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INDIAN BUREAU OF MINES
MINES CONTROL AND CONSERVATION OF MINERAL DIVISION
MCDR INSPECTION REPORT FOR THE YEAR 2022-23
Guwahati Regional Office

Mine file No : MCDR-MiFLOLST/3/2023-GUH-IBM_RO_GUH

Mine code : 38MEG03005

Date of Inspection: 28.12.2023		
General		
S.N.	Particulars	
1	Name of the Mine	Khliehjeri Limestone Mine
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	4.9 Ha. Forest: NIL , Non Forest: 4.9 Ha.
3	Mine code	38MEG03005
4	IBM Registration Number under rule 45 of MCDR , 1988	IBM/5869/2011
5	Name of the lessee, Address, phone, email and fax number	M/s Meghalaya Cements Limited
6	Village	Thangskai
7	Taluka/Mandal	Khliehriat
8	District	East Jaintia Hills
9	Pin code	793210
10	State	Meghalaya
11	Post Office	Lumshnong
12	Nearest Police Station	Lumshnong
13	Nearest Railway Station	Badarpur
14	Date of Grant of Mining Lease	15.06.2005
15	Date of Execution	21.06.2006.
16	Date of opening of Mine	24.07.2006
17	Date of first Renewal , if applicable and its period & expiry	No
18	Date of second Renewal , if applicable and its period & expiry	No
19	Date of submission of Renewal application if Mining operations are continuing under deemed extension	Nil
20	Name of the Nominated owner with Address, phone, email, fax number and date of appointment	Ramesh Kumar Pareek Date of appointment: 05.11.2018 Vill : Thangskai, P.O : Lumshnong Dist : East Jaintia Hills Meghalaya - 793210 Email : rkpareek@topcem.in Mob : 9402198186
21	Name of the Mine agent with Address, phone, email, fax number and date of appointment	Arun Kejriwal Date of appointment: 12.11.2018 Megha Plaza, 4th Floor, Christian Basti, Guwahati - 781005 Email : aagarwal@topcem.in Mob : 8638993718

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22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment	<p>Mr. Krushna Chandra Sahu Date of appointment : 18-07-2022 - 04.09.2023 Vill : Thangskai, P.O : Lumshnong Dist : East Jaintia Hills Meghalaya - 793210 Email : mines@topcem.in; Mob : 7085031018</p> <p>Mr. Amit Kumar (I/C) Date of appointment : 05.02.2019 - 18.07.2022 Vill : Thangskai, P.O : Lumshnong Dist : East Jaintia Hills Meghalaya - 793210 Email : mines@topcem.in; Mob : 7085031018</p> <p>Mr. Umesh Kumar, Date of appointment : 05.09.2023 - Continue as on date Vill : Thangskai, P.O : Lumshnong Dist : East Jaintia Hills Meghalaya - 793210 . Email : mines@topcem.in;</p>
23	Name of the Mining Engineer , Qualification and total experience with Address , phone, email, fax number and date of appointment in mine	<p>Mr. Arelli Sravan Kumar Date of appointment: 05-02-2019 Qualification: - B. Tech (Mining) Experience : 03 Years Vill : Thangskai, P.O : Lumshnong Dist : East Jaintia Hills Meghalaya - 793210 Email : mines@topcem.in Mob : 8328530586</p>
24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44	<p>Yes, Geologist: - 2022-23 1. Tapas ranjan Mahakud Date of appointment : 20.02.2021 - Continue Qualification : M.Sc (Geology) Experience : 4 Years</p> <p>1. Padam Singh Date of appointment : 17.03.2023 Qualification : M.Sc (Geology) Experience : 4 Years</p> <p>Mining Engineers: - 1. Mr. Arelli Sravan Kumar Date of appointment : 21.03.2023 - Continue 2. Mr. Krushna Chandra sahu Date of appointment : 18.07.2022 - 04.09.2023 3. Mr. Amit Kumar Date of appointment : 05.02.2019 - 18.07.2022</p>
25	Date of Approval of Mining plan /Modified Mining plan with five year period & specific condition in approvals letter, if any	Mining Plan approved on 28/04/2006 for five years period.
26	Date of Approval of Scheme of Mining /Modified Scheme of Mining with five year period & specific condition in approval letter, if any	First Review of Mining Plan was approved on 11.11.2016 for the 5 years period i.e. 2016-17 to 2020-21 and valid upto 31.03.2021. The year 2021-22 was elapsed and the Review of Mining Plan was approved on 26.07.2022 for 4 years period i.e. from 2022-23 to 2025-26.

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27	Mineral(s) granted in lease and proved for mining	Limestone
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 (Duplication of information in existing TMIS data sheets and draft write up has been avoided)

Exploration

S.N.	Items	Proposals	Actual work	Remarks
1a	Backlog of previous year	Nil	Nil	No backlog
1b	Exploration over lease area for Geological axis 1 or 2	6	6	Violation of Rule 12(5) observed for not carrying sampling in the manner specified in this regard.
1c	Exploration Agency & Expenditure in lakh Rupees during the year	In house	In house	
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	Nil	
1e	Balance reserves as on 01.04.2022	As per RMP as on dated 01.04.2022 Reserves = 111-330552.00 MT 122-72690.00 MT Resources = 221- 420160 MT 222- 51869 MT	As per RMP as on dated 01.04.2023 Reserves = 111-270032.00 MT 122- 59405.00 MT Resources = 221- 420160 MT 222- 51869 MT	
1f	General remarks of inspecting officer on geology, exploration etc.	Drilling of approx 993.00 m is done in 2022-23 to covert G2 to G1 area and further explores depth of 2nd band upto the end of mineralization. Incomplete exploration witnessed for end of mineralization.		

Development

S.N.	Items	Proposals	Actual work	Remarks
2a	Location of development w.r.t lease area	South-western part of the working pit. N- 2787130.0 to N- 2787270.0; E-437846.0 to E-437942.0	South-western part of the working pit. N- 2787130.0 to N- 2787270.0; E-437846.0 to E-437942.0	As per proposal
2b	Separate benches in topsoil , overburden and mineral (Rule 15)	Yes, Top Soil - Nil OB - 02 Limestone - 04	Top Soil - Nil OB - 01 Limestone - 02	Maintained
2c	Stripping ratio or ore to OB ratio	1 : 0.14	1 : 0.13	In T /M ³
2d	Quantity of topsoil generation in m ³	Nil	Nil	
2e	Quantity of overburden generation in m ³	10145.00 M ³	9940.00 M ³	

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2f	General remarks of inspecting officer on development of pit w.r.t type of deposit etc.	Mine is worked as benches are formed. Development is done as per Plan. Benches are formed for mechanical mining. There are total 3 benches in waste and 8 benches in ores.
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Exploitation

S.N.	Items	Proposals	Actual work	Remarks
3a	Number of pits proposed for production	1	1	
3b	Quantity of ROM mineral production	75105.00 T	73805.00 T	
3c	Recovery of salable/usable mineral from ROM production	75105.00 T	73805.00 T	
3d	Quantity of mineral reject generation	NP	NA	
3e	Grade of mineral reject generation and threshold value declared	>34% CaO <5% MgO	>34% CaO <5% MgO	
3f	Quantity of sub-grade mineral generation	NP	NA	
3g	Grade of sub-grade mineral generation	NP	NA	
3h	Manual/Mechanised method adopted for segregating from ROM.	Mechanised	Mechanised	
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject.	NP	NA	
3j	Provision of drilling & blasting in mineral benches.	Drilling:- 115 mm dia, Hole depth = 6.6 m. Spacing -3.0 m Burden= 2.5 m Hole Charge = 15.0 Kg. Kg of Explosives. Nonel technology as well as detonating fuse and delay detonators are using for sequential blasting.	Drilling:- 115 mm dia, Hole depth = 5.5m. Spacing -3.0 m Burden= 2.5 m Hole Charge = 12.0 Kg of Explosives. Nonel technology as well as detonating fuse and delay detonators are using for sequential blasting.	
3k	Provision of mining machineries in mineral benches	Proposed: excavator- 1.2 M3/ Tipper - 25.0 T	Provided excavator- 1.2 M3/ Tipper - 25.0 T	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM.	Proposed 5.0 m	It is suitable	
3m	Total area covered under excavation / pits	4.204 Ha	4.144 Ha	
3n	Ore to OB ratio for the pit/mine during the year	1 : 0.14	1 : 0.13	
3o	Total area put in use under different heads	Total Area - 4.441 Ha	Total Area – 4.369 Ha	Excludes greenbelt

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3p	Production of ROM mineral during last five year, as applicable	Production proposal 2018-19= 243312 MT 2019-20= 223625 MT 2020-21= 221687 MT 2021-22= 85805 MT 2022-23 = 75105 MT	Actual Production 2018-19= 175570 MT 2019-20= 163005 MT 2020-21= 148041 MT 2021-22= 30305 MT 2022-23 = 73805 MT	
3q	General remarks of inspecting officer on method of mining etc.	Mining is done in benches. Production is done about 98% of the planned production. Separate benches in waste and Mineral maintained. Review of Mining plan is approved from 2022-23 to 2025-26.		

Solid Waste Management- Dumping

S.N.	Items	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	OB to be used in Haul Road	OB is used in Haul Road	
4b	Location of topsoil , OB & mineral reject dumps	OB Dump:- N 2787130.0 to N 2787200.0 E 437927.0 to E 437996.0 (Haul Road)	OB Dump:- N 2787130.0 to N 2787200.0 E 437927.0 to E 437996.0 (Haul Road)	2022-23= OB has been used in the construction of haul road as per proposal. OB generation till date for the year 2023-24 is 0.00 M3
4c	Number of dumps within lease area and outside lease area	1	1	As per Approved RoMP , dumping OB/soil has to be put on Haul Road directly being very small in quantity.
4d	Location of dumps w.r.t ultimate pit limit (Rule 16)	Within UPL	Within UPL	
4e	Number of active & alive dumps	Nil	Nil	OB is used in Haul Road
4f	Number of dead dumps	Nil	Nil	
4g	Number of dumps stabilised	Nil	Nil	
4h	Whether Retaining wall or garland drain all along dump.	NP	NA	Retaining wall/bund has been constructed below the high wall.
4i	Length of Retaining wall or garland drain all along dump	Retaining wall (i) 158 meters (ii) 14 meters Garland drain – Nil	Retaining wall (i) 158 meters (ii) 14 meters Garland drain – Nil	Retaining wall/bund maintained
4j	Number of settling ponds	NP	Nil	
4k	Specific comments of inspecting officer on waste dump management	OB has been used to construct haul road as per proposal. Work done is satisfactory.		

Solid Waste Management- Backfilling

S.N.	Items	Proposals	Actual work	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	NP	NA	
5b	Area under backfilling of mined out area	NP	NA	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area	NP	NA	
5d	Total area fully reclaimed & rehabilitated	NP	NA	

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5e	General remarks of inspecting officer on backfilling , reclamation etc.	No provision for backfilling is made as there is no area is matured. Mineral reject stacked in mine pit was consumed by blending with ROM and sent to the factory/plant. 10276 Tonns of Limestone Mineral between the Threshold value and cut Off grade was consumed with ROM and sent to factory/plant
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Progressive Mine Closure Plan

S.N.	Items	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.	First July of Every Year	Submitted vide letter no – nill dated 27th June,2023 &14th July 2023 through email.	
6b	Management of worked /mined out benches i)Area available for rehabilitation(ha) ii)Afforestation done (ha) iii) No. of saplings planted during the year iv)Cumulative no. of plants v) Any other specific method of rehabilitation vi)Cost incurred on watch & care during the year.	(i) No Proposals (NP) ii) NP iii) NP iv) NP v) NP	(i) Not Applicable (NA) ii) NP iii) NP iv) NP v) NP	
6c	Compliance on reclamation and rehabilitation by backfilling i) Voids available for backfilling (L X B X D) ii)Void filled by waste/tailings iii) Afforestation on the backfilled area iv) Rehabilitation by making water reservoir v) Any other specific means	i) Nil ii) NP iii) NP iv) NP v) NP	i) Nil ii) NA iii) NA iv) NA v) NA	
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated(ha) iii) Method of rehabilitation	i) 133 Nos ii) 0.107 Ha iii) Nil	i) 183 Nos ii) 0.107 Ha iii) Nil	Barrier plantation is done between Pillars no -13 to 14 in 2022-23 and 2023-24, 160 numbers of sapling has been planted till date.
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Proposed	Done	
6f	General remarks of inspecting officer on PMCP compliance & progressive closure operations	The lessee has done satisfactory work towrds PMCP compliance and Progerssive compliance w.r.t submitted proposals.		

Mineral Conservation

S.N.	Items	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM dispatched	ROM dispatched	
7b	Method of grade -wise mineral sorting i.e manual or mechanical	No Proposals (NP)	Not Applicable (NA)	
7c	Different grade of mineral sorted out at mines	NP	NA	
7d	Any beneficiation process at mines	NP	NA	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	ROM mined is dispatched to Cement Plant at a distance of 1.50 Km from mine. No beneficiation is proposed.		

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Environment

S.N.	Items	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No Proposals (NP)	Not Applicable (NA)	
8b	Concurrent use or storage of topsoil	NP	NA	
8c	Separate dumps for overburden , waste rock , rejects and fines (Rule 33)	2022-23 - Concurrent use of OB in haul road & 2023-24 shall be stacked near pillar no - 10/1	2022-23 - Concurrent use in haul road as per proposal 2023-24 No OB has been generated till date of inspection.	
8d	Use of overburden , waste rock, rejects and fines dumps for restoring the land to its original use.	Not Proposed	NA	
8e	Phased restoration , reclamation and rehabilitation of lands affected by mining operations (pits, dumps etc).	Not Proposed	NA	
8f	Baseline information on existence of plantation & additional plantation done(Rule 41)	133 nos Area = 0.1070 Ha (WML)	183 nos Area = 0.1070 Ha (WML)	
8g	Survival rate	70%	75.00%	
8h	Water sprinkling on roads to control	Proposed	Done	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Plantation is done in Mine's barrier zone. However the progress is not satisfactory at all.		

Compliance of Rule 45

S.N.	Item	Comments		Remarks
9a	Status of submission of Monthly and Annual returns	Monthly Return submitted upto November,2023	Submitted within 10 th every month	
		Annual Return submitted on 26.06.2023	Submitted within July, 2023	
S.N	Item	Details Given in Annual Return	Observation of I/Officer	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager.	<u>Mining Engr:-</u> Mr. Arelli Sravan Kumar <u>Geologist:-</u> Mr. Padam Singh	Geologist: - 2022-23 1. Tapas ranjan Mahakud Date of appointment : 20.02.2021 - Continue Qualification : M.Sc (Geology) Experience : 4 Years Geologist:- 1. Padam Singh Date of appointment : 17.03.2023 Qualification : M.Sc (Geology) Experience : 4 Years Mining Engineers: - 1. Mr. Arelli Sravan Kumar Date of appointment : 21.03.2023 - Continue 2. Mr. Krushna Chandra sahu Date of appointment : 18.07.2022 - 04.09.2023 3. Mr. Amit Kumar Date of appointment : 05.02.2019 - 18.07.2022	

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9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pit Area - 4.144 Ha	~ Pit Area: 4.14 Ha.	
9d	Scrutiny of Annual return on afforestation	183 nos / 0.107 Ha	Plantation is done in Mine's barrier zone. However the progress is not satisfactory at all.	
9e	Scrutiny of Annual return on mineral reject generation(Grade & Quantity).	Nil (No reject generated)	10276.00 MT of Mineral reject of the previous year has been sent factory/Plant by blinding with ROM	
9f	Scrutiny of Annual return on ROM stock and/ or graded ore	No pit head stock	No pit head stock	
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost.	Sale value: - NA Ex. Mine price: - Rs 324/- Ton Production costs:- Rs 324/-Ton	Ex. Mine price: - Rs 324/-Ton Production costs:- Rs 324/-Ton	
9i	Scrutiny of Annual return on fixed assets.	Fixed assets: Land – Rs 1240990.00/- Plant & Machinery – Rs 2338326.00/- Capital Exp:- Rs 3579316.00/-	Fixed assets: Land – Rs 1240990.00/- Plant & Machinery – Rs 2338326.00/- Capital Exp:- Rs 3579316.00/-	
9k	Scrutiny of Annual return on mining machineries	As per the approved Review of Mining Plan 2022-23 to 2025-26 <u>Machineries nos.</u> 1) Back hoe -----02 2) Air compressor -01 3) Blast Host Drill -01 4) Dumper -----5 5) Dozer -----01 6) Water Tanker -01	Submitted upto in Annual return of 2021-22 <u>Machineries nos.</u> 1) Back hoe -----01 2) Air compressor -01 3) Blast Host Drill -01 4) Dumper -----05 5) Dozer -----01 6) Water Tanker -01	

Details of Violation observed during current inspection and compliance position of earlier violation pointed out :-

1. **Rule 12(5):** Sampling done from drill core is not at all the correct representation of the in-situ material. Sample representation made from drill cores have not been made meter-wise. Core samples have not been cut in half along the axis of core-run. Further, it has also been observed that the recovery is also poor for the said boreholes.

No violation stand for past inspection.

(Vikas Kumar), ACOM

Name of inspecting officer with designation and date