

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

Check up inspection REPORT

Jabalpur regional office

Mine file No : MP/SATNA/LST.355

Mine code : 38MPR35328

- (i) Name of the Inspecting : **N007**) **PUKHRAJ NENIVAL**
Officer and ID No.
- (ii) Designation : Regional Controller Mines
- (iii) Accompanying mine : Mr Akhilesh Singh, VP (Mines) and Mr Bharat Sahasrabu
Official with
Designation
- (iv) Date of Inspection : 01-NOV-21
- (v) Prev.inspection date : 29-JUL-17

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 : **495.566**
- (c) Period of lease : **50 YEARS**
(31/03/2012 to
30/03/2042)
- (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	Nil	Nil	
1b	Exploration over lease area for geological axis 1 or 2	G1 - 407.156 Ha. G2 - 52.41 Ha.	G1 - 407.156 Ha. G2 - 52.41 Ha.	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	In-house (Rs. 600000)	In-house (Rs. 600000)	
1d	Balance area to be explored to bring Geological axis in 1 or 2	20 Ha.	Work under progress	Area is already under G-2 category
1e	Balance reserve as on 01/04/20		111- 39.278 MT 122 - 4.00 MT	
1f	General remarks of inspecting officers on geology, exploration etc			limestone of the area is on vindhyan super group, rohtas limestone of semri group. avg thickness of soil in the lease area 1.5-2.0 m, limestone thickness is of 12-15 m, after that shale continued .

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	South part of Block-1 South & Northeast part of Block-2	South part of Block-1 Northeast part of Block-2	

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Topsoil and OB - 1.5 m Mineral Bench 4.5 m in Block I & 6 m in Block-2	Topsoil and OB - 1.5 m Mineral Bench 4.5 m in Block I & 6 m in Block-2	
2c	Stripping ratio or ore to OB ratio	1: 0.28	1: 0.04	
2d	Quantity of topsoil generation in m3	14000 m3	1317 m3	Total quantity generated till Sept'21 has been spread over backfilled area for tree plantation.
2e	Quantity of overburden generation in m3	215600m3	17102.6 m3	Total quantity generated till Sept'21 has been utilized for backfilling.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Two pit	One pit	The development work as proposed was not done for which violation of rule 11(1) pointed out.
3b	Quantity of ROM mineral production proposed	1500000 MT	446313.43 MT	
3c	Recovery of sailable/usable mineral from ROM production	98.3 %	99 %	
3d	Quantity of mineral reject generation	Nil	Nil	

3e	Grade of mineral rejects generation and threshold value declared.	Reject grade - Minimum 34 % CaO Maximum 5% MgO	Reject grade - Minimum 34 % CaO Maximum 5% MgO	
3f	Quantity of sub grade mineral generation.	Nil	Nil	No subgrade material generated during mining.
3g	Grade of sub grade mineral generation	Not applicable	Not applicable	
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 applicable	Not applicable	
3j	Provision of drilling and blasting in mineral benches	Yes	As per proposal	
3k	Provision of mining machineries in mineral benches	Yes	As per proposal	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes	Maintained as per proposal	
3m	Total area covered under excavation/pits	52.89 ha	North Pit-14.10 H. South Pit-31.20 H. Total- 45.3 H.	
3n	Ore to OB ratio for the pit/mine during the year.	1: 0.28	1: 0.04	
3o	Total area put in use under different heads at the end of year	65.35 ha	52.65 ha	

3p	Production of ROM mineral during the last five year period as applicable	2016-17 = 1980000 2017-18 = 1980000 2018-19 = 1257878 2019-20 = 1260662 2020-21 = 1395659	2016-17 = 835451.66 2017-18 = 1027820.361 2018-19 = 1193721.92 2019-20 = 1075032.54 2020-21 = 1096883.86
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3q	General remarks of inspecting officers on method of mining etc.	The development work as proposed was not done for which violation of rule 11(1) pointed out.
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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 Spreading over backfilled area OB & Mineral reject is used for backfilling.	Top Soil is Spreading over backfilled area OB & Mineral reject is used for backfilling.	
4b	Location of topsoil, OB and mineral reject dumps	NA	NA	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	2 no. OB dump	2 no. OB dump	2 no. OB dump & 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)	NA	NA	
4e	Number of active and alive dumps.	One	One	Backfilled dump

4f	Number of dead dumps.	2 nos (1 no. OB dump (D1) & 1 no. Topsoil dump	2 nos (1 no. OB dump (D1) & 1 no. Topsoil dump	
4g	Number of dumps established.	Nil	Nil	As both OB dump will proposed to backfilled. Hence no dump is stabilized.
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	Nil	Nil	No retaining wall & garland drain is proposed during the year
4j	Number of settling ponds	Nil	Nil	No settling pond is proposed during the year
4k	Specific comments of inspecting officer on waste dump management			

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 before backfilling.	Full extraction has been done before backfilling.	
5b	Area under backfilling of mined out area	5.0 Hect	0.15 Hect.	The backfillingt work as proposed was not done for which violation of rule 11(1) pointed out.

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	8.95 / 6.8 ha	4.0 / 3.8 ha	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			The backfilling work as proposed was not done for which violation of rule 11(1) pointed out.

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).	Yes	PMCP Report has been submitted within time limit.	
6b	Area available for rehabilitation (ha) .	Area available for rehabilitation (ha) - 3.00 Ha.	Area available for rehabilitation (ha) - 0.15 Ha.	
6c	afforestation done (ha).	Afforestation done (ha) - 3.0 Ha	Nil	
6d	No. of saplings planted during the year	6000 plants	Nil	
6e	Cumulative no .of plants	23350 plants	23350 plants	
6f	Any other method of rehabilitation	Not proposed	Not applicable	

6g	Cost incurred on watch and care during the year	Cost incurred on watch & care during the year - Rs. 1214200	Nil	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	27.20 Ha.	27.20 Ha.	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	9.00 Ha.	4.00 Ha.	Lease area is available for backfilling due to lesser production in previous year
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	6.8 Ha.	3.80 Ha.	Lease area is available for backfilling due to lesser production in previous year
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Nil	Nil	
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	1.0 Ha.	0.2 Ha.	

6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	1.0 Ha	0.2 ha	
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Plantation	Plantation	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Proposed	Found in order	Quarterly report submitted in proper time
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			The backfilling work as proposed was not done for which violation of rule 11(1) pointed out.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM is to be used for captive use of cement plant.	ROM is being used for captive use of plant.	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Not proposed	Not applicable	
7c	Different grade of mineral sorted out at mines.	Not proposed	Not applicable	
7d	Any beneficiation process at mines	Not proposed	Not applicable	

7e General remarks
of inspecting
officer on
Mineral
conservation and
beneficiation
issues

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Yes	To be used for restoration and rehabilitation	
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 & Mineral reject is proposed to be used for backfilling	OB & Mineral reject is used for backfilling	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	OB & Mineral reject is proposed to be used for backfilling.	OB & Mineral reject is proposed to be used for backfilling.	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Yes	Yes	

8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	A total of 12.9 Ha. area has been planted so far. Out which 3.8 Ha. area planted over backfilled dump & 9.1 Ha. barren land	
8g	Survival rate		violation of rule 11(1) pointed out.
8h	Water sprinkling proposed on roads to control airborne dust	Done	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		Around the lease area aesthetic beauty is good but in the lease area is needs to be improved by afforestation.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns		M.R. Submitted for the month Sept' 21 A.R. submitted for the year 2020-21	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Details Given in A.R.	Mining Engineer - Mr. Manish Kumar Mishra Geologist - Priyam Jain	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Details given in AR	Lease area utilization 1. Covered under current working - 44.80 ha 2. Reclamation/Rehabilitated area - 3.95 ha 3. Occupied by Plant, Building roads - 2.5 ha 4. Other purpose (Bund drain & sedimentation pond) - 0.68 ha 5. Work done under PMCP plan during the year - 3.950 ha	

9d	Scrutiny of Annual return on afforestation		Number of trees planted during the year - 2500 nos	Violation pointed out for survival rate
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	NIL	NIL	
9f	Scrutiny of Annual return on ROM stock and/or graded ore		Production (in tonne) - 1096883.460 Dispatches from mine head (in tonne) - 1096883.460 Closing Stock - 14675.400	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Details provided in AR	163.35	Captive use of mineral not for sale
9h	Scrutiny of Annual return on fixed assets		Rs 124422631/-	
9k	Scrutiny of Annual return on mining machineries		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 couse position		
Rule NO.	Issued on	Compliance on	Rule NO.	Issued on	Compliance on
MCDR17	Rule 11(1)	01-DEC-21			
MCDR17	Rule 27(1)	01-DEC-21			

Date :

(PUKHRAJ NENIVAL)

Indian Bureau of Mines