## **INSPECTION REPORT**

### 1.0 GENERAL

SN	Particulars	Details
1 (a)	Name of the Mine	Aniali Rana Bordi Limestone Mine
1 (b)	Name of Inspecting officer &	Darshan Deep Bhardwaj Deputy Controller of Mines
	Designation	
1 (c)	Accompanying Mines Representatives	Mayank Srivastava
1 (d)	Type of Inspection	Star Rating
1 (e)	Date of Inspection	11.03.2022
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	12.27 Hectare
3	Minecode	38GUJ08103
4	IBM Registration Number under rule 45 of MCDR, 1988	437
5	Name of the lessee, Address,	Tata Chemicals Limited
	phone, email and fax number	Ranavav Quarries,
		Ranavav,
		Dist- Porbandar
		Gujarat - 360550
6	Village	Aniali
7	Taluka/Mandal	Ranavav
8	District	Porbandar
9	Pincode	360550
10	State	Gujarat
11	Post office	Aniali
12	Nearest police station	Ranavav
13	Nearest Railway station	Ranavav
14	Date of Grant of Mining Lease	07.07.1966
15	Date of Execution	23.12.1966
16	Date of opening of Mine	01.03.2017
17	Date of first Renewal, if applicable and its period & expiry	02.09.1985 period 20 Years
18	Date of second Renewal, if applicable and its period & expiry	17.11.2005 period 20 years
19	Date of submission of renewal application if Mining Operations are continuing under deemed extension	02.02.2018 extended till 31.03.2030
20	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	R. Mukundan Tata Chemicals Limited Bombay House, 24 Homy Modi Street, Mumbai – 400001, Maharastra
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	C M Dwivedi Tata Chemicals Limited Ranavav Quarries, Ranavav - 360550 Porbandar

		Gujarat
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Mayank Srivastava BE Mining & FCC metal(R) Date of appointment in mines - 15.12.2015 Tata Chemicals Limited Ranavav Quarries, Ranavav - 360550 Porbandar Gujarat
23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Mayank Srivastava Mining Engineer, BE (Mining) & FCC metal (R), Total Experience 19 years date of appointment in mine - 15.12.2015
24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Yes.
25	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	682(23)(373)/2005-MCCM(N)UDP, 24.03.2005
26	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	682(23)(373)/2005-MCCM(N)UDP, 20.02.2013 682(23)(373)/2005-MCCM(N)UDP, 14.09.2016 <b>Review of Mining Plan</b> No. 684(4)(1)/MP-320/2020-21-MDRD(U)/GNR,18.02.2021 period from 2021-22 to 2025-26.
27	Mineral(s) granted in lease and proved for mining	Limestone
28	Method of Mining (Opencast, Underground)	Opencast
29	Category (Fully Mechanised, Others or Manual)	Mechanised.
30	Captive/Non Captive	Captive

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

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SN	Item	Proposals of (2020-21)	Actual work	Remarks
1a	Backlog of previous year	No proposal was given.	Entire has been	Entire has been
1b	Exploration over lease area for	Entire has been explored.	explored.	explored in G1
	Geological axis 1 or 2.			level. Hence no
1c	Exploration Agency & Expenditure			further
	in lakh Rupees during the year			exploration is
1d	Balance area to be explored to bring			required.
	Geological axis in 1 or 2			

1e	Balance reserves as on 01.04.2021	0.807252 Million Tonne	0.0012 Million	NA
		Balance as on 1 <sup>st</sup> Apr	Tonne	
		2021		
1f	General remarks of inspecting officer on geology, exploration etc.	Entire has been explored in G1 level. Hence no further exploration is required.		

2.0 Development

SN	Item	Proposals of (2020-21)	Actual work	Remarks
2a	Location of development w.r.t. lease area	E/W 585200 585590 N/S 2400000 2400460	E/W 585210 585370 N/S 2400400 2400520	
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	There was no such proposal	As per plan	Limestone is outcropping in nature, Hence no soil or OB proposed.
2c	Stripping ratio or ore to OB ratio	1:0	1:0	
2d	Quantity of topsoil generation in m3	Nil	As per plan	
2e	Quantity of overburden generation in m3	Nil	As per plan	
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	Pits are developed as per mining proposal. Mining is being done by using Excavator, Rock Breaker and occasional drilling blasting		

## 3.0 Exploitation

SN	Item	Proposals of (2020-21)	Actual work	Remarks
3a	Number of pits proposed for production	One	One	NIL
3b	Quantity of ROM mineral production proposed	175000 tonnes	13975 Tonnes	NIL
3c	Recovery of salable/usable mineral from ROM production	100%	100%	Sized limestone 65% & undersigsed 35%
3d	Quantity of mineral reject generation	0	0	No mineral rejects generated
3e	Grade of mineral reject generation and threshold value declared	NIL	No mineral rejects generated	-
3f	Quantity of sub-grade mineral generation	NIL	NIL	-
3g	Grade of sub-grade mineral generation	NIL	NIL	-
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	NA	-
3j	Provision of drilling & blasting in mineral benches	Yes	Apart from drilling blasting, rock breaker is being used for mining.	Occasional Drilling and Blasting
3k	Provision of mining machineries in mineral benches	Yes	Rock Breaker, Excavator, Loader and Tippers	-
31	Whether height of benches in overburden and mineral suitable	Yes	Bench formed as per the	-

	for method of mining proposed in MP/SOM		proposal	
3m	Total area covered under excavation/pits	11.2339	3.9734	-
3n	Ore to OB ratio for the pit/mine during the year	1:0	1:0	-
30	Total area put in use under different heads at the end of year	Pit- 11.2339 Waste/reject Others- 0.3312	Pit- 3.9734 Waste/reject Others- 0.3959	-
3p	Production of ROM mineral during last five-year period, as applicable	2016-17-85000 tonne 2017-18-120000 tonne 2018-19-175000 tonne 2019-20-175000 tonne 2020-21-175000 tonne	2016-17- Not having EC 2017-18-12150 tonne 2018-19-12712 tonne 2019-20-12450 tonne 2020-21-13975 tonne	ROM production less due to EC.
3q	General remarks of inspecting officer on method of mining etc.	Pits are developed as per mining proposal. Mining is being done by using Excavator, Rock Breaker and occasional drilling blasting		

4.0 Solid Waste Management-Dumping

SN	Item	Proposals of (2020-21)	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject	NA, No mines waste, concurrent use of top soil for plantation. (850 Cum topsoil)	NA, No mines waste, concurrent use of top soil for plantation	NA
4b	Location of topsoil, OB & mineral reject dumps	NIL	There was no proposal of OB removal and	The mining lease area is devoid of
4c	Number of dumps within lease area and outside lease area	NIL	dumping of waste or mineral rejects.	Top soil and OB, except in some
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	NIL	inneral rejects.	portion few cm
4e	Number of active & alive dumps	NIL		thick top soil.
4f	Number of dead dumps	NIL		
4g	Number of dumps established	NIL		
4h	Whether Retaining wall or garland drain all along dumps are there	NIL	NIL	
4i	Length of Retaining wall or garland drain all along dump	NIL	NIL	
4j	Number of settling ponds	NIL	Temporary water storage during monsoon season is being used in plantation and GW recharge.	
4k	Specific comments of inspecting officer	No mine waste is generated du utilized by proper blending.	uring the process of Minin	g. Entire ROM is

5.0 Solid Waste Management-Backfilling

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SN	Item	Proposals of (2020-21)	Actual work	Remarks
5a	Status on part or full extraction of	Partial	Partial	There was
	mineral from mined out area			no such
	before starting backfilling			area where
5b	Area under backfilling of mined	NIL	NIL	backfilling
	out area			can be

5c	Concurrent use of topsoil for	NIL	Utilized for	proposed.
	restoration or rehabilitation of		plantation	
	mined out area (Rule 32)			
5d	Total area fully reclaimed &	NIL	NIL	
	rehabilitated			
5e	General remarks of inspecting	Area is not matured for back	filling.	
	officer on backfilling, reclamation			
	etc			

<b>6.0</b> ]	Progressive Mine Closure Plan			
SN	Item	Proposals of (2020-21)	Actual work (2020- 21)	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly - Rule 26(2).	Yes	Yes Submitted	-
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	0.006 Hect.  0.006 hect 200  1000  Nil  Rs. 52,000	0.2 Hect. 0.2 Hect. 285 1024 Nil Rs. 125400	-
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	Plantation in periphery of the lease area	Plantation done in periphery of the lease area	-
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Methof of rehabilitation	200 Nos. 0.006 Hect.	285 Nos. 0.2 Hect.	-
бе	Compliance of Environmental monitoring (core zone & buffer zone)	Core Zone with in limit – Ambient Air Quality, Surface water Quality, Ground water quality, Noise level, Noise vibration to be monitor and should be in limit.	Core Zone with in limit – Ambient Air Quality, Surface water Quality, Ground water quality, Noise level, Noise vibration are measured with in limit	-
6f	General remarks of inspecting officer on PMCP compliance & progressive	PMCP return is submitted as p MCDR 2017	per the provision of rule 2	26(2) of

# 7.0 Mineral Conservation

SN	Item	Proposals of (2020-21)	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	175000 Tonne	13975 Tonne	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Crushing and screening / manual	Crushing and screening/ manual	
		Mechanical	Mechanical	
7c	Different grade of mineral sorted out at mines	NIL	NIL	
7d	Any beneficiation process at mines			
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	Crushing and screening/ manual sorting is done for better utilization of ROM		

## 8.0 Environment

SN	Item	Proposals of (2020-21)	Actual work	Remarks
8a	Separate removal and utilization of topsoil	850 Cu. Meter	Occurrence of top soil is not regular. Concurrent use in Plantation	Wherever available is utilised for the plantation work
8b	Concurrent use or storage of topsoil	850 Cu. Meter	Concurrent use done with temporary storage.	NIL
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	NIL	Negligible quantity found	NIL
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	NA	NA	NIL
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Yes, as per PMCP Plantation 200 Nos	Yes and per PMCP Plantation 285 Nos	NIL
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	As per PMCP Plantation 200 Nos	Plantation 285 Nos	NIL
8g	Survival rate	90%	90%	Actual as per annual return.
8h	Water sprinkling on roads to control airborne dust	Yes	Yes	NIL
8i	General remarks of inspecting officer on aesthetic beauty in and around mines are	Aesthetic environment around lease is good		

9.0 Compliance of Rule 45

S.N	Item		A.R. of 2020-21 submitted		Remarks
•					
	Status of submission of Onlin	-			NIL
	Monthly and Annual returns				
S.N	Item		etails GIVEN in A.R 2020-	Observation of I/Officer	Remarks
•		21		/Actual reported in Returns	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Ye	es	Found in order	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Ye	es	Found in order	
9d	Scrutiny of Annual return on afforestation	Ye	es	Found in order	
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	Ye	es	Found in order	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Ye		Found in order	
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Ye		Found in order	
9i	Scrutiny of Annual return on fixed assets	Ye	es	Found in order	
9k	Scrutiny of Annual return on mining machineries	Ye	es	Found in order	

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

Mine was inspected for star rating, No significant violation observed.

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