

**INDIAN BUREAU OF MINES  
MINERALS DEVELOPEMMENT AND REGULATION DIVISION**

**MCDR INSPECTION REPORT**

**Bhubaneshwar regional office**

**Mine file No :** ORI/MN/SNG/MCDR-3/BBS

**Mine code :** 40ORI13010

- (i) Name of the Inspecting : **SRM** ) **SHRI SUDIP RANJAN MAZUMDAR**  
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Shri Sanju Mahto, Mines Manager  
Official with  
Designation
- (iv) Date of Inspection : 31/01/2020
- (v) Prev.inspection date : 07/02/2019

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **KOLMONG**
- (b) **Registration NO.** : **IBM/4562/2011**
- (c) Category : A Other than Fully Mech.
- (d) Type of Working : Opencast
- (e) Postal address
- State : ORISSA
- District : SUNDARGARH
- Village : KOLMONG
- Taluka : BONAI
- Post office : MALDA
- Pin Code :
- FAX No. : 06767-276651
- E-mail : bbloffice@rungtamines.com
- Phone : 06767-276651
- (f) Police Station : Koira
- (g) First opening date : 01/09/1939
- (h) Weekly day of rest : TUE
2. Address for : KOLMONG MANGANESE MINE  
correspondance VILL-KOLMONG, PO-KOIRA  
DIST-SUNDERGARH
3. (a) Lease Number : ORI0197
- (b) Lease area : 218.83
- (c) Period of lease : 20
- (d) Date of Expiry : 31/12/1999
4. Mineral worked : MANGANESE ORE Main

## 5. Name and Address of the

Lessee : Rungta Mines Ltd  
 Rungta House P.O.Chaibasa  
 SINGHBHUM (WEST) JHARKHAND  
 Phone:06582-56461,56561,56661,56761  
 FAX :91-6582-56442

Owner : M/S Rungta Mines Ltd  
 M/S Rungta Mines Ltd Rungta  
 House At P.O.Chaibasa  
 SINGHBHUM (WEST) JHARKHAND  
 Phone: 06582- 56461,56  
 FAX : 91- 6582 - 5644

Agent : A.S.MAHAPATRA  
 Rungta Office, Main Road,  
 Barbil Keonjhar, Orissa  
 KEONJHAR ORISSA  
 Phone: 06767-276651  
 FAX : 06767-276651

## Geologist

Name : Pramod Kumar Giri,Full Time  
 Qualification : M.sc.  
 Appointment/ : 01/01/2015  
 Termination date

## Manager

Name : Sanju Mahato  
 Qualification : BE (Mining)  
 Appointment/ : 20/12/2016  
 Termination date

6. Date of approval of Mining	:	Renewal under rule 22 MCR1960	20/10/1999
Plan/Scheme of Mining		Modif.of approved Mining Plan	11/09/2007
		Mining Scheme rule 12 MCDR1988	28/03/2008
		Mining Scheme rule 12 MCDR1988	08/06/2010
		Modif.approved Mining Scheme	16/06/2014
		Mining Scheme rule 12 MCDR1988	02/03/2015
		Modif.of approved Mining Plan	29/08/2016
		MP modif under 17(3) MCR 2016	10/08/2018
		FMCP under 23C(1)	04/10/2018
		FMCP under 23C(1)	06/03/2019

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

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	In 2018-19, in the proposed retained area of 113.375 Ha, 72 no of boreholes have been proposed and in the proposed surrendered area of 105.155 Ha, 122 no of boreholes have been proposed. The lessee has submitted an application for surrender area over 105.155 Ha and exploration proposal in this area will commence if the surrender is not accepted by the state government.	In the proposed retained area of 113.375 ha, 74 nos of boreholes have been completed against proposal of 72 nos of boreholes. Further, an area of 105.155 Ha is applied for surrender to Govt. of Odisha vide letter dated 17.05.2018. It has been mentioned in the modification of mining plan approved dated 18.05.2018 that exploration proposal in 105.155 Ha area will commence if the surrender is not accepted by the state government.	In the proposed retained area of 113.375 ha, 74 nos of boreholes have been completed against proposal of 72 nos of boreholes. Further, an area of 105.155 Ha is applied for surrender to Govt. of Odisha vide letter dated 17.05.2018. It has been mentioned in the modification of mining plan approved dated 18.05.2018 that exploration proposal in 105.155 Ha area will commence if the surrender is not accepted by the state government.

1b	Exploration over lease area for geological axis 1 or 2	In 2018-19, in the proposed retained area of 113.375 Ha, 72 no of boreholes have been proposed and in the proposed surrendered area of 105.155 Ha, 122 no of boreholes have been proposed. The lessee has submitted an application for surrender area over 105.155 Ha and exploration proposal in this area will commence if the surrender is not accepted by the state government.	As on 01.04.2019, the proposed retained area of 113.375 Ha has been explored under G1/G2 level of exploration. Area under G1 is 69.59 Ha and under G2 is 43.785 Ha. The proposed area for surrender i.e, 105.155 Ha is unexplored.	As on 01.04.2019, the proposed retained area of 113.375 Ha has been explored under G1/G2 level of exploration. Area under G1 is 69.59 Ha and under G2 is 43.785 Ha. The proposed area for surrender i.e, 105.155 Ha is unexplored.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Exploration Agency: M/s VKS Mining Services & M/s Geo exploration India Expenditure: No specific expenditure is specified.	Exploration Agency: M/s VKS Mining Services & M/s Geo exploration India Expenditure incurred: Rs. 9895775.00	Exploration Agency: M/s VKS Mining Services & M/s Geo exploration India Expenditure incurred: Rs. 9895775.00

1d	Balance area to be explored to bring Geological axis in 1 or 2	Balance area to be explored under G1 or G2 is 105.155 Ha. The lessee has submitted an application for surrender an area over 105.155 Ha and exploration proposal in this area will commence if the surrender is not accepted by the state government.	Balance area to explore is 105.155 ha. The lessee has submitted an application for surrender an area over 105.155 Ha to Govt. of Odisha vide letter dated 17.05.2018 which is under process. It has been mentioned in the modification of mining plan approved dated 18.05.2018 that exploration proposal in 105.155 Ha area will commence if the surrender is not accepted by the state government.	Balance area to explore is 105.155 ha. The lessee has submitted an application for surrender an area over 105.155 Ha to Govt. of Odisha vide letter dated 17.05.2018 which is under process. It has been mentioned in the modification of mining plan approved dated 18.05.2018 that exploration proposal in 105.155 Ha area will commence if the surrender is not accepted by the state government.
1e	Balance reserve as on 01/04/20	As per the modification of mining plan approved dated 10.08.2018, Reserve and Resource as on 01.07.2018 are as follows: Reserve is 1938103 tones and Remaining resources is 233383MT. Total reserves & resources is 2171486MT	Production during 2018-19 is 14086.013 tons. As per the annual return, the reserve as on 01.04.2019 is 1927865.457MT, Remaining resources-233383 MT. Total reserves & resources-2161248.457MT	Production during 2018-19 is 14086.013 tons. As per the annual return, the reserve as on 01.04.2019 is 1927865.457MT, Remaining resources-233383 MT. Total reserves & resources-2161248.457MT

1f	General remarks of inspecting officers on geology, exploration etc	In 2018-19, in the proposed retained area of 113.375 Ha, 72 no of boreholes have been proposed and in the proposed surrendered area of 105.155 Ha, 122 no of boreholes have been proposed. The lessee has submitted an application for surrender area over 105.155 Ha and exploration proposal in this area will commence if the surrender is not accepted by the state government.	In the proposed retained area of 113.375 ha, 74 nos of boreholes have been completed against proposal of 72 nos of boreholes. Further, an area of 105.155 Ha which is unexplored has been applied for surrender to Govt. of Odisha vide letter dated 17.05.2018. It has been mentioned in the modification of mining plan approved dated 18.05.2018 that exploration proposal in 105.155 Ha area will commence if the surrender is not accepted by the state government.	In the proposed retained area of 113.375 ha, 74 nos of boreholes have been completed against proposal of 72 nos of boreholes. Further, an area of 105.155 Ha which is unexplored has been applied for surrender to Govt. of Odisha vide letter dated 17.05.2018. It has been mentioned in the modification of mining plan approved dated 18.05.2018 that exploration proposal in 105.155 Ha area will commence if the surrender is not accepted by the state government.
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Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	In 2018-19, Location of development proposed in four pits namely New Pit, Q-6&7, D-Pit and M-Pit	In 2018-19, development took place in four pits namely New Pit, Q-6&7, D-Pit and M-Pit	In 2018-19, development took place in four pits namely New Pit, Q-6&7, D-Pit and M-Pit

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	No separate topsoil bench in top soil. Separate benches in ore and overburden proposed.	No separate bench in top soil. Separate benches in ore and overburden developed.	No separate bench in top soil. Separate benches in ore and overburden developed.
2c	Stripping ratio or ore to OB ratio	1:12.37 t/m3	1:10.33 t/m3	ROM production was 14086.013 tones against proposal of 40000 tones.
2d	Quantity of topsoil generation in m3	There was no proposal of top soil generation during the year 2018-19	There was no generation of top soil.	There was no generation of top soil.
2e	Quantity of overburden generation in m3	The overburden proposal during the year 2018-19 was 495003 m3	The overburden generated during the year 2018-19 was 145505.51 m3	The OB generation is less due to less production. ROM production was 14086.013 tones against proposal of 40000 tones.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	In 2018-19, Location of development proposed in four pits namely New Pit, Q-6&7, D-Pit and M-Pit. The overburden proposal during the year 2018-19 was 495003 m3	In 2018-19, development took place in four pits namely New Pit, Q-6&7, D-Pit and M-Pit. The overburden generated during the year 2018-19 was 145505.51 m3. The OB generation is less due to less production. ROM production was 14086.013 tones against proposal of 40000 tones.	In 2018-19, development took place in four pits namely New Pit, Q-6&7, D-Pit and M-Pit. The overburden generated during the year 2018-19 was 145505.51 m3. The OB generation is less due to less production. ROM production was 14086.013 tones against proposal of 40000 tones.

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### Exploitation:

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Sl.No.	Item	Propasals	Actual work	Remarks
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3a	Number of pit proposed for production	In 2018-19, four number of pits are proposed to be developed namely New pit, Quarry 6&7, Dhandaria pit and Magazine pit	In 2018-19, four number of pits have been developed namely New pit, Quarry 6&7, Dhandaria pit and Magazine pit.	In 2018-19, four number of pits have been developed namely New pit, Quarry 6&7, Dhandaria pit and Magazine pit.
3b	Quantity of ROM mineral production proposed	In 2018-19, ROM production proposed was 40000 tones	In 2018-19, actual ROM production was 14086.013 tones	In 2018-19, actual ROM production was 14086.013 tones
3c	Recovery of sailable/usable mineral from ROM production	In 2018-19, recovery of saleable mineral from ROM production proposed was 36000 tones	In 2018-19, recovery of saleable mineral from ROM production was 13786.013 tones	In 2018-19, recovery of saleable mineral from ROM production was 13786.013 tones
3d	Quantity of mineral reject generation	In 2018-19, quantity of mineral reject generation proposed was 4000 tones	In 2018-19, quantity of mineral reject generated was 300 tones	In 2018-19, actual ROM production was 14086.013 tones against proposal of 40000 tones. Hence the generation of mineral reject was less.
3e	Grade of mineral rejects generation and threshold value declared.	Grade of mineral reject is 10-25%Mn & threshold value is considered as 10% Mn	Grade of mineral reject is 10-25%Mn & threshold value is considered as 10% Mn	Grade of mineral reject is 10-25%Mn & threshold value is considered as 10% Mn
3f	Quantity of sub grade mineral generation.	In 2018-19, quantity of subgrade generation proposed was 4000 tones	In 2018-19, quantity of subgrade generated was 300 tones	In 2018-19, actual ROM production was 14086.013 tones against proposal of 40000 tones. Hence the generation of subgrade was less.
3g	Grade of sub grade mineral generation	Grade of subgrade mineral generation is 10-25% Mn	Grade of subgrade mineral generation is 10-25% Mn	Grade of subgrade mineral generation is 10-25% Mn

3h	Manual / Mechanised method adopted for segregating from ROM	Manual	Manual	Manual
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No beneficiation is proposed	Nil	Nil
3j	Provision of drilling and blasting in mineral benches	Deephole drilling & blasting is proposed for development of OB benches. Shorthole drilling & blasting will be done in hard strata of ore benches.	Deephole drilling & blasting is used for development of OB benches with occasional use of rock breaker.	Deephole drilling & blasting is used for development of OB benches with occasional use of rock breaker.
3k	Provision of mining machineries in mineral benches	Excavator and dumpers combination will be used for development of benches in ore.	Excavator and dumpers combination used for development of benches in ore.	Excavator and dumpers combination used for development of benches in ore.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	In the quarry the bench height will vary from 3 to 4m.	Height of the bench proposed is suitable for proposed method of mining.	Height of the bench proposed is suitable for proposed method of mining.
3m	Total area covered under excavation/pits	43.677 Ha (at the end of the plan period)	34.479 Ha at the end of 2018-19	Data as furnished in annual return for 2018-19
3n	Ore to OB ratio for the pit/mine during the year.	1:12.37 t/m <sup>3</sup>	1:10.33 t/m <sup>3</sup>	ROM production was 14086.013 tones against proposal of 40000 tones.

3o	Total area put in use under different heads at the end of year	Total area put in use under different heads at the end of plan period is 71.078 ha	Total area put in use under different heads at the end of 2018-19 is 53.9 ha	Total area put in use under different heads at the end of 2018-19 is 53.9 ha
3p	Production of ROM mineral during the last five year period as applicable	Year wise ROM Production proposal: 2014-15: 40001 tones 2015-16: 25376 tones 2016-17: 30085 tones 2017-18: 34000 tones 2018-19: 40000 tones	Year wise ROM Production generated: 2014-15: 2921.514 tones 2015-16: 10641.433 tones 2016-17: 9569.336 tones 2017-18: 9923.784 tones 2018-19: 14086.013 tones	Year wise ROM Production generated: 2014-15: 2921.514 tones 2015-16: 10641.433 tones 2016-17: 9569.336 tones 2017-18: 9923.784 tones 2018-19: 14086.013 tones
3q	General remarks of inspecting officers on method of mining etc.	In 2018-19, four number of pits are proposed to be developed namely New pit, Quarry 6&7, Dhandaria pit and Magazine pit. In 2018-19, actual ROM production was 40000 tones, Excavator and dumpers combination will be used for development of benches in ore.	In 2018-19, four number of pits have been developed namely New pit, Quarry 6&7, Dhandaria pit and Magazine pit. In 2018-19, actual ROM production was 14086.013 tones. Excavator and dumpers combination used for development of benches in ore.	In 2018-19, four number of pits have been developed namely New pit, Quarry 6&7, Dhandaria pit and Magazine pit. In 2018-19, actual ROM production was 14086.013 tones. Excavator and dumpers combination used for development of benches in ore.

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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)	In 2018-19, there is no proposal for generation of top soil. The OB generated will be dumped in Dump-1 and Dump-3 and also will be backfilled.	No top soil generated. The OB is dumped in separate dumping yard. The OB generated has been dumped in Dump-1 and Dump-3 and also backfilled.	No top soil generated. The OB is dumped in separate dumping yard. The OB generated has been dumped in Dump-1 and Dump-3 and also backfilled.
4b	Location of topsoil, OB and mineral reject dumps	In 2018-19, there is no proposal for generation of top soil. The OB generated will be dumped in Dump- and Dump-3 and also will be backfilled. Mineral reject generated will be stored in stack having coordinate S550-650 & E720-820.	No top soil generated. The OB is dumped in separate dumping yard. The OB generated has been dumped in Dump- and Dump-3 and also backfilled. Mineral reject generated is stored in stack having coordinate S550-650 & E720-820	No top soil generated. The OB is dumped in separate dumping yard. The OB generated has been dumped in Dump- and Dump-3 and also backfilled. Mineral reject generated is stored in stack having coordinate S550-650 & E720-820
4c	Number of dumps within lease area and outside of lease area	2 nos of active dumps & 1 no of inactive dump within the lease area.	2 nos of active dumps & 1 no of inactive dump is present within the lease area.	2 nos of active dumps & 1 no of inactive dump is present within the lease area.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Dumps are to be present outside the UPL.	Dumps are present outside the UPL.	Dumps are present outside the UPL.
4e	Number of active and alive dumps.	Two nos of active dumps namely Dump-1 and Dump-3	Two nos of active dumps namely Dump-1 and Dump-3	Two nos of active dumps namely Dump-1 and Dump-3
4f	Number of dead dumps.	One no of dead dump, namely Dump-2	One no of dead dump, namely Dump-2	One no of dead dump, namely Dump-2
4g	Number of dumps established.	One no of dead dump, namely Dump-2	One no of dead dump, namely Dump-2	One no of dead dump, namely Dump-2

4h	Whether Retaining wall or garland drain all along dumps are there.	(a)In 2018-19, it was proposed to construct retaining wall at the toe of backfilled area of length 150m. (b) It was proposed to construct garland drain at the toe of Dump-3 of length 50m.	(a)It was observed during inspection that the proposed retaining wall at the toe of the backfilled area has not been constructed. (b)It was observed during inspection that the proposed garland drain at the toe of dump-3 are has not been constructed. Further, it was observed that northern part of Dump-1 has not been secured through retaining wall and garland drain.	Violation has been issued to lessee under rule 37 (2) and 26(1) of MCDR 2017
4i	Length of Retaining wall or garland drain all along dumps	In 2018-19, 150 m retaining wall and 150 m garland drain to be constructed as per FMCP	Not constructed during 2018-19	Violation has been issued to lessee under rule 26(1) of MCDR 2017.
4j	Number of settling ponds	In 2018-19, One no of settling pond is proposed to be constructed as per FMCP.	Not constructed during 2018-19	The violation has been issued to lessee under rule 26(1) of MCDR 2017.

4k	Specific comments of inspecting officer on waste dump management	In 2018-19, there is no proposal for generation of top soil. The OB generated will be dumped in Dump-1 and Dump-3 and also will be backfilled. 150 m retaining wall and 150 m garland drain to be constructed. In 2018-19, One no of settling pond is proposed to be constructed.	No top soil generated. The OB is dumped in separate dumping yard. The OB generated has been dumped in Dump-1 and Dump-3 and also backfilled. The proposed length of retaining wall and garland drain have not been constructed during 2018-19. Also proposed settling pond have not been constructed in 2018-19. Further, it was observed that northern part of Dump-1 has not been secured through retaining wall and garland drain. Violation has been issued to lessee under rule 37 (2) and 26(1) of MCDR 2017.	No top soil generated. The OB is dumped in separate dumping yard. The OB generated has been dumped in Dump-1 and Dump-3 and also backfilled. The proposed length of retaining wall and garland drain have not been constructed during 2018-19. Also proposed settling pond have not been constructed in 2018-19. Further, it was observed that northern part of Dump-1 has not been secured through retaining wall and garland drain. Violation has been issued to lessee under rule 37 (2) and 26(1) of MCDR 2017.
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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.	The earmarked area for backfilling in quarry-6&7 is already proved barren by exploration.	Backfilling done is done as per proposal in quarry-6&7 already proved barren by exploration.	Backfilling done is done as per proposal in quarry-6&7 already proved barren by exploration.

5b	Area under backfilling of mined out area	During 2018-19, waste will be dumped over the already backfilled area. Heightening of already backfilled area of 2.4 ha up to 594 mRL is proposed	Heightening of 2.4 Ha already backfilled area done up to 592 mRL. It was proposed to backfill Quarry-6&7 with waste generated from quarry-6 & 7 in already exhausted part of quarry-6 & 7. The production proposed from quarry 6&7 was 12000 MT of ROM with proposed waste generation at 149321 cum. The actual ROM production from the quarry -6& 7 was 3572.907 tones and waste generated was 46075.67 cum. Thus due to less generation of waste from quarry-6&7 the proposed height was not achieved.	Heightening of 2.4 Ha already backfilled area done up to 592 mRL. It was proposed to backfill Quarry-6&7 with waste generated from quarry-6 & 7 in already exhausted part of quarry-6 & 7. The production proposed from quarry 6&7 was 12000 MT of ROM with proposed waste generation at 149321 cum. The actual ROM production from the quarry -6& 7 was 3572.907 tones and waste generated was 46075.67 cum. Thus due to less generation of waste from quarry-6&7 the proposed height was not achieved.
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	In 2018-19, there is no proposal for generation of top soil.	No top soil generated.	No top soil generated.
5d	Total area fully reclaimed and rehabilitated	In 2018-19, proposal for afforestation on 0.5 ha of the backfilled area	Afforestation done on 0.6 ha of the backfilled area.	Afforestation done on 0.6 ha of the backfilled area.

5e	General remarks of inspecting officers on backfilling and reclamation etc.	During 2018-19, waste will be dumped over the already backfilled area. Heightening of already backfilled area of 2.4 ha up to 594 mRL is proposed. In 2018-19, proposal for afforestation on 0.5 ha of the backfilled area.	Heightening of 2.4 Ha already backfilled area done up to 592 mRL. Afforestation done on 0.6 ha of the backfilled area.	Heightening of 2.4 Ha already backfilled area done up to 592 mRL. Afforestation done on 0.6 ha of the backfilled area.
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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).	Annual report on PMCP to be submitted as per Rule 26 (2) of MCDR, 2017	Annual report on PMCP for the year 2018-19 have been submitted timely.	Annual report on PMCP for the year 2018-19 have been submitted timely.
6b	Area available for rehabilitation (ha) .	3.0 Ha	3.0 Ha	3.0 Ha
6c	afforestation done (ha).	3.0 Ha	3.0 Ha	3.0 Ha
6d	No. of saplings planted during the year	7000 nos	10,000 nos	Nil
6e	Cumulative no .of plants	77503 nos.	82003 nos.	Nil
6f	Any other method of rehabilitation	By plantation	By plantation	By plantation
6g	Cost incurred on watch and care during the year	1.50 lakhs	10.8 lakhs	Nil

6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	During 2018-19, waste will be dumped over the already backfilled area. Heightening of already backfilled area of 2.4 ha up to 594 mRL is proposed	Heightening of 2.4 Ha already backfilled area done up to 592 mRL.	Heightening of 2.4 Ha already backfilled area done up to 592 mRL.
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	It was proposed to backfill Quarry-6&7 with waste generated from quarry-6 & 7 in already exhausted part of quarry-6 & 7. The production proposed from quarry 6&7 was 12000 MT of ROM with proposed waste generation at 149321 cum.	The actual ROM production from the quarry -6& 7 was 3572.907 tones and waste generated was 46075.67 cum. Thus due to less generation of waste from quarry-6&7 the proposed height of backfilled area was not achieved.	The actual ROM production from the quarry -6& 7 was 3572.907 tones and waste generated was 46075.67 cum. Thus due to less generation of waste from quarry-6&7 the proposed height of backfilled area was not achieved.
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	1500 nos	1500 nos	Nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Not Proposed	Nil	Nil

6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	Not Proposed	Nil	Nil
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	3000 nos as per FMCP	Nil	Violation was issued under rule 26 (1) of MCDR 2017
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	1 Ha as per FMCP	Nil	Violation was issued under rule 26 (1) of MCDR 2017
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Plantation	Nil	Violation was issued under rule 26 (1) of MCDR 2017
6p	Compliance of environmental monitoring (core zone and buffer zone)	Quarterly environmental monitoring at 4 locations for air monitoring, 3 locations for water quality, 4 stations for noise level survey.	Quarterly environmental monitoring at 3 locations for air monitoring, 3 locations for water quality, 3 stations for noise level survey.	Quarterly environmental monitoring at 3 locations for air monitoring, 3 locations for water quality, 3 stations for noise level survey.

6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	Annual report on PMCP to be submitted as per Rule 26 (2) of MCDR, 2017. During 2018-19, waste will be dumped over the already backfilled area. Heightening of already backfilled area of 2.4 ha up to 594 mRL is proposed. No. of saplings proposed for plantation: 7000 nos	Annual report on PMCP for the year 2018-19 have been submitted timely. Heightening of 2.4 Ha already backfilled area done up to 592 mRL. No. of saplings for planted: 10000 nos	Annual report on PMCP for the year 2018-19 have been submitted timely. Heightening of 2.4 Ha already backfilled area done up to 592 mRL. No. of saplings for planted: 10000 nos
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Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade wise sorting	Grade wise sorting	Grade wise sorting
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Manual	Manual	Manual
7c	Different grade of mineral sorted out at mines.	The ore will be manually sorted as low, medium and high grade	Different grade of ore produced as furnished in annual return for 2018-19 are: Below 25% Mn, 25% to Below 35% Mn, 35% to below 46% Mn and 46% Mn and above.	Different grade of ore produced as furnished in annual return for 2018-19 are: Below 25% Mn, 25% to Below 35% Mn, 35% to below 46% Mn and 46% Mn and above.

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7d	Any beneficiation process at mines .	Not Proposed	Nil	Nil
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	Grade wise sorting. The ore will be manually sorted as low, medium and high grade	Grade wise sorting. Different grade of ore produced as furnished in annual return for 2018-19 are: Below 25% Mn, 25% to Below 35% Mn, 35% to below 46% Mn and 46% Mn and above.	Grade wise sorting. Different grade of ore produced as furnished in annual return for 2018-19 are: Below 25% Mn, 25% to Below 35% Mn, 35% to below 46% Mn and 46% Mn and above.

#### Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	In 2018-19, there is no proposal for generation of top soil.	No top soil generated	No top soil generated
8b	Concurrent use or storage of topsoil	In 2018-19, there is no proposal for generation of top soil.	No top soil generated	No top soil generated
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes, the waste dump & mineral reject dump are proposed to be done separately.	Yes, the waste dump & mineral reject dump are done separately.	Yes, the waste dump & mineral reject dump are done separately.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	During 2018-19, waste will be dumped over the already backfilled area. Heightening of already backfilled area of 2.4 ha up to 594 mRL is proposed	Heightening of 2.4 Ha already backfilled area done up to 592 mRL.	Heightening of 2.4 Ha already backfilled area done up to 592 mRL.

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	During 2018-19, waste will be dumped over the already backfilled area. Heightening of already backfilled area of 2.4 ha up to 594 mRL is proposed	Heightening of 2.4 Ha already backfilled area done up to 592 mRL.	Heightening of 2.4 Ha already backfilled area done up to 592 mRL.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	No of saplings proposed for plantation during the year 2018-19 was 7000 nos	No of saplings planted during the year 2018-19 was 10000 nos	No of saplings planted during the year 2018-19 was 10000 nos
8g	Survival rate	Not Specified	Survival rate of 96% as furnished in annual return for 2018-19. It was observed during inspection that the proposed plantation in Dump-1 during the year 2018-19 have been carried out in 2019-20 and the survival rate of the saplings planted is very less. Adequate casualty replacement has not been done. Violation was issued under rule 26 (1) of MCDR 2017.	Survival rate of 96% as furnished in annual return for 2018-19. It was observed during inspection that the proposed plantation in Dump-1 during the year 2018-19 have been carried out in 2019-20 and the survival rate of the saplings planted is very less. Adequate casualty replacement has not been done. Violation was issued under rule 26 (1) of MCDR 2017.
8h	Water sprinkling on roads to control airborne dust	Yes, water sprinklers are proposed to be deployed in haul roads & mine roads.	Yes, water sprinklers are deployed in haul roads & mine roads.	Yes, water sprinklers are deployed in haul roads & mine roads.

8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	No of saplings proposed for plantation during the year 2018-19 was 7000 nos	Aesthetic beauty in and around maintained. No of saplings planted during the year 2018-19 was 10000 nos	Aesthetic beauty in and around maintained. No of saplings planted during the year 2018-19 was 10000 nos
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Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Monthly returns and annual return for 2018-19 have been submitted.	Monthly returns and annual return for 2018-19 have been submitted.	Monthly returns and annual return for 2018-19 have been submitted.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Information on mining engineer, Geologist and Manager has been furnished in annual return submitted for 2018-19.	Mining Engineer, Manger and Geologist appointed in mines.	Mining Engineer, Manger and Geologist appointed in mines.

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Lease area (surface area) utilization at the end of the year as furnished in annual return for 2018-19. Covered under current working: 34.479 ha, Reclaimed / rehabilitated: 2.40 Ha, Used for waste disposal: 6.66 Ha, Occupied by plant buildings, residential, welfare buildings & roads: 3.251 Ha, Other purpose (mineral storage, green belt etc.) : 8.51 Ha, Work done under progressive mine closure plan during this year : 1.00 Ha	Lease area (surface area) utilization at the end of the year as furnished in annual return for 2018-19. Covered under current working: 34.479 ha, Reclaimed / rehabilitated: 2.40 Ha, Used for waste disposal: 6.66 Ha, Occupied by plant buildings, residential, welfare buildings & roads: 3.251 Ha, Other purpose (mineral storage, green belt etc.) : 8.51 Ha, Work done under progressive mine closure plan during this year : 1.00 Ha	Lease area (surface area) utilization at the end of the year as furnished in annual return for 2018-19. Covered under current working: 34.479 ha, Reclaimed / rehabilitated: 2.40 Ha, Used for waste disposal: 6.66 Ha, Occupied by plant buildings, residential, welfare buildings & roads: 3.251 Ha, Other purpose (mineral storage, green belt etc.) : 8.51 Ha, Work done under progressive mine closure plan during this year : 1.00 Ha
9d	Scrutiny of Annual return on afforestation	10000 nos	10000 nos	Data as furnished in annual return for 2018-19
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Mineral reject generated during the year 2018-19 was 300 tones with grade below 25% Mn as furnished in annual return 2018-19.	Mineral reject generated during the year 2018-19 was 300 tones with grade below 25% Mn as furnished in annual return 2018-19.	Mineral reject generated during the year 2018-19 was 300 tones with grade below 25% Mn as furnished in annual return 2018-19.

9f	Scrutiny of Annual return on ROM stock and/or graded ore	Closing stock at mine head Grades (% of Mn content): (a). below 25% 1402.0MT, (b). 25 to below 35%: 4450.609MT, © 35% to below 46%: 46.524MT, (d) 46% & above: 0.163MT	Closing stock at mine head Grades (% of Mn content): (a). below 25% 1402.0MT, (b). 25 to below 35%: 4450.609MT, © 35% to below 46%: 46.524MT, (d) 46% & above: 0.163MT	Closing stock at mine head Grades (% of Mn content): (a). below 25% 1402.0MT, (b). 25 to below 35%: 4450.609MT, © 35% to below 46%: 46.524MT, (d) 46% & above: 0.163MT
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex-mine price (Rs per tonne) Grades (% of Mn content): (a) 25 to below 35%: Rs 8267.58 (b) 35% to below 46%: Rs19748.88 ©46% & above: Rs25565.20 Cost of production-Rs 5595.11 per tonne	Ex-mine price (Rs per tonne) Grades (% of Mn content): (a) 25 to below 35%: Rs 8267.58 (b) 35% to below 46%: Rs19748.88 ©46% & above: Rs25565.20 Cost of production-Rs 5595.11 per tonne	Ex-mine price (Rs per tonne) Grades (% of Mn content): (a) 25 to below 35%: Rs 8267.58 (b) 35% to below 46%: Rs19748.88 ©46% & above: Rs25565.20 Cost of production-Rs 5595.11 per tonne
9h	Scrutiny of Annual return on fixed assets	Rs 60,48,940.00	Rs 60,48,940.00	Data as furnished in annual return for 2018-19
9k	Scrutiny of Annual return on mining machineries	Poclain CK 90 (0.9 cum): 2 nos, Rock breaker: 1 no, Hyva (20MT): 6 no etc.	Poclain CK 90 (0.9 cum): 2 nos, Rock breaker: 1 no, Hyva (20MT): 6 no etc.	Poclain CK 90 (0.9 cum): 2 nos, Rock breaker: 1 no, Hyva (20MT): 6 no etc.

**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 37(2)	11/02/2020			
	Rule 45(7)	11/02/2020			
	Rule 26(1)	11/02/2020			

**Date :**

(SHRI SUDIP RANJAN MAZUMDAR)

Indian Bureau of Mines