

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

MCDR INSPECTION REPORT

Gandhinagar regional office

Mine file No : RAJ/CHT/LST-12

Mine code : 38RAJ09011

- (i) Name of the Inspecting : **S012**) **H C SHARMA**
Officer and ID No.
- (ii) Designation : Assistant Controller Mine
- (iii) Accompanying mine : Sh. Somnath Banerjee, Mine Manager
Official with
Designation
- (iv) Date of Inspection : 23-JUL-19
- (v) Prev.inspection date : 02-AUG-17

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **ARNIYA JOSHI**
- (b) **Registration NO.** : **IBM/378/20111**
- (c) Category : A Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
- State : RAJASTHAN
- District : CHITTORGARH
- Village : ARNIYA JOSHI
- Taluka : NIMBAHERA
- Post office : ARNIYA JOSHI
- Pin Code : 312617
- FAX No. : 022-66306510 (F)
- E-mail : somnath.banerjee@nuvoco.in
- Phone : 01477-225155
- (f) Police Station : Nimbaheda
- (g) First opening date : 14-MAY-10
- (h) Weekly day of rest : SUN
2. Address for : VILLAGE ARNIYA JOSHI
correspondance : TEHSIL NIMBAHERA
DIST. CHITTORGARH
3. (a) Lease Number : RAJ3940
- (b) Lease area : 1476.43
- (c) Period of lease : 50
- (d) Date of Expiry : 13-MAY-60
4. Mineral worked : LIMESTONE Main

5. Name and Address of the

Lessee : Novaco Vistas Corp Ltd.
Equinox Business Park,
Tower 3, East Wing, 4 th
Floor, Off Bandra Kurla
Road, LBS Marg, Kurla
Mumbai MUMBAI (SUBURBAN)
MAHARASHTRA
Phone:02267692500
FAX :02266306510

Owner : Jayakumar Krshnaswamy
Equinox Business Park,
Tower3, East Wing, 4th
Floor, Off Bandra Kurla
Road, Kurla (west), Mumbai
MUMBAI (SUBURBAN)
MAHARASHTRA
Phone: 02267692500
FAX : 02266306510

Agent : Raghvendraro Jahagirdar
Nuvaco Vistas Corp Ltd.
Village Bhawaliya, Tehsil-
-Nimbahera, Distt-
Chittorgarh CHITTORGARH
RAJASTHAN
Phone: 8003090425
FAX :

Mining Engineer

Name : Sri Mahendra Kumar Vyas,Full Time
Qualification : BE Mining
Appointment/ : 21-APR-18
Termination date

Geologist

Name : Sri Satyanjay Kumar Chaturvedi,Full Tim
Qualification : M. Tech in Geology
Appointment/ : 08-JUL-19
Termination date

Manager

Name : Somnath Banerjee
Qualification : B.E.(MIN)
Appointment/ : 10-AUG-15
Termination date

6. Date of approval of Mining : Mining Scheme rule 12 MCDR1988 24-APR-15
Plan/Scheme of Mining MP modif under 17(3) MCR 2016 15-JAN-18

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

| Sl.No. | Item | Proposals | Actual work | Remarks |
|--------|---|---|--|--|
| 1a | Backlog of previous year | No Backlog | Not applicable | |
| 1b | Exploration over lease area for geological axis 1 or 2 | 25 Boreholes each of 50m depth (total Meterage of 1250) were proposed during the year 2018-19 | Total 25 Bore holes drilled to a meterage of 1138m during 2018-19. | Less Drilling as some of the holes could not be drilled to 50m depth due to geological disturbances. |
| 1c | Exploration Agencies and Expenditure in lakh rupees during the year | DSS IFRA Kohapur | Rs 3.451736.00 | |
| 1d | Balance area to be explored to bring Geological axis in 1 or 2 | Proposal of 24 nos of holes in 2019-20. | 18 nos of holes drilled & exploration work under progress. | |
| 1e | Balance reserve as on 01/04/20 | 67 million tones | 67 million tones as on 1/4/2019. | |
| 1f | General remarks of inspecting officers on geology, exploration etc | Not applicable | The lessee conduct towards exploration was satisfactory. | |

Development :

| Sl.No. | Item | Proposals | Actual work | Remarks |
|--------|--|---|---|---------|
| 2a | Location of development w.r.t.lease area | Bounded by Easting 469540.48, Northing 2731374.98 to Easting 4698528.841 & Northing 2730954.88. | Bounded by Easting 469540.48, Northing 2731374.98 to Easting 4698528.841 & Northing 2730954.88. | |
| 2b | Separate benches in topsoil, overburden and minerals (Rule 15) | Three benches in mineral only. as there is no top soil & O/B at proposed location. | Three benches in mineral only. as there is no top soil & O/B at proposed location. | |
| 2c | Stripping ratio or ore to OB ratio | 1:0 (Not applicable) | 1:0 (Not applicable) | |

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|----|---|----------------|---|
| 2d | Quantity of topsoil generation in m3 | Nil | Nil |
| 2e | Quantity of overburden generation in m3 | Nil | Nil |
| 2f | General remarks of inspecting officers on development of pit w.r.t. type of deposit etc | Not applicable | The opencast manual method has been adopted to carry out mining operations in the pit which is best suited for the type of deposit. |

Exploitation:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|-------------------------------|----------------|---------|
| 3a | Number of pit proposed for production | Single pit | Single pit | |
| 3b | Quantity of ROM mineral production proposed | 200000 T | 160720 T | |
| 3c | Recovery of sailable/usable mineral from ROM production | 100% | 100% | |
| 3d | Quantity of mineral reject generation | No mineral reject generation. | Nil | |
| 3e | Grade of mineral rejects generation and threshold value declared. | Not applicable | Not applicable | |
| 3f | Quantity of sub grade mineral generation. | No subgrade generation | Nil | |
| 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. | No proposal | Not applicable |
| 3j | Provision of drilling and blasting in mineral benches | The drilling of 115mm dia holes by drill machines operated by Compressed air & blasting slurry cap sensitive explosive, ANFO and SME to be used. | As per proposals |
| 3k | Provision of mining machineries in mineral benches | Drill M/C of 115mm dia, Air Compressor, Excavator of 2.4 CuM bucket & dumpers of 16T, Dozer & Rock Breaker. | Drill M/C of 115mm dia, Air Compressor, Excavator of 2.4 CuM bucket & dumpers of 16T, Dozer & Rock Breaker. |
| 3l | Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM | Yes | Yes |
| 3m | Total area covered under excavation/pits | 11.11 ha | 11.11 ha |
| 3n | Ore to OB ratio for the pit/mine during the year. | Not applicable (1:0) | Not applicable (1:0) |
| 3o | Total area put in use under different heads at the end of year | Pit 12 ha, Reject Dump- Nil, Others- Nil | Pit 11.11 ha, Reject Dump- Nil, Others- Nil |
| 3p | Production of ROM mineral during the last five year period as applicable | 2013-14=2.59MT, 2014-15=2.61MT, 2015-16=1.04MT, 2016-17=0.35MT, 2017-18=0.35MT. | 2013-14=0.78MT, 2014-15=1.996MT, 2015-16=0.60MT, 2016-17=0.14MT, 2017-18=0.45MT. |

3q General remarks of inspecting officers on method of mining etc. Not applicable The opencast method of mining had been chosen for carrying out mining operations in the area which is most 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) | There is no top soil or O/B waste in the area, mineral is outcropping in the area. | There is no top soil or O/B waste in the area, mineral is outcropping in the area. | |
| 4b | Location of topsoil, OB and mineral reject dumps | No proposal in absence of Top Soil & O/B waste or reject. | Not applicable | |
| 4c | Number of dumps within lease area and outside of lease area | Not applicable | Not applicable | |
| 4d | Location of dumps w.r.t. ultimate pit limit (Rule 16) | No proposal | Not applicable | |
| 4e | Number of active and alive dumps. | No proposal | Not applicable | |
| 4f | Number of dead dumps. | No proposal | Not applicable | |
| 4g | Number of dumps established. | No proposal | Not applicable | |
| 4h | Whether Retaining wall or garland drain all along dumps are there. | No proposal | Not applicable | |
| 4i | Length of Retaining wall or garland drain all along dumps | No proposal | Not applicable | |
| 4j | Number of settling ponds | No proposal | Not applicable | |
| 4k | Specific comments of inspecting officer on waste dump management | Not applicable | There is no top soil, O/B waste or reject in the area. | |

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 proposal | Not applicable | |
| 5b | Area under backfilling of mined out area | Nil | Not applicable | |
| 5c | Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32) | There is no top soil. | 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 | There is no top soil, O/B waste or reject in the area, which can be used for backfilling. | |

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). | As per Rule | Submitted | |
| 6b | Area available for rehabilitation (ha) . | No proposal | Not applicable | |
| 6c | afforestation done (ha). | 2000 nos | 3015 nos planted | |
| 6d | No. of saplings planted during the year | 2000 nos | 3015 nos | |
| 6e | Cumulative no .of plants | No baseline information available | Not reported | |
| 6f | Any other method of rehabilitation | No proposal | Not applicable | |
| 6g | Cost incurred on watch and care during the year | No Proposal | Not applicable | |

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|----|--|-------------|----------------|
| 6h | Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D | No proposal | Not applicable |
| 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 on backfilled area | No proposal | Not applicable |
| 6k | Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir | No proposal | Not applicable |
| 6l | Compliance on reclamation and rehabilitation by backfilling (v)any other specific means. | No proposal | Not applicable |
| 6m | Compliance of rehabilitation of waste land within lease (i)afforestation | 2000 nos | 3015 nos |
| 6n | Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha) | No proposal | Not applicable |
| 6o | Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation | No proposal | Not applicable |

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|----|---|---|---|
| 6p | Compliance of environmental monitoring (core zone and buffer zone) | Regular monitoring as per SPCB & MOEF conditions. | Being done |
| 6q | General remarks of inspecting officers on PMCP compliance and progressive closure operations etc. | Not applicable | There is no issue regarding implementation of PMCP in the mine. |

Mineral Conservation:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|--|---|---|---------|
| 7a | ROM Mineral dispatch or grade-wise sorting within lease area | All ROM to be dispatched to the captive cement plant. | As per proposals. | |
| 7b | Method of grade-wise mineral sorting i.e. manual or mechanical. | No proposal | Not applicable | |
| 7c | Different grade of mineral sorted out at mines. | No proposal | Not applicable | |
| 7d | Any beneficiation process at mines | No proposal | Not applicable | |
| 7e | General remarks of inspecting officer on Mineral conservation and beneficiation issues | Not applicable | There is no issue regarding mineral conservation in the area. | |

Environment:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|-----------------------------------|----------------|---------|
| 8a | Separate removal and utilization of topsoil (Rule 32) | There is no top soil in the area. | Not applicable | |

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|----|---|--|---|
| 8b | Concurrent use or storage of topsoil | Not applicable as there is no top soil. | Not applicable |
| 8c | Separate dumps for overburden, waste rock, rejects and fines (Rule 33) | There is no O/B waste or Reject in the mine requiring its dumping. | Not applicable |
| 8d | Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use | Not applicable in absence of such material. | Not applicable |
| 8e | Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc) | No proposal | Not applicable |
| 8f | Baseline information on existence of plantation and additional plantation done (Rule 41) | About 13.8 ha area will be Covered by Plantation during SOM Plan Period. | 22133 Trees have been planted so far on 15.55 ha area. |
| 8g | Survival rate | 88% | 88% |
| 8h | Water sprinkling on roads to control airborne dust | Regular Water spraying during transportation of limestone. | Regular water spraying is being carried out. |
| 8i | General remarks of inspecting officer on aesthetic beauty in and around mines area | Not applicable | The general aestharic beauty of in & around the mine is satisfactory. |

Compliance of Rule 45:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|--|----------------|--|---------|
| 9a | Status of submission of Monthly and Annual returns | Not applicable | The M/R submitted up to July 2019. The A/R submitted for 2018-19. | |

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|----|---|--|--|
| 9b | Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager | Sh. Mahendra Kumar Vyas as Mining Engineer, Sh. Somnath Banerjee as Manager mines & Sh Mrinmoy Chakraborty as Geologist in the mine. | Sh. Mahendra Kumar Vyas as Mining Engineer, Sh. Somnath Banerjee as Manager mines & Sh Mrinmoy Chakraborty as Geologist in the mine. |
| 9c | Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc. | Covered under current Working 11.11 ha, Occupied under plant & building- 6.00 ha, Dumps-Nil, Top Soil Stack- Nil | Covered under current Working 11.11 ha, Occupied under plant & building- 6.00 ha, Dumps-Nil, Top Soil Stack- Nil |
| 9d | Scrutiny of Annual return on afforestation | Number of trees planted 3015 within lease & 2500 outside lease area. | Number of trees planted 3015 within lease & 2500 outside lease area. |
| 9e | Scrutiny of Annual return on mineral reject generation (Grade and quantity) | Reject Generation Nil & Grade Nil | Reject Generation Nil & Grade Nil |
| 9f | Scrutiny of Annual return on ROM stock and/or graded ore | Production reported 160720 T with closing stock as Nil. | Production made 160720 T with closing stock as Nil. |
| 9g | Scrutiny of Annual return on sale value, Ex. Mine price and production cost | The Sale Value & Ex mine price Nil as in captive Cement Plant Consumption. The Cost of Production not reported. | The Sale Value & Ex mine price Nil as in captive Cement Plant Consumption. The Cost of Production not reported. |
| 9h | Scrutiny of Annual return on fixed assets | The Value of fixed assets reported as Nil. | The Value of fixed assets reported as Nil, which can not be NIL. |
| 9k | Scrutiny of Annual return on mining machineries | Details Furnished | Found O. K. |

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 :

(H C SHARMA)

Indian Bureau of Mines