

MCDR INSPECTION REPORT**GENERAL**

SN	Particulars	Details
1(a)	Name of the Mine	Vastan Limestone Mine
1(b)	Name of Inspecting Officer & Designation	Shri Sanjaya Kumar Sahoo, Junior Mining Geologist
1(c)	Accompanying Mines Representatives	Mr N K Chauhan, Mr Madhu Ranjan Choudhary and Ms J J Desai
1(d)	Type of Inspection	Star Rating
1(e)	Date of Inspection	17.12.2024
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	80 Ha (Non-forest Land)
3	Mine code	38GUJ15001
4	IBM Registration Number under rule 45 of MCDR, 1988	IBM/502/2011
5	Name of the lessee, Address, phone, email and fax number	M/s Gujarat Industries Power company Limited, GIPCL, Office, PO - Ranoli, 391350. Dist. - Vadodara. Phone no-+91 2629261087, Faxno+912629261112Gujarat. cgmmineoffice@gipcl.com
6	Village	Nogama & Tadkeshwar
7	Taluka/Mandal	Mangrol
8	District	Surat
9	Pin code	394112
10	State	GUJARAT
11	Post office	GIPCL, Nani Naroli
12	Nearest police station	Mosali
13	Nearest Railway station	Kim
14	Date of Grant of Mining Lease	7-12-1998 to 30-08-2026
15	Date of Execution	15-10-1999
16	Date of opening of Mine	15-10-1999
17	Date of first Renewal, if applicable and its period & expiry	NA
18	Date of second Renewal, if applicable and its period & expiry	NA
19	Date of submission of renewal application if Mining Operations are continuing under deemed extension	Expiry: 30-08-2046, vide letter no. MCR-1092-(g-8)-3626-CHH1, dated- 08-11-223
20	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Mrs Vastsala Vasudeva (IAS), Address: Gujarat Industries power Company Ltd, GIPCL, Office, PO - Ranoli, 391350. Dist. - Vadodara. Gujarat. Phone: 0265 2230182, Email: md@gipcl.com , Date of appointment: 20/08/2018
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Mr Prakash Chand, Address: Gujarat Industries power Company Ltd, SLPP, Nani Naroli, Tal -Mangrol, Dist.-Surat, Gujarat. 394110 Phone: 9978937702 Email: cgmmineoffice@gipcl.com Date of appointment: 06/05/2010
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Mr Madhu Ranjan Choudhary, Address: Gujarat Industries power Company Ltd, SLPP, Nani Naroli, Tal -Mangrol, Dist.-Surat, Gujarat. 394112 Phone: 9099045784 Email: mrchoudhary@gipcl.com Date of appointment: 16/05/2024
23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Mr Vinod Kumar Singh, Qualification: Diploma in Mining with second class Manager Competency under MMR,1961 Experience-30 years, Address: Gujarat Industries power Company Ltd, SLPP, Nani Naroli, Tal -Mangrol, Dist.-Surat, Gujarat. 394112

		Phone: 9909992510 Email: vrsingh@gipcl.com, Date of appointment in the mine: 16/05/2024
24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 55& carrying out their duties as per rule 56 &57.	Ms Janki Desai
25	Date of Approval of Mining Plan/Modified Mining Plan /Review of Mine Plan with five-year period and specific condition in approval letter, if any.	Mining Plan with Review of Progressive Closure Plan was approved for a period of five (5) years from 2022-23 to 2026-27 on dated 17-12-2021, vide File No: 684(4)(1)/MP-362(73)/2021-22/2116 GNR
26	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	NA
27	Mineral(s) granted in lease and proved for mining	Limestone
28	Method of Mining(Open cast, Underground)	open cast
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. –

1.0 Exploration

SN	Item	Proposals (2023-24)	Actual work (2023-24)	Remarks
1a	Backlog of previous year	No Proposal	Not Applicable	
1b	Exploration over lease area for Geological axis 1 or 2.	No Proposal	Not Applicable	
1c	Exploration Agency & Expenditure in lakh Rupees during the year	No Proposal	Not Applicable	
1d	Balance area to be explored to bring Geological axis in 1 or 2	No Proposal	Not Applicable	
1e	Balance reserves as on 31.03.2024	UNFC Code 111: 1300426.16 MT		
1f	General remarks of inspecting officer on geology, exploration etc.	Total area is already explored to G1. No violation found.		

2.0 Development

SN	Item	Proposals (2023-24)	Actual work (2023-24)	Remarks
2a	Location of development w.r.t. lease area	Pit 3 21.38949° to 21.39230° N 73.07559° to 73.07795° E	Pit 3 N21°23'23.9" & E073°04'39.8"	Size of Pit 3: 197m x 71m x 3m
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	3m in Mineral & 3m in Overburden	3m in Mineral & 3m Overburden	
2c	Stripping ratio or ore to OB ratio	1:1.266	1:1.16	
2d	Quantity of topsoil generation in m ³	52760	23988.1274	
2e	Quantity of overburden generation in m ³	236835	141245.28	
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	Pit profiles are well maintained. Approximately benches in OB are advanced about 15m w.r.t mineral benches. Topsoil generated was used for plantation.		

3.0 Exploitation

SN	Item	Proposals (2023-24)	Actual work (2023-24)	Remarks
3a	Number of pits proposed for production	One (Pit-3)	One (Pit-3)	
3b	Quantity of ROM mineral production proposed in MT	300000	165189.84	
3c	Recovery of saleable/usable mineral from ROM production in MT	300000	165189.84	
3d	Quantity of mineral reject generation	No Proposal	Not Applicable	
3e	Grade of mineral reject	No Proposal	Not Applicable	

	generation and threshold value declared				
3f	Quantity of sub-grade mineral generation	No Proposal		Not Applicable	
3g	Grade of sub-grade mineral generation	No Proposal		Not Applicable	
3h	Manual / Mechanised method adopted for segregating from ROM	No Proposal		Not Applicable	
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	No Proposal		Not Applicable	
3j	Provision of drilling & blasting in mineral benches	No Proposal		Not Applicable	
3k	Provision of mining machineries in mineral benches	Dozer, Dumper, Excavator, Water tanker		Back hoe, front end loader, Dozer, Dumper, Water tanker	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	3m in Mineral & 3m in Overburden		3m in Mineral & 3m Overburden	
3m	Total area covered under excavation/pits in Ha	34.6391		22.578	
3n	Ore to OB ratio for the pit/mine during the year	1:1.266		1:1.16	
3o	Total area put in use under different heads at the end of year	43.3811 ha		Already exploited and abandoned by opencast (O-C) mining: 17.167 Area under pits: 5.411 Ha Buildings, roads etc.: 2.562 Ha Reclaimed-rehabilitated: 15.644 ha Work done under PMCP: 4.089 Ha	
3p	Production of ROM mineral during last five-year period, as applicable in MT	2019-20	424739	361452	
		2020-21	422153	350911	
		2021-22	424316	277051	
		2022-23	300000	251128.96	
		2023-24	300000	165189.84	
3q	General remarks of inspecting officer on method of mining etc.	Mining operations were carried out during inspection as per plan.			

4.0 Solid Waste Management-Dumping

SN	Item	Proposals (2023-24)	Actual work (2023-24)	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	No Proposal	Not Applicable	No Dumping work was proposed. Topsoil was proposed to use for plantation and OB for backfilling.
4b	Location of topsoil, OB & mineral reject dumps	No Proposal	Not Applicable	
4c	Number of dumps within lease area and outside lease area	No Proposal	Not Applicable	
4d	Location of dumps w.r.t. ultimate pit limit	No Proposal	Not Applicable	
4e	Number of active & alive dumps	No Proposal	Not Applicable	
4f	Number of dead dumps	No Proposal	Not Applicable	
4g	Number of dumps stabilised	No Proposal	Not Applicable	
4h	Whether Retaining wall or garland drain all along dumps are there	No Proposal	Not Applicable	

4i	Length of Retaining wall or garland drain all along dump	No Proposal	Not Applicable	
4j	Number of settling ponds	No Proposal	Not Applicable	
4k	Specific comments of inspecting officer	Top soil used for plantation and Overburden generated during the year were used for backfilling.		

5.0 Solid Waste Management-Backfilling

S N	Item	Proposals (2023-24)	Actual work (2023-24)	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	No Proposal	Not Applicable	
5b	Area under backfilling of mined out area	3.6436 ha	For 2023-24-4.089Ha Cumulative-15.6436Ha	Backfilling is carried out in exhausted pit No. 1 &2 (Partly Backfilled)
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	52760 m ³	23988 m ³	Used for plantation
5d	Total area fully reclaimed & rehabilitated	No Proposal	Not Applicable	
5e	General remarks of inspecting officer on backfilling, reclamation etc	Backfilling has been done. Location of backfilling taken at Pit-2 is N21°23'51.9" & E073°04'50.9'.		

6.0 Progressive Mine Closure Plan

SN	Item	Proposals (2023-24)	Actual work (2023-24)	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly - Rule 26(2). Details should be given in the format as given in Annexure-20.	Yes	Yes, for FY 2023-24 Report submitted online, Dated: 24-06-2024	
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 Proposal	Area of plantation-2.5 Ha 1700 Plants Cumulative no. of plants- 14066	
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	Backfilling: 3.6436 Ha	Backfilling: 4.089 Ha Cumulative Backfilling: 15.644 Ha	
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	No Proposal	Not Applicable	
6e	Compliance of Environmental monitoring (core zone & buffer	Yes	YES	

	zone)			
6f	General remarks of inspecting officer on PMCP compliance & progressive	Backfilling has been done. Location of backfilling taken at Pit-2 is N21°23'51.9" & E073°04'50.9". Location of plantation taken is N21°23'56.3" & E073°04'58.4".		

7.0 Mineral Conservation

SN	Item	Proposals (2023-24)	Actual work (2023-24)	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	300000 MT	165189.840 MT	.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Mechanical Crushing	Mechanical Crushing	
7c	Different grade of mineral sorted out at mines	No Proposal	Not Applicable	
7d	Any beneficiation process at mines	No Proposal	Not Applicable	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	No issue on mineral conservation was found. Only ROM Mechanical crushing is done for sizing.		

8.0 Environment

SN	Item	Proposals (2023-24)	Actual work (2023-24)	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	52760 cum	23988 cum	Yes, total 23988 cum top soil generated in 2023-24 is being used for spreading on backfilled area for plantation.
8b	Concurrent use or storage of topsoil	For plantation	For plantation	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	No Proposal	Not Applicable	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	OB material shall be carried out for backfilled in mined out area.	Use of OB/IB is being carried out for backfilling in mined-out area restoring land	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc.)	No Proposal	Not Applicable	
8f	Baseline information on existence of plantation & additional plantation done	-	2.5 Ha area (1700 plants) Cumulative no. of plants- 14066	2.5 Ha area (plants survived -1370 out of 1700 saplings planted)
8g	Survival rate	--	81%	
8h	Water sprinkling on roads to control airborne dust	Water sprinkling for dust emission control	Regular mobile water tanker/ sprinkler are being used for dust suppression.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Water sprinkling through water tanker was seen during inspection. Aesthetic beauty in and around mines area is good with more plantation done.		

9.0 Compliance of Rule 45

S. N	Item	COMMENTS		Remarks
	Status of submission of Monthly and Annual returns	Monthly Return of January-2025 was submitted on 05-02-2025 and Annual return was submitted on 24-06-2024.		.
S. N	Item	Details GIVEN in A.R.	Observation of I/Officer	Remarks

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Manager: Mr Madhu Ranjan Choudhary Mining Engineer: Mr Vinod Kumar Singh Geologist Ms Janki Desai	No violation found
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc. in Ha	Already exploited and abandoned by opencast (O-C) mining: 17.167 Area under pits: 5.411 Ha Buildings, roads etc.: 2.562 Ha Reclaimed-rehabilitated: 15.644 ha Work done under PMCP: 4.089 Ha	
9d	Scrutiny of Annual return on afforestation	1700 Plants Survival rate- 81%	
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	Nil	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM O/S and C/S: NIL ROM Production: 165189.84 MT	
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Sale value: NIL, Captive EMP: Rs. 429.21 per tonne Production cost: Rs. 429.21 per tonne	
9i	Scrutiny of Annual return on fixed assets	Rs. 429594000	
9k	Scrutiny of Annual return on mining machineries	Back hoe: 1.020 cum-01, Back hoe: 0.020 cum-01, Back hoe: 0.600 cum-02, front end loader: 2.100 cum-01, Dozer: 85.000 HP-01, Dumper: 25.000 Tonne-08, Water tanker: 12000 Litre-01	

10- Details of violations observed during current inspection and compliance position of earlier violation pointed out: No violation for the year 2022-23.

- No violation was given during previous year inspection.
- No violation was pointed out during current year inspection.
- Self-assessment date of Star Rating by the Lessee is 26-06-2024. 5 Star was given by the Lessee. It has been validated and given 5 Star.
- Drone data was submitted by the Lessee on 22-05-2024, it has been referred back. The Drone was resubmitted and found as per SOP.

Sanjaya Kumar Sahoo
Junior Mining Geologist
Indian Bureau of Mines