

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

**MCDR inspection REPORT
Jabalpur regional office**

Mine file No : MP/SATNA/LST.355

Mine code : 38MPR35328

- (i) Name of the Inspecting : **KQ06**) **NARESH KUMAR KATARIYA**
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : Mr Akhilesh Singh, VP (Mines) and Mr Bharat Sahasrabu
Official with
Designation
- (iv) Date of Inspection : 06-SEP-22
- (v) Prev.inspection date : 01-OCT-19

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **SALAIYA 495.566HA.**
- (b) **Registration NO.** : **IBM/19577/2015**
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address :
State : MADHYA PRADESH
District : SATNA
Village : SALAIYA
Taluka : MAIHAR
Post office : AJWAIN
Pin Code : 485772
FAX No. : 07674234580
E-mail : uttam.roy@birlacorp.com
Phone : 02230384303
- (f) Police Station : BADERA
- (g) First opening date : 21-NOV-14
- (h) Weekly day of rest :
2. Address for : M/s Reliance Ornatus Enterprises & Ventures Priv
correspondance P.O. Ajwain, Tehsil: Maihar
Tehsil - Maihar, Distt - Satna - 485772
3. (a) Lease Number :
(b) Lease area :
(c) Period of lease :
(d) Date of Expiry :
4. Mineral worked : LIMESTONE Main

5. Name and Address of the

Lessee : RELIANCE ORNATUS ENTERPRISE AND VENTURES
 G-BLOCK, 1ST.FLOOR, 3RD.
 WING, DHIRUBHAI AMBANI
 KNOWLEDGE CITY
 KOPARKHAIRANE, NAVI MUMBAI
 MUMBAI (SUBURBAN)
 MAHARASHTRA
 Phone:NA
 FAX :NA

Mining Engineer

Name : Manish Kumar Mishra, Full Time
 Qualification : BE Mining
 Appointment/ :
 Termination date

6. Date of approval of Mining	:	Mining Scheme rule 12 MCDR1988	06-APR-16
Plan/Scheme of Mining		MP modif under 17(3) MCR 2016	03-OCT-18
		MP review under 17(1) MCR 2016	26-MAR-21

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	9 BH	9 BH	
1b	Exploration over lease area for geological axis 1 or 2	G-1	G-1	Lease area-459.566 Has been explored under G1 axis as per records.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Departmental	Exploration has been done by departmental machine. Expenditure for exploration during the year is Rs. 600000.	Date of commencement of exploration - 26.10.2021
1d	Balance area to be explored to bring Geological axis in 1 or 2	NIL	Balance 25.410 Ha. G2 area is converted in to G1	Exploration completed under G-1 category for entire lease area.
1e	Balance reserve as on 01/04/20		Balance reserve as on 31.03.2022 111- 42.63 Million T 221 - 7.55 Million T	
1f	General remarks of inspecting officers on geology, exploration etc			Total Mining Lease has been covered under G1 category of exploration. Limestone is found in the area at shallow depth and in a single bench only.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	E475482 to E475029 N226667 to N266681	E475482 to E475029 N226667 to N266681	Working is being done inside the proposed area. Mine development is lagging from the proposal. Violation pointed out for the same under rule 11(1) of MCDR-2017

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Topsoil and OB - 1.5 m Mineral Bench 4.0 m in Block I & 6 m in Block-2	Topsoil and OB - 1.5 m Mineral Bench 4.0 m in Block I & 6 m in Block-2	Mine development is lagging from the proposal. Violation pointed out for the same under rule 11(1) of MCDR-2017
2c	Stripping ratio or ore to OB ratio	1: 0.28	1: 0.048	Working is being done inside the proposed area. But, Mine development is lagging from the proposal. Violation pointed out for the same under rule 11(1) of MCDR-2017
2d	Quantity of topsoil generation in m3	14000 m3	4067 m3	Top soil has been concurrent spread over backfilled area for plantation as per records. Mine development is lagging from the proposal. Violation pointed out for the same under rule 11(1) of MCDR-2017
2e	Quantity of overburden generation in m3	225800 m3	47623.33 m3	Working is being done inside the proposed area. Mine development is lagging from the proposal. Violation pointed out for the same under rule 11(1) of MCDR-2017

2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	Top soil has been concurrent spread over backfilled area for plantation as per records . Working is being done inside the proposed area. Mine development is lagging from the proposal. Violation pointed out for the same under rule 11(1) of MCDR-2017
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Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Two	Two	
3b	Quantity of ROM mineral production proposed	1500000MT	1086228.71 MT	Mine development is lagging from the proposal. Violation pointed out for the same under rule 11(1) of MCDR-2017
3c	Recovery of sailable/usable mineral from ROM production	100 %	99 %	
3d	Quantity of mineral reject generation	Nil	Nil	
3e	Grade of mineral rejects generation and threshold value declared.	Reject grade - < 34 % CaO > 5% MgO	Reject grade - < 34 % CaO >8% MgO	
3f	Quantity of sub grade mineral generation.	Nil	Nil	No subgrade material generated during mining.
3g	Grade of sub grade mineral generation	NA	NA	

3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized	Mechanized	
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Not proposed	Not applicable	
3j	Provision of drilling and blasting in mineral benches	Yes	Yes	Control deep hole drilling and blasting has been carried out in the lease area
3k	Provision of mining machineries in mineral benches	Yes	As per approved proposal.	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Topsoil and OB - 1.5m Mineral Bench 4.0m in Block I & 6m in Block-1	Topsoil and OB - 1.5 m Mineral Bench 4.0 m in Block I & 6 m in Block-2	
3m	Total area covered under excavation/pits	14 Ha.	8.2 Ha	Working is being done inside the proposed area. Mine development is lagging from the proposal. Violation pointed out for the same under rule 11(1) of MCDR-2017.
3n	Ore to OB ratio for the pit/mine during the year.	1: 0.28	1: 0.048	
3o	Total area put in use under different heads at the end of year	14 Ha.	8.2 Ha.	Mine development is lagging from the proposal. Violation pointed out for the same under rule 11(1) of MCDR-2017

3p	Production of ROM mineral during the last five year period as applicable	2017-18 - 1980000 MT	2017-18 - 1027820.361 MT
		2018-19 - 1257878 MT	2018-19 - 1193721.92 MT
		2019-20 - 1260662 MT	2019-20 - 1075032.54 MT
		2020-21 - 1395659 MT	2020-21 - 1096883.86 MT
		2021-22 - 1500000 MT	2021-22 - 1086228.71 MT

3q	General remarks of inspecting officers on method of mining etc.		Open cast mechanized working proposed by using Excavator & dumper combination. Working is being done inside the proposed area. Mine development is lagging from the proposal. Violation pointed out for the same under rule 11(1) of MCDR-2017
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Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Top Soil is to be Spread over backfilled area and OB is to be used for backfilling	Top Soil has been spreaded over backfilled area and OB has been used for backfilling as per records.	

4b	Location of topsoil, OB and mineral reject dumps	OB Dump (D1) N-240 06' 27.4'' E-800 45' 21.9" to N-240 06' 42.5'' E-800 45' 32.9" OB Dump (D2) N-240 06' 27.4'' E-800 45' 22.2" to N-240 06' 37.0'' E-800 45' 37.0" Top Soil Dump N-240 06' 42.1'' E-800 45' 35.9" to N-240 06' 44.1'' E-800 45' 38.2"	OB Dump (D1) N-240 06' 38.3'' E-800 45' 26.6" to N-240 06' 42.2'' E-800 45' 32.7" OB Dump (D2) N-240 06' 28.5'' E-800 45' 23.4" To N-240 06' 36.5'' E-800 45' 35.6" Top Soil Dump N-240 06' 42.2'' E-800 45' 35.9" to N-240 06' 44.0'' E-800 45' 38.	Top Soil is Spreading over backfilled area OB & Mineral reject is used for backfilling.
4c	Number of dumps within lease area and outside of lease area	Three	Three	2 no. OB dumps & 1 no. Backfilled dump made within lease area. No dump is made outside the mining lease area.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Within UPL (Temporary dump)	Within UPL (Temporary dump)	
4e	Number of active and alive dumps.	one	one	Backfilled dump
4f	Number of dead dumps.	Nil	Nil	
4g	Number of dumps established.	Nil	Nil	

4h	Whether Retaining wall or garland drain all along dumps are there.	Yes	Yes	
4i	Length of Retaining wall or garland drain all along dumps	Retaining wall length - 1400 m Garland drain length - 800 m	Retaining wall length - 1400 m Garland drain length - 800 m	
4j	Number of settling ponds	01	01	No new settling pond is proposed during the year 2021 -22.
4k	Specific comments of inspecting officer on waste dump management			One OB dump was observed in the lease area. Backfilling is proposed and being done from the OB.

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.	Full extraction of mineral from mined out area is to be ensured before starting of backfilling work.	Full extraction of mineral from mined out area has been ensured before starting of backfilling work as per records.	
5b	Area under backfilling of mined out area	4.94 Hect	2.55 Hect.	Backfilling not achieved because OB generation was less due to less mine development. Violation has been pointed out for the same under rule 11(1) of MCDR 2017.

5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	As per approved mining plan topsoil is to be concurrently utilized for rehabilitation of backfilled area.	Topsoil is being concurrently utilized for rehabilitation of backfilled area.	
5d	Total area fully reclaimed and rehabilitated	6.8 ha	3.8 ha	Backfilling of mined out area is lagging.
5e	General remarks of inspecting officers on backfilling and reclamation etc.			Top soil & OB removed from the lease area have been stacked at earmarked location for future backfilling and plantation purpose. Backfilling is lagging due to less quantity of OB generation. Violation pointed out for less mine development.

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).	Yes	Yes	PMCP Report has been submitted on 07.06.2022.
6b	Area available for rehabilitation (ha) .	Area proposed for rehabilitation (ha) - 3.00 Ha.	Area available for rehabilitation (ha) - 2.5 Ha	
6c	afforestation done (ha).	Afforestation proposed (ha) - 3.0 Ha.	Afforestation done (ha) - 2.5 Ha.	

6d	No. of saplings planted during the year	No. of saplings proposed during the year - 6000	No. of saplings planted during the year - 3150	Less plantation in the ML area due to less backfilling. Violation pointed out for the same under rule 11(1) of MCDR-2017
6e	Cumulative no. of plants	Cumulative no. of plants - 23350	Cumulative no. of plants - 19050	
6f	Any other method of rehabilitation	Not proposed	Not done	
6g	Cost incurred on watch and care during the year	Rs. 1214200/-	Rs. 1,63,800/-	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (L x B x D	14.0 Ha.	8.2 Ha.	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	4.94 Ha.	2.55 Ha	
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	3.0 Ha.	2.5 Ha.	
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Not Proposed	YES (L-312Mtrs.X W-92Mtrs. X 1.00 Mtrs.	

6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	NA	NA	
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	Afforestation - 1.0 Ha.	Afforestation - 0.2 Ha.	
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	Area rehabilitated - 1.0 Ha. (ha)	Area rehabilitated (ha) - 0.2	
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Method of rehabilitation - By planting saplings	Method of rehabilitation - By planting saplings	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Quarterly report	Compliance done on quarterly basis	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			PMCP report submitted within time. Backfilling is lagging due to less OB generation. Violaiton pointed out for the same under rule 11(1) of MCDR 2017.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM to be dispatched to captive plant 1.50 MT	ROM dispatched to captive plant 1.086 MT	

7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical	Mechanical	
7c	Different grade of mineral sorted out at mines.	Not proposed	NA	
7d	Any beneficiation process at mines .	Not proposed	Not applicable	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			ROM dispatched to captive plant above 34% CaO. No mineral reject as per records.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	concurrent spread of top soil over the backfilled area for plantation	Top soil has been concurrent spread over backfilled area for plantation	
8b	Concurrent use or storage of topsoil	Top soil is proposed to be spread over backfilled area.	Top soil is being spread over backfilled area	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	OB is proposed to be used for backfilling.	OB is used for backfilling.	

8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	OB is proposed to be used for backfilling	OB is used for backfilling	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Yes	Backfilling has been done for phased restoration.	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)		Plantation has been done on total 10.25 Ha. . Out of which 3.8 Ha. area planted over backfilled area & 6.45 Ha. In barren land.	
8g	Survival rate	100%	90%	
8h	Water sprinkling on roads to control airborne dust	Yes	Continuous water sprinkling in mine haul road	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Plantation along the haul road and backfilled area has been observed during the inspection.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
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9a	Status of submission of Monthly and Annual returns	Annual Return fy 2021-22 - submitted on 25.06.2022 Monthly return - April-21 - 07.05.2021 May -21 - 09.06.2021 June-21 - 10.07.2021 July-21 - 10.08.2021 August-21 - 09.09.2021 September-21 - 09.10.2021 October-21 - 09.11.2021 November-21 - 10.12.2021 December-21 - 10.01.2021 January-22 10.02.2022 February-22 - 10.03.2022 March-22 - 09.04.2022	Violation pointed out for late submission of MRS under rule 45 of MCDR 2017
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Yes	Mining Engineer - Manish Kumar Mishra Geologist - Priyam Jain Manager - Manish Kumar Mishra
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Yes	Area covered under working - 53.00 Ha. Reclaimed / Rehabilitation - 6.50 Ha./3.8 Ha. Area used for waste disposal - 4.03 Ha. Infrastructure - 2.50 Ha. Other (Bund, drain, sedimentation pond) - 5.93 Ha.
9d	Scrutiny of Annual return on afforestation	Yes	3150 saplings planted within mining lease area and 2700 saplings planted outside mining lease area.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Yes	Nil

9f	Scrutiny of Annual return on ROM stock and/or graded ore	Yes	ROM closing stock as on 31.03.2021 = 14675.40 MT
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Yes	Ex. Mine price - Rs. 190.29 / MT
9h	Scrutiny of Annual return on fixed assets	Yes	Rs 124422631/-
9k	Scrutiny of Annual return on mining machineries	Yes	BACK HOE - 2.000 CUM - 1 NOS AIR COMPRESSOR 450.00 CUM/MN - 1 NOS WATER TANKER - 18000 LTR - 1 NOS TIPPER - 14 TONNE - 1 NOS BLAST HOST DRILL - 115 MM - 1 NOS

Details of violations observed during current inspection and compliance position of violation pointed out

Violation observed		Show cause position	
Rule NO.	Issued on Compliance on	Rule NO.	Issued on Compliance on

Date :

(NARESH KUMAR KATARIYA)

Indian Bureau of Mines