

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

MCDR INSPECTION REPORT

Ajmer regional office

Mine file No : RAJ/PAL-47/LST-5

Mine code : 38RAJ21012

- (i) Name of the Inspecting : **S012**) **Sharma H.C.**
Officer and ID No.
- (ii) Designation : Sr. Asst. Contrl. Mines
- (iii) Accompanying mine : Sh. Nitin Purohit, Agent
Official with
Designation
- (iv) Date of Inspection : 16/01/2021
- (v) Prev.inspection date : 28/11/2019

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **DIGRANA 377/90**
- (b) **Registration NO.** : **IBM/10630/2012**
- (c) Category : A Mechanised
- (d) Type of Working : Opencast
- (e) Postal address :
State : RAJASTHAN
District : PALI
Village : DIGRANA
Taluka : JAITARAN
Post office : NIMBOL
Pin Code : 306308
FAX No. : 079-27546565
E-mail : mines_nimbol@nirma.co.in
Phone : 079-27546999
- (f) Police Station : JAITARAN
- (g) First opening date : 28/04/2015
- (h) Weekly day of rest : SUN
2. Address for : Nuvoco Viatas Corporation Ltd.,
correspondance : At & PO- Nimbol, Tehsil - Jaitaran,
District Pali
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 : Nuvoco Viatas Corporation Ltd.
 At & P O - Nimbol Tehsil
 Jaitaran Pali, Rajasthan
 PALI RAJASTHAN
 Phone:
 FAX :

Agent : B Uma Suryam
 Nuvoco Vistas Corp. Ltd. At
 & PO- Nimbol, Tehsil-
 Jaitaran, District Pali
 PALI RAJASTHAN
 Phone:
 FAX :

Mining Engineer

Name : Tushar Kanti Paul, Full Time
 Qualification : Diploma(Mining) & II Class FCC(R)
 Appointment/ : 01/07/2019
 Termination date

Geologist

Name : KRISHAN KUMAR SHARMA, Full Time
 Qualification : MSc GEOLOGY
 Appointment/ : 01/07/2015
 Termination date

Manager

Name : RAJESH BORA
 Qualification : B.E (MINING)
 Appointment/ : 01/07/2015
 Termination date

6. Date of approval of Mining	:	Fresh under rule 22 MCR1960	09/05/2013
Plan/Scheme of Mining		MP modif under 17(3) MCR 2016	31/05/2017
		MP review under 17(1) MCR 2016	08/01/2020

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No Proposal	None	
1b	Exploration over lease area for geological axis 1 or 2	G1 Axis 39.00ha. G2 Axis 27.02ha. G3 Axis 33.98ha	G1 Axis 39.00ha. G2 Axis 27.02ha. G3 Axis 33.98ha	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	None	Nil	
1d	Balance area to be explored to bring Geological axis in 1 or 2	G1 Axis 27.02ha. G2 Axis 33.98ha.	G1 Axis 27.02ha. G2 Axis 33.98ha.	
1e	Balance reserve as on 01/04/20	As on 01.04.2020- 14.188 Million Tonnes	As on 01.04.2020- 14.188 Million Tonnes	
1f	General remarks of inspecting officers on geology, exploration etc	Not applicable	No issue regarding exploration in the mine.	

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	2918240N 2919030N & 384646E 385372E	2918260N 2918990N & 384702E 385290E	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Yes	Yes	
2c	Stripping ratio or ore to OB ratio	1:1.50	1:0.61	

2d	Quantity of topsoil generation in m3	Nil	Nil
2e	Quantity of overburden generation in m3	900000 m3	73696m3
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	Not applicable	The development was lagging due to market demand.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	05 (Pit no. 7,9,10,12,13)	01(Pit no. 12)	Pit no. 7,9,10 & 13 merged with pit no. 12 by systematic mining working.
3b	Quantity of ROM mineral production proposed	1.50 Mill.Tonne	0.301Mill.Tonne	
3c	Recovery of sailable/usable mineral from ROM production	100 %	100%	
3d	Quantity of mineral reject generation	No proposal	None	
3e	Grade of mineral rejects generation and threshold value declared.	No proposal	Not applicable	
3f	Quantity of sub grade mineral generation.	No proposal	Not applicable	
3g	Grade of sub grade mineral generation	No proposal	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.	No proposal	None
3j	Provision of drilling and blasting in mineral benches	Yes	Drilling operation carried out with DTH Drilling ICM 260 & ROC D40 having hole dia of 115 mm.
3k	Provision of mining machineries in mineral benches	Using L&T 300 CK loading excavator with the combination of Volvo FMX 440 tipper for transportation of Limestone.	Using L&T 300 CK loading excavator with the combination of Volvo FMX 440 tipper for transportation of Limestone.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	7 - 8 meter	7 - 8 meter
3m	Total area covered under excavation/pits	At the end of plan period i.e.2019-20 30.44 ha	At the end of 2019-20 17.74 ha.
3n	Ore to OB ratio for the pit/mine during the year.	1:1.50	1:0.61
3o	Total area put in use under different heads at the end of year	At the end of plan period i.e.2019-20 48.14 ha.	At the end of 2019-20 28.27 ha.
3p	Production of ROM mineral during the last five year period as applicable	2015-16 1.00 MTPA 2016-17 1.20 MTPA 2017-18 0.71 MTPA 2018-19 0.918 MTPA 2019-20 1.50 MTPA	2015-16 0.519 MTPA 2016-17 0.609 MTPA 2017-18 0.434 MT 2018-19 0.437 MT 2019-20 0.301MT

3q General remarks Not applicable The opencast method with use of HEMM delayed for carrying out mining operations in the lease area, which is suitable to the type of deposit.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	No top soil at the site of excavation, no reject generation. The O/B waste proposed to be dumped separately.	No top soil at the site of excavation, no reject generation. The O/B waste proposed dumped separately.	
4b	Location of topsoil, OB and mineral reject dumps	Dump No -05 385154 E to 385496 E 2918350 N to 2918790 N Dump No -06 384990 E to 385290 E 2917980 N to 2918384 N	385144 E to 385538 E 2918330 N to 2918650 N	
4c	Number of dumps within lease area and outside of lease area	Within the lease area - 06	Within the lease area - 05	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Three old dumps are within UPL & three dumps are outside UPL	Three old dumps are within UPL & three dumps are outside UPL	The dump inside the UPL in future we will shifted in near future.
4e	Number of active and alive dumps.	02	01	
4f	Number of dead dumps.	04	04	
4g	Number of dumps established.	No proposal	None	
4h	Whether Retaining wall or garland drain all along dumps are there.	No proposal	Nil	

4i	Length of Retaining wall or garland drain all along dumps	No proposal	Nil
4j	Number of settling ponds	No proposal	01
4k	Specific comments of inspecting officer on waste dump management	Not applicable	No area become matured for backfilling.

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.	No matured area for backfilling.	Not applicable	
5b	Area under backfilling of mined out area	No proposal	Not applicable	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No proposal	Not applicable	
5d	Total area fully reclaimed and rehabilitated	No proposal	Not applicable	
5e	General remarks of inspecting officers on backfilling and reclamation etc.	Not applicable	No area become matured for backfilling, reclamation & rehabilitation.	

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 as per rule	Submitted well in time	

6b	Area available for rehabilitation (ha) .	No proposal	Nil
6c	afforestation done (ha).	0.5 ha	0.5 ha
6d	No. of saplings planted during the year	500 nos	500 nos
6e	Cumulative no .of plants	2500 nos	2846 nos
6f	Any other method of rehabilitation	No proposal	Not applicable
6g	Cost incurred on watch and care during the year	Rs. 125000	Rs. 125000
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No proposal	None
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No proposal	Not applicable
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area	No proposal	Nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal	None
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No proposal	None

6m	Compliance of rehabilitation of waste land within lease (i)afforestation	500 nos	500 nos
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	0.5 ha	0.5 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)	Monitoring will be done for AAQ, Water & Noise	Monitoring of AAQ, Water & Noise are carried out quarterly
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	Not applicable	The implementation of proposals of PMCP was satisfactory.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	1.50 MT Cement Grade +44% CaO	0.301MT Cement Grade +44% CaO	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical	Mechanical	
7c	Different grade of mineral sorted out at mines.	Whole ROM despatched to plant.	Whole ROM despatched to plant.	
7d	Any beneficiation process at mines	No proposal	None	

7e General remarks of inspecting officer on Mineral conservation and beneficiation issues Not applicable No issue regarding mineral conservation.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Very thin quantity of top soil recovered is used for plantation.	Very thin quantity of top soil recovered is used for plantation.	
8b	Concurrent use or storage of topsoil	Very thin quantity of top soil recovered is used for plantation.	Very thin quantity of top soil recovered is used for plantation.	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumps for O/B waste proposed.	Being done	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	None	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal	Nil	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	2500 nos planted during plan period.	2846 planted cummulatively.	

8g	Survival rate	Not specified	83 %
8h	Water sprinkling on roads to control airborne dust	Water Sprinkling on all dust generating points i.e. haul road	A water tanker is deployed in mines for water sprinkling on all dust generating points on regular basis.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Not applicable	The general aesthetic beauty in & around the mine was satisfactory.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Not applicable	M/R submitted up to Jan 2021. A/R submitted for 2019-20	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Manager - Sh. Rajesh Bora, Geologist- Sh. K.K. Sharma, Mining Engineer- Sh. Tushar Kanti Paul	Found in order.	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	O/C working - 17.740ha., Waste dump - 6.56 ha., Infrastructure & Roads - 2.000 ha.	Found in order	
9d	Scrutiny of Annual return on afforestation	Number of Tree planted during the year 2019-20 = 500 nos.	Found in order.	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Reject generation- Nil	Found in order.	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Opening & Closing stock - Nil, ROM Production = 300969.770 MT	Found in order	

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Production cost = 424.80 Rs./MT in this captive mine	Found in order
9h	Scrutiny of Annual return on fixed assets	Value of fixed Assets(Rs.) = 271170586/- which are common for this mine & Sinla Lst Mine of same lessee.	Found in order
9k	Scrutiny of Annual return on mining machineries	List of M/C deployed has been given.	Found in order.

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 :

(Sharma H.C.)

Indian Bureau of Mines