) 325510-325740/ 2446220- 2446440 (WDJ) D-area: 328380-328470/ 2447680- 2447860 327180-328680/ 2446800- 2447300 Panposh: 326780-327100/ 2446320- 2446530  Mineral Reject Stacking proposed in the following locations:  F-area: 325070-325190/ 2444200- 2444390 G-area: 324680-324810/ 24449	No top soil generated during the excavation. Waste dumping carried out in the following blocks: F-area: 324210-324410/ 2443530-2443810 (WDF-1) G-area: 324390-324680/ 2444920-2445120 (WDG) 326860-325060/ 2444950- 2445280 (WDG-1) 325510-325740/ 2446220- 2446440 (WDJ Panposh: 326780-327100/ 2446320- 2446530	Lessee has not carried out the waste dump in the southern side of the MRD / D-area quarry during the reporting year as per the proposal of the approved mining plan. A violation letter under rule 11(1) vide dated 02.01.2024 has been issued to to the lesse in this regard.
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4c	Number of dumps within lease area and outside of lease area	Following no. of waste dumps and mineral reject dumps are present within lease area. F-area: 4 Nos. (WML) G-area: 4 Nos. (WML) D-area: 4 Nos. (WML) Panposh: 5 Nos. (WML) Out side-Nil	Following no. of waste dumps and mineral reject dumps are present within lease area. F-area: 4 Nos. (WML) G-area: 4 Nos. (WML) D-area: 4 Nos. (WML) Panposh: 5 Nos. (WML) Out side-Nil	Following no. of waste dumps and mineral reject dumps are present within lease area. F-area: 4 Nos. (WML) G-area: 4 Nos. (WML) D-area: 4 Nos. (WML) Panposh: 5 Nos. (WML) Out side-Nil
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Waste accommodation are proposed in F-area G-area, D-area, Panposh and B&C area which are outside the ultimate pit area	Waste accommodation are carried out as per the proposal during the reporting year apart form MRD/D-area quarry. Lessee has not carried out the waste dump in the southern side of the MRD / D-area quarry during the reporting year as per the proposal of the approved mining plan. A violation letter under rule 11(1) vide dated 02.01.2024 has been issued to to the lesse in this regard.	Waste accommodation are carried out as per the proposal during the reporting year apart form MRD/D-area quarry. Lessee has not carried out the waste dump in the southern side of the MRD / D-area quarry during the reporting year as per the proposal of the approved mining plan. A violation letter under rule 11(1) vide dated 02.01.2024 has been issued to to the lesse in this regard.
4e	Number of active and alive dumps.	Waste dump: F-area: 01 active G-area: 01 active D-Area: 02 active Panposh: 01 active	Active Waste dump: F-area: 01 active G-area: 01 active D-Area: 02 active Panposh: 01 active	Active Waste dump: F-area: 01 active G-area: 01 active D-Area: 02 active Panposh: 01 active



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4f	Number of dead dumps.	F-area: 02 inactive Panposh: 03 inactive	F-area: 02 inactive Panposh: 03 inactive	F-area: 02 inactive Panposh: 03 inactive
4g	Number of dumps established.	F-area: 01 stabilized D-Area: 01 stabilized Panposh: 01 stabilized	F-area: 01 stabilized D-Area: 01 stabilized Panposh: 01 stabilized	F-area: 01 stabilized D-Area: 01 stabilized Panposh: 01 stabilized
4h	Whether Retaining wall or garland drain all along dumps are there.	Reatining wall and garland drains are already exists around the waste dump within the lease area.	Reatining wall and garland drains are already exists around the waste dump within the lease area.	Reatining wall and garland drains are already exists around the waste dump within the lease area.
4i	Length of Retaining wall or garland drain all along dumps	Construction of Retaining wall in MRD/D-area quarry Near Waste dump WDD-2 600 (L) x 1.5 (H) x 1.2 (W)  Garland Drain proposed at the toe of D-area Dump WDD-2 600 (L) x 1.5 (H) x 1.2 (W)	Lessee has not carried out the waste dump in the southern side of the MRD / D-area quarry during the reporting year as per the proposal of the approved mining plan. A violation letter under rule 11(1) vide dated 02.01.2024 has been issued to to the lesse in this regard.	Lessee has not carried out the waste dump in the southern side of the MRD / D-area quarry during the reporting year as per the proposal of the approved mining plan. A violation letter under rule 11(1) vide dated 02.01.2024 has been issued to to the lesse in this regard.
4j	Number of settling ponds	One	One	One carried out in the reporting year.

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4k	Specific comments of inspecting officer on waste dump management	Waste accommodation are carried out as per the proposal during the reporting year apart from MRD/D-area quarry. Lessee has not carried out the waste dump in the southern side of the MRD / D-area quarry during the reporting year as per the proposal of the approved mining plan. A violation letter under rule 11(1) vide dated 02.01.2024 has been issued to to the lesse in this regard.	Waste accommodation are carried out as per the proposal during the reporting year apart from MRD/D-area quarry. Lessee has not carried out the waste dump in the southern side of the MRD / D-area quarry during the reporting year as per the proposal of the approved mining plan. A violation letter under rule 11(1) vide dated 02.01.2024 has been issued to to the lesse in this regard.
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Solid Waste Management - Backfilling:

Sl.No.	Item	Propasals	Actual work	Remarks
5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	Nil	Nil	None of the working pits is completely mined out. The mine is not mature till the reporting year for back filling.
5b	Area under backfilling of mined out area	Nil	Nil	None of the working pits is completely mined out. The mine is not mature till the reporting year for back filling.
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Nil	Nil	None of the working pits is completely mined out. The mine is not mature till the reporting year for back filling.

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5d	Total area fully reclaimed and rehabilitated	Nil	Nil	None of the working pits is completely mined out. The mine is not mature till the reporting year for back filling.
5e	General remarks of inspecting officers on backfilling and reclamation etc.		No mined out areas will be available for reclamation & rehabilitation in F, G, D , Panposh and B & C quarries. None of the working pits is completely mined out. The mine is not mature till the reporting year for back filling.	No mined out areas will be available for reclamation & rehabilitation in F, G, D , Panposh and B & C quarries. None of the working pits is completely mined out. The mine is not mature till the reporting year for back filling.

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Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	As per Rule 26(2) Annual PMCP report to be submitted before 1st day of July of Every Year.	Annual Report on PMCP for 2022-23 has been submitted within stipulated time period.	Annual Report on PMCP for 2022-23 has been submitted within stipulated time period.
6b	Area available for rehabilitation (ha) .	Nil	Nil	Nil
6c	afforestation done (ha).	2.0 Ha. Proposed for plantation with 2500 nos of sapplings.	About 2.3 Ha. Area is rehabilitated by plantation with 5832 nos of sapplings.	About 2.3 Ha. Area is rehabilitated by plantation with 5832 nos of sapplings.
6d	No. of sapplings planted during the year	2.0 Ha. Proposed for plantation with 2500 nos of sapplings.	About 2.3 Ha. Area is rehabilitated by plantation with 5832 nos of sapplings.	About 2.3 Ha. Area is rehabilitated by plantation with 5832 nos of sapplings.

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6e	Cumulative no .of plants		About 94967 Nos of sapplings have been planted within the mining lease area.	About 94967 Nos of sapplings have been planted within the mining lease area.
6f	Any other method of rehabilitation	Nil	Nil	No such proposal within the lease area for the reporting year.
6g	Cost incurred on watch and care during the year	Nil	Nil	No such proposal within the lease area for the reporting year.
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	Nil	Nil	No such proposal within the lease area for the reporting year.
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Nil	Nil	No such proposal within the lease area for the reporting year.
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on on backfilled area	Nil	Nil	No such proposal within the lease area for the reporting year.
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Nil	Nil	No such proposal within the lease area for the reporting year.
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	Nil	Nil	No such proposal within the lease area for the reporting year.

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6m	Compliance of rehabilitation of waste land within lease (i)afforestation	About 2.0 Ha. Area is rehabilitation proposed by plantation with 2500 nos of sapplings.	About 2.3 Ha. Area is rehabilitated by plantation with 5832 nos of sapplings.	About 2.3 Ha. Area is rehabilitated by plantation with 5832 nos of sapplings.
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	About 2.0 Ha. Area is rehabilitation proposed by plantation with 2500 nos of sapplings.	About 2.3 Ha. Area is rehabilitated by plantation with 5832 nos of sapplings.	About 2.3 Ha. Area is rehabilitated by plantation with 5832 nos of sapplings.
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Afforestation.	Afforestation.	Afforestation.
6p	Compliance of environmental monitoring (core zone and buffer zone)	Air, Noise and Water quality monitoring will be done during the year within the lease area.	Air (4 nos), Noise (7 nos) and Water quality monitoring (4 nos) are being carried out as per the proposal during the reporting year.	Air (4 nos), Noise (7 nos) and Water quality monitoring (4 nos) are being carried out as per the proposal during the reporting year.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.		The lessee has carried out afforestation of about 5832 nos of sapplings and environmental monitoring as per the proposal during the reporting year.	The lessee has carried out afforestation of about 5832 nos of sapplings and environmental monitoring as per the proposal during the reporting year.

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**Mineral Conservation:**

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Saleable Ore:+58 % Fe, Mineral Reject:- +45 to 58% Fe were proposed.	Saleable Ore:+58 % Fe, Mineral Reject:- +45 to 58% Fe are being carried out.	Saleable Ore:+58 % Fe, Mineral Reject:- +45 to 58% Fe are being carried out.

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7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical	Mechanical	Mechanical
7c	Different grade of mineral sorted out at mines.	Saleable Ore: +55 % Fe, Mineral Reject:- +45 to 51% Fe +51 to 55% Fe were proposed.	Saleable Ore: +55 % Fe, Mineral Reject:- +45 to 51% Fe +51 to 55% Fe are being carried out.	Saleable Ore: +55 % Fe, Mineral Reject:- +45 to 51% Fe +51 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 and 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 Screenings are being carried out during the reporting year.	Saleable Ore: +55 % Fe, Mineral Reject: +45 to 55% Fe stocks are being practiced. Further no beneficiation process was proposed. Only crushing and Screenings are being carried out during the reporting year.

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**Environment:**

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Proposal of incidental occurence was proposed.	No top soil generated during the year.	No top soil generated during the year.
8b	Concurrent use or storage of topsoil	Proposal of incidental occurence and subsequent utalization was proposed.	No top soil generated during the year.	No top soil generated during the year.

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8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate OB and Mineral Rejects dumps were proposed in the approved review of mining plan.	Separate dumps for Overburden and mineral stacks and other waste rocks are being practiced. However, Dumping was not carried out in the proposed location i.e. southern end of the MRD-area as per the proposal of approved mining plan. In this regard, a violation letter vide letter dated 02.01.2024 has been issued to the lessee.	Separate dumps for Over-burden and mineral stacks and other waste rocks are being practiced. However, Dumping was not carried out in the proposed location i.e. southern end of the MRD-area as per the proposal of approved mining plan. In this regard, a violation letter vide letter dated 02.01.2024 has been issued to the lessee.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Nil	Nil	No such proposal was there for the reporting year.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Nil	Nil	No such proposal was there for the reporting year.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	About 2.0 Ha. Area was proposed for rehabilitation by plantation with 2500 nos of sapplings.	About 2.3 Ha. Area is rehabilitated by plantation with 5832 nos of sapplings.	About 2.3 Ha. Area is rehabilitated by plantation with 5832 nos of sapplings.

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8g	Survival rate	About 2.0 Ha. Area was proposed for rehabilitation by plantation with 2500 nos of sapplings. Survival rate 100% proposed.	About 2.3 Ha. Area is rehabilitated by plantation with 5832 nos of sapplings and survival rate is 80%.	About 2.3 Ha. Area is rehabilitated by plantation with 5832 nos of sapplings and survival rate is 80%.
8h	Water sprinkling on roads to control airborne dust	Water sprinkling by water tanker over haul roads was proposed.	Water sprinkling by water tanker over haul roads has been carried out during the reporting year to control the air borne dust particles.	Water sprinkling by water tanker over haul roads has been carried out during the reporting year to control the air borne dust particles.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		Separate OB dump and mineral stacks and other waste rocks are in practiced. However, Dumping was not carried out in the proposed location i.e. southern end of the MRD-area as per the proposal. In this regard, a violation letter has been issued to the lessee. Plantation overt 2.3 Ha. Area with 5832 nos of sapplings and 80% survival rate. water sprinkling by water tanker over haul roads has been carried out to control the air borne dust particles. This sustains the asthetic beauty of the mine area	Separate OB dump and mineral stacks and other waste rocks are in practiced. However, Dumping was not carried out in the proposed location i.e. southern end of the MRD-area as per the proposal. In this regard, a violation letter has been issued to the lessee. Plantation overt 2.3 Ha. Area with 5832 nos of sapplings and 80% survival rate. water sprinkling by water tanker over haul roads has been carried out to control the air borne dust particles. This sustains the asthetic beauty of the mine area



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Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	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.	Monthly returns and annual return for the reporting year have been submitted within the stipulated time period.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Sri B. N. Singh, appointed as full time mining engineer, Sri S. Kumar appointed as full time geologist, and Sri U. K. Bhasker appointed as mines manager.	Sri B. N. Singh, appointed as full time mining engineer, Sri S. Kumar appointed as full time geologist, and Sri U. K. Bhasker appointed as mines manager. All were present during the inspection.	Sri B. N. Singh, appointed as full time mining engineer, Sri S. Kumar appointed as full time geologist, and Sri U. K. Bhasker appointed as mines manager. All were present during the inspection.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Area covered by pits- 290.8 Ha. Waste dump- 29.83 Ha. Reclaimed Area- 51.21 Ha. Infrastructure s & Roads- 75.35 Ha. Magazine & POL- 1.00 Ha.	Area covered by pits- 290.8 Ha. Waste dump- 29.83 Ha. Reclaimed /Rehabilitated Area- 51.21 Ha. Infrastructures & Roads- 75.35 Ha. Magazine & POL- 1.00 Ha.	Area covered by pits- 290.8 Ha. Waste dump- 29.83 Ha. Reclaimed /Rehabilitated Area- 51.21 Ha. Infrastructures & Roads- 75.35 Ha. Magazine & POL- 1.00 Ha.
9d	Scrutiny of Annual return on afforestation	Out side ML area- 5832 Nos of sapplings Outside Ml area- 2523 nos of sapplings Survival rate- 80%	Out side ML area- 5832 Nos of sapplings Outside Ml area- 2523 nos of sapplings Survival rate- 80%	Out side ML area- 5832 Nos of sapplings Outside Ml area- 2523 nos of sapplings Survival rate- 80%

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9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	484302 tons (> 45% to <58% Fe).	484302 tons (> 45% to <58% Fe).	484302 tons (> 45% to <58% Fe).
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Opening stock- 404970.000 tons Production- 7202585.000 tons Closing stock- 12308.000 tons	Opening stock- 404970.000 tons Production- 7202585.000 tons Closing stock- 12308.000 tons	Opening stock- 404970.000 tons Production- 7202585.000 tons Closing stock- 12308.000 tons
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Cost of production: Rs 526.93/- furnished in Annual return.	Cost of production: Rs 526.93/- furnished in Annual return.	Cost of production: Rs 526.93/- furnished in Annual return.
9h	Scrutiny of Annual return on fixed assets	Fixed Asset: Rs. 4329962078/-, furnished in annual return of the reporting year.	Fixed Asset: Rs. 4329962078/-, furnished in annual return of the reporting year.	Fixed Asset: Rs. 4329962078/-, furnished in annual return of the reporting year.

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9k	Scrutiny of Annual return on mining machineries	SHOVEL (HYDRAULIC) 9.500 CUM 3 Nos. Non Electrical Opencast BACK HOE 2.600 CUM 3 Nos. Non Electrical Opencast BACK HOE 1.200 CUM 3 Nos. Non Electrical Opencast DUMPER 100.000 TONNE 6 Nos. Non Electrical Opencast WATER TANKER 28000.000 LITRE 3 Nos. Non Electrical Opencast ROCK DRILL (NON-ELEC.) 160.000 MM 4 Nos. Non Electrical Opencast DOZER 410.000 HP 8 Nos. Non Electrical Opencast FRONT END LOADER 3.400 CUM 4 Nos. Non Electrical Opencast MOTOR GRA	SHOVEL (HYDRAULIC) 9.500 CUM 3 Nos. Non Electrical Opencast BACK HOE 2.600 CUM 3 Nos. Non Electrical Opencast BACK HOE 1.200 CUM 1 No. Non Electrical Opencast DUMPER 100.000 TONNE 6 Nos. Non Electrical Opencast WATER TANKER 28000.000 LITRE 3 Nos. Non Electrical Opencast ROCK DRILL (NON-ELEC.) 160.000 MM 4 Nos. Non Electrical Opencast DOZER 410.000 HP 8 Nos. Non Electrical Opencast FRONT END LOADER 3.400 CUM 4 Nos. Non Electrical Opencast MOTOR GRA	SHOVEL (HYDRAULIC) 9.500 CUM 3 Nos. Non Electrical Opencast BACK HOE 2.600 CUM 3 Nos. Non Electrical Opencast BACK HOE 1.200 CUM 1 No. Non Electrical Opencast DUMPER 100.000 TONNE 6 Nos. Non Electrical Opencast WATER TANKER 28000.000 LITRE 3 Nos. Non Electrical Opencast ROCK DRILL (NON- ELEC.) 160.000 MM 4 Nos. Non Electrical Opencast DOZER 410.000 HP 8 Nos. Non Electrical Opencast FRONT END LOADER 3.400 CUM 4 Nos. Non Electrical Opencast MOTOR GRA
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**Details of violations observed during current inspection and compliance position of violation pointed out**

Violation observed			Show couse position		
Rule NO.	Issued on	Compliance on	Rule NO.	Issued on	Compliance on
MCDR17	Rule 11(1)	02/01/2024			

**Date :****(SANJIB KUMAR MOHAPATRA)**

Indian Bureau of Mines