

**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 : **DJ03**) **DILIP JAIN**
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Shri Somnath Banerjee, AVP(Mines) & Mine Manager
Official with
Designation
- (iv) Date of Inspection : 16-AUG-23
- (v) Prev.inspection date : 15-JAN-23

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.
Equinex 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 : Sri Jeetendra Kumar Jain
Nuvoco Vistas Corp. Ltd,
Village - Bhawaliya Tehsil
- Nimbahera, Chittorgarh,
CHITTORGARH RAJASTHAN
Phone: 7368801402
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 30-AUG-21
Termination date

Geologist

Name : Krishan Kumar Sharma,Full Time
Qualification : M. Sc (Tech) in Geology
Appointment/ : 30-AUG-21
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
MP review under 17(1) MCR 2016 24-JAN-20

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	A total of 8 holes with 400 mtrs of drilling was proposed during the previous 2021-22.	A total of 16 holes with 800 mtrs of drilling were carried out during previous year 2021-22.	No backlog.
1b	Exploration over lease area for geological axis 1 or 2	A total of 9 holes with 450 mtrs of drilling were proposed during the reporting year (RY) 2022-23.	A total of 9 holes with 450 mtrs of drilling were carried out during reporting year (RY) 2022-23.	NIL
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No specific proposal on agency and expenditure.	Expenditure: Rs. 486978 and Agency- DSS Infra, Kolhapur.	NIL
1d	Balance area to be explored to bring Geological axis in 1 or 2	An area of 46.73 hectare was proposed to bring under G1 level of exploration	Proposed area has been brought under G1 level of exploration.	NIL
1e	Balance reserve as on 01/04/20	The position of reserve and resources as per approved Mining plan was 63.996 and 224.36 million tons respectively.	The position of reserve and resources as on 01/04/2023 was 63.755 and 224.36 million tons respectively.	NIL
1f	General remarks of inspecting officers on geology, exploration etc	Exploration with 09 BHs and 450 mts drilling was proposed.	A total of 9 holes with 450 mtrs of drilling were carried out during reporting year (RY) 2022-23.	Geologically the area belongs to the Vindhyan Super group of rocks of Nimbahera formation.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	Development has been proposed in extension of the existing pit-1.	Development has been carried out as per proposal and in extension of existing pit-1.	NIL
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	No proposal of separate benches in top soil and overburden. 3 Benches in Limestone.	No benches in top soil and waste. 3 Benches developed in Limestone.	Top soil removal through scraping.
2c	Stripping ratio or ore to OB ratio	1:0 T/T	1:0006 T/T	Ratio with interburden generated during the year 2022-23.
2d	Quantity of topsoil generation in m3	174 CuM	177.89 CuM	Top soil generated used for plantation.
2e	Quantity of overburden generation in m3	No proposal of OB/waste generation.	A quantity of 32.60 CuM of IB was generated.	Waste generated was used for safety bund work within lease area.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	Opencast method of development was proposed.	Opencast method of development is in practice.	No issue relate to development.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One.	One.	NIL
3b	Quantity of ROM mineral production proposed	200000.00 MT	124326.670 MT	Violation of rule 11(1) of MCDR, 2017 issued for less production.
3c	Recovery of sailable/usable mineral from ROM production	100%	100%	NIL
3d	Quantity of mineral reject generation	No proposals of mineral reject generation.	Mineral rejects were not generated during RY.	NIL

3e	Grade of mineral rejects generation and threshold value declared.	Not applicable as no proposal of MR generation.	Not applicable.	NIL
3f	Quantity of sub grade mineral generation.	No proposals of sub-grade generation.	Sub-grade was not generated during RY.	NIL
3g	Grade of sub grade mineral generation	Not applicable as no proposal of SG generation.	Not applicable.	NIL
3h	Manual / Mechanised method adopted for segregating from ROM	No proposal of segregation of ROM within lease area.	Not applicable.	Entire ROM is dispatched to crusher located at cement plant.
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No beneficiation study proposed during RY.	No beneficiation study carried during RY.	NIL
3j	Provision of drilling and blasting in mineral benches	The blast hole drilling is being done by down the hole drill machines of 115 mm. diameter. For blasting slurry cap sensitive explosives, ANFO and SME proposed to use.	Drilling and blasting are done as per the proposal	NIL
3k	Provision of mining machineries in mineral benches	HEMM with combination of excavator and dumper.	HEMM with combination of excavator and dumper.	NIL
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Bench height proposed not more than 10 meter.	Bench height maintained as per proposal.	NIL
3m	Total area covered under excavation/pits	An area of 12.85 hectare at the end of plan period 2024-25.	An area of 11.939ha at the end of 2022-23.	NIL

3n	Ore to OB ratio for the pit/mine during the year.	1:0 T/T	1:0006 T/T	Ratio with interburden generated during the year 2022-23.
3o	Total area put in use under different heads at the end of year	An area of 18.85 hectare at the end of plan period 2024-25.	An area of 17.939 hectare at the end of 2022-23.	NIL
3p	Production of ROM mineral during the last five year period as applicable	2017-18: 70000 2018-19: 200000 2019-20: 200000 2020-21: 200000 2021-22: 200000 2022-23: 200000	2017-18: 45201.15 2018-19: 160720.30 2019-20: 142574.59 2020-21: 37071.98 2021-22: 72683.290 2022-23: 124326.67	All figures in tons.
3q	General remarks of inspecting officers on method of mining etc.	Opencast method of mining is proposed.	Opencast method of mining is in practice.	The method of mining is best suited method 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)	Top Soil proposed to use concurrently. No proposal of OB/waste and mineral reject generation.	Top soil was concurrently used for plantation. Mineral reject was not generated during RY. Waste generated was used for safety bund work.	NIL
4b	Location of topsoil, OB and mineral reject dumps	No proposal.	Not applicable.	NIL
4c	Number of dumps within lease area and outside of lease area	No proposal.	Not applicable.	NIL
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Not applicable as no proposal of waste dumping.	Not applicable.	NIL
4e	Number of active and alive dumps.	No proposal of waste dumping.	Not applicable.	NIL

4f	Number of dead dumps.	No proposal.	Not applicable.	NIL
4g	Number of dumps established.	No proposal.	Not applicable.	NIL
4h	Whether Retaining wall or garland drain all along dumps are there.	No proposal.	Not applicable.	NIL
4i	Length of Retaining wall or garland drain all along dumps	No proposal.	Not applicable.	NIL
4j	Number of settling ponds	No proposal.	Not applicable.	NIL
4k	Specific comments of inspecting officer on waste dump management	Top Soil proposed to use concurrently. No proposal of OB/waste and mineral reject generation.	Top soil was concurrently used for plantation. Waste generated was used for safety bund work.	No waste dump observed. No issue related to waste dumping.

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 of part or full extraction of mineral.	Not applicable.	NIL
5b	Area under backfilling of mined out area	No proposal.	Not applicable.	NIL
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Top soil of 174.00 CuM was proposed to generate and concurrent use.	Top soil of 177.89 CuM was generated and utilized.	NIL
5d	Total area fully reclaimed and rehabilitated	No proposal.	Not applicable.	NIL
5e	General remarks of inspecting officers on backfilling and reclamation etc.	No proposal of part or full extraction of mineral.	Not applicable.	None of the area matured 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 26 of MCDR, 2017 holder of mining lease shall submit PMCP before 1st day of July every year.	PMCP report for the year 2022-23submitted along with annual return.	NIL
6b	Area available for rehabilitation (ha) .	No proposal.	Not applicable.	NIL
6c	afforestation done (ha).	Only proposals of gap filling plantation.	A total of 15.82 hectare has been planted till 31/03/2023.	NIL
6d	No. of saplings planted during the year	A total of 500 nos plants in gap filling.	Gap filling plantation by 4930 nos. within ML & 919 nos. outside ML.	NIL
6e	Cumulative no .of plants	Not Specified	Cumulatively 41517 nos of plants have been planted.	Cumulatively 39498 nos plants within lease & 2019 outside lease area.
6f	Any other method of rehabilitation	No proposal.	Not applicable.	NIL
6g	Cost incurred on watch and care during the year	Not Specified.	Rs. 28.38 lac	NIL
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.	NIL
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on on backfilled area	No proposal.	Not applicable.	NIL

6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal.	Not applicable.	NIL
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No proposal.	Not applicable.	NIL
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	A total of 500 nos plants in gap filling plantation.	Gap filling plantation by 4930 nos. within ML & 919 nos. outside ML.	NIL
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No proposal of area, only gap filling.	A total of 15.82 hectare has been planted till 31/03/2023.	NIL
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Plantation.	Plantation.	NIL
6p	Compliance of environmental monitoring (core zone and buffer zone)	Regularly monitoring of environmental parameters.	Environment parameters are being monitoring as per norms.	NIL
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	A total of 500 number of saplings have been proposed to plant as gap filling.	Gap filling plantation by 4930 nos. within ML & 919 nos. outside ML.	PMCP compliances are satisfactory.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM mineral dispatch. No proposal for grade-wise sorting.	ROM mineral dispatched. No grade wise sorting.	Entire ROM dispatched to crusher located at cement plant.

7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	No proposal for grade wise sorting.	Not applicable.	ROM is directly dispatched to crusher located at cement plant.
7c	Different grade of mineral sorted out at mines.	No proposal.	Not applicable.	NIL
7d	Any beneficiation process at mines	No proposal of any beneficiation.	Not applicable.	NIL
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	No proposal of any beneficiation.	Not applicable.	No issue related to mineral conservation observed during mine inspection.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Top soil of 174 CuM was proposed to generate.	Top soil of 177.89 CuM was generated during RY.	Top soil was concurrently used for plantation.
8b	Concurrent use or storage of topsoil	Top Soil proposed to use concurrently.	Top soil was concurrently used for plantation.	Top soil of 177.89 CuM was generated during RY.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	No proposal of waste and reject generation.	Mineral reject was not generated during RY. Waste generated was used for safety bund work.	NIL
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal.	Not applicable.	NIL

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal.	Not applicable.	NIL
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	A total of 500 number of saplings have been proposed to plant as gap filling.	Gap filling plantation by 4930 nos. of saplings within ML & 919 nos. outside ML.	Cumulative 39498 nos of plants within lease & 2019 nos. outside lease have been planted.
8g	Survival rate	No proposal.	75%	NIL
8h	Water sprinkling on roads to control airborne dust	Water Sprinkling on haul roads through water tankers.	Water sprinkling observed through water tanker.	NIL
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	A total of 500 number of saplings have been proposed to plant as gap filling.	Gap filling plantation by 4930 nos. of saplings within ML & 919 nos. outside ML.	The general aesthetic beauty is satisfactory in and around mine area.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	As per rule 45 of MCDR, 2017 monthly and annual returns to be submitted.	Annual and Monthly returns for RY have been submitted.	NIL
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mine Manager - Somnath banerjee Mining Engineer- Mahendra Vyas Geologist- Krishan Kumar Sharma	Manager, Mining Engineer and Geologist are appointed.	NIL

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pit : 11.939 ha Waste Dump: Nil Storage of Top Soil: Nil Infrastructure (Office, ANFO mixing Shed, WB, Magazine etc): 2.00 ha. Roads: 4.00 ha. Green Belt: 15.82 ha	The information of land use furnished appears in order.	NIL
9d	Scrutiny of Annual return on afforestation	4930 nos. within ML & 919 nos. outside ML.	Found to be in order.	NIL
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Mineral Reject: NIL.	No mineral reject generation during RY.	NIL
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM and graded ore stock: NIL	No stock all excavated mineral consumed in captive cement plant.	NIL
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex Mine Price and cost of production: Rs 269.58/tons.	Appears in order.	NIL
9h	Scrutiny of Annual return on fixed assets	Value of Fixed Assets in (?): 294346644.00	Common with Sitaram Ji Ka Khera Limestone Mine of Lessee.	NIL
9k	Scrutiny of Annual return on mining machineries	Back hoe, Dozer, Dumper, Rock Drilling Machine, Water Tanker, Explosive Van etc.	Back hoe, Dozer, Dumper, Rock Drilling Machine, Water Tanker, Explosive Van etc.	NIL

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)	15-SEP-23			
MCDR17	Rule 26(2)	15-SEP-23			

Date :

(DILIP JAIN)

Indian Bureau of Mines