

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

MCDR INSPECTION REPORT

Nagpur regional office

Mine file No : MAH/CND/LST- 4/NGP

Mine code : 38MSH08001

- (i) Name of the Inspecting : **G002**) **OM PRAKASH GOPAL**
Officer and ID No.
- (ii) Designation : Regional Mining Geologist
- (iii) Accompanying mine : Sh. S. Ghosh Agent, R. K Mishra Geologist & QP, Shala
Official with
Designation
- (iv) Date of Inspection : 06-Dec-22
- (v) Prev.inspection date : 08-Mar-22

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **NAOKARI**
- (b) **Registration NO.** : **IBM/441/2011**
- (c) Category : A Mechanised
- (d) Type of Working : Opencast
- (e) Postal address :
State : MAHARASHTRA
District : CHANDRAPUR
Village : NAOKARI
Taluka : KORPANA
Post office : AWARPUR CEMENT WORK
Pin Code : 442917
FAX No. : 07173- 266341
E-mail : amathawale@adityabirla.com
Phone : 07173- 266330
- (f) Police Station : GADCHANDUR
- (g) First opening date : 21-Apr-82
- (h) Weekly day of rest : SUN
2. Address for : P.O.- AWARPUR CEMENT PROJECT,
correspondance : DISTT. - CHANDRAPUR (MS) 442 917
3. (a) Lease Number : MSH0007
- (b) Lease area : 1030.58
- (c) Period of lease : 50
- (d) Date of Expiry : 31-Mar-30
4. Mineral worked : SHALE Associated
LIMESTONE Main

5. Name and Address of the

Lessee : M/S ULTRATECH CEMENT LTD.
 CHANDRAPUR MAHARASHTRA
 Phone:
 FAX :

Owner : SHRI V.T.MOORTHY
 UNIDENTIFIED TAMIL NADU
 Phone:
 FAX :

Agent : SHRI A.M.ATHAWALE
 CHANDRAPUR MAHARASHTRA
 Phone:
 FAX :

Mining Engineer

Name : SHRI D.D. MAHULE, Full Time
 Qualification : BE MINING
 Appointment/ : 26-Sep-06
 Termination date

Geologist

Name : Shri C.N.Joshi, Full Time
 Qualification : M.Sc.Tech. (Applied Geology)
 Appointment/ :
 Termination date

Manager

Name : SHRI R.V.SAMBREY
 Qualification : DIP. MINING
 Appointment/ : 04-Jul-06
 Termination date

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| 6. Date of approval of Mining | : | Modif.of approved Mining Plan | 18-Dec-00 |
| Plan/Scheme of Mining | : | Modif.of approved Mining Plan | 16-Dec-03 |
| | : | Mining Scheme rule 12 MCDR1988 | 28-Jul-05 |
| | : | Mining Scheme rule 12 MCDR1988 | 21-Jan-11 |
| | : | Mining Scheme rule 12 MCDR1988 | 12-Jun-15 |
| | : | MP review under 17(1) MCR 2016 | 23-Dec-19 |

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

| Sl.No. | Item | Proposals | Actual work | Remarks |
|--------|---|---|-------------|---|
| 1a | Backlog of previous year | NIL | NIL | NIL |
| 1b | Exploration over lease area for geological axis 1 or 2 | No exploration proposal for the year 2021-22. | NIL | NIL |
| 1c | Exploration Agencies and Expenditure in lakh rupees during the year | None | None | NIL |
| 1d | Balance area to be explored to bring Geological axis in 1 or 2 | NIL | NIL | Entire mineralised area has already been explored upto G1 level. |
| 1e | Balance reserve as on 01/04/20 | Balance Reserves as on 1/11/2019 : 187.77 million tonnes (111), 136.07 million tonnes (121) | NIL | NIL |
| 1f | General remarks of inspecting officers on geology, exploration etc | NIL | NIL | The rock formations of the lease area belongs to Penganga beds of Vindhyan System. The limestone deposit is sandwiched between sandstone, high MgO limestone and shale . Entire mineralised area has already been explored upto G1 level. |

Development :

| Sl.No. | Item | Proposals | Actual work | Remarks |
|--------|------|-----------|-------------|---------|
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| 2a | Location of development w.r.t.lease area | A Block : E305540 to 306132 and N2189910 to 2191060 B Block : E306939 to 308527 and N2189260 to 2190100 | A Block : E305574 to 306049 and N2190010 to 2190930 B Block : E306939 to 307128 and N2189390 to 2190060 | Development within proposed limit |
| 2b | Separate benches in topsoil, overburden and minerals (Rule 15) | Seperate benches for OB and mineral proposed | Seperate benches for OB and mineral are being maintained. | NIL |
| 2c | Stripping ratio or ore to OB ratio | 1:0.39 | 1:0.25 | NIL |
| 2d | Quantity of topsoil generation in m3 | 109066 Tonnes | 33054 Tonnes | NIL |
| 2e | Quantity of overburden generation in m3 | 26,71,600 Tonnes | 8,90,285 tonnes | NIL |
| 2f | General remarks of inspecting officers on development of pit w.r.t. type of deposit etc | NIL | NIL | Two pits one each in Block A and Block B has been developed and are under active exploitation. The bench height is normally kept 7 m in block A and 8 m in block B. |

Exploitation:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---------------------------------------|-----------|-------------|---------|
| 3a | Number of pit proposed for production | Two | Two | NIL |

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|----|---|------------------|------------------|---|
| 3b | Quantity of ROM mineral production proposed | 74,49,830 Tonnes | 36,23,701 Tonnes | Actual production is less (49%) than approved proposal. Valid EC is for production of 4.5 million tonnes of ROM and EC for enhanced production (7.5 million tonnes) not obtained so for. Violation of Rule 11(1) for deviation from approved proposal was pointed out vide letter dated 22/9/2022. To address this issue the lessee has submitted Modification in Mining plan which is under process. |
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| 3c | Recovery of sailable/usable mineral from ROM production | 98% | 100% | It was proposed that screen rejects of -6mm size will not be used for production of cement as the material is having high SO ₃ & SiO ₂ / less than 60 LSF and these material will be stored in Block B towards southern side in Block B. During discussion mine management informed that ROM which is not suitable for cement making at Awarrpur Cement works are now dispatched to Manikgarh Cement plant (sister concern) for blending and cement making and there is no reject generation now. |
| 3d | Quantity of mineral reject generation | 67702 tonnes | NIL | It was proposed that screen rejects of -6mm size will not be used for production of cement as the material is having high SO ₃ & SiO ₂ / less than 60 LSF and these material will be stored in Block B towards southern side in Block B. During discussion mine management informed that and there is no reject generation now. |

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| 3e | Grade of mineral rejects generation and threshold value declared. | High SO ₃ & SiO ₂ / less than 60 LSF | ROM which is not suitable for cement making at Awarrpur Cement works are now dispatched to Manikgarh Cement plant (sister concern) for blending. | NIL |
| 3f | Quantity of sub grade mineral generation. | NIL | NIL | NIL |
| 3g | Grade of sub grade mineral generation | No such proposal | NIL | NIL |
| 3h | Manual / Mechanised method adopted for segregating from ROM | Mechanised | Mechanised | NIL |
| 3i | Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects. | No such proposal | NIL | NIL |
| 3j | Provision of drilling and blasting in mineral benches | Yes | Conventional method of drilling and blasting in mineral benches are in practice | NIL |
| 3k | Provision of mining machineries in mineral benches | Excavator and dumper combination | As per proposal | NIL |
| 3l | Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM | Proposed bench height 7 m in block A and 9 m in block B | Yes, proposed bench height is suitable for mechanised operations. | NIL |
| 3m | Total area covered under excavation/pits | 258.42 ha at the end of plan period ie 31/3/2025. | 220.17 ha as on 31/3/2022. | NIL |
| 3n | Ore to OB ratio for the pit/mine during the year. | 1:0.39 | 1:0.25 | NIL |

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| 3o | Total area put in use under different heads at the end of year | Total area put to use at the end of Plan period ie. 31/3/2025 are: Area under Mining- 258.42 ha; Waste dumps 49.09 ha; Shale dump 2.45 ha; Screen rejects 5.0 ha; ST building 6.16 ha; Roads 6.62 ha. | Total area put to use at the end of Plan period ie. 31/3/2022 are: Area under Mining- 220.17 ha; Waste dumps 42.38 ha; Storage of top soil 18.39 ha; Plant & building and roads 12.78 ha. | NIL |
| 3p | Production of ROM mineral during the last five year period as applicable | 2017-18 - 729998 Tonnes; 2018-19 - 729998 Tonnes; 2019-20 - 7300000 Tonnes; 2020-21 - 7436384 Tonnes; 2021-22 - 7449830 Tonnes | 2017-18 - 3571573 Tonnes; 2018-19 - 3690543 Tonnes; 2019-20 - 3700995 Tonnes; 2021 - 3295745 Tonnes; 2021-22 - 3612820 Tonnes | The mine is captive plant of Awarpur Cement Works and production of limestone depends upon plant's requirement. |
| 3q | General remarks of inspecting officers on method of mining etc. | NIL | NIL | Mining operations are being done by deployment of HEM Mining Machenaries. Two pits one each in Block A and Block B has been developed and are under active exploitation. Bench height is normally kept 7 m in block A and 8 m in block B. |

Solid Waste Management - Dumping:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|------|-----------|-------------|---------|
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| 4a | Separate dumping of topsoil, OB and mineral rejects (Rule 32,33) | Provision of seperate dumping of top soil, OB and mineral rejects are envisaged. | Generated Top soil and OB are being dumped seperately . Reject generation not reported during 2021-22. | NIL |
| 4b | Location of topsoil, OB and mineral reject dumps | Top soil: N2190403 to 2190533 and E306861 to 307982 Waste Dump DIII (N2190447 to 2190574 and E307428 to 307784) DIV (N2189997 to 2190248 and E308318 to 308525) Screen Reject (N2188846 to 2189010 and E304348 to 308465) | Genrated soil are being utilised for plantation and balaced top soil is being preserved at proposed location. Generation of OB is less than proposal and are being dumped at proposed location. Generation of sceen reject not reported. | NIL |
| 4c | Number of dumps within lease area and outside of lease area | Total 8 (Soil Dumps 4 nos & OB dumps 4 nos.). All dumps are outside UPL and within lease area. | As per proposal | NIL |
| 4d | Location of dumps w.r.t. ultimate pit limit (Rule 16) | All dumps are outsid UPL. | As per proposal | NIL |
| 4e | Number of active and alive dumps. | 3 dumps (Soil dump one no and Waste dump 2 nos.) | As per proposal | NIL |
| 4f | Number of dead dumps. | 5 dumps (Soil dump 3 no & Waste dump 2 nos.) | As per proposal. | NIL |

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| 4g | Number of dumps established. | 5 dumps (Soil dump 3 no & Waste dump 2 nos.) | As per proposal | NIL |
| 4h | Whether Retaining wall or garland drain all along dumps are there. | Yes | Yes | NIL |
| 4i | Length of Retaining wall or garland drain all along dumps | 540 m | As per proposal | NIL |
| 4j | Number of settling ponds | No proposal for construction of settling ponds | NIL | NIL |
| 4k | Specific comments of inspecting officer on waste dump management | NIL | NIL | NIL |

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 such proposal | NIL | There is no mined out area. Mineral continued in depth thus there is no scope for backfilling |
| 5b | Area under backfilling of mined out area | NIL | NIL | NIL |
| 5c | Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32) | NIL | NIL | NIL |
| 5d | Total area fully reclaimed and rehabilitated | NIL | NIL | NIL |

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|----|--|-----|-----|--|
| 5e | General remarks of inspecting officers on backfilling and reclamation etc. | NIL | NIL | There is no mined out area. Mineral continued in depth thus there is no scope for backfilling and reclamation of mined out area. |
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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). | Annual Report of PMCP should be submitted on or before 1st of July every year for the preceding year | Annual Report of PMCP submitted. | NIL |
| 6b | Area available for rehabilitation (ha) . | NIL | NIL | NIL |
| 6c | afforestation done (ha). | 1.6 ha | As per proposal | NIL |
| 6d | No. of saplings planted during the year | 4000 | As per proposal | NIL |
| 6e | Cumulative no .of plants | Not mentioned | NA | NIL |
| 6f | Any other method of rehabilitation | None | None | NIL |
| 6g | Cost incurred on watch and care during the year | 2 Lakhs | As per proposal | NIL |
| 6h | Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D | NIL | NIL | There is no mined out area thus there is no scope for backfilling. |

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| 6i | Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings | NIL | NIL | There is no mined out area thus there is no scope for backfilling |
| 6j | Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area | NIL | NIL | There is no mined out area thus there is no scope for backfilling |
| 6k | Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir | NIL | NIL | There is no mined out area thus there is no scope for making water reservoir |
| 6l | Compliance on reclamation and rehabilitation by backfilling (v) any other specific means. | No such proposal | NIL | NIL |
| 6m | Compliance of rehabilitation of waste land within lease (i) afforestation | Aforestation proposed | As per proposal | NIL |
| 6n | Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha) | 0.6 ha | AS per proposal | NIL |
| 6o | Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation | Aforestation | As per proposal | NIL |

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|----|---|--|--|---|
| 6p | Compliance of environmental monitoring (core zone and buffer zone) | Quarterly monitoring in core and buffer zone | Quarterly environmental monitoring are being done. | NIL |
| 6q | General remarks of inspecting officers on PMCP compliance and progressive closure operations etc. | NIL | NIL | Progressive Mine closure plan proposals are being implementewd. |

Mineral Conservation:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|---|-----------------|---------|
| 7a | ROM Mineral dispatch or grade-wise sorting within lease area | ROM dispatch after crushing and sizing | As per proposal | NIL |
| 7b | Method of grade-wise mineral sorting i.e. manual or mechanical. | No such proposal for grade wise sorting | NIL | NIL |
| 7c | Different grade of mineral sorted out at mines. | No such proposal | NIL | NIL |
| 7d | Any beneficiation process at mines . | Crushing and Sizing | As per proposal | NIL |

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|----|--|-----|-----|---|
| 7e | General remarks of inspecting officer on Mineral conservation and beneficiation issues | NIL | NIL | High magnesia limestone not suitable for cement manufacturing at Awarpur Cement works which were previously stacked at mine site as subgrade/waste dump are being dispatched to Mankgarh Cement works a sister concern for cement making. |
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Environment:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|--|---|---------|
| 8a | Separate removal and utilization of topsoil (Rule 32) | Seperate removal and utilisation of top soil. | Top soil are being removed and stacked seperately and are being utilised as per reurement for plantation purpose. | NIL |
| 8b | Concurrent use or storage of topsoil | Storage and utilisation as per requirement. | As per proposal | NIL |
| 8c | Separate dumps for overburden, waste rock, rejects and fines (Rule 33) | Seperate dumps for OB/waste rocks and screen rejects proposed. | Dumping of OB/ waste rocks are being done as per proposal. There is no screen reject Generation. | NIL |
| 8d | Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use | No such proposal | NIL | NIL |

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| 8e | Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc) | Reclamation of dumps by plantation. | Plantation done on dump area. | NIL |
| 8f | Baseline information on existence of plantation and additional plantation done (Rule 41) | Proposal for additional plantation | Plantation are being done over dumps as per proposal. | NIL |
| 8g | Survival rate | No such proposal | 90% | NIL |
| 8h | Water sprinkling on roads to control airborne dust | Yes | Water sprinkling on roads are in practice to control airborne dust. | NIL |
| 8i | General remarks of inspecting officer on aesthetic beauty in and around mines area | Aforestation inside the lease area | Aforestation are being done as per proposal | Mining activity leads to distortion of the aesthetic beauty in and around lease area. To overcome this problem water sprinkling is being done on haul roads to arrest dust. Further, afforestation are being done over dump area and waste land. |

Compliance of Rule 45:

| Sl.No. | Item | Proposals | Actual work | Remarks |
|--------|------|-----------|-------------|---------|
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|----|---|--|---|-----|
| 9a | Status of submission of Monthly and Annual returns | Monthly Return shall be submitted before tenth of every month in respect of preceding month and Annual Return shall be submitted before 1st of July every year in respect of preceding year. | Annula Return for 2021-22 ahs been submitted. Monthly Returns are being submitted in online mode regularly. | NIL |
| 9b | Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager | Mining Engineer: Sh. NK Sharma, Geologist: Sh. RK Mishra, Manager: Sh. | Mining Engineer and Geologist are in place. | NIL |

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| 9c | Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc. | (i) Already exploited & abandoned by opencast (O/C) mining : 0.0 ha; (ii) Covered under current (O/C) Workings 220.17 ha; (iii) Reclaimed/Rehabilitated 0.0 ha; (iv) Used for waste disposal 42.38 ha; (v) Occupied by plant, buildings, residential, welfare buildings & roads 18.39 ha; (vi) Other Purpose (storage of top soil) 18.39 ha; (vii) Work done under PMCP plan during the year: 2.0 ha | Details on land use pattern appears to be in order. | NIL |
| 9d | Scrutiny of Annual return on afforestation | Number of trees planted during the year within lease area: 5000; Survival rate: 90% | Details on afforestation appears to be in order. | NIL |
| 9e | Scrutiny of Annual return on mineral reject generation (Grade and quantity) | Mineral rejects generated: NIL | Details are in order as there is no reject generation in 2021-22. | NIL |

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| 9f | Scrutiny of Annual return on ROM stock and/or graded ore | Opning and closing stocks of ROM: NIL, and graded ore: NIL | Reported Details are in order. | NIL |
| 9g | Scrutiny of Annual return on sale value, Ex. Mine price and production cost | Sale Value: NIL; Exmine price: Rs. 218.84 per tonnes, Cost of Production Rs. 218.76/tonnes | It is captive mine and there is no external sale. Details apperas to be in order. | |
| 9h | Scrutiny of Annual return on fixed assets | Total value of fixed assets: Rs. 378251820/- | No comments on Finencial aspects. | NIL |
| 9k | Scrutiny of Annual return on mining machineries | SHOVEL (HYDRAULIC) 4.00 CUM 2; SHOVEL (HYDRAULIC) 6.5 CUM 2; DUMPER 35.00 TONNE 4; DUMPER 60.00 TONNE 9; BLAST HOLE DRILL (NON ELEC.) 115.0 MM 1; BLAST HOLE DRILL (NON ELEC.) 152.0 MM (Non Electrical) 2; WATER TANKER 20000.0 LITRE 1 ; WATER TANKER 28000.000 LITRE 2 ; eXPLOSSIVE VAN 2; FRONT END LOADER 6.5 CUM 1; CRUSHER 850 TPH 1, CRUSHER 1450 TPH 1 | Mining operations are fully mechanised. Details on mining machenaries appears to be in order. | NIL |

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 :

(OM PRAKASH GOPAL)

Indian Bureau of Mines