

MCDR-MiFLOLST/1/2022-GNR-IBM_RO_GNR
MCDR INSPECTION REPORT

1.0 GENERAL

1/20591/2023

SN	Particulars	Details
1 (a)	Name of the Mine	Narmada Cement Mines
1(b)	Name of Inspecting Officer	Sunil Kumar Sharma, Sr. ACOM
2.	Total Lease Area (Ha) with breakup of Non-forest and forest land	Total ML area -565.9398 Ha. Forest land -177.25 Ha. Non Forest land – 388.6898 Ha.
3	Mine-code	38GUJ02004
4	IBM Registration Number under rule 45 of MCDR, 1988	IBM/ 441/2011
5	Name of the lessee, Address, phone, email and fax number	M/s. UltraTech Cement Limited, Narmada Cement- Jafarabad works P.B. No: 10, Jafarabad – 365 540, Dist. Amreli, Gujarat Tel: (02794) 245105 / 145113 / 245121 Fax: (02794) 245109 / 245110.
6	Village	Babarkot
7	Taluka/Mandal	Jafarabad
8	District	Amreli
9	Pin code	365540
10	State	Gujarat
11	Post office	Jafarabad
12	Nearest police station	Jafarabad
13	Nearest Railway station	Rajula- Junction
14	Date of Grant of Mining Lease	25.09.1978
15	Date of Execution	02.01.1979
16	Date of opening of Mine	15.10.1981
17	Date of first Renewal, if applicable and its period & expiry	NA
18	Date of second Renewal, if applicable and its period & expiry	NA
19	Date of submission of renewal application if Mining Operations are continuing under deemed extension	18.09.1997
20	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Mr. K.C. Jhanwar UltraTech Cement Limited, Ahura Centre, “B” Wing, 2 nd Floor, Mahakali Caves Road, Andheri (E), Mumbai – 400093, Phone No.: (022) – 66917800 E-Mail: - occupierutcl@adityabirla.com Fax: - 02794 – 245357 Date of appointment - 09.11.2018
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Mr. Rajendra Kumar Goyal, B.E. Mining with FCC (R) Narmada Cement- Jafarabad Works Village – Babarkot Taluka – Jafarabad Dist. – Amreli 365540 Mobile – 8003895390 Email- rajendra.goyal@adityabirla.com Date of Appointment – 21.10.2019.
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Mr. Abhishek Bharadwaj, B.E. Mining with FCC (R) Narmada Cement- Jafarabad Works Village – Babarkot Taluka – Jafarabad Dist. – Amreli 365540 Mobile – 9826429066 Email- abhishek.bhardwaj@adityabirla.com Date of Appointment – 20.11.2020.
23	Name of the Mining Engineer, Qualification and total experience	Mr. Abhishek Bharadwaj, B.E. Mining with FCC (R)

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	with Address, phone, email, fax number and date of appointment in mine	Narmada Cement- Jafarabad Works Village – Babarkot Taluka – Jafarabad Dist. – Amreli 365540 Mobile – 9574211176 Email- abhishek.bhardwaj@adityabirla.com Date of Appointment – 15.04.2021 B.E. (Mining Engineer) Experience – 17 years
24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Geologist appointed: Mr. Santosh Sharma, M.Sc. Geology Date of appointment: - 08.10.2022
25	Date of Approval of Mining Plan/ Modified Mining Plan with five-year period and specific condition in approval letter, if any.	684(4)(1)/MP-188/2018-GNR Approval Date: 10.01.2019 Period from 01.01.2019 to 31.03.2023
26	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	Not applicable
27	Mineral(s) granted in lease and proved for mining	Limestone & Marl
28	Method of Mining(Open cast, Underground)	Open cast
29	Category (Fully Mechanised, Others or Manual)	Fully Mechanised
30	Captive/Non Captive	Captive

Scientific Mining: Compliance of proposals of approved mining plan/scheme of mining. –

Exploration

SN	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No Proposal	NIL	No any backlog of previous year
1b	Exploration over lease area for Geological axis 1 or 2.	No Proposal	No any exploration carried out during the year.	No Proposal in approved mining plan.
1c	Exploration Agency & Expenditure in lakh Rupees during the year	No Proposal	NIL	No Proposal in approved mining plan.
1d	Balance area to be explored to bring Geological axis in 1 or 2	No Proposal	NIL	Total 206.30 Ha. Area is balanced & to be explored.
1e	Balance reserves as on 31.03.2023 (in Mio. Metric Tonne)	Mineral – Limestone 111:25.92 221:5.89 222:39.24	Mineral – Marl 111: 3.07 221:0.70 222:4.68	(*Resources includes CRZ & Forest area)
1f	General remarks of inspecting officer on geology, exploration etc.	Total 206.30 Ha. Area is balanced & to be explored.		

2.0 Development

SN	Item	Proposals	Actual work	Remarks
1/20591/2023 2a	Location of development w.r.t. lease area	North Block: - Bench Floor (mRL) Grid Reference EW NS 26 to 8 7489 00 to 50 23109 00 to 23120 00 East Block: - Bench Floor (mRL) Grid Reference EW NS 14 to 8 7524 00 to 00 23102 00 to 23111 00	North Block: - Bench Floor (mRL) Grid Reference EW NS 26 to 8 74890 0 to 74995 0 2310900 to 2312000 East block: - Bench Floor (mRL) Grid Reference EW NS 14 to 8 75240 0 to 75350 0 2310200 to 2311100	EC for 2.3 Million Metric Tonne, Production proposed in Approved Mining Plan was 1.8 Million Metric Tonne and Actual Production for the FY 2022-23 is *0.982 Million Metric tonne.
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	5 benches proposed at North block and 3 benches proposed at Eastern block (surface miner pits)	5 benches proposed at North block and 3 benches proposed at Eastern block (surface miner pits)	No deviation from mining plan.
2c	Stripping ratio or ore to OB ratio	1:0.00	1:0.02	Overburden (Windblown sand) generated during year was directly used for backfilling and strengthening of Haul road barrier along with statutory barrier purpose.
2d	Quantity of topsoil generation in m3	Soil removed is directly used for plantation purposes	Soil removed is directly used for plantation purposes	Nil
2e	Quantity of overburden generation in m3	OB is in the form of windblown sand is present randomly in some part of lease. Which is not uniform.	There is variation of thickness of sand encountered, OB sand was directly use for backfilling at Mined out area and reclamation.	NIL.
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	During inspection, two excavators, one surface miner and five dumpers are in operations. Bench height is being maintained as per approved mining plan.		

3.0 Exploitation

SN	Item	Proposals	Actual work	Remarks
3a	Number of pits proposed for production	05 benches in North block & 03 SM Pits in Eastern block	05 benches in North block & 03 SM Pits in Eastern block	No deviation and work carried out as per proposal.
3b	Quantity of ROM mineral production proposed	1.8 Million Metric Tonnes	1.21 Million Metric Tonnes	Less production of ROM is as per Cement Plant's requirement.

3c	Recovery of saleable/usable mineral from ROM production	100 % Utilization	100 % Utilization	No deviation from proposal.
3d	Quantity of mineral reject generation	No proposal	No reject generation during the year.	No deviation from proposal.
3e	Grade of mineral reject generation and threshold value declared	No proposal	No reject generation during the year.	No deviation from proposal.
3f	Quantity of sub-grade mineral generation	No proposal	No reject generation during the year.	No deviation from proposal.
3g	Grade of sub-grade mineral generation	No proposal	No sub-grade mineral generation during the year.	No sub-grade mineral has been generated.
3h	Manual / Mechanised method adopted for segregating from ROM	No proposal	No Manual / Mechanised method was adopted during the year.	Mineral marl has been intermixed with L/S and cannot be segregated.
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	No beneficiation is proposed in the mining plan	No beneficiation is carried out	Suitable blending is carried out by mixing high grade material with low grade material to conserve the mineral and utilise 100% without rejection. Also, to meet the quality as per plant requirement, high grade domestic and imported sweetener is purchased.
3j	Provision of drilling & blasting in mineral benches	Drilling and blasting proposed in North block & Eastern block is operated through surface miner.	Drilling and blasting proposed in North block & Eastern block is operated through surface miner.	No deviation from mining plan.
3k	Provision of mining machineries in mineral benches	Surface miner, Loader, excavator, Drill, dumper, tipper & dozer is proposed.	Surface miner, Loader, excavator, Drill, dumper, tipper & dozer is used.	No deviation from mining plan.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Height of benches proposed is 6 meter in mineral in North block. Width of benches 4.5 Meter to 6.0 Meter in mineral.	Maximum bench height maintained 06 meter in mineral in North block. Width of benches is maintained 6.0 Meter in mineral in North block.	No deviation from mining plan.
3m	Total area covered under excavation/pits	267.930 Ha. Area was proposed.	267.930 Ha. Area covered under excavation.	No deviation from mining plan.
3n	Ore to OB ratio for the pit/mine during the year	1:0.000	1:0.02	There is variation of thickness of sand encountered, OB sand was directly use for backfilling at Mined out area and reclamation.
3o	Total area put in use under different heads at the end of year	Below mentioned area was proposed put in use in different heads: Pit - 267.03 Ha. Dump/soil - 0.00 Ha.	Below mentioned area was actually put in use for different heads: Pit- 267.03 Ha. Dump/soil - 0.00 Ha.	No deviation from mining plan.

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		Others - 90.030 ha (Occupied by Roads/Plants/Buildings)	Others - 90.030 ha (Occupied by Roads/Plants/Buildings)	
3p	Production of ROM mineral during last five-year period, as applicable	Yr-2018-19 – 1.8 MnT Yr-2019-20 – 1.8 MnT Yr-2020-21 – 1.8 MnT Yr-2022-23 – 1.8 MnT Yr-2022-23 – 1.8 MnT	Yr-2018-19 – 1.45 MnT Yr-2019-20 – 1.47 MnT Yr-2020-21 – 1.25 MnT Yr-2022-23 – 0.982 MnT Yr-2022-23 – 1.21 MnT	Narmada Cement mine is captive mine to NCJW plant and production & dispatch of mineral is depends on plant requirement.
3q	General remarks of inspecting officer on method of mining etc.	During inspection, mechanised surface mining method with using Surface Miner, HEMM & Tipper combination was under progress.		

4.0 Solid Waste Management-Dumping

SN	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	No proposal given in mining plan for overburden or mineral rejects or top soil.	No dumps available in mines for overburden or mineral rejects. Top soil is used concurrently for afforestation purpose on lease boundary.	No overburden or rejects available in mines. Zero percent mineral waste mining is adopted by suitable blending of marl material.
4b	Location of topsoil, OB & mineral reject dumps	No OB or reject dumps are proposed. Concurrent use of top soil for afforestation.	Top soil generation was Zero during FY 22-23. OB generated was used for berm & haul road strengthening and backfilling purpose.	No deviation from mining plan.
4c	Number of dumps within lease area and outside lease area	No Proposal given in mining plan.	No dumps made during the year 2022-23.	No deviation from mining plan.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	No Proposal	No dump made.	No deviation from mining plan.
4e	Number of active & alive dumps	No Proposal	No dump made.	No deviation from mining plan.
4f	Number of dead dumps	No Proposal	No dump made.	No deviation from mining plan.
4g	Number of dumps stabilised	No Proposal	No dump made.	No deviation from mining plan.
4h	Whether Retaining wall or garland drain all along dumps are there	No Proposal	No dump made.	No deviation from mining plan.
4i	Length of Retaining wall or garland drain all along dump	No Proposal	No dump made.	No deviation from mining plan.
4j	Number of settling ponds	No Proposal	No dump made.	No deviation from mining plan.
4k	Specific comments of inspecting officer	No OB or rejects dumps in mines		

5.0 Solid Waste Management-Backfilling

SN	Item	Proposals	Actual work	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	No Proposal	Nil	No deviation from mining plan as full extraction of mineral from mine out area is remaining.
5b	Area under backfilling of	No Proposal	0.1 Ha area at	No deviation

	mined out area		North Block	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	No Proposal	10002 CUM top soil is generated during this year	Thin layer of soil use for plantation purpose
5d	Total area fully reclaimed & rehabilitated	Plantation proposed on 1.60 Ha. Area	Plantation carried on 1.60 Ha. Area	Additional saplings was planted to curb non-survival of last year.
5e	General remarks of inspecting officer on backfilling, reclamation etc	There are no OB/Waste generation. Hence no backfilling is carried out.		

6.0 Progressive Mine Closure Plan

SN	Item	Proposals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly - Rule 23E (2). Details should be given in the format as given in Annexure-20.	Proposed to submit as per RULE 23 (E) (2).	Submitted vide letter along with Annual Return	Status given in annual report against the proposal given in PMCP.
6b	Management of worked/mined out benches i) Area available for rehabilitation (ha)	No Proposal	Nil	No deviation
6c	Afforestation done (ha)	1.60 Ha. Proposed for afforestation.	1.60 Ha. Area is used for plantation.	Improvement in existing green belt.
6d	No. of saplings planted during the year	3000 Saplings.	6460 Sapling planted during the year 2022-23.	Peltaforum and Cassia species are planted.
6e	Cumulative no. of plants	No data given in mining plan.	Since the inception of mines about 310770 saplings planted.	Survival rate is about 87% in FY 2022-23.
6f	Any other specific method of rehabilitation	No proposal given	No other method adopted	No deviation from mining plan.
6g	Cost incurred on watch & care during the year	Rs. 2.00 lakhs rupees is proposed in mining plan for the year 2022-23	Rs. 19.00 lakhs is spent for plantation after care expenses during the year 2022-23	Three years contract will be awarded for plantation and after care. Also after three years, yearly once maintenance will be done
6h	Compliance on reclamation and rehabilitation by backfilling i) Voids available for backfilling (L X B X D)	No proposal in mining plan.	0.10 Ha.	No deviation
6i	Compliance on reclamation	No proposal in mining	Backfilling of 7088	Deviation

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	and rehabilitation by backfilling ii) Void filled by waste/tailings	plan.	MT overburden (windblown sand) has been done.	observed due to OB was encountered.
6j	Compliance on reclamation and rehabilitation by backfilling iii) Afforestation on the backfilled area	No proposal in mining plan.	Nil	No deviation
6k	Compliance on reclamation and rehabilitation by backfilling iv) Rehabilitation by making water reservoir	No proposal in mining plan.	Nil	No deviation
6l	Compliance on reclamation and rehabilitation by backfilling v) Any other specific means	No proposal in mining plan.	Nil	No deviation
6m	Compliance of Rehabilitation of waste land within lease i) Afforestation	1.60 Ha area was proposed for afforestation.	1.60 Ha. Area actually used for afforestation.	Improvement in greenbelt.
6n	Compliance of Rehabilitation of waste land within lease ii) Area rehabilitated (ha)	No proposal in mining plan.	Nil	No deviation
6o	Compliance of Rehabilitation of waste land within lease iii) Method of rehabilitation	No proposal in mining plan.	Nil	No deviation
6p	Compliance of Environmental monitoring (core zone & buffer zone)	Monitoring of Ambient air quality, water quality, noise level survey and ground vibration is given in mining plan. 1. Half yearly monitoring done in core zone and quarterly monitoring done in buffer zone. 2. The Quarterly Compiled Report is being submitted to IBM	All the compliances are compiled as per mining plan and submitted to IBM on quarterly basis. (i.e. January – 2023 to March – 2023 data submitted vide letter no. NCJW/ENVT-RET/2023-24/937 on dated 8 th April, 2023.	All the monitoring values are within the prescribed limits.
6q	General remarks of inspecting officer on PMCP compliance & progressive	Plantation work is carried out in excavated mining area and developed garden and nursery.		

7.0 Mineral Conservation

SN	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	1.8 Million Tonne ROM was proposed during FY 2022-23.	1.21 Million Tonne was produced.	No sorting was proposed in mining plan and 100 % utilisation of mineral is being done.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	No mineral sorting proposal in mining plan.	No mineral sorting is done.	Marl intermixed with limestone and cannot be segregated. 100% utilised by blending with high grade.
7c	Different grade of mineral sorted out at mines	No mineral sorting proposal in mining plan.	No mineral sorting is done. 100% mineral	Marl intermixed with limestone and cannot be segregated. 100% utilised by blending with high

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			extracted by mechanised method is crushed directly and dispatched to cement plant.	grade.
7d	Any beneficiation process at mines	No beneficiation is proposed in the mining plan.	No beneficiation is carried out.	No deviation from mining plan.
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	Marl is utilised for cement plant after blending with limetone.		

8.0 Environment

SN	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	In mining plan it is proposed that Top soil to be utilised concurrently for plantation.	Soil removed and utilised for plantation.	No deviation from mining plan.
8b	Concurrent use or storage of topsoil	No proposal given in mining plan.	No top soil stored during the year 2022-23	No deviation from mining plan.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	No dumps proposed in mining plan for Overburden or Mineral Rejects.	No active surface dump available in mines	No deviation from mining plan.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal in mining plan	Overburden (Windblown Sand) is used for backfilling.	No deviation from mining plan.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Phased restoration proposed in mining plan over 1.60 Ha area.	Phased restoration by mean of plantation in mines over 2.91 Ha area.	No deviation from mining plan.
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	3000 Saplings was proposed in Mining Plan.	6460 Saplings has been planted during the FY 22-23.	Plantation was on higher side.
8g	Survival rate	No details given in mining plan	87% (Survival rate in the FY 2022-23)	No deviation from mining plan.
8h	Water sprinkling on roads to control airborne dust	Water tankers is proposed for water sprinkling on roads.	Water sprinkling carried out on the haul road round the clock.	No deviation from mining plan.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines are	During inspection, Water sprinkling work was being carried out at mine.		

9.0 Compliance of Rule 45

S.N	Item	COMMENTS		Remarks
	Status of submission of Monthly and Annual returns	Monthly Return submitted up to till date Annual Return submitted up to- till date		No deviation.
S.N	Item	Details given in Annual return.	Observation of I/Officer	Remarks
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer – Abhishek Bharadwaj Geologist – Santosh Sharma Manager – Abhishek Bharadwaj.		

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9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Details of land use pattern is given as on 01.04.2023, Open Pit: 276.310 Ha. Reclaimed area: 42.950 Ha. Plant building, roads: 90.030 Ha. Dump: NIL.		The total open up area is given in Pit, which includes forest area also.
9d	Scrutiny of Annual return on afforestation	Afforestation details area given: Within lease area: 6460, saplings planted with 87% survival and Outside lease area: 5495 saplings planted with survival 98%.		Outside lease area includes, colony, Cement Plant and nearby surrounding villages.
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	No mineral rejects given in annual return		No mineral rejects available in mines. 100% of mineral utilised with proper blending.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	No mineral stock is available		Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Ex. Mine Price and production cost is Rs. 286.92/Metric Tonne for Limestone & 260.52/ Metric Tonne for Mineral Marl. Same is reported in Annual Return. It includes statutory fees such as Royalty, DMF & NMET also.		Mineral is used for captive purpose only.
9i	Scrutiny of Annual return on fixed assets	Fixed assets like, Machinery, Building and land details along with value is given in annual return.		
9k	Scrutiny of Annual return on mining machineries	Mining Machinery details are given in annual return.		As per the proposal of mining plan mining machinery is deployed.

10- Details of violations observed during current inspection and compliance position of earlier violation pointed out: - Presently mine was inspected for MCDR/Star Rating & Online star rating evaluation done (5Star). Presently no significant violation observed & pointed out.