

**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 : **G021**) **D R GURJAR**
Officer and ID No.
- (ii) Designation : Sr. Asst. Contrl. Mines
- (iii) Accompanying mine : Shri Rajesh Bora, Mine Manager
Official with
Designation
- (iv) Date of Inspection : 28-NOV-19
- (v) Prev.inspection date : 25-JAN-18

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-APR-15
- (h) Weekly day of rest : SUN
2. Address for : NIRMA HOUSE
correspondance ASHARM ROAD
AHMDABAD
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 : NIRMA LIMITED
 NIRMA HOUSE ASHARM ROAD,
 AHMDABAD PALI RAJASTHAN
 Phone:
 FAX :

Owner : NIRMA LIMITED
 PALI RAJASTHAN
 Phone:
 FAX :

Agent : Bharat A. Mehta
 PO -Nimbol, Tehsil Jaitaran
 Tehsil Jaitaran PALI
 RAJASTHAN
 Phone: 02939-222481
 FAX : 02939-222481

Mining Engineer

Name : Tushar Kanti Paul, Full Time
 Qualification : Diploma(Mining) & II Class FCC(R)
 Appointment/ : 01-JUL-19
 Termination date

Geologist

Name : KRISHAN KUMAR SHARMA, Full Time
 Qualification : MSc GEOLOGY
 Appointment/ : 01-JUL-15
 Termination date

Manager

Name : RAJESH BORA
 Qualification : B.E (MINING)
 Appointment/ : 01-JUL-15
 Termination date

6. Date of approval of Mining Plan/Scheme of Mining : Fresh under rule 22 MCR1960 09-MAY-13
 MP modif under 17(3) MCR 2016 31-MAY-17

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

| Sl.No. | Item | Proposals | Actual work | Remarks |
|--------|---|--|--|--|
| 1a | Backlog of previous year | No backlog of previous year. | Nil | Nil |
| 1b | Exploration over lease area for geological axis 1 or 2 | During the year 2018-19 no exploration proposal given. | Nil | |
| 1c | Exploration Agencies and Expenditure in lakh rupees during the year | During the year 2018-19 no exploration proposal given. | Nil | Nil |
| 1d | Balance area to be explored to bring Geological axis in 1 or 2 | No specific proposal given during the year 2018-19 | Nil | Current MCDR inspection has been carried out along with Review of MP inspection, hence vide scrutiny letter dated 13.12.2019 lessee has been directed to submit proposal of exploration for entire potential mineralised area under G1 level as per time limit given in MCDR 2017. |
| 1e | Balance reserve as on 01/04/20 | Balance reserves as on 01.04.2019 14.48 Million Tonnes | Balance reserves as on 01.04.2019 14.48 Million Tonnes | Nil |

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| 1f | General remarks of inspecting officers on geology, exploration etc | Current MCDR inspection has been carried out along with Review of MP inspection, hence vide scrutiny letter dated 13.12.2019 lessee has been directed to submit proposal of exploration for entire potential mineralised area under G1 level as per time limit given in MCDR 2017. |
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Development :

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|--|---|--|
| 2a | Location of development w.r.t.lease area | 2018-19 2918240N to 2919020N & 384650E to 385375E | 2018-19 2918260N to 2918980N & 384702E to 385280E | Mine development has been carried out as per proposal. |
| 2b | Separate benches in topsoil, overburden and minerals (Rule 15) | Yes | Yes as per proposal. | Nil |
| 2c | Stripping ratio or ore to OB ratio | 2018-19 1:1.63 | 2018-19 1:1.03 | Nil |
| 2d | Quantity of topsoil generation in m3 | During the year 2018-19 no top soil generation proposal given. | Not generated. | Nil |
| 2e | Quantity of overburden generation in m3 | 2018-19 599168 m3 | 2018-19 179580 m3 | Nil |
| 2f | General remarks of inspecting officers on development of pit w.r.t. type of deposit etc | | | Mine development has been carried out within proposed limit. |

Exploitation:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|--|---|---|
| 3a | Number of pit proposed for production | 01 Pit | 01 Pit | Pit no. 7,9,10 & 13 are very small pits and as per proposal these pits are merged with pit no. 12 by systematic mine working. |
| 3b | Quantity of ROM mineral production proposed | 2018-19 0.918 MT | 2018-19 0.437 MT | MT- Million Tonnes |
| 3c | Recovery of sailable/usable mineral from ROM production | 2018-19 0.918 MT | 2018-19 0.437 MT | Nil |
| 3d | Quantity of mineral reject generation | No Mineral reject generation proposed. | Nil | Nil |
| 3e | Grade of mineral rejects generation and threshold value declared. | No Mineral reject generation proposed. | Nil | Nil |
| 3f | Quantity of sub grade mineral generation. | No subgrade mineral generation proposed. | No subgrdae mineral generated. | Nil |
| 3g | Grade of sub grade mineral generation | No subgrade mineral generation proposed. | No subgrdae mineral generated. | Nil |
| 3h | Manual / Mechanised method adopted for segregating from ROM | No proposal | Nil | Nil |
| 3i | Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects. | No proposal during the last year | Nil | Nil |
| 3j | Provision of drilling and blasting in mineral benches | Yes | Yes, drilling operation carried out with DTH Drilling ICM 260 & ROC D40 having hole dia of 115 mm | Nil |

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| 3k | Provision of mining machineries in mineral benches | Yes | Yes, Using L&T 300 CK loading excavator with the combination of Volvo FMX 440 tipper for transportation of Limestone & OB. | Nil |
| 3l | Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM | Yes | Yes as per proposal. | Nil |
| 3m | Total area covered under excavation/pits | At the end of plan period i.e.2019-20 it is proposed that total area will be covered under excavation/pits will be: 30.44 ha. | At the end of year 2018-19 total area covered under excavation/pits is: 17.74 ha. | Nil |
| 3n | Ore to OB ratio for the pit/mine during the year. | 2018-19 1:1.63 | 2018-19 1:1.03 | Nil |
| 3o | Total area put in use under different heads at the end of year | At the end of plan period i.e.2019-20 it is proposed that total area put in use under different head: 48.14 ha. | At the end of year 2018-19 total area put in use under different head is 26.3 ha. | |
| 3p | Production of ROM mineral during the last five year period as applicable | 2015-16: 1.00 MT 2016-17: 1.20 MT 2017-18: 0.71 MT 2018-19: 0.918 MT 2019-20: 1.50 MT | 2015-16: 0.519 MT 2016-17: 0.609 MT 2017-18: 0.434 MT 2018-19: 0.437 MT 2019-20: 0.179MT (upto 31.10.2019) | MT- Million Tonnes |
| 3q | General remarks of inspecting officers on method of mining etc. | | | Method of mining is suitable to the type of deposit. |

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|--|---|---|---|
| 4a | Separate dumping of topsoil, OB and mineral rejects (Rule 32,33) | Top soil : No proposal OB:Yes Mineral Reject:No proposal | Top soil : Not generated OB:Yes Mineral Reject: Not generated | Nil |
| 4b | Location of topsoil, OB and mineral reject dumps | Proposed location of OB/Waste 2018-19 384990 E to 385500 E 2917980 N to 2918780 N | Actual location of OB/Waste 2018-19 385148 E to 385428 E 2918330 N to 2918650 N | Dumping has been carried out within proposed limit, however at the end of year 2018-19 height of dump has been raised from proposed limit, hence violation of rule 11(1) of MCDR 2017 issued to the lessee. |
| 4c | Number of dumps within lease area and outside of lease area | Within the lease area - 06 Outside the lease area - Nil | Within the lease area - 05 Outside the lease area - Nil | Nil |
| 4d | Location of dumps w.r.t. ultimate pit limit (Rule 16) | Three old dumps are within UPL | Three old dumps are within UPL | Nil |
| 4e | Number of active and alive dumps. | 02 | 01 | Nil |
| 4f | Number of dead dumps. | 04 | 04 | Nil |
| 4g | Number of dumps established. | No such proposal given | Nil | Nil |
| 4h | Whether Retaining wall or garland drain all along dumps are there. | During the year 2018-19 total 1048m retaining wall was proposed. | Retaining wall was made but no such long retaining wall was made. | No such long retaining wall was made as per proposal during the year 2018-19, hence violation of rule 11(1) of MCDR 2017 issued to the lessee. |
| 4i | Length of Retaining wall or garland drain all along dumps | During the year 2018-19 total 1048m retaining wall was proposed. | Retaining wall was made but no such long retaining wall was made. | No such long retaining wall was made as per proposal during the year 2018-19, hence violation of rule 11(1) of MCDR 2017 issued to the lessee. |
| 4j | Number of settling ponds | No such proposal given | Nil | Nil |

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| 4k | Specific comments of inspecting officer on waste dump management | | | Durinn the year 2018-19 retaining wall was not made as per proposal , hence violation of rule 11(1) of MCDR 2017 issued to the lessee. |
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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. | During the year 2018-19 no backfilling was proposed. | No backfilling has been carried out. | Nil |
| 5b | Area under backfilling of mined out area | During the year 2018-19 no backfilling was proposed. | No backfilling has been carried out. | Nil |
| 5c | Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32) | No top soil generation proposal given. | No top soil generated during the year 2018-19 | Nil |
| 5d | Total area fully reclaimed and rehabilitated | No proposal during the year 2018-19 | Nil | Nil |
| 5e | General remarks of inspecting officers on backfilling and reclamation etc. | | | Area is not fully matured for backfilling at this stage. |

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). | PMCP yearly report shall be submitted up to 1 July for the preceding financial year. | PMCP yearly report for the year 2018-19 submitted on time. | Nil |

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|----|--|--|------------|-----|
| 6b | Area available for rehabilitation (ha) . | 0.5 hect. | 0.5 hect. | Nil |
| 6c | afforestation done (ha). | 0.5 hect. | 0.5 hect. | Nil |
| 6d | No. of saplings planted during the year | 500 nos. | 515 nos. | |
| 6e | Cumulative no .of plants | 2000 nos. | 1925 nos. | Nil |
| 6f | Any other method of rehabilitation | No proposal | Nil | Nil |
| 6g | Cost incurred on watch and care during the year | Rs. 250000 | Rs. 257500 | Nil |
| 6h | Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D | No proposal of backfilling during the year 2018-19 | Nil | Nil |
| 6i | Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings | No proposal of backfilling during the year 2018-19 | Nil | Nil |
| 6j | Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area | No proposal | Nil | Nil |
| 6k | Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir | No proposal | Nil | Nil |
| 6l | Compliance on reclamation and rehabilitation by backfilling (v)any other specific means. | No proposal | Nil | Nil |

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| 6m | Compliance of rehabilitation of waste land within lease (i)afforestation | 0.5 hect. | 0.5 hect. | Nil |
| 6n | Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha) | 0.5 hect. | 0.5 hect. | 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) | Monitoring proposed. | Monitoring is being carried out. | Nil |
| 6q | General remarks of inspecting officers on PMCP compliance and progressive closure operations etc. | | | Durinn the year 2018-19 retaining wall was not made as per proposal , hence violation of rule 11(1) of MCDR 2017 issued to the lessee. |

Mineral Conservation:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|--|--|---------|
| 7a | ROM Mineral dispatch or grade-wise sorting within lease area | 2018-19 0.918 million tonne limestone will be dispatched to captive cement plant. | 2018-19 0.437MT million tonne limestone dispatched to captive cement plant. | Nil |
| 7b | Method of grade-wise mineral sorting i.e. manual or mechanical. | No proposal | No grade wise sorting. | Nil |
| 7c | Different grade of mineral sorted out at mines. | No proposal | Nil | Nil |

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| 7d | Any beneficiation process at mines | No proposal | Nil | Nil |
| 7e | General remarks of inspecting officer on Mineral conservation and beneficiation issues | | | No issue was observed related to mineral conservation. |

Environment:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|--|---|---------|
| 8a | Separate removal and utilization of topsoil (Rule 32) | No top soil generation proposed during the year 2018-19. | No top soil generated | Nil |
| 8b | Concurrent use or storage of topsoil | It will be use in plantation if encountered. | No top soil generated. | Nil |
| 8c | Separate dumps for overburden, waste rock, rejects and fines (Rule 33) | Yes. OB/Waste dumps proposed | As per proposals. | Nil |
| 8e | Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc) | During the year 2018-19 no such proposal given. | Nil | Nil |
| 8f | Baseline information on existence of plantation and additional plantation done (Rule 41) | During the year 2018-19 total 500 nos. sapling was proposed. | During the year 2018-19 total 515 sapling planted. Cumulative plantation- 1925 nos. | Nil |
| 8g | Survival rate | Not specified | 83% | Nil |
| 8h | Water sprinkling on roads to control airborne dust | Water sprinkling was proposed. | Water sprinkling was observed on haul roads. | Nil |

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| 8i | General remarks of inspecting officer on aesthetic beauty in and around mines area | Aesthetic beauty is good in and around mines. |
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Compliance of Rule 45:

| Sl.No. | Item | Proposals | Actual work | Remarks |
|--------|---|--|-------------------------------|---------|
| 9a | Status of submission of Monthly and Annual returns | Monthly return submitted up to Nov. 2019 & annual return submitted up to year 2018-19. | Timely submission of returns. | Nil |
| 9b | Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager | Details given in AR Manager - Sh. Rajesh Bora Geologist- Sh. K.K. Sharma Mining Engineer- Sh. Tushar Kanti Paul | Found correct. | Nil |
| 9c | Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc. | Details given in AR O/C working - 17.747ha. Waste dump - 6.56 ha. Infrastructure & Roads - 2.000 ha. | Found to be correct. | Nil |
| 9d | Scrutiny of Annual return on afforestation | Details given Number of tree planted during the year 2018-19 = 515 nos. within lease area having survival rate 83% | Found correct. | Nil |
| 9e | Scrutiny of Annual return on mineral reject generation (Grade and quantity) | Detail given No reject generation reported | No reject generated. | Nil |

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| 9f | Scrutiny of Annual return on ROM stock and/or graded ore | ROM stock -Nil Found to be correct. | Nil |
| 9g | Scrutiny of Annual return on sale value, Ex. Mine price and production cost | Ex. Mine price & production cost = 387.36 Rs. per tonne | Nil |
| 9h | Scrutiny of Annual return on fixed assets | Value of fixed Assets(Rs.) = 281877202/- | Nil |
| 9k | Scrutiny of Annual return on mining machineries | Details given Found correct. | |

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 :

(D R GURJAR)

Indian Bureau of Mines