INDIAN BUREAU OF MINES MINES CONTROL AND CONSERVATION OF MINERAL DIVISION MCDR INSPECTION REPORT Guwahati Regional Office

Mine file No : IBM/GHY/MEG/JNH/LST-17

Date of Inspection: : 22.08.2018

General S.N. Particulars 1 Name of the Mine South Khliehjari Limestone Mine 31.05 Hect, Forest: NIL Total Lease Area(Ha) with breakup of Non-2 forest and forest land Non Forest : 31.05 Hect. Mine code 3 38MEG03004 IBM Registration Number under rule 45 of 4 IBM/5869/2011 MCDR, 1988 Name of the lessee,Address, phone, email 5 M/s Meghalaya Cements Limited and fax number Village Thangskai 6 $\overline{7}$ Taluka/Mandal Khliehriat 8 District East Jaintia Hills 793210 Pincode 9 State Meghalaya 10 11 Post office Lumshnong 12 Nearest police station Lumshnong Nearest Railway station Badarpur 13 Date of Grant of Mining Lease 14 10-01-2017 15 Date of Execution 10-01-2017 16 Date of opening of Mine 19-01-2018 Date of first Renewal, if applicable and its Nil 17period & expiry Date of second Renewal, if applicable and its Nil 18 period & expiry Date of submission of Renewal application if Mining operations are continuing under Nil 19 deemed extension Sri Ramesh Kumar Pareek Date of appointment: 05.11.2018 Vill : Thangskai, P.O : Lumshnong Name of the Nominated owner with Address, Dist : East Jaintia Hills 20 phone, email, fax number and date of Meghalaya - 793210 appointment Email:rkpareek@topcem.in Mob: 9402198186 Sri Arun Kejriwal Date of appointment: 12.11.2018 Megha Plaza, 4th Floor, Name of the Mine agent with Address, phone, 21 Christian Basti, Guwahati - 781005 email, fax number and date of appointment Email : aagarwal@topcem.in Mob: 8638993718 Name of the Mines Manager with Address, Sri Umesh Kumar phone, email, fax number and date of Date of appointment: 01-02-2017 appointment Vill : Thangskai, P.O : Lumshnong 22 Dist : East Jaintia Hills Meghalaya - 793210 Email : mines@topcem.in Mob: 9402198201

Mine code : 38MEG03004

	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment	Sri Jyoti Prakash Panda Date of appointment : 10-06-2019 Qualification : BE (Mining)
23	in mine	Experience : 02 Years Vill : Thangskai, P.O : Lumshnong Dist : East Jaintia Hills
		Meghalaya - 793210 Email : mines@topcem.in Mob : 8249433171
24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44	Yes, <u>Geologist-</u> Abdul Motin Barbhuiya Date of appointment : 19.01.2018. Qualification : M.Sc.(Geology) Experience : 09 Years <u>Mining Engineer -</u> Sri Jyoti Prakash Panda Date of appointment : 10-06-2019 Qualification : BE (Mining) Experience : 02 Years.
25	Date of Approaval of Mining plan/Modified Mining plan with five year period & specific condition in approaval letter, if any	Modified Mining Plan was approved on 13-12-2016 for 31.05 ha .
26	Date of Approaval of Scheme of Mining/Modified Scheme of Mining with five year period & specific condition in approaval letter, if any	NA
27	Mineral(s) granted in lease and proved for	Limestone
28	Method of Mining(Opencast, Underground)	Opencast
29	Category (Fully Mechanised, Others or Manual)	Fully Mechanised
30	Captive/Non Captive	Captive

Scientific Mining : Compliance of proposals of approaved 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	
1b	Exploration over lease area for Geological axis 1 or 2	4 Bore Holes	4 Bore Holes	04 nos of bore hole drilled in 2018-19
1c	Exploraion Agency & Expenditure in lakh Rupees during the year	Nil	Exploration Agency - Self Expeniture - About 2.20 Lakhs	
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	Nil	Exploration over entire lease area has been completed during the reporting year. The entire lease area is under G1 category.

1e	Balance reserves as on 01.04.2019	13890277 MT	16543498 MT	Production could not be done in 2016-17 as date of opening of the mine is 19-01- 2018.
1 11		Exploration over entire lease area has been completed during the reporting year. The entire lease area is under G1 category. Balance reserve is not matching with the proposed figure, as the mine opened on 19.01.2018.		

	<u>Development</u>			
S.N.	Items	Proposals	Actual work	Remarks
2a	Location of development w.r.t lease area	Southeastern side of the Pit. Location: 102 S- 138N 245 E-620 E	Southeastern side of the Pit. Location: 102 S- 138N 245 E-540 E	Leasee has not carried out production in the proposed location. As the mine has opened on 19.01.2018, and backlog in the proposal.
2b	Separate benches in topsoil , overburden and mineral(Rule 15)	Yes, Top soil bencehes:710 mRL-698 mRL, OB: 698 mRL-692 mRL, Mineral: 692 mRL-674 mRL.	Yes, Top soil bencehes:710 mRL-698 mRL, OB: 698 mRL-692 mRL, Mineral: 698 mRL- 681 mRL.	Lessee could not achived the proposal due to the back log of the earliear year proposal.
2c	Stripping ratio or ore to OB ratio	1: 0.052	1: 0.16	
2d	Quantity of topsoil generation in m ³		61787 m ³	No proposal for generation of top soil
2e	Quantity of overburden generation in m ³	Nil	100924 m ³	No proposal for generation of OB
2f	General remarks of inspecting officer on development of pit w.r.t type of deposit etc.	During the reporting year, 6 generated, which is not as p under rule 11(1) has been is	per the proposal. In this re	

Exploitation

S.N.	Items	Proposals	Actual work	Remarks
3a	Number of pits proposed for production	1	1	
3b	Quantity of ROM mineral production proposed	1533402 MT	1023050 MT	
3c	Recovery of salable/usable mineral from ROM production	1456732 MT	1023050 MT	
3d	Quantity of mineral reject generation	76670 MT	Nil	
3e	Grade of mineral reject generation and thershold value declared	Nil, 34% CaO, 4% MgO	Nil, 34% CaO, 4% MgO	
3f	Quantity of sub-grade mineral generation	Nil	Nil	
3g	Grade of sub-grade mineral generation	NA	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	Nil	Nil	
Зј	Provision of drilling & blasting in mineral benches	Yes, Jack Hammer 115 mm dia. Drills. Blasting proposed with LD explosives of 25mm dia. & 83mm dia. with detonating cord & milli second delay detonators.	Yes, Jack Hammer 115 mm dia. Drills. Blasting proposed with LD explosives of 25mm dia. & 83mm dia. with detonating cord & milli second delay detonators.	
3k	Provision of mining machineries in mineral benches	Yes, Shovel and Dumper combination. L&T-PC 300 (Backhoe), Hyva- 30 ton	Yes, Shovel and Dumper combination. L&T-PC 300 (Backhoe), Hyva- 30 ton	
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM.	Yes, Top soil bencehes:710 mRL-698 mRL, OB: 698 mRL-692 mRL, Mineral: 692 mRL-674 mRL.	Yes, Top soil bencehes:710 mRL-698 mRL, OB: 698 mRL-692 mRL, Mineral: 698 mRL- 681 mRL.	
3m	Total area covered under excavation / pits	13.22 ha	11.94 ha	
3n	Ore to OB ratio for the pit/mine during the year	1: 0.052	1: 0.16	
30	Total area put in use under different heads at the end of year	Pit =12.345 ha Soil Dump= 3.415 ha OB Dump = 3.875 ha Road = 0.89 ha Total = 20.525 ha	Pit =11.94 ha Soil Dump= 2.10 ha OB Dump = 2.23 ha Road = 0.418 ha Total = 16.688 ha	
Зр	Production of ROM mineral during last five year, as applicable	<u>Proposal</u> 2016-17 = 1015092 MT 2017-18= 1229280 MT 2018-19 = 1533402 MT	<u>Actual</u> 2016-17 = Nil 2017-18= 101503 MT 2018-19 = 1023050 MT	
3q	General remarks of inspecting officer on method of mining etc	During the reporting year, 6 generated, which is not as 1 under rule 11(1) has been i	per the proposal. In this re	

Solid Waste Management- Dumping

S.N.	Items	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	Yes	Yes	
4b	Location of topsoil , OB & mineral reject dumps	1) Topsoil Dump: 350 N- 615 N, 445 E-615 E 2) OB Dump: 32 S-360 S, 00 E-205 E	1) Topsoil Dump: 440 N- 615 N, 445 E-615 E 2) OB Dump: 100 S-290 S, 00 E-160 E	
4c	Number of dumps within lease area and outside lease area	2 nos. within the lease area.	2 nos. within lease area	
4d	Location of dumps w.r.t ultimate pit limit (Rule 16)	1) Topsoil Dump: 350 N- 615 N, 445 E-615 E 2) OB Dump: 32 S-360 S, 00 E-205 E	1) Topsoil Dump: 440 N- 615 N, 445 E-615 E 2) OB Dump: 100 S-290 S, 00 E-160 E	
4e	Number of active & alive dumps	Top Soil Dump-1, OB Dump- 1	Top Soil Dump-1, OB Dump- 1	
4f	Number of dead dumps	Nil	Nil	
4g	Number of dumps stabilished	Nil	Nil	

4h	Whether Retaining wall or garland drain all	Yes, No proposal for the	Yes, No proposal for the	
	along dump	reporting year	reporting year	
4i	Length of Retaining wall or garland drain all along dump	Nil	Nil	
4j	Number of settling ponds	Nil	Nil	
4k	Specific comments of inspecting officer on waste dump management			

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	Nil	Nil	
5b	Area under backfilling of mined out area	Nil	Nil	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area	Nil	Nil	
5d	Total area fully reclaimed & rehabilitated	Nil	Nil	
5e	General remarks of inspecting officer on backfilling , reclamation etc	As the mine has opened on 19.01.2018, there is no scope for backfilling & reclamation during the reporting year.		

Progressive Mine Closure Plan

S.N.	Items	Proposals	Actual work	Remarks
ба	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	As per Rule 26(2) Annual PMCP report to be submitted before 1st day of July of Every Year	Submitted on 10th July, 2019 for the reporting year	
dð	Management of worked /mined out benches i)Area available for rehabilitation (ha) ii)Afforestation done(ha) ii) 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) NA ii) NA ii) NA iv) NA v) Nil vi) NA	i) NA ii) NA ii) NA iv) NA v) Nil vi) NA	
бс	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) NA ii) Nil iii) NA iv) NA v) Nil	i) NA ii) Nil iii) NA iv) NA v) Nil	
	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	i) 200 nos saplings in safety barriers. ii) Nil iii) Nil	i) 816 nos saplings in safety barriers. ii) Nil iii) Nil	Rehabilitation not started as the lease area is not yet matured.
бе	Compliance of Environmental monitoring (core zone & buffer zone)	Air, Noise and Water quality monitoring will be done during the year within the lease area	Air, Noise and Water (each 2 locations) quality monitoring carried out as per the proposal during the reporting year.	
6f	General remarks of inspecting officer on PMCP compliance & progressive closure operations	The lessee has carried out afforestation and environmental monitoring as per the proposal during the reporting year.		

Mineral Conservation

S.N.	Items	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Produced ROM will be directly sent to the crusher unit from the mine	Produced ROM has directly sent to the crusher unit from the mine	
7b	Method of grade -wise mineral sorting i.e manual or mechanical	Mehanical	Mechanical	
7c	Different grade of mineral sorted out at mines	Nil	Nil	
7d	Any beneficiation process at mines	Nil	Nil	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	No such proposal for mineral benificiation was proposed during the reporting year.		

Environment

S.N.	Items	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Yes	Yes	
8b	Concurrent use or storage of topsoil	Yes	Yes	Partly used for plantation work in safety barrier
8c	Separate dumps for overburden , waste rock , rejects and fines (Rule 33)	Yes	Yes	
8d	Use of overburden , waste rock, rejects and fines dumps for restoring the land to its original use.	Nil	Nil	
8e	Phased restoration , reclamation and rehabilitation of lands affected by mining operations (pits, dumps etc.)	Nil	Nil	
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	Within lease- 200 nos saplings	1. Within lease- 816 2. Outside Lease- 587	
8g	Survival rate	Nil	1. within Lease - 80.64% 2. Outside Lease - 82.96%	
8h	Water sprinkling on roads to control airborne dust	Water Sprinkling on Haul roads were proposed.	Water sprinkling by water tanker over haul roads has been carried out.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Lessee has planted 816 no of sapling within and along the lease boundary, 587 no of saplings ouside the lease area and carried out water sprinking inside the mine over haul roads to minimize the fugutive dust emmision. This sustains the asthetic beauty of the mine area.		

Compliance of Rule 45

S.N.	Item	Comments		Remarks
9a	Status of submission of Monthly and Annual returns	Monthly Return submitted upto	Submitted upto July'2019	
		Annual Return submitted upto	Submitted upto 2018-19	

S.N	Item	Details Given in Annaul Return	Observation of I/Officer	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	 Umesh Kumar- Mines Manager. Jyoti Prakash Panda- Mining Engineer. Motim- Geologist. 	Geologist and Mining engineer were present during the inspection. Date of appointment: Manager: 01.02.2017 Mining Engineer: 10.06.2019 Geologist: 19.01.2018	
9c	Scrutiny of Annual return on land use pattern	Pit =11.94 ha Soil Dump= 2.10 ha OB Dump = 2.23 ha Road = 0.418 ha Total = 16.688 ha	Pit =11.94 ha Soil Dump= 2.10 ha OB Dump = 2.23 ha Road = 0.418 ha Total = 16.688 ha	
		Sanlings'-	Sanlings'-	

9d	Scrutiny of Annual return on afforestation	Saplings:- 1. Within lease- 816 2. Outside Lease- 587 Survival rate 1. within Lease - 80.64% 2. Outside Lease -82.96%	Saplings:- 1. Within lease- 816 2. Outside Lease- 587 Survival rate 1. within Lease - 80.64% 2. Outside Lease -82.96%	
9e	Scrutiny of Annual return on mineral reject generation(Grade & Quantity)	Nil	Nil	
9f	Scrutiny of Annual return on ROM stock and/ or graded ore	Opening Stock- Nil Production- 1023050 MT. Dispatch- 1023050 MT. Closing Stock- Nil There is no separate stock for graded ore	Opening Stock- Nil Production- 1023050 MT. Dispatch- 1023050 MT. Closing Stock- Nil There is no separate stock for graded ore	
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Ex. Mine Price- 318.00	Cross checked from the returns found it to be correct	
9i	Scrutiny of Annual return on fixed assets	Rs 2097947511	Verified with Asset register during inspection & found it to be correct.	
9k	Scrutiny of Annual return on mining machineries	1) Back Hoe01 2) Back Hoe - 01(PC 200) 3)Air compressor01 4) Blast host drill - 01 5) Dumper10 6) Dozer01 7) Water Tanker01	Verified from submitted annual machinery statement; 1) Back Hoe 01 2) Back Hoe - 01(PC 200) 3)Air compressor01 4) Blast host drill - 01 5) Dumper10 6) Dozer01 7) Water Tanker01	

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

Violations under rule 11(1), 33 were pointed out and violation letter has been issued to the lessee on 29.08.2017. Lesee has complied the earlier violations under rule 11(1), 26(2) of vide letter dated 12.09.2018.

Name of Inspecting Officer with Designation and Date

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