

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

MCDR INSPECTION REPORT

Bhubaneshwar regional office

Mine file No : ORI/CR/JJP/MCDR-3/BBS

Mine code : 11ORI19004

- (i) Name of the Inspecting : **SRM**) **SHRI SUDIP RANJAN MAZUMDAR**
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Shri Bijay Ketan Giri, Mines Manager
Official with
Designation
- (iv) Date of Inspection : 17/02/2020
- (v) Prev.inspection date : 24/01/2020

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **KAMARDA**
- (b) **Registration NO.** : **IBM /6143 /2011**
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
- State : ORISSA
- District : JAJPUR
- Village : KAMARDA
- Taluka : SUKINDA
- Post office : KANSA
- Pin Code : 755028
- FAX No. : 0671-2520347
- E-mail : bcmohantysonsprivatelimited
- Phone : 9437054347
- (f) Police Station : Jajpur
- (g) First opening date : 22/02/1963
- (h) Weekly day of rest : SUN
2. Address for : VILLAGE: KALIAPANI, PO: KALIAPANI
correspondance DIST: JAJPUR,ORISSA.
PHONE:06726- 68722
3. (a) Lease Number : ORI0232
- (b) Lease area : 107.24
- (c) Period of lease :
- (d) Date of Expiry : 31/03/2020
4. Mineral worked : CHROMITE Main

5. Name and Address of the

Lessee : B.C.MOHANTY
 AT/PO : RAJABAGICHA
 CUTTACK ORISSA
 Phone:620347, 621030
 FAX :620347

Owner : B.C.MOHANTY
 AT/PO:RAJABHAGICHA
 CUTTACK ORISSA
 Phone: 620347, 621030
 FAX : 620347

Mining Engineer

Name : Sri Gokulananda Sahoo,Full Time
 Qualification : AMIE
 Appointment/ : 01/01/2008
 Termination date

Geologist

Name : Sri Padmalochan Das,Full Time
 Qualification : M.Sc. (Applied Geology)
 Appointment/ : 02/01/2012
 Termination date

Manager

Name : SHRI B K GIRI
 Qualification : AMIE (MINING ENGNIEERING)
 Appointment/ : 16/09/2014
 Termination date

6. Date of approval of Mining	:	Mining Scheme rule 12 MCDR1988	03/01/2005
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	06/05/2007
		Renewal under rule 24 MCR1960	27/02/2008
		Modif.approved Mining Scheme	03/02/2011
		Modif.of approved Mining Plan	03/02/2011
		Modif.of approved Mining Plan	08/03/2013
		Mining Scheme rule 12 MCDR1988	26/03/2013
		Modif.approved Mining Scheme	04/02/2016
		MP review under 17(1) MCR 2016	07/02/2018
		Modif.approved Mining Scheme	10/07/2018
		FMCP under 23C(1)	25/09/2018

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	In 2018-19, 51 numbers of boreholes have been proposed to be drilled.	In 2018-19, 50 nos of boreholes have been drilled.	In 2018-19, 50 nos of boreholes have been drilled.
1b	Exploration over lease area for geological axis 1 or 2	In 2018-19, 51 numbers of boreholes have been proposed to be drilled.	In 2018-19, 50 nos of boreholes have been drilled. Entire lease area has been explored under G1/G2 level of exploration. Area under G1 is 68.183 Ha and under G2 is 39.057	In 2018-19, 50 nos of boreholes have been drilled. Entire lease area has been explored under G1/G2 level of exploration. Area under G1 is 68.183 Ha and under G2 is 39.057
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not Specified	Exploration agency: M/s Drillmech engineers & M/S NREMPL Expenditure incurred : Rs 357lakh (approx.)	Exploration agency: M/s Drillmech engineers & M/S NREMPL Expenditure incurred : Rs 357lakh (approx.)
1d	Balance area to be explored to bring Geological axis in 1 or 2	In 2018-19, 51 numbers of boreholes have been proposed to be drilled.	In 2018-19, 50 nos of boreholes have been drilled. Entire lease area has been explored under G1/G2 level of exploration. Area under G1 is 68.183 Ha and under G2 is 39.057	In 2018-19, 50 nos of boreholes have been drilled. Entire lease area has been explored under G1/G2 level of exploration. Area under G1 is 68.183 Ha and under G2 is 39.057

1e	Balance reserve as on 01/04/20	As per the modification of review of mining plan approved dated 10.07.2018, the reserve and resource as on 01.04.2018 is as follows. Reserve is 1.27 million tones and Remaining resources is 0.0729 million tones. Total Reserve and Resource is 1.346 million tones.	Reserve as on 01.04.2019 is 1.185 million tones and remaining resources is 0.0729 million tones. Total reserve and resource is 1.258 million tones. Data as furnished in annual return for 2018-19.	Reserve as on 01.04.2019 is 1.185 million tones and remaining resources is 0.0729 million tones. Total reserve and resource is 1.258 million tones. Data as furnished in annual return for 2018-19.
1f	General remarks of inspecting officers on geology, exploration etc	In 2018-19, 51 numbers of boreholes have been proposed to be drilled.	In 2018-19, 50 nos of boreholes have been drilled. Entire lease area has been explored under G1/G2 level of exploration. Area under G1 is 68.183 Ha and under G2 is 39.057	In 2018-19, 50 nos of boreholes have been drilled. Entire lease area has been explored under G1/G2 level of exploration. Area under G1 is 68.183 Ha and under G2 is 39.057

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	In 2018-19, Development proposed in two quarries namely Quarry-2 and Quarry-3&4	In 2018-19, development carried out in two quarries namely Quarry-2 and Quarry-3&4 as proposed.	In 2018-19, development carried out in two quarries namely Quarry-2 and Quarry-3&4 as proposed.

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	There is no proposal for top soil generation. Separate benches in overburden and mineral proposed.	Separate benches in overburden and mineral maintained.	Separate benches in overburden and mineral maintained.
2c	Stripping ratio or ore to OB ratio	1:5.50 t/cum	1:5.32 t/cum	Nil
2d	Quantity of topsoil generation in m3	Not Proposed	Nil	Nil
2e	Quantity of overburden generation in m3	1100105 cum	468376 cum	OB generation was less as proposed ROM production of 199935 tones could not be achieved. ROM production was restricted with EC limit of 88000 tones. Actual ROM production during the year was 87997.933 tones.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	In 2018-19, Development proposed in two quarries namely Quarry-2 and Quarry-3&4	In 2018-19, development carried out in two quarries namely Quarry-2 and Quarry-3&4 as proposed. OB generation was less as proposed ROM production of 199935 tones could not be achieved. ROM production was restricted with EC limit of 88000 tones. Actual ROM production during the year was 87997.933 tones.	In 2018-19, development carried out in two quarries namely Quarry-2 and Quarry-3&4 as proposed. OB generation was less as proposed ROM production of 199935 tones could not be achieved. ROM production was restricted with EC limit of 88000 tones. Actual ROM production during the year was 87997.933 tones.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
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3a	Number of pit proposed for production	In 2018-19, production proposed from two quarries namely Quarry-2 and Quarry-3&4	In 2018-19, production done from two quarries namely Quarry-2 and Quarry-3&4	In 2018-19, production done from two quarries namely Quarry-2 and Quarry-3&4
3b	Quantity of ROM mineral production proposed	In 2018-19, ROM production proposal was 199935MT	In 2018-19, ROM production was 87997.933MT	In 2018-19, ROM production was 87997.933MT
3c	Recovery of salable/usable mineral from ROM production	In 2018-19, Recovery of salable/usable mineral from ROM production proposal was 31875 tones	In 2018-19, Recovery of salable/usable mineral from ROM production was 60940.46 tones	In 2018-19, Recovery of salable/usable mineral from ROM production was 60940.46 tones
3d	Quantity of mineral reject generation	In 2018-19, Quantity of mineral reject generation proposal was 168060 MT	In 2018-19, Quantity of mineral reject generated was 27057.473MT	In 2018-19, Quantity of mineral reject generated was 27057.473MT
3e	Grade of mineral rejects generation and threshold value declared.	Grade of mineral reject 10-40% Cr2O3, threshold value is 10% Cr2O3	Grade of mineral reject 10-40% Cr2O3, threshold value is 10% Cr2O3	Grade of mineral reject 10-40% Cr2O3, threshold value is 10% Cr2O3
3f	Quantity of sub grade mineral generation.	In 2018-19, Quantity of subgrade mineral generation proposal was 168060 MT	In 2018-19, Quantity of subgrade mineral generated was 27057.473MT	In 2018-19, Quantity of subgrade mineral generated was 27057.473MT
3g	Grade of sub grade mineral generation	Grade of subgrade mineral 10-40% Cr2O3	Grade of subgrade mineral 10-40% Cr2O3	Grade of subgrade mineral 10-40% Cr2O3
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized	Mechanized	Mechanized

3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Proposed. Feed grade to COB plant: 23% Cr2O3 with Product Grade: 46 to 47% Cr2O3 and tailings grade: 8.03% Cr2O3	Carried out. Feed grade to COB plant: 26% Cr2O3 with Product Grade: 52% Cr2O3 and tailings grade: 8.0% Cr2O3	Carried out. Feed grade to COB plant: 26% Cr2O3 with Product Grade: 52% Cr2O3 and tailings grade: 8.0% Cr2O3
3j	Provision of drilling and blasting in mineral benches	Drilling of blast holes is proposed to be done by DTH drill of 100 mm dia holes in the insitu zone. Control blasting with V pattern firing in practice which is much safe and fragmentation is good and though is in control. Sequential blasting is done by using electric delay detonator or NONEL system of initiation to reduce vibration and fly rock	Drilling & blasting has been carried out as per proposal.	Drilling & blasting has been carried out as per proposal.
3k	Provision of mining machineries in mineral benches	Shovel and dumper combination is proposed for excavation and hauling	Shovel and dumper combination is deployed for excavation and hauling	Shovel and dumper combination is deployed for excavation and hauling
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Height of the benches proposed is 6m	Bench height is maintained.	Bench height is maintained.

3m	Total area covered under excavation/pits	Area under mining at the end of plan period will be 35.183 Ha	Area under mining at the end of 2018-19 is 33.21 Ha as reported in annual return for 2018-19	Area under mining at the end of 2018-19 is 33.21 Ha as reported in annual return for 2018-19
3n	Ore to OB ratio for the pit/mine during the year.	1:5.50 t/cum	1:5.32 t/cum	Nil
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 will be 77.843 Ha	Total area put in use under different heads at the end of 2018-19 is 75.52 Ha	Total area put in use under different heads at the end of 2018-19 is 75.52 Ha
3p	Production of ROM mineral during the last five year period as applicable	Year wise Production proposal 2014-15=87750 tones 2015-16=87915 tones 2016-17=199860 tones 2017-18=199275 tones 2018-19=199935 tones	Year wise ROM production 2014-15=41300 tones 2015-16=87912 tones 2016-17=87895.87 tones 2017-18=87748.12 tones 2018-19=87997.933 tones	Year wise ROM production 2014-15=41300 tones 2015-16=87912 tones 2016-17=87895.87 tones 2017-18=87748.12 tones 2018-19=87997.933 tones
3q	General remarks of inspecting officers on method of mining etc.	In 2018-19, production proposed from two quarries namely Quarry-2 and Quarry-3&4	In 2018-19, production done from two quarries namely Quarry-2 and Quarry-3&4. Mining is done by open cast mining method as propose din the modification of review of mining plan approved dated 10.07.2018	In 2018-19, production done from two quarries namely Quarry-2 and Quarry-3&4. Mining is done by open cast mining method as propose din the modification of review of mining plan approved dated 10.07.2018

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
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4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	There is no proposal for top soil generation. Separate dumping of OB and mineral reject proposed.	There was no generation of top soil. Separate dumping of OB and mineral reject done as proposed.	There was no generation of top soil. Separate dumping of OB and mineral reject done as proposed.
4b	Location of topsoil, OB and mineral reject dumps	There is no proposal for top soil generation. In 2018-19, OB dumping proposed in existing waste dump-A&B, Dump-D and proposed Dump-E. Separate temporarily stacking of mineral rejects in three temporary subgrade/mineral stack yards namely MR-1, MR-2 & MR-3	There was no generation of top soil. OB dumped in Dump A&B and Dump D. Mineral Rejects have been temporary stacked in subgrade/mineral stack yards namely MR-1, MR-2 & MR-3	Dump-E was not created due to generation of OB as development was less. Less development due to less ROM production than proposed. ROM production was restricted within EC limit.
4c	Number of dumps within lease area and outside of lease area	In 2018-19, proposed four waste dumps within lease area namely Dump-A & B (Existing-Active), Dump-C (Existing-inactive), Dump-D (Existing-Active) & Proposed Dump-E	In 2018-19, three waste dumps within lease area namely Dump-A & B (Existing-Active), Dump-C (Existing-inactive), Dump-D (Existing-Active)	Dump-E was not created due to generation of OB as development was less. Less development due to less ROM production than proposed. ROM production was restricted within EC limit.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Dumps are located outside the UPL	Dumps are located outside the UPL	Dumps are located outside the UPL

4e	Number of active and alive dumps.	Two active waste dumps, namely Dump-A&B and Dump-D	Two active dumps, namely Dump-A&B and Dump-D	Two active dumps, namely Dump-A&B and Dump-D
4f	Number of dead dumps.	One inactive waste dump namely Dump-C	One inactive waste dump namely Dump-C	One inactive waste dump namely Dump-C
4g	Number of dumps established.	One inactive waste dump namely Dump-C	One inactive waste dump namely Dump-C	One inactive waste dump namely Dump-C
4h	Whether Retaining wall or garland drain all along dumps are there.	In 2018-19, maintenance of existing retaining wall around dump-A & B, and proposed construction of 1647m of retaining wall around Dump-C, Dump-D and Dump-E and 1101m of Garland drain around Dump-D and Dump-E. Retaining wall over 832m around MR stack-1, 2 & 3 and 863m of garland drain around MR stacks-1,2 & 3 proposed.	It was observed during inspection that existing retaining wall around dump-A&B has been maintained. Retaining wall and garland drain around dump-E has not been constructed as dump-E has not been created. Retaining wall along Dump-C and retaining wall and garland around Dump-D have been constructed. Retaining wall Retaining wall over 832m around MR stack-1, 2 & 3 have been completed while construction of garland drain around MR stacks-1,2 & 3 is incomplete.	Retaining wall around dump-C and Dump-D is found to be broken at places. Violation has been issued under rule 26(1) of MCDR 2017. The construction of garland drain around MR stacks-1,2 & 3 is incomplete. Violation has been issued under rule 26 (1) of MCDR 2017.

4i	Length of Retaining wall or garland drain all along dumps	In 2018-19, maintenance of existing retaining wall around dump-A & B, and proposed construction of 1647m of retaining wall around Dump-C, Dump-D and Dump-E and 1101m of Garland drain around Dump-D and Dump-E. Retaining wall over 832m around MR stack-1, 2 & 3 and 863m of garland drain around MR stacks-1,2 & 3 proposed.	It was observed during inspection that existing retaining wall around dump-A&B has been maintained. Retaining wall and garland drain around dump-E has not been constructed as dump-E has not been created. Retaining wall along Dump-C and retaining wall and garland around Dump-D have been constructed. Retaining wall over 832m around MR stack-1, 2 & 3 have been completed while construction of garland drain around MR stacks-1,2 & 3 is incomplete.	Retaining wall around dump-C and Dump-D is found to be broken at places. Violation has been issued under rule 26(1) of MCDR 2017. The construction of garland drain around MR stacks-1,2 & 3 is incomplete. Violation has been issued under rule 26 (1) of MCDR 2017.
4j	Number of settling ponds	5 nos of settling pond around waste dump-A&B, Dump-C, Dump-D and dump-E. Two no of settling ponds have been proposed to be constructed around MR Stack-1, 2 & 3.	4 nos. of settling ponds have been created around waste dump-A&B, Dump-C, Dump-D. One no of settling pond around dump-E have not been constructed as the waste Dump-E has not been created. It was observed during inspection that the proposed settling ponds around MR Stack-1, 2 & 3 have not been constructed.	Violation has been issued under rule 26(1) of MCDR 2017 for not constructing settling ponds around MR Stack-1, 2 & 3 which should have been completed by 2018-19.

4k	Specific comments of inspecting officer on waste dump management	There is no proposal for top soil generation. In 2018-19, OB dumping proposed in existing waste dump-A&B, Dump-D and proposed Dump-E. Separate temporarily stacking of mineral rejects in three temporary subgrade/mineral stack yards namely MR-1, MR-2 & MR-3	There was no generation of top soil. OB dumped in Dump A&B and Dump D. Mineral Rejects have been temporary stacked in subgrade/mineral stack yards namely MR-1, MR-2 & MR-3. Violation has been issued under 26(1) for non-maintaining retaining wall around dump C and dump-D, non-construction of garland drain and settling ponds around MR stacks-1, 2 &3.	There was no generation of top soil. OB dumped in Dump A&B and Dump D. Mineral Rejects have been temporary stacked in subgrade/mineral stack yards namely MR-1, MR-2 & MR-3. Violation has been issued under 26(1) for non-maintaining retaining wall around dump C and dump-D, non-construction of garland drain and settling ponds around MR stacks-1, 2 &3.
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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.	Not proposed	Nil	Nil
5b	Area under backfilling of mined out area	Not proposed	Nil	Nil
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	There was no proposal for top soil generation	There was no proposal for top soil generation	There was no proposal for top soil generation
5d	Total area fully reclaimed and rehabilitated	Not proposed	Nil	Nil

5e	General remarks of inspecting officers on backfilling and reclamation etc.	There was no proposal for reclamation and rehabilitation	There was no reclamation of quarries.	There was no reclamation of quarries.
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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	Annual report on PMCP for the year 2018-19 have been submitted
6b	Area available for rehabilitation (ha) .	.207 Ha already backfilled area and 2.093 Ha area for plantation of matured benches	0.207 Ha already backfilled area have been rehabilitated. It was observed during inspection that plantation of matured benches in Quarry-2,3 & 4 have not been done. Violation has been issued under rule 26(1) of MCDR 2017	0.207 Ha already backfilled area have been rehabilitated. It was observed during inspection that plantation of matured benches in Quarry-2,3 & 4 have not been done. Violation has been issued under rule 26(1) of MCDR 2017
6c	afforestation done (ha).	0.207 Ha already backfilled area and 2.093 Ha area for plantation of matured benches	0.207 Ha already backfilled area have been rehabilitated. It was observed during inspection that plantation of matured benches in Quarry-2,3 & 4 have not been done. Violation has been issued under rule 26(1) of MCDR 2017	0.207 Ha already backfilled area have been rehabilitated. It was observed during inspection that plantation of matured benches in Quarry-2,3 & 4 have not been done. Violation has been issued under rule 26(1) of MCDR 2017
6d	No. of saplings planted during the year	8562 nos of saplings	8000 nos of saplings planted	Data as furnished in annual return for 2018-19
6e	Cumulative no .of plants	Not specified	97424 nos of saplings planted	97424 nos of saplings planted

6f	Any other method of rehabilitation	Dump C- Coir matting over 1.296 Ha & gap plantation over 0.117 Ha on dump slope. Dump-D: Bottom slope area over 1.517 Ha and Dump-A7B, coir matting over 0.503 Ha and plantation over 2.919 Ha on dump slope	During inspection it was observed that coir matting and proposed plantation was under progress. However, violation was issued during previous inspection dated 24.01.2020 under rule 26 (1) of MCDR 2017	During inspection it was observed that coir matting and proposed plantation was under progress. However, violation was issued during previous inspection dated 24.01.20 under rule 26 (1) of MCDR 2017
6g	Cost incurred on watch and care during the year	38.029 Lakhs	2.54 lakhs	2.54 lakhs
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (L x B x D	Not Proposed	Nil	Nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Not Proposed	Nil	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	Backfilled area- 0.207 Ha with 300nos of saplings	Backfilled area- 0.207 Ha have been afforested with 268 nos of saplings	Backfilled area- 0.207 Ha have been afforested with 268 nos of saplings
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	Backfilled area- 0.207 Ha with 300nos of saplings	Backfilled area- 0.207 Ha have been afforested with 268nos of saplings	Backfilled area- 0.207 Ha have been afforested with 268nos of saplings
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	Backfilled area- 0.207 Ha with 300nos of saplings	Backfilled area- 0.207 Ha have been afforested with 268nos of saplings	Backfilled area- 0.207 Ha have been afforested with 268nos of saplings
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Plantation	Plantation	Plantation
6p	Compliance of environmental monitoring (core zone and buffer zone)	Proposed monitoring of environmental parameters	Monitoring of environmental parameters done	Monitoring of environmental parameters done

6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	0.207 Ha already backfilled area and 2.093 Ha area for plantation of matured benches. Dump C- Coir matting over 1.296 Ha & gap plantation over 0.117 Ha on dump slope. Dump-D: Bottom slope area over 1.517 Ha and Dump-A&B, coir matting over 0.503 Ha and plantation over 2.919 Ha on dump slope	0.207 Ha already backfilled area have been rehabilitated. It was observed during inspection that plantation of matured benches in Quarry-2, 3 & 4 have not been done. During inspection it was observed that coir matting and proposed plantation was under progress.	Violation has been issued under rule 26 (1) of MCDR 2017
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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 within lease area.	Grade wise sorting within lease area.	Grade wise sorting within lease area.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical	Mechanical	Mechanical
7c	Different grade of mineral sorted out at mines.	10-40% Cr2O3 and +40% Cr2O3	10-40% Cr2O3 and +40% Cr2O3	10-40% Cr2O3 and +40% Cr2O3

7d	Any beneficiation process at mines .	Proposed to feed subgrade and low grade mineral to COB plant.. Feed grade to COB plant: 23% Cr2O3 with Product Grade: 46 to 47% Cr2O3% and tailings grade: 8.03% Cr2O3	Beneficiation of subgrade/low grade mineral carried out. Feed grade to COB plant: 26% Cr2O3 with Product Grade: 52% Cr2O3% and tailings grade: 8.0% Cr2O3	Beneficiation of subgrade/low grade mineral carried out. Feed grade to COB plant: 26% Cr2O3 with Product Grade: 52% Cr2O3% and tailings grade: 8.0% Cr2O3
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	Proposed to feed subgrade and low grade mineral to COB plant.. Feed grade to COB plant: 23% Cr2O3 with Product Grade: 46 to 47% Cr2O3% and tailings grade: 8.03% Cr2O3	Beneficiation of subgrade/low grade mineral carried out. Feed grade to COB plant: 26% Cr2O3 with Product Grade: 52% Cr2O3% and tailings grade: 8.0% Cr2O3	Beneficiation of subgrade/low grade mineral carried out. Feed grade to COB plant: 26% Cr2O3 with Product Grade: 52% Cr2O3% and tailings grade: 8.0% Cr2O3

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	There is no proposal for top soil generation.	There was no generation of top soil.	There was no generation of top soil.
8b	Concurrent use or storage of topsoil	There is no proposal for top soil generation	There was no generation of top soil.	There was no generation of top soil.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumping of OB and mineral reject proposed.	Separate dumping of OB and mineral reject done as proposed	Separate dumping of OB and mineral reject done as proposed

8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Not Proposed	Nil	Nil
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	8562nos saplings proposed	8000 no of sapling planted	8000 no of sapling planted
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	8562nos saplings proposed	8000 no of sapling planted	8000 no of sapling planted
8g	Survival rate	Not Specified	Survival rate: 75%	Data as furnished in annual return for 2018-19
8h	Water sprinkling on roads to control airborne dust	Water sprinkling proposed for controlling to airborne dust.	Water sprinkling is being done.	Water sprinkling is being done.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Water sprinkling proposed for controlling to airborne dust.	Water sprinkling is being done. Aesthetic beauty in and around mines is maintained.	Water sprinkling is being done. Aesthetic beauty in and around mines is maintained.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
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9a	Status of submission of Monthly and Annual returns	Monthly returns and annual return are to be submitted as per rule 45 of MCDR, 2017	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 Manager, Mining Engineer and Geologist furnished in annual return for 2018-19	Manager, Mining Engineer and Geologist have been appointed in mines.	Manager, Mining Engineer and Geologist have been 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: 33.21 ha, Used for waste disposal: 27.83 Ha, Occupied by plant buildings, residential, welfare buildings & roads: 7.23 Ha, other purposes: 0.12 Ha etc	Lease area (surface area) utilization at the end of the year as furnished in annual return for 2018-19. Covered under current working: 33.21 ha, Used for waste disposal: 27.83 Ha, Occupied by plant buildings, welfare buildings & roads: 7.23 Ha, other purposes: 0.12 Ha etc	Lease area (surface area) utilization at the end of the year as furnished in annual return for 2018-19. Covered under current working: 33.21 ha, Used for waste disposal: 27.83 Ha, Occupied by plant buildings, residential, welfare buildings & roads: 7.23 Ha, other purposes: 0.12 Ha etc
9d	Scrutiny of Annual return on afforestation	8562 nos saplings proposed	8000 nos of sapling planted	8000 nos of sapling planted
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Quantity of mineral reject generated was 27057.473MT. Grade of mineral reject 10-40% Cr2O3	Quantity of mineral reject generated was 27057.473MT. Grade of mineral reject 10-40% Cr2O3	Quantity of mineral reject generated was 27057.473MT. Grade of mineral reject 10-40% Cr2O3

9f	Scrutiny of Annual return on ROM stock and/or graded ore	Closing stock of ROM is 3355.330 tones	Closing stock of ROM is 3355.330 tones	Closing stock of ROM is 3355.330 tones
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex-mine price in Rs per tonne (A)Fines : Grades (% of Cr2O3 content) (1)Below 40% Cr2O3: Rs 2833.67; (2)40% to below 52% (B)Concentrates: Rs 14055.42 Production cost: Rs 6977.02 per tonne.	Ex-mine price in Rs per tonne (A)Fines : Grades (% of Cr2O3 content) (1)Below 40% Cr2O3: Rs 2833.67; (2)40% to below 52% (B)Concentrates: Rs 14055.42 Production cost: Rs 6977.02 per tonne.	Ex-mine price in Rs per tonne (A)Fines : Grades (% of Cr2O3 content) (1)Below 40% Cr2O3: Rs 2833.67; (2)40% to below 52% (B)Concentrates: Rs 14055.42 Production cost: Rs 6977.02 per tonne.
9h	Scrutiny of Annual return on fixed assets	Value of Fixed Assets (in Rs) 200836319	Value of Fixed Assets (in Rs) 200836319	Value of Fixed Assets (in Rs) 200836319
9k	Scrutiny of Annual return on mining machineries	Load Haul dumper (0.35 cum capacity)-1 no; Dumper (25 tonne capacity)- 4 nos; Backhoe (1.1 cum capacity)-1 no etc	Load Haul dumper (0.35 cum capacity)-1 no; Dumper (25 tonne capacity)- 4 nos; Backhoe (1.1 cum capacity)-1 no etc	Load Haul dumper (0.35 cum capacity)-1 no; Dumper (25 tonne capacity)- 4 nos; Backhoe (1.1 cum capacity)-1 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
Rule 26(1)	18/02/2020		

Date :

(SHRI SUDIP RANJAN MAZUMDAR)

Indian Bureau of Mines