INDIAN BUREAU OF MINES MINERAL DEVELOPMENT AND REGULATION DIVISION

MCDR INSPECTION REPORT

Mino	File No.	i Regional Office Mine code - 38TMN38006	
Mille	Name of the inspecting officer	Mr. Matiul Islam,	
	Designation	Assistant Controller of Mines	
	Date of inspection:	07/08/2024	
	Accompanied mine official and designation	Mr. K.Elansurian (AGM Geology),	
	Accompanied infine official and designation	Mr. J.Ravi (AGM Geology) &	
		Mr. S.Duraimurugan (DGM Mines)	
	PART-I: Ge	eneral Information	
1	Name of the Mine	Alathiyur South Limestone Mine	
2	Total Lease Area (Ha) with breakup of Non-	•	
	forest and forest land	Extent:- Non Forest- 89.87.5 Ha .	
3	Minecode	38TMN38006	
4	IBM Registration Number under rule 45 of MCDR, 1988	IBM/638/2011	
5	Name of the lessee, Address, phone, email and	Adanakurichi and Manakudayan,	
	fax number	The Ramco Cements Limited,	
		Alathiyur Works,	
		Ariyalur District.	
		Pin : 621730	
		Fax : 04329 - 248303	
		E-mail : ravij@ramcocements.co.in	
		Phone : 04329 - 248305, 248306	
6	Village	Adanakurichi & Manakudayan	
7	Taluka/Mandal	Sendurai	
8	District	Ariyalur	
9	Pin code	621 730	
10	State	Tamilnadu	
11	Post office	Dalavoi	
12	Nearest police station	Dalavoi	
13	Nearest Railway station	Echangadu	
14 15	Date of Grant of Mining Lease Date of Execution	03.01.1995 31.03.1995	
16 17	Date of opening of Mine Date of first Renewal, if applicable and its	31.03.1995	
	period & expiry	Not applicable.	
18	Date of second Renewal, if applicable and its period & expiry	Not applicable.	
19	Date of submission of renewal application if		
	Mining Operations are continuing under	Not applicable.	
	deemed extension		
20	Name of the Nominated Owner with Address,	P.R.Venkatramarajah, Chairman,	
	phone, email, fax number and Date of	Auras Corporate Centre,	
	appointment	98-A, Dr.Radhakrishnan Salai,	
		Mylapore, Chennai-600004.	
		State : Tamilnadu	
		Phone : 04329 - 248305, 248306	
		Fax : 04329 - 248303	
		E-mail : mclalr@ramcocements.co.in	

21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Mr. R. Meenashisundaram, Senior Vice President, The Ramco Cements Limited, Alathiyur Works. District: Ariyalur State: Tamilnadu Pin: 621730 Phone: 044 - 28478666, 28478656 Fax: 044 - 28478676, 28478677 E-mail: mclalr@ramcocements.co.in Date: 05/10/2023		
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	R. Naren, The Ramco Cements Limited, Alathiyur Works. District: Ariyalur State: Tamilnadu Pin: 621730 Phone: 04329 - 248305, 248306 Fax: 04329 - 248303 E-mail: mclalr@ramcocements.co.in Date: 13/05/2022		
23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	J. Iyyappan, The Ramco Cements Limited, Alathiyur Works. District: Ariyalur State: Tamilnadu Pin: 621730 Phone: 04329 - 248305, 248306 Fax: 04329 - 248303 E-mail: mclalr@ramcocements.co.in Date: 21/03/2019		
24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	R. Balamurugan The Ramco Cements Limited, Alathiyur Works. District: Ariyalur State: Tamilnadu Pin: 621730 Phone: 04329 - 248305, 248306 Fax: 04329 - 248303 E-mail: mclalr@ramcocements.co.in Date: 31/03/2019		
25	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	NA		
26	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	29.11.2021 (2021-22 to 2023-24)		
27	Mineral(s) granted in lease and proved for mining	Limestone & Marl		
28	Method of Mining(Opencast, Underground)	Open Cast.		
29	Category (Fully Mechanised, Others or Manual)	Fully Mechanised.		
30	Captive/Non Captive	Captive.		

II - OBSERVATION AND COMMENTS OF INSPECTING OFFICER

Exploration

S.N.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No Backlog	10 Boreholes for a meterage of 386 mts drilled during the year	A total of 46 boreholes for a total meterage of 1746 mts drilled so far.
1b	Exploration over lease area for Geological axis 1 or 2.	G-1	G-1	Potentially Mineralised Area fully explored upto G-1 level.
1c	Exploration Agency & Expenditure in lakh Rupees during the year	No proposal	Agency – M/s Sai Hi Tech Engineering Expenditure – Rs 6,21,300/-	Boreholes drilled to ascertain the depth persistence of mineral and geological variation
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	Nil	Nil
1e	Balance reserves as on 01.04.2024 (111+121 Category)	Limestone - 32,65,039, Marl-11,40,000	Limestone - 38,68,723.48, Marl-11,40,000	Less depletion in the past
1f	General comments of inspecting officer on geology, exploration etc.	-	-	Geology & Exploration of the lease was found satisfactory.

<u>Development</u>

S.N.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t. lease area (Ref With Grid)	307600 E - 1254400 N to 308300 E - 1255500 N	307600 E - 1254400 N to 308300 E - 1255500 N	As per proposal
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	Topsoil – 1, Overburden – 2, Mineral –4	Topsoil – 1, Overburden – 2, Mineral – 4	Separate benches maintained
2c	Stripping ratio or ore to OB ratio	1:1.17	1:1.13	Within limit
2d	Quantity of topsoil generation in m ³	Nil	Nil	As per proposal
2e	Quantity of overburden generation in m ³	3,98,706	3,86,229.88	As per proposal
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	-	-	The development of the pit w.r.t. the type of deposit was found satisfactory.

Exploitation

	Exploration				
S.N.	Item	Proposals	Actual work	Remarks	
3a	Number of pits proposed for production	2	2	As per proposal	
3b	Quantity of ROM mineral production proposed	6,13,097 te	6,11,684.52 te	Total ROM is Used.	
3c	Recovery of salable/usable mineral from ROM production	100 %	100 %	As per proposal	
3d	Quantity of mineral reject generation	Nil	NA	Nil	
3e	Grade of mineral reject generation and	NA	NA	Nil	

	threshold value declared			
3f	Quantity of sub-grade mineral generation	Nil	NA	Nil
3g	Grade of sub-grade mineral generation	Nil	NA	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised	Mechanised	Nil
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	Nil	Nil	Nil
3j	Provision of drilling & blasting in mineral benches	Non-conventional mining without drilling & blasting proposed	Non-conventional mining without drilling & blasting carried out	Mining carried out using Surface Miners
3k	Provision of mining machineries in mineral benches	Surface Miner-1, Tipper-10, Shovel-2, Wheel Loader-1, Water Tanker-1, Other HEMM-1	Surface Miner-1, Tipper-10, Shovel-2, Wheel Loader-1, Water Tanker-1, Other HEMM-1	As proposed
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Height – 5m, Width – 6m	Height – 5m, Width – 6m	Benches suitable for the method of mining
3m	Total area covered under excavation/pits	52.33	39.207	Within proposed extents
3n	Ore to OB ratio for the pit/mine during the year	1:1.17	1:1.13	Within limit
30	Total area put in use under different heads at the end of year	End of 5th year: Area under Mining- 52.33, Waste dump-3.16, Mineral storage – 2.29, Infrastructure-1, Roads- 3.5, Mineral separation plant- 5.006, Others-9.25	Covered under current (O/C) Workings – 39.207 Reclaimed/ Rehabilitated – 9.253 Waste Dump – 4.710 Occupied by plant, buildings, & roads – 10.450 Other Purpose – 26.255	Within Proposed Limits
3p	Production of ROM mineral during last five- year period, as applicable	2018-19 8,83,000 2019-20 4,45,968 2020-21 4,45,968 2021-22 5,91,458 2022-23 6,19,762	2018-19 3,39,972 2019-20 4,43,529 2020-21 3,14,942 2021-22 2,44,399 2022-23 3,64,545	Within Proposed Limits
3q	General Remarks of inspecting officer on method of mining etc.	-	-	The method of mining was found satisfactory.

Solid Waste Management-Dumping (2023-24)

S.N.	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	No Topsoil generated. 2 OB dump	No Topsoil generated. 2 OB dump	OB proposed & dumped separately
4b	Location of topsoil, OB & mineral reject dumps (Ref to Grids)	OB dump location 1254500 N – 307300 E to 1255000 N – 307800 E	OB dump location 1254500 N – 307300 E to 1255000 N – 307800 E	As per plan
4c	Number of dumps within lease area and outside lease area	OB – 2	OB – 2	As per plan
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Within UPL	Within UPL	Over previously backfilled mined out pit.

4e	Number of active & alive dumps	2	2	As per plan
4f	Number of dead dumps	Nil	Nil	Nil
4g	Number of dumps Stabilized	Nil	Nil	Nil
4h	Whether Retaining wall or garland drain all along dumps are there	No proposal	Garland drain has been desilted	Garland drain has been desilted
4i	Length of Retaining wall or garland drain all along dump	No proposal	515 x 2 x 2	Garland drain provided all along dump
4j	Number of settling ponds	Nil	1	Existing settling pond de-silted.
4k	Specific comments of inspecting officer on waste dump management	-	-	Waste dump management was found satisfactory.

Solid Waste Management – Backfilling (2023-24)

S.N.	Item	Proposals	Actual work	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	Backfilling proposed after full exhaustion of mineral from benches	Backfilling carried after full exhaustion of mineral from benches	Dumping being carried out over previously backfilled area
5b	Area under backfilling of mined out area	Cumulative - 9.253 Ha	Cumulative - 9.253 Ha	Previously backfilled area.
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	Previously stacked topsoil proposed to be utilized for afforestation	Previously stacked topsoil utilized for afforestation	As proposed
5d	Total area fully reclaimed & rehabilitated	Nil	Nil	Nil
5e	General Remarks of inspecting officer on backfilling, reclamation etc	-	-	Backfilling & reclamation was found satisfactory.

Progressive Mine Closure Plan (2023-24)

S.N.	Item	Proposals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly – Rule 23E(2)	Yes	Yes	Submitted along with AR
6b	Area available for rehabilitation (ha)	0.38	0.38	Afforestation proposed
6c	Afforestation done (ha)	0.38	0.38	As proposed
6d	No. of saplings planted during the year	600	600	As proposed
6e	Cumulative no. of plants	65,937	65,937	Since inception
6f	Any other specific method of rehabilitation	Nil	Nil	Nil
6g	Cost incurred on watch & care during the year	41,250	45,275	As proposed
6h	Compliance on reclamation and rehabilitation by backfilling (i) Void filled (L x W x D)	No backfilling proposed	Nil	Nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii)Void filled by waste/tailings	Nil	Nil	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on the backfilled area	Nil	Nil	Nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Nil	Nil	Nil
61	Compliance on reclamation and rehabilitation by backfilling (v) Any other specific means	Nil	Nil	Nil

6m	Compliance of Rehabilitation of waste land within lease i) Afforestation	Nil	Nil	No waste land available
6n	Compliance of Rehabilitation of waste land within lease ii) Area rehabilitated (ha)	Nil	Nil	No waste land available
60	Compliance of Rehabilitation of waste land within lease iii) Method of rehabilitation	Not applicable	Not applicable	No waste land available
6р	Compliance of Environmental monitoring (core zone & buffer zone)	Periodic monitoring proposed	Periodic monitoring carried out	All parameters within norms
6q	General remarks of inspecting officer on PMCP compliance & progressive closure operations	-	-	PMCP Compliance and closure operations were found satisfactory.

Mineral Conservation (2023-24)

S.N.	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Yes	Grade wise sorting carried out	As proposed
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Mechanised	Mechanised	Using Surface Miner
7c	Different grade of mineral sorted out at mines	High Grade, Low grade, Very low grade, Very very low grade	High Grade, Low grade, Very low grade, Very very low grade	As proposed
7d	Any beneficiation process at mines	Wet Beneficiation Technology is proposed	Being carried out as per proposal.	As per proposal
7e	General Remarks of inspecting officer on Mineral conservation & beneficiation issues	-	-	Entire ROM generated is consumed.

Environment (2023-24)

S.N.	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No Topsoil removal proposed	No Topsoil removed	As per the proposal
8b	Concurrent use or storage of topsoil	Nil	NA	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	2	2	As per proposal
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	OB dumping is proposed over previously backfilled area	OB dumping is done over previously backfilled area	As per proposal
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal for the year	Nil	Backfilling carried out in the past and proposed for future.
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	600 saplings proposed	600 saplings planted	As per proposal
8g	Survival rate	80 %	85 %	
8h	Water sprinkling on roads to control	Yes	Yes	Water Sprinkler

	airborne dust			deployed
8i	General Remarks of inspecting officer on aesthetic beauty in and around mines area	-	-	Aesthetic beauty in and around mines was found satisfactory.

Compliance of Rule 45

S.N.	Item	Proposals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Nil	Monthly & Annual returns submitted	In time
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	R. Naren – Mines Manager, J.Iyyappan- Mining Enginner, R.Balamurugan- Geologist	Given in Part I, Sl 7-9	Nil
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Covered under current (O/C) Workings - 39.207 Reclaimed/ Rehabilitated - 9.253 Waste Dump - 4.710 Occupied by plant, buildings, & roads - 10.450 Other Purpose - 26.255	Given in Part - I. Sl no.12	Nil
9d	Scrutiny of Annual return on afforestation	600 nos	Given in Part - V. Sl no.4.	Nil
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	No reject	Given in Part – V. Sl no.3	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Nil	Given in Part - VI. Sl no.2 & 3	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Rs. 301.17	Given in Part - VI. Sl no.3(ii) & Part VII	Nil
9h	Scrutiny of Annual return on fixed assets	Rs 1,17,88,72,747	Given in Part – IIA. Sl no.1	Nil
9i	Scrutiny of Annual return on mining machineries Name of the Machinery Capacity	Surface Miner-1, Tipper-8, Shovel-1, Wheel Loader-1, Water Tanker-1, Other HEMM-1	Given in Part – V Sec – 6	Nil

Details of violations observed during inspection and compliance position of violation pointed out: -		
Violation observed	Show Cause position	

(Matiul Islam) Indian Bureau of Mines