

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

MCDR INSPECTION REPORT

Bhubaneshwar regional office

Mine file No : ORI/CR/JJP/MCDR-14/BBS

Mine code : 11ORI19015

- (i) Name of the Inspecting : **U11**) **DAYANAND UPADHYAY**
Officer and ID No.
- (ii) Designation : Sr. Asst. Contrl. Mines
- (iii) Accompanying mine : Shri S Mohapatra, Mines Manager
Official with
Designation
- (iv) Date of Inspection : 17/03/2019
- (v) Prev.inspection date : 10/08/2017

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **JINDAL KALIAPANI**
- (b) **Registration NO.** : **IBM/1129/2011**
- (c) Category : A Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
State : ORISSA
District : JAJPUR
Village : KALIAPANI
Taluka : JAJPUR ROAD
Post office : KALIAPANI
Pin Code :
FAX No. : 06726-268315
E-mail : jindal_mines@yahoo.com
Phone : 06726 -268315,268449
- (f) Police Station : Kaliapani
- (g) First opening date : 28/01/2002
- (h) Weekly day of rest : SUN
2. Address for : POST&VIL: KALIAPANI
correspondance DIST:JAJPUR
P.S:TOMKA,ORISSA,PIN:755 047
3. (a) Lease Number : ORI0760
- (b) Lease area : 89
- (c) Period of lease : 20
- (d) Date of Expiry : 03/01/2022
4. Mineral worked : CHROMITE Main

5. Name and Address of the

Lessee : M/S JINDAL STAINLESS LTD.
KALINGA NAGAR JAJPUR
JAJPUR ORISSA
Phone:
FAX :

Owner : SUBRATA BHATTACHARYA
JINDAL CHROMITE MINES
KALIAPANI, JAJAPUR ODISHA
JAJPUR ORISSA
Phone: 06726268315
FAX : 06726268315

Agent : SHAILENDER KUMAR SINHA
JINDAL CHROMITE MINES
KALIAPANI, JAJPUR ODISHA
JAJPUR ORISSA
Phone: 06726268315
FAX : 06726268315

Mining Engineer

Name : SABYASACHI MOHAPATRA, Full Time
Qualification : AMIE MINING
Appointment/ : 01/12/2002
Termination date

Geologist

Name : S.K.VAIDYA, Full Time
Qualification : MSC APPLIED GEOLOGY
Appointment/ : 12/05/2008
Termination date

Manager

Name : SABYASACHI MOHAPATRA
Qualification : AMIE MINING
Appointment/ : 01/02/2017
Termination date

6. Date of approval of Mining Plan/Scheme of Mining	:	Modif.of approved Mining Plan	29/01/2005
		Mining Scheme rule 12 MCDR1988	14/06/2007
		Modif.approved Mining Scheme	24/06/2010
		Mining Scheme rule 12 MCDR1988	02/05/2012
		Modif.approved Mining Scheme	13/06/2016
		MP review under 17(1) MCR 2016	29/12/2016

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	14 number of bore holes in 2017-18.	In 2017-18, total 14 numbers of bore holes have been drilled by lessee.	There is no backlog.
1b	Exploration over lease area for geological axis 1 or 2	G1 Level of exploration.	In 2017-18, total 14 numbers of bore holes have been drilled by lessee under G1/G2 Level of exploration.	About 30.31 ha area has been explored under G1/G2 level by putting 52 nos. of bore holes.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Exploration agency not specified prior to execute of proposed drilling.	M/s Geo-Exploration India. Total expenditure incurred is 36,99,500 (Thirty Six lakh Ninety Nine Thousand Five hundred only.)	M/s Geo-Exploration India. Total expenditure incurred in 2016-17 is 36,99,500 (Thirty Six lakh Ninety Nine Thousand Five hundred only.)
1d	Balance area to be explored to bring Geological axis in 1 or 2	9.68 ha during plan period.	About 30.31 ha area has been explored under G1/G2 level by putting 52 nos. of bore holes. The remaining area to be explored is about 58.69 Ha.	The remaining area to be explored is about 58.69 Ha.
1e	Balance reserve as on 01/04/20	Reserve as per review of mining plan approved on 29.12.2016 is 1.0621 MT and Remaining Resource at 7.5143 MT.	Reserve as on 01.04.2018 is 1.019 Million Tonnes while remaining resources at 7.5143 Million tonnes.	Reserve as on 01.04.2018 is 1.019 Million Tonnes while remaining resources at 7.5143 Million .
1f	General remarks of inspecting officers on geology, exploration etc	14 number of bore holes in 2017-18.	In 2017-18, total 14 numbers of bore holes have been drilled by lessee.	About 30.31 ha area has been explored under G1/G2 level by putting 52 nos. of bore holes.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	Quarry-1- S200/S585 to E600/E1055 Quarry-2- S1328/S1617 to E1271/E1584	Development is carried out in Quarry 2 only between coordinates S1328/S1617 to E1271/E1584.	Quarry-1 is not worked out due to want of permission from state government for joint mining with M/s Balasore Alloys. Mining operation is presently suspended by MOEF since 22/02/2018.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches in OB and ore with 8-9m height, top soil bench-nil.	Separate benches in OB and ore of 8-9m height have been maintained.	Separate benches in OB and ore of 8-9m height have been maintained.
2c	Stripping ratio or ore to OB ratio	Stripping Ratio 1:18.90	Stripping ratio in 2017-18 is 18.65	Quarry-1 is not worked out due to want of permission from state government for joint mining with M/s Balasore Alloys.
2d	Quantity of topsoil generation in m3	Top soil not proposed as working is propopsed in broken up area.	No top soil generation as working is propopsed in broken up area.	No top soil generation is proposed.
2e	Quantity of overburden generation in m3	Cumulative OB generation of Quarry 1 and Quarry 2 is 1017313 Cum	OB generated in Quarry 2 is 180000 Cum	Quarry-1 is not worked out due to want of permission from state government for joint mining with M/s Balasore Alloys.

2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	Development was proposed in Quarry-land Quarry-2.	Development is carried out in Quarry 2 only between coordinates S1328/S1617 to E1271/E1584.	Quarry-1 is not worked out due to want of permission from state government for joint mining with M/s Balasore Alloys. Mining operation is presently suspended by MOEF since 22/02/2018.
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Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Two quarries, Band-I-Quarry-01 and Band-VI-Quarry-02	Working is carried out in Band-VI-Quarry-02.	Quarry-1 is not worked out due to want of permission from state government for joint mining with M/s Balasore Alloys. Mining operation is presently suspended by MOEF since 22/02/2018.
3b	Quantity of ROM mineral production proposed	Q-1-99928 T, Q-2-48500 MT	Q-1-Nil, Q-2-33785.975T	Quarry-1 is not worked out due to want of permission from state government for joint mining with M/s Balasore Alloys. Mining operation is presently suspended by MOEF since 22/02/2018.
3c	Recovery of sailable/usable mineral from ROM production	Proposed ROM is Mineral reject grade 10%-40% Cr2O3.	ROM production 33785.975T is reported mineral reject grade between 10%-40% Cr2O3.	ROM production 33785.975T is reported mineral reject grade between 10%-40% Cr2O3.

3d	Quantity of mineral reject generation	Q-1-99928 T, Q-2-48500 MT	Q-1-Nil, Q-2-33785.975T	Total ROM production 33785.975T is reported mineral reject grade/sub grade between 10%-40% Cr2O3.
3e	Grade of mineral rejects generation and threshold value declared.	10%-40% Cr2O3.	Total ROM production 33785.975T is reported mineral reject grade/sub grade between 10%-40% Cr2O3.	Total ROM production 33785.975T is reported mineral reject grade/sub grade between 10%-40% Cr2O3.
3f	Quantity of sub grade mineral generation.	Q-1-99928 T, Q-2-48500 T	Total ROM production 33785.975T is reported mineral reject grade/sub grade between 10%-40% Cr2O3.	Total ROM production 33785.975T is reported mineral reject grade/sub grade between 10%-40% Cr2O3.
3g	Grade of sub grade mineral generation	10%-40% Cr2O3.	Total ROM production 33785.975T is reported mineral reject grade/sub grade between 10%-40% Cr2O3.	Total ROM production 33785.975T is reported mineral reject grade/sub grade between 10%-40% Cr2O3.
3h	Manual / Mechanised method adopted for segregating from ROM	Both Manual & Mechanized	Both Manual & Mechanized	Segregation is being done by sorting manually and & sizing of more than 300mm boulders with machineries.
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	COBP I & COBP II	The feed of COBP -1 as planned from Quarry 1 could not be done as the quarry 1 was not under operation. COBP-II is in operation for beneficiating sub grade/tailings to upgrading above 40% Cr2O3.	The feed of COBP -1 as planned from Quarry 1 could not be done as the quarry 1 was not under operation. COBP-II is in operation for beneficiating sub grade/tailings to upgrading above 40% Cr2O3.

3j	Provision of drilling and blasting in mineral benches	Deep hole Drilling 150mm dia & Controlled blasting.	Deep hole Drilling 150mm dia & Controlled blasting with Nonel has been adopted.	Deep hole Drilling 150mm dia & Controlled blasting with Nonel has been adopted.
3k	Provision of mining machineries in mineral benches	Wagon drill 150mm dia-3, Excavator 2.4cum-3, Tipper 25T-16, Dozer-1, Water tanker-3	Wagon drill 150mm dia-1, Excavator 2.1//3.2cum-3, Tipper 25/40T-16, Dozer-1, Water tanker-2	Wagon drill 150mm dia-1, Excavator 2.1//3.2cum-3, Tipper 25/40T-16, Dozer-1, Water tanker-2
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Bench height 8m	Bench height is suitably matched with the excavator.	Bench height is suitably matched with the excavator.
3m	Total area covered under excavation/pits	29.756 ha proposed during approved plan period.	About 29.351 ha area has been covered under excavation pits.	About 29.351 ha area has been covered under excavation pits.
3n	Ore to OB ratio for the pit/mine during the year.	Stripping Ratio 1:18.90	Stripping ratio in 2017-18 is 18.65	Quarry-1 is not worked out due to want of permission from state government for joint mining with M/s Balasore Alloys.

3o	Total area put in use under different heads at the end of year	Total area proposed under different heads are Mining - 29.756 ha, Dump-28.782 ha, Back filling- 8.24Ha, Mineral storage-2.831 Ha, Infrastructure & Road-4.228 Ha, Green belt - 4.275 Ha, Tailing pond - 0.70 Ha, ETP - 0.60 Ha, COB- 1.47 ha.	Mining - 29.351 Ha, Dump-28.377 Ha, Back filling- 8.24 Ha, Mineral storage-2.831Ha, Infrastructure & Road- 4.228 Ha Green belt - 5.04 Ha, Tailing pond -0.70 ha, ETP -0.60 Ha, COB-1.47 Ha.	Mining - 29.351 Ha, Dump-28.377 Ha, Back filling- 8.24 Ha, Mineral storage-2.831Ha, Infrastructure & Road-4.228 Ha Green belt - 5.04 Ha, Tailing pond - 0.70 ha, ETP -0.60 Ha, COB-1.47 Ha.
3p	Production of ROM mineral during the last five year period as applicable	2013-14 Q-1- Nil, Q-2- 98070 2014-15 Q-1- 2014-15 Q-1- 98175 2015-16 Q-1- Nil, Q-2- 98700T 2016-17 Q-1- 126192T, Q-2- 89537T 2017-18 Q-1- 99928 T, Q-2- 48500 T	2013-14 Q-1 Nil, Q-2- 64086.842T 2014-15 Q-1 Nil, Q-2- 69298T 2015-16 Q-1 Nil, Q-2- 88246T 2016-17 Q-1 Nil, Q-2- 99950T 2017-18 Q-1- Nil, Q-2- 33785.975T	2013-14 Q-1 Nil, Q-2-64086.842T 2014-15 Q-1 Nil, Q-2-69298T 2015-16 Q-1 Nil, Q-2- 88246T 2016-17 Q-1 Nil, Q-2- 99950T 2017-18 Q-1- Nil, Q-2-33785.975T
3q	General remarks of inspecting officers on method of mining etc.	Proposed Quarry-1 and Quarry 2	Mining is carried out in Quarry 2 only. Quarry-1 was not operated as necessary permission has not been accorded by state government for joint mining/common boundary mining with M/s Balasore Alloys.	Quarry-1 is not worked out due to want of permission from state government for joint mining with M/s Balasore Alloys.

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)	Separate dumping for overburden and mineral reject.	Separate dumping for overburden and mineral reject are maintained.	Separate dumping for overburden and mineral reject are maintained.
4b	Location of topsoil, OB and mineral reject dumps	Dump-1(S 537 / S 870 to E 800 / E 1128), Dump-2 (S 200 / E 350), MR STOCK-1- / S 680 to W 290 / E 350), MR STOCK-1-(S328/S262 TO E652/E800), MR STACK-2-(S465/S340 TO E300/E482), MR STACK-3-(S 1210 /S 955 TO E 1172 /E 1360)	Dump-1(S 537 / S 870 to E 800 / E 1128), Dump-2 (S 200 / S 680 to W 290 / E 350), MR STOCK-1-(S328/S262 TO E652/E800), MR STACK-2-(S465/S340 TO E300/E482), MR STACK-3-(S 1210 /S 955 TO E 1172 /E 1360)	Dumping is as per proposal.
4c	Number of dumps within lease area and outside of lease area	Two OB dump, Dump-1 and Dump-2 within lease area.	Two OB dump, Dump-1 and Dump-2 within lease area.	Two OB dump, Dump-1 and Dump-2 within lease area.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Dump-1 (In between quarry-1 & 2) in between coordinates (S 537 / S 870 to E 800 / E 1128) Dump-2 (North west of lease area) in between coordinates (S 200 / S 680 to W 290 / E 350)	Dump-1 (In between quarry-1 & 2) in between coordinates (S 537 / S 870 to E 800 / E 1128) Dump-2 (North west of lease area) in between coordinates (S 200 / S 680 to W 290 / E 350)	Location of dump is as per proposal.
4e	Number of active and alive dumps.	02, namely Dump-1 (OB Dump) and Dump - 2 (OB Dump)	02, namely Dump-1 (OB Dump) and Dump - 2 (OB Dump)	02, namely Dump-1 (OB Dump) and Dump - 2 (OB Dump)

4f	Number of dead dumps.	Dump is active and no dead dump in lease area.	There is no dead dump.	There is no dead dump.
4g	Number of dumps established.	Dump is active and no dead dump in lease area.	There is no dead dump.	There is no dead dump.
4h	Whether Retaining wall or garland drain all along dumps are there.	Retaining wall of 100mX1.0mX1.5m	Retaining wall of 100mX1.0mX1.5m is constructed by lessee.	Retaining wall and garland drain around the dump are constructed by lessee.
4i	Length of Retaining wall or garland drain all along dumps	Retaining wall of 100mX1.0mX1.5m	Retaining wall of 100mX1.0mX1.5m is constructed by lessee.	Retaining wall and garland drain around the dump are constructed by lessee.
4j	Number of settling ponds	One settling pond of 20m*10m*3m	Settling pond of 20m*10m*3m is constructed by lessee.	Settling pond of 20m*10m*3m is constructed by lessee.
4k	Specific comments of inspecting officer on waste dump management	02, namely Dump-1 (OB Dump) and Dump - 2 (OB Dump)	There is 02 OB dump namely dump-1 and dump-2 as per proposal.	Retaining wall and garland drain around the dumps are constructed by lessee.

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 in 2017-18 as pits are not matured.	Pits are not matured for backfilling and reclamation and rehabilitation.	Earlier part of Quarry- 1 of about 8.24 ha area has been backfilled and reclaimed and rehabilitated.
5b	Area under backfilling of mined out area	Not proposed in 2017-18 as pits are not matured.	Pits are not matured for backfilling and reclamation and rehabilitation.	Earlier part of Quarry- 1 of about 8.24 ha area has been backfilled and reclaimed and rehabilitated.

5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Not proposed in 2017-18 as pits are not matured.	Pits are not matured for backfilling and reclamation and rehabilitation.	Earlier part of Quarry- 1 of about 8.24 ha area has been backfilled and reclaimed and rehabilitated.
5d	Total area fully reclaimed and rehabilitated	Not proposed in 2017-18 as pits are not matured.	Earlier part of Quarry- 1 of about 8.24 ha area has been backfilled and reclaimed and rehabilitated.	Earlier part of Quarry- 1 of about 8.24 ha area has been backfilled and reclaimed and rehabilitated.
5e	General remarks of inspecting officers on backfilling and reclamation etc.	Backfilling and reclamation and rehabilitation not proposed in 2017-18 as pits are not matured.	Earlier part of Quarry- 1 of about 8.24 ha area has been backfilled and reclaimed and rehabilitated.	Earlier part of Quarry- 1 of about 8.24 ha area has been backfilled and reclaimed and rehabilitated.

Progressive Mine Closure Plan:

Sl.No.	Item	Proposals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	Annual return on PMCP.	Annual return on PMCP has been submitted.	Annual return on PMCP has been submitted.
6b	Area available for rehabilitation (ha) .	Not proposed in 2017-18 as pits are not matured.	Pits are not matured for backfilling and reclamation and rehabilitation.	Pits are not matured for backfilling and reclamation and rehabilitation.
6c	afforestation done (ha).	0.8ha area.	In 2017-18, total area cover under afforestation is about 2.80 ha.	In 2017-18, total area cover under afforestation is about 2.80 ha.
6d	No. of saplings planted during the year	3500 saplings.	In 2017-18, total 5000 nos. of saplings have been planted by lessee.	In 2017-18, total 5000 nos. of saplings have been planted by lessee.
6e	Cumulative no .of plants	3500 saplings. in 2017-18.	Cumulative nos. of saplings planted in the lease area is about 118700.	Cumulative nos. of saplings planted in the lease area is about 118700.

6f	Any other method of rehabilitation	Not proposed in 2017-18 as pits are not matured.	Pits are not matured for backfilling and reclamation and rehabilitation.	Pits are not matured for backfilling and reclamation and rehabilitation.
6g	Cost incurred on watch and care during the year	Watch and care cost not specified.	Around Rs 1.0 lakh cost incurred on watch and care.	Around Rs 1.0 lakh cost incurred on watch and care.
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (L x B x D	Not proposed in 2017-18 as pits are not matured.	Pits are not matured for backfilling and reclamation and rehabilitation.	Pits are not matured for backfilling and reclamation and rehabilitation.
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Not proposed in 2017-18 as pits are not matured.	Pits are not matured for backfilling and reclamation and rehabilitation.	Pits are not matured for backfilling and reclamation and rehabilitation.
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	Not proposed in 2017-18 as pits are not matured.	Pits are not matured for backfilling and reclamation and rehabilitation.	Pits are not matured for backfilling and reclamation and rehabilitation.
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Not proposed in 2017-18 as pits are not matured.	Pits are not matured for backfilling and reclamation and rehabilitation.	Pits are not matured for backfilling and reclamation and rehabilitation.
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	Not proposed in 2017-18 as pits are not matured.	Pits are not matured for backfilling and reclamation and rehabilitation.	Pits are not matured for backfilling and reclamation and rehabilitation.
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	No Waste land proposal of rehabilitation .	Nil.	There is no proposal of rehabilitation of waste land.

6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No Waste land proposal of rehabilitation .	Nil.	There is no proposal of rehabilitation of waste land.
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No Waste land proposal of rehabilitation .	Nil.	There is no proposal of rehabilitation of waste land.
6p	Compliance of environmental monitoring (core zone and buffer zone)	Quarterly monitoring	Quarterly monitoring of air, water and noise level are being carried out.	Quarterly monitoring of air, water and noise level are being carried out.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	Backfilling and reclamation and rehabilitatio n not proposed in 2017-18 as pits are not matured.	Earlier part of Quarry- 1 of about 8.24 ha area has been backfilled and reclaimed and rehabilitated.	Earlier part of Quarry- 1 of about 8.24 ha area has been backfilled and reclaimed and rehabilitated.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Gradewise sorting.	Gradewise sorting.	Gradewise sorting.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Manual/Mechanical	Manual/Mechanical	Both Manual and Mechanical are being practiced.
7c	Different grade of mineral sorted out at mines.	10- 40 % Cr2O3	Only 10 - 40 % Cr2O3 grade is sorted out.	Only 10 - 40 % Cr2O3 grade is sorted out.

7d	Any beneficiation process at mines .	COBP I & COBP II	The feed of COBP -1 as planned from Quarry 1 could not be done as the quarry 1 was not under operation. COBP-II is in operation for beneficiating sub grade/tailings to upgrading above 40% Cr2O3.	Mining operation is presently suspended by MOEF since 22/02/2018.
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	Gradewise sorting of 10 - 40 % Cr2O3	Gradewise sorting of 10 - 40 % Cr2O3 grade is carried out.	The feed of COBP - 1 as planned from Quarry 1 could not be done as the quarry 1 was not under operation. COBP-II is in operation for beneficiating sub grade/tailings to upgrading above 40% Cr2O3.

Environment:

Sl.No.	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Top soil not proposed as working is proposed in broken up area.	No top soil generation as working is proposed in broken up area.	No top top soil generation is proposed.
8b	Concurrent use or storage of topsoil	Top soil not proposed as working is proposed in broken up area.	No top soil generation as working is proposed in broken up area.	No top top soil generation is proposed.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumping for overburden and mineral reject	Separate dumping for overburden and mineral reject are maintained.	Separate dumping for overburden and mineral reject are maintained.

8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Backfilling and reclamation and rehabilitattio n not proposed in 2017-18 as pits are not matured.	Earlier part of Quarry- 1 of about 8.24 ha area has been backfilled and reclaimed and rehabilitated.	Earlier part of Quarry- 1 of about 8.24 ha area has been backfilled and reclaimed and rehabilitated.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Backfilling and reclamation and rehabilitattio n not proposed in 2017-18 as pits are not matured.	Earlier part of Quarry- 1 of about 8.24 ha area has been backfilled and reclaimed and rehabilitated.	Earlier part of Quarry- 1 of about 8.24 ha area has been backfilled and reclaimed and rehabilitated.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	3500 saplings in 2017-18.	Total 5000 nos. saplings have been planted in 2017-18. Cumulative 118700 nos. have been planted by lessee .	Total 5000 nos. saplings have been planted in 2017-18. Cumulative 118700 nos. have been planted by lessee .
8g	Survival rate	Survival rate not specified.	As reported survival rate is 90%.	As reported survival rate is 90%.
8h	Water sprinkling on roads to control airborne dust	Water Tanker.	Water tankers are used to control air borne dust.	Water tankers are used to control air borne dust.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	3500 saplings in 2017-18.	Total 5000 nos. saplings have been planted in 2017-18. Cumulative 118700 nos. have been planted by lessee .	Aesthetic beauty in and aroun mined area is maintained plantation.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Monthly & Annual returns are being regularly submitted by lessee.	Monthly & Annual returns are being regularly submitted by lessee.	Monthly & Annual returns are being regularly submitted by lessee.

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining engineer, geologist & mine managers were employed in the mine.	Mining engineer, geologist & mine managers were employed in the mine.	Mining engineer, geologist & mine managers were employed in the mine.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Mining - 29.351 Ha, Dump-28.377 Ha, Back filling- 8.24 Ha, Mineral storage- 2.831Ha, Infrastructure & Road-4.228 Ha Green belt, Tailing pond, ETP , COB & other-13.14 Ha.	Mining - 29.351 Ha, Dump-28.377 Ha, Back filling- 8.24 Ha, Mineral storage-2.831Ha, Infrastructure & Road-4.228 Ha Green belt, Tailing pond, ETP , COB & other-13.14 Ha.	Mining - 29.351 Ha, Dump-28.377 Ha, Back filling- 8.24 Ha, Mineral storage-2.831Ha, Infrastructure & Road-4.228 Ha Green belt, Tailing pond, ETP , COB & other-13.14 Ha.
9d	Scrutiny of Annual return on afforestation	5000nos. of saplings.	5000nos. of saplings.	5000nos. of saplings.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil.	Nil.	Nil.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Closing stock: Lump below 40 % Cr2O3-2388T Fines: below 40 % Cr2O3-7601.07T, 40-50% Cr2O3-2113.295T	Closing stock: Lump below 40 % Cr2O3-1902.857T Fines: below 40 % Cr2O3-7601.07T, 40-50% Cr2O3-2113.295T	Closing stock: Lump below 40 % Cr2O3-2388T Fines: below 40 % Cr2O3-7601.07T, 40-50% Cr2O3-2113.295T
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex mine price: Lump below 40 % Rs 2388/-	Ex mine price: Lump below 40 % Rs 2388/-	Ex mine price: Lump below 40 % Rs 2388/-
9h	Scrutiny of Annual return on fixed assets	Fixed asset as furnished in AR is Rs 2270846/-	Fixed asset as furnished in AR is Rs 2270846/-	Fixed asset as furnished in AR is Rs 2270846/-

9k	Scrutiny of Annual return on mining machineries	Wagon drill 150mm dia-1, Excavator 2.1//3.2cum-3, Tipper 25/40T- 16, Dozer-1, Water tanker-2	Wagon drill 150mm dia-1, Excavator 2.1//3.2cum-3, Tipper 25/40T-16, Dozer- 1, Water tanker-2	Wagon drill 150mm dia-1, Excavator 2.1//3.2cum-3, Tipper 25/40T-16, Dozer-1, Water tanker-2
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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

Date :

(DAYANAND UPADHYAY)

Indian Bureau of Mines