

MCDR INSPECTION REPORT

1.0 GENERAL

SN	Particulars	Details
1	Name of the Mine	Zinzerka Limestone Mine, Survey No-22/P (Captive)
1(b)	Name of Inspecting Officer & Designation	Sanjay M. Girhe, Sr. Mining Geologist
1(c)	Accompanying Mines Representatives	Sh. C.M. Devidi, Agent (Mines)
1(d)	Type of Inspection	Modified Mining Plan/MCDR
1(e)	Date of Inspection	31.01.2019
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	14.27 Hectare (Non-Forest), Forest-Nil
3	Mine Code	38GUJ08145
4	IBM Registration Number under rule 45 of MCDR, 1988	IBM/437/2011
5	Name of the lessee, Address, phone, email and fax number	Tata Chemicals Limited Ranavav Quarries, Ranavav, Dist- Porbandar Gujarat – 360550, Phone-+912801230381 cdwivedi@tatachemicals.com
6	Village	Zinzerka
7	Taluka/Mandal	Porbandar
8	District	Porbandar
9	Pincode	360545
10	State	Gujarat
11	Post office	Boricha
12	Nearest police station	Adityana
13	Nearest Railway station	Ranavav
14	Date of Grant of Mining Lease	20.01.1971
15	Date of Execution	19.06.1971 (As per section 8A(5) of MMDR Act,2015 lease period deemed to be extended up to 31.03.2030 (Captive Mining Lease)
16	Date of opening of Mine	Mining operation discontinued since 1999-2000 due to non-availability of Environment Clearance
17	Date of first Renewal, if applicable and its period & expiry	13.06.1990 for 20 yrs from 19.06.1971 to 18.06.1991
18	Date of second Renewal, if applicable and its period & expiry	17.06.2000 for 20 years
19	Date of submission of renewal application if Mining Operations are continuing under deemed extension	03.04.2018
20	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	R. Mukundan, Resolution passed on 26.11.2008 Tata Chemicals Limited Bombay House, 24 Homy Modi Street, Mumbai – 400001, Maharashtra, Phone: 022-6657411, Email:rmukundan@tatachemical.com
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, Email: cdwivedi@tatachemicals.com M-09227194002
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Mining operation stopped since 1999-2000 to till date due to pending of Env. Clearance & also ML area falls within Barda Wildlife Sanctuary. Due to this reason Mines Manager not appointed
23	Name of the Mining Engineer, Qualification and total experience with Address, phone,	Mining operation stopped since 1999-2000 to till date due to pending of Env. Clearance & also ML

	email, fax number and date of appointment in mine	area falls with Barda Wildlife Sanctuary. Due to this reason Mining Engineer was not appointed.
24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	--do--
25	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	Mining Plan was approved vide letter No-682 (23) (706) / 97-MCCM(N) UDP dt-28.09.1997
26	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	Scheme of Mining approved vide letter No-682(23) MS-187/2003 UDP , Dt- 17.06.2003 PMCP approved vide letter No-682(23) CLP-60/2005-UDP, Dt-01.04.2005 Scheme of Mining approved vide letter No-682(23) (474)/2006-MCCM(N) , Dt-28.11.2006 Scheme of Mining approved vide letter No-682(23) (404)/2006-MCCM(N) , Dt-01.04.2013 Review of mining plan with PMCP approved vide letter no-684(4)(1)/MP-81/2017-MDRD(N) / GNR ,Dt-26.12.2017
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

SN	Item	Proposals (2017-18)	Actual work	Remarks
1a	Backlog of previous year	No backlog of previous year 2016-17	NA	--
1b	Exploration over lease area for Geological axis 1 or 2.	No Proposals for exploration on for G1 or G2 axis	Entire mining lease area of 14.27 Ha explored in G1 axis	During 1995-96 entire area was explored by 20 drilled borehole on grid 100m x 100m
1c	Exploration Agency & Expenditure in lakh Rupees during the year	Not Proposed	NA	Previously exploration carried out by M/s. GIEM (India) Consortium
1d	Balance area to be explored to bring Geological axis in 1 or 2	Not Proposed	Entire mining lease area of 14.27 Ha explored in G1 axis	--
1e	Balance reserves as on 01.04.2018	<u>Reserves: (Million Tons)</u> Proved (111)-2.89 <u>Resources: (Million Tons)</u> Feasibility(211):0.55 Pre-feasibility(331):1.15	<u>Reserves: (Million Tons)</u> Proved (111)-2.89 <u>Resources: (Million Tons)</u> Feasibility(211):0.55 Pre-feasibility(331):1.15	No change in reserves as mining operation stopped since 1999-2000
1f	General remarks of inspecting officer on geology, exploration etc.	Entire lase area had been explored as per UNFC Guidelines. During the year 1995-96 total 20 boreholes at 100m x 100x grid pattern were drilled. Hence, no further exploration proposed in plan period.		

2.0 Development

SN	Item	Proposals(2016-17)	Actual work	Remarks
2a	Location of development w.r.t. lease area	No Proposals	NA	Mining operation stopped since 1999-2000 to till date due to pending of Env. Clearance & also ML area was falling under Barda Wildlife Sanctuary. No Approved MP/ROMP for RY
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	No Proposals	NA	
2c	Stripping ratio or ore to OB ratio	Not Proposed	NA	
2d	Quantity of topsoil generation in m ³	Not Proposed	NA, (thin layer of top soil encountered)	
2e	Quantity of overburden generation in m ³	Not Proposed	NA	
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	Mining activity were carried out previously by opencast method & 2 working pits were observed of different dimension with maximum depth of working of about 8 to 9.0m		

3.0 Exploitation

SN	Item	Proposals (2017-18)	Actual work	Remarks
3a	Number of pits proposed for production	No Proposals	NA	Mining operation were stopped since 1999-2000 to till date due to pending of Env. Clearance. Mining lease area was falling within Eco-sensitive Zone of Barda Wildlife Sanctuary No Approved document MP/ROMP for RY. Hence, no proposals.
3b	Quantity of ROM mineral production proposed	No Proposals	NA	
3c	Recovery of salable/usable mineral from ROM production	No Proposals	NA	
3d	Quantity of mineral reject generation	No Proposals	NA	
3e	Grade of mineral reject generation and threshold value declared	No Proposals	NA	
3f	Quantity of sub-grade mineral generation	No Proposals	NA	
3g	Grade of sub-grade mineral generation	No Proposals	NA	
3h	Manual / Mechanised method adopted for segregating from ROM	No Proposals	NA	
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	No Proposals	NA	
3j	Provision of drilling & blasting in mineral benches	No Proposals	NA	
3k	Provision of mining machineries in mineral benches	No Proposals	NA	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	No Proposals	NA	
3m	Total area covered under excavation/pits	8.4966	8.4966	
3n	Ore to OB ratio for the pit/mine during the year	NA	NA	
3o	Total area put in use under different heads at the end of year	Pit- 8.4966 Waste/reject Others- 5.7734	Pit- NA Waste/reject Others- NA	

3p	Production of ROM mineral during last five-year period, as applicable	Yr- 2013-14 Yr- 2014-15 Yr- 2015-16 Yr- 2016-17 Yr- 2017-18	0 0 0 0 0	
3q	General remarks of inspecting officer on method of mining etc.	Open cast mining is proposed with combination of rock breaker, shovel & dumper, occasional drilling blasting also proposed in modified mining plan.		

4.0 Solid Waste Management-Dumping

SN	Item	Proposals (2017-18)	Actual work	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	Mining operation stopped since 1999-2000 to till date due to pending of Env. Clearance. Mining lease area was falling within Eco-sensitive Zone of Barda Wildlife Sanctuary No Approved document MP/ROMP found for RY. Hence, no proposals.
4b	Location of topsoil, OB & mineral reject dumps	No Proposals	NA	
4c	Number of dumps within lease area and outside lease area	None	None	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	No Proposals	NA	
4e	Number of active & alive dumps	None	None	
4f	Number of dead dumps	None	None	
4g	Number of dumps stabilised	No proposals	NA	
4h	Whether Retaining wall or garland drain all along dumps are there	No Proposals	NA	
4i	Length of Retaining wall or garland drain all along dump	No Proposals	NA	
4j	Number of settling ponds	None	None	
4k	Specific comments of inspecting officer	Nil		

5.0 Solid Waste Management-Backfilling

SN	Item	Proposals (2017-18)	Actual work	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	No Proposals	NA	Mining operation stopped since 1999-2000 to till date due to pending of Env. Clearance. Mining lease area was falling within Eco-sensitive Zone of Barda Wildlife Sanctuary
5b	Area under backfilling of mined out area	No Proposals	NA	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	No Proposals	NA	
5d	Total area fully reclaimed & rehabilitated	No Proposals	NA	
5e	General remarks of inspecting officer on backfilling, reclamation etc	Neither any working pits were fully mineral exhausted nor were any such proposals given in previous approved mining plans.		

6.0 Progressive Mine Closure Plan

SN	Item	Proposals (2017-18)	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.	No. Due to mine discontinued.	No. Due to mine discontinued	--
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	No Proposals	Nil	Mine is discontinued Since long back due reason stated as above
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	No Proposals	Nil	
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	No Proposals	Nil	
6e	Compliance of Environmental monitoring (core zone & buffer zone)	No Proposals	Nil	
6f	General remarks of inspecting officer on PMCP compliance & progressive	Mine is discontinued since 1999-2000 due to pending for Env. Clearance & Barda Eco-sensitive Zone. Hence, no such PMCP proposals were given.		

7.0 Mineral Conservation

SN	Item	Proposals (2017-18)	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	No Proposals	Nil	--
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Mechanical	Mechanical	--
7c	Different grade of mineral sorted out at mines	No Proposals	<u>Chemical grade Lst:</u> >92% CaCO ₃ , SiO ₂ < 4.0% <u>Cement Grade:</u> 44-52% CaO, MgO- 3.5(Max)	---
7d	Any beneficiation process at mines	No Proposals	NA	---

7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	As per the proposals given in MP/ROMP, Mineral proposed to be conserved very systematically as entire ROM is consumed in soda ash plant having chemical grade $Lst > 92\% \text{ CaCO}_3$ & in cement plant having cement grade limestone of $< 92\% \text{ CaCO}_3$.
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8.0 Environment

SN	Item	Proposals (2017-18)	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No Proposals	Concurrent use for plantation	
8b	Concurrent use or storage of topsoil	No Proposals	NA	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	No Proposals	NA	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No Proposals	NA	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No Proposals	NA	
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	No Proposals	Mine is discontinued since 1999-2000	
8g	Survival rate	No Proposals	NA	
8h	Water sprinkling on roads to control airborne dust	No Proposals	NA	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines are	Mine is discontinued since 1999-2000 due to pending for Env. Clearance & Barda Eco-sensitive Zone. Hence, no such Env. monitoring proposals were given.		

9.0 Compliance of Rule 45

S.N.	Item	COMMENTS	Remarks
	Status of submission of Online Monthly and Annual returns	M.R. Submitted up to till date -10.01.2019 A.R. submitted up to till date- 30.6.2018	NIL

S.N.	Item	Details GIVEN in A.R.(2017-18)	Observation of I/Officer /Actual reported in Returns	Remarks
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Given	Appointment of Sh. C.M. Dwivedi as Geologist given. He was present during inspection	Mining operation temporarily discontinued/stopped since 1999-2000 to till inspection date due to pending of Env. Clearance and also mining lease
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Given	Pit area-8.659Ha Infrastructure-0.135Ha	

9d	Scrutiny of Annual return on afforestation	Not Given	NA	area was falling within Eco-sensitive Zone of Barda Wildlife Sanctuary
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	Not Given	NA	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM opening & closing stock given as "Nil"	Nil	
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Ex-mine price & production cost furnished as "Nil"	Nil	
9i	Scrutiny of Annual return on fixed assets	Not Given	Nil	
9k	Scrutiny of Annual return on mining machineries	Not Given	Nil	

Remarks: *The above mining lease has been discontinued since 1999-2000 for pending Environmental Clearance. Further, this ML was also falls within Eco Sensitive Zone of Barda Wildlife Sanctuary as per MoEF draft Notification No-S.O.2991(E) dtd 02.11.2015. But, recently MoEF & CC have notified the final ESZ notification dtd 28.04.2017 wherein this mining lease has been kept outside the Eco-Sensitive Zone boundary. In view of these developments party submitted the draft Modified Mining Plan & accordingly inspection of this mine was carried out.*

10- Details of violations observed during current inspection and compliance position of earlier violation pointed out:- The last inspection of mine was carried out on dtd 10.11.2017 and no violations pointed out. Present inspection was carried out in connection with evaluation of Star Ratings Templates/MCDR during inspection but significant violations observed as the mine was temporarily discontinued since 1999-2000.
