### MCDR INSPECTION REPORT

#### 1.0 **GENERAL**

SN	Particulars	Details
1 (a)	Name of the Mine	Aniali B Limestone Mine
1(b)	Name of Inspecting Officer & Desig.	Sanjay M. Girhe, Sr. Mining Geologist
1(c)	Accompanying Mines Representatives	Sh. Mayank Srivastava, ME & Sh. C.M.Diwedi, Geologist
1(d)	Type of Inspection	Star Ratings/MCDR
1(e)	Date of Inspection	01.10.2017
2	Total Lease Area (Ha) with breakup of	6.07 Hectare
	Non-forest and forest land	
3	Minecode	38GUJ08333
4	IBM Registration Number under rule 45 of MCDR, 1988	437
5	Name of the lessee, Address, phone,	Tata Chemicals Limited
	email and fax number	Ranavav Quarries,
		Ranavav,
		Dist- Porbandar
		Gujarat - 360550
6	Village	Aniali
7	Taluka/Mandal	Ranavav
8	District	Porbandar
9	Pin code	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	25.11.1986
15	Date of Execution	25.05.1987
16	Date of opening of Mine	01.11.2015
17	Date of first Renewal, if applicable and	Applied on 28.04.2006 for the period 25.05.2007 to
	its period & expiry	24.05.2027 and pending at State level.
18	Date of second Renewal, if applicable	-
	and its period & expiry	
19	Date of submission of renewal	20.10.2015
	application if Mining Operations are	
	continuing under deemed extension	
20	Name of the Nominated Owner with	R. Mukundan
	Address, phone, email, fax number and	Tata Chemicals Limited
	date of appointment	Bombay House, 24 Homy Modi Street,
		Mumbai – 400001,
		Maharastra
21	Name of the Mine Agent with Address,	S K Bhakta
	phone, email, fax number and date of	Tata Chemicals Limited
	appointment	Ranavav Quarries,
		Ranavav - 360550
		Porbandar
		Gujarat
22	Name of the Mines Manager with	Mayank Srivastava
	Address, phone, email, fax number and	BE Mining & FCC metal(R)
	date of appointment in mines	date of appointment in mines - 15.12.2015
		Tata Chemicals Limited
		Ranavav Quarries,
22	N 61 N 7	Ranavav – 360550, Porbandar. Gujarat
23	Name of the Mining Engineer,	Mayank Srivastava
	Qualification and total experience with	Mining Engineer, BE (Mining) & FCC metal (R),

	Address, phone, email, fax number and date of appointment in mine	Total Experience 18 years date of appointment in mine - 15.12.2015
24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 55 & carrying out their duties as per rule 56 & 57.	Yes, Geologist and Mining Engineer appointed as per rule 55 of MCDR, 2017.
25	Date of Approval of Mining Plan/Modified Mining Plan with five- year period and specific condition in approval letter, if any.	682(23)(355)/2004-MCCM(N)UDP, 13.01.2005 and 684(4)(1)/MP-12/2017-GNR, 12.04.2017
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)(473)/2006-MCCM(N)UDP, 10.11.2006 682(23)(473)/2006-MCCM(N)UDP, 1.04.2013
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** 

Exp.	ioration			
SN	Item	Proposals (2016-17)	Actual work (2016-17)	Remarks
1a	Backlog of previous year	NIL	NA	To ascertain variation in grade 3 prospecting
1b	Exploration over lease area for Geological axis 1 or 2.	Not Proposed	Not Proposed	pits were made during the year 2016-17
1c	Exploration Agency & Expenditure in lakh Rupees during the year	Not Applicable	Not Applicable	
1d	Balance area to be explored to bring Geological axis in 1 or 2	NIL	Not Applicable	
1e	Balance reserves as on 01.04.2017	0.2956	0.051	Including chemical & cement grade limestone
1f	General remarks of inspecting officer on geology, exploration etc.	Entire lase area has bee guidelines.	en explored as per U	NFC/MEMC Rules,2015

2.0 Development

SN	Item	Proposals(2016-17)	Actual work (2016-17)	Remarks
2a	Location of development w.r.t. lease area	E/W 1900 2100 N/S 600 800	E/W 1900 2100 N/S 600 800	
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	Not Applicable	Not Applicable	
2c	Stripping ratio or ore to OB ratio	Not Applicable	Not Applicable	
2d	Quantity of topsoil generation in m3	Not Applicable	Not Applicable	
2e	Quantity of overburden	Not Applicable	Not Applicable	

	generation in m3			
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	Chemical grade limestone in most of the area. A sruse.	•	•

# $2.0~\underline{\textbf{Exploitation}}$

SN	Item	Proposals (2016-17)	Actual work (2016-17)	Remarks
3a	Number of pits proposed for	One	One	
3b	Quantity of ROM mineral	51296	51050	
3c	Recovery of salable/usable mineral from ROM production	95%	95%	
3d	Quantity of mineral reject generation	Not Proposed	0	
3e	Grade of mineral reject generation and threshold value declared	Not Proposed	0	
3f	Quantity of sub-grade mineral generation	Not Proposed	NIL	
3g	Grade of sub-grade mineral generation	Not Proposed	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	Not Applicable	NA	
3j	Provision of drilling & blasting in mineral benches	Jack Hammer drilling & blasting	Jack Hammer drilling & blasting adopted	
3k	Provision of mining machineries in mineral benches	Loader/JCB & dumper/tipper combination	Rock breaker with loader/JCB & dumper/tipper combination adopted	
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes	Yes	
3m	Total area covered under excavation/pits	2.73 На	2.72 На	
3n	Ore to OB ratio for the pit/mine during the year	NA	NA	
30	Total area put in use under different heads at the end of year	Pit- 2.73 Ha Waste/reject Others- 0.20	Pit- 2.72 Ha Waste/reject Others- 0.20	
3p	Production of ROM mineral during last five-year period, as applicable	Yr- 2012-13 Yr- 2013-14 Yr- 2014-15 Yr- 2015-16 Yr- 2016-17	0 0 0 1950 51050	Due to non- availability of EC production was Nil
3q	General remarks of inspecting officer on method of mining etc.	Opencast working is bein and dumper combination.	g carried out by deploym	ent of rock breaker

### 4.0 Solid Waste Management-Dumping

SN	Item	Proposals (2016-17)	Actual work (2016-17)	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	NA, No mines waste, concurrent use of top soil for plantation	NA, No mines waste, concurrent use of top soil for plantation	
4b	Location of topsoil, OB & mineral reject dumps	Not Applicable	Not Applicable	
4c	Number of dumps within lease area and outside lease area	Not Applicable	Not Applicable	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Not Applicable	Not Applicable	
4e	Number of active & alive dumps	Not Applicable	Not Applicable	
4f	Number of dead dumps	Not Applicable	Not Applicable	
4g	Number of dumps stabilished	Not Applicable	Not Applicable	
4h	Whether Retaining wall or garland drain all along dumps are there	Not Applicable	Not Applicable	
4i	Length of Retaining wall or garland drain all along dump	Not Applicable	Not Applicable	
4j	Number of settling ponds	0	0	0
4k	Specific comments of inspecting officer	Concurrent use of top soil for plantation, no OB & mineral reject encountered during mining operation hence most items are not applicable		

## 5.0 Solid Waste Management-Backfilling

SN	Item	Proposals (2016-17)	Actual work (2016-17)	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	Not Applicable	Not Applicable	
5b	Area under backfilling of mined out area	Not Proposed	Not Applicable	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	Not Proposed	Not Applicable	
5d	Total area fully reclaimed & rehabilitated	Not Proposed	NA	
5e	General remarks of inspecting officer on backfilling, reclamation etc	No comments		

### **6.0 Progressive Mine Closure Plan**

SN	Item	Proposals	Actual work	Remarks
		(2016-17)	(2016-17)	
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.	Yes Submitted	Yes Submitted on 3 <sup>rd</sup> July 2017	

		T	T	
6b	Management of worked/mined			
	out benches			
	i) Area available for rehabilitation	0.000 11	0.00.11	
	(ha)	0.020 Hect.	0.20 Hect.	G 1 1
	ii) Afforestation done (ha)	0.020	0.20	Survival rate
	iii) No. of saplings planted during	0.020	0.20	& caring of
	the year	240	250	saplings found
	iv) Cumulative no. of plants	240	250	satisfactorily
	v) Any other specific method of rehabilitation	240	250	
	vi) Cost incurred on watch & care	Nil	Nil	
	during the year			
		51600	96270	
6c	Compliance on reclamation and	NA	NA	
	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			
6d	Compliance of Rehabilitation of	Not Applicable	Not Applicable	
	waste land within lease			
	i) Afforestation			
	ii) Area rehabilitated (ha)			
	iii) Methof of rehabilitation			
6e	Compliance of Environmental	Core Zone with in	Core Zone with in	Monitoring
	monitoring (core zone & buffer	limit – Ambient Air	limit – Ambient Air	carried out as
	zone)	Quality, Surface	Quality, Surface	per IBM
		water Quality,	water Quality,	guidelines
		Ground water	Ground water	
		quality, Noise level,	quality, Noise	
		Noise vibration are	level, Noise	
		with in limit	vibration are with	
C.C.	Consul naments of inspecting	No comments	in limit	
6f	General remarks of inspecting	No comments		
	officer on PMCP compliance & progressive			
	progressive			

### 7.0 Mineral Conservation

7.0	Willera Conservation					
SN	Item	Proposals (2016-17)	Actual work (2016-17)	Remarks		
7a	ROM Mineral dispatch or grade-wise sorting within lease area	51296	51050 Dispatch Quantity			
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Mechanical	Mechanical	No specific shorting required		
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	In order as per the appro	oved MP/ROMP plan			

# 8.0 Environment

SN	Item	Proposals (2016-17)	Actual work (2016-17)	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Yes proposed	Concurrent use for plantation	
8b	Concurrent use or storage of topsoil	Yes proposed	Yes	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes proposed	Yes	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	NA	NA	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Yes and per PMCP proposals	Attended as per the PMCP proposals	
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	As per PMCP	250 plantation	Good aesthetic near mine office
8g	Survival rate	75%	75%	NIL
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	Established Env. Monicontrol parameters are	_	of environment

## 9.0 Compliance of Rule 45

S.	Item	COMMENTS	Remarks
N.			
	Status of submission of Online	M.R. Submitted up to till date -10.12.2017	
	Monthly and Annual returns	A.R. submitted up to till date- 30.6.2017	

S.	Item	Details GIVEN in	Observation of	Remarks
N.		A.R.(2016-17)	I/Officer /Actual	
			reported in Returns	
9b	Scrutiny of Annual return for	Mayank	C.M. Diwedi	
	information on Mining	Srivastava	Geologist & Mayank	
	Engineer, Geologist and	Mining Engineer,	Srivastava were	
	Manager	C.M. Diwedi	present in inspection	
		Geologist reported		
9c	Scrutiny of Annual return on	Pit- 2.72 Ha	Pit- 2.72 Ha	Slight variation
	land use pattern for area under	Waste/reject	Waste/reject	due to less
	pits, reclaimed area, dumps etc.	Others- 0.20Ha	Others- 0.20Ha	production in
				approved plan
				period.
9d	Scrutiny of Annual return on	240	250	
	afforestation	(Survival Rate-	(Survival Rate-75%	
		75%)		

9e	Scrutiny of Annual return on	Not Given	Not Given	
	mineral reject generation (Grade			
	& quantity)			
9f	Scrutiny of Annual return on	NIL	NIL	
	ROM stock and/or graded ore			
9g	Scrutiny of Annual return on	Production cost	Production cost Rs-	NMET & DMF
	sale value, Ex. Mine price &	Rs-142.43/MT	142.43/MT	Considered
	production cost			
9i	Scrutiny of Annual return on	Given	Given	
	fixed assets			
9k	Scrutiny of Annual return on	Given	Given	
	mining machineries			

- 10- Details of violations observed during current inspection and compliance position of earlier violation pointed out:-
- 1. Last inspection was carried out on dtd. 10.1.2013, and rules 23(E)(2), 23(F)(1), 34, 42(1)( C), 45(5)(b) were pointed out and the same were compiled vide reply letter no. RQG/633/12-13 Date-28.03.2013. The present inspection was carried out for evaluation of online templates filled by the lessee for year 2016-17 but as such no violations were pointed out.

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