

## INSPECTION REPORT

### 1.0 GENERAL

SN	Particulars	Details
1	Name of the Mine	Harnasa Limestone Mine
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	Total Lease Area: 141.8538 ha., Non-Forest land:
3	Mine code	38GUJ08155
4	IBM Registration Number under rule 45 of MCDR, 1988	IBM/5292/2011
5	Name of the lessee, Address, phone, email and fax number	M/s. GHCL LIMITED, At & Post: - Sutrapada, Dist.:- Gir-Somnath-362265, Gujarat. Phone:- 02876305564/305377, E-Mail:- <a href="mailto:mining@ghcl.co.in">mining@ghcl.co.in</a> , <a href="mailto:r Chopra@ghcl.co.in">r Chopra@ghcl.co.in</a> , Fax:- 02876263480
6	Village	Harnasa
7	Taluka/Mandal	Sutrapada
8	District	Gir-Somnath
9	Pincode	362275
10	State	Gujarat
11	Post office	Lati
12	Nearest police station	Sutrapada Police station
13	Nearest Railway station	Somnath Railway station
14	Date of Grant of Mining Lease	09/12/1985
15	Date of Execution	15.04.1986
16	Date of opening of Mine	01/01/1988
17	Date of first Renewal, if app.	14.4.2006
18	Date of second Renewal, if applicable and its period & expiry	No renewal
19	Date of submission of renewal application if Mining Operations are continuing under deemed extension	05/4/2005
20	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Mr. Raman Chopra, M/s GHCL Ltd, Corporate Office: B-38, institutional area, sector-1, Noida – 201301, (U.P.) Date of appointment-05.05.2012
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Mr. Manish Kumar, M/s GHCL Ltd, At & Post – Sutrapada, Dist.:- Gir-Somnath Pin- 362275 (Gujarat), Ph. No. 9328849666, Date of Appointment:-01/02/2014
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Devanand Roy, GHCL LTD, Sutrapada-362275 , Gir Somnath, 9099093088, <a href="mailto:devanandroy@ghcl.co.in">devanandroy@ghcl.co.in</a> Date of appointment:- 31/8/2009

23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Devanand Roy, BE (Mining), GHCL LTD, Sutrapada-362275 , Gir Somnath, 9099093088, Exp-20Years devanandroy@ghcl.co.in Date of appointment:- 31/8/2009
24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Yes, Geologist :- R.K.Pathak M/s GHCL Ltd, At & Post – Sutrapada, Dist.:- Gir-Somnath Pin-362275 (Gujarat), Ph. No. 9099093080, Qualification :- B.E. mining, Total Experience :- 13 Years Email :- <a href="mailto:rajeshtiwari@ghcl.co.in">rajeshtiwari@ghcl.co.in</a> ,
25	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	Date of Approval of mining Plan:- 04/1/2017, Period of Mining Plan:- 2017-18 to 2021-22
26	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	Date of Approval of mining Plan:- 04/1/2017, Period of Mining Plan:- 2017-18 to 2021-22
27	Mineral(s) granted in lease and proved for mining	Limestone
28	Method of Mining(Open cast, Underground)	Open cast
29	Category (Fully Mechanized, Others or Manual)	B
30	Captive/Non Captive	CAPTIVE

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

SN	Item	Proposals (2016-17)	Actual work	Remarks
1a	Backlog of previous year	Not proposed	--NIL--	The mine lease area is Fully explored.
1b	Exploration over lease area for Geological axis 1 or 2.	Not proposed	--NIL--	
1c	Exploration Agency & Expenditure in lakh Rupees during the year	Not applicable		
1d	Balance area to be explored to bring Geological axis in 1 or 2	No proposal	--	--
1e	Balance reserves as on 01.04.2017	2833509MT Chemical grade		--
1f	General remarks of inspecting officer on geology, exploration etc.	NIL		

## **2.0 Development**

SN	Item	Proposals(2016-17)	Actual work	Remarks
2a	Location of development w.r.t. lease area	Not proposed, only for exploitation	As per proposal	--
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	No separate benches,	Area is devoid of OB	-
2c	Stripping ratio or ore to OB ratio	NO Proposal	Area is devoid of OB	--
2d	Quantity of topsoil generation in m3	NO Proposal	NIL	-
2e	Quantity of overburden generation in m3	NO Proposal	NIL	-
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	NIL		

## **3.0 Exploitation**

SN	Item	Proposals (2016-17)	Actual work	Remarks
3a	Number of pits proposed for production	8pits, HA-1, HB-5, HC-1,2&3 , HD-1 &2	8pits, HA-1, HB-5, HC-1,2&3 , HD-1 &2 as per grade require.	Lagging in ROM Production is due to lack of plant requirement/ grade problems
3b	Quantity of ROM mineral production proposed	173390MT	113256 T	
3c	Recovery of salable/usable mineral from ROM production	154317	102763	
3d	Quantity of mineral reject generation	19073	10493	
3e	Grade of mineral reject generation and threshold value declared	Undersize chemical grade Limestone	Undersize Limestone is spreading on L/s	
3f	Quantity of sub-grade mineral generation	NIL	NIL	
3g	Grade of sub-grade mineral generation	NP	NIL	
3h	Manual / Mechanised method adopted for segregating from ROM	Manual	As proposed.	
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	Not Proposed	NIL	
3j	Provision of drilling & blasting in mineral benches	Drilling and Blasting by Jack Hammer of 32mm dia.	Not required.	
3k	Provision of mining machineries in mineral benches	Tipper/Truck of capacity 10MT	Tipper/Truck of capacity 10MT	
3l	Whether height of benches in overburden and mineral suitable for	Yes	Yes	--

	method of mining proposed in MP/SOM			
3m	Total area covered under excavation/pits	30.69HA	25.14HA	-
3n	Ore to OB ratio for the pit/mine during the year	Not Proposed	NIL	-
3o	Total area put in use under different heads at the end of year	Pit-30.69,Reject- 1.92 Infrastructure2.13,Road-1.98,Green belt-3.5	Pit-25.14 Infrastructure-3.728 Green Belt-3.7	
3p	Production of ROM mineral during last five-year period, as applicable	Ist Yr(12-13)-173181 IInd Yr(13-14)-173536 IIIrd Yr(14-15)-173154 IVth Yr(15-16)-173245 Vth Yr(16-17)-173390	IstYr-215993 IIndYr-212367 IIIrdYr-173200 IVthYr-129839 VthYr-113256	
3q	General remarks of inspecting officer on method of mining etc.	---		

#### **4.0 Solid Waste Management-Dumping**

SN	Item	Proposals (2016-17)	Actual work	Remarks	
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	Not proposed	NIL	-	
4b	Location of topsoil, OB & mineral reject dumps			-	
4c	Number of dumps within lease area and outside lease area			-	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)			-	
4e	Number of active & alive dumps			-	
4f	Number of dead dumps			-	
4g	Number of dumps stabilised			-	
4h	Whether Retaining wall or garland drain all along dumps are there			--	-
4i	Length of Retaining wall or garland drain all along dump			--	-
4j	Number of settling ponds			--	-
4k	Specific comments of inspecting officer	---			

#### **5.0 Solid Waste Management-Backfilling**

SN	Item	Proposals (2016-17)	Actual work	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	Fully mined out	Fully mined out	--

5b	Area under backfilling of mined out area	Not Proposed	NIL	--
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area	Not Proposed	NIL	--
5d	Total area fully reclaimed & rehabilitated	Not Proposed	18Ha	-
5e	General remarks of inspecting officer on backfilling, reclamation etc	---		

## **6.0 Progressive Mine Closure Plan**

SN	Item	Proposals (2016-17)	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly - Rule 23E(2).	Wire fence+post plantation care. 1350Plantation, 234m fencing done.	Annual return for the PMCP is submitted with in stipulated time.	--
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	NP 0.40 Ha 400 saplings  --- Not Proposed  Not Proposed	NIL 1.20 Ha 1350 Saplings  ---- NIL  NIL	
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	Not Proposed	NIL	--
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	Not Proposed	NIL	--
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Yes, Comet consultancy, Rajkot	Yes	
6f	General remarks of inspecting officer on PMCP compliance & progressive	----		

## **7.0 Mineral Conservation**

SN	Item	Proposals (2016-17)	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	-	Utilized Size & grade as per plant requirement.	--
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	B-category	B-category	
7c	Different grade of mineral sorted out at mines	Not Proposed	Chemical Grade and Cement Grade	
7d	Any beneficiation process at mines	Not Proposed	NIL	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	NIL		

## **8.0 Environment**

SN	Item	Proposals (2016-17)	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Not Proposed	NIL	--
8b	Concurrent use or storage of topsoil	Not Proposed	NIL	--
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Not Proposed	NIL	-
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Not Proposed	NIL	-
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not Proposed	NIL	-
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	PLANTS: 400 Fencing-434M	Planted: 1350 Fencing-434M	--
8g	Survival rate	50-55%	48	--
8h	Water sprinkling on roads to control airborne dust	Water sprinkling	Water sprinkling by tankers.	--
8i	General remarks of inspecting officer on aesthetic beauty in and around mines are	NIL		

## **9.0 Compliance of Rule 45**

S.N.	Item	COMMENTS	Remarks
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	Status of submission of Online Monthly and Annual returns	M.R. Submitted up to till date –June-2017 A.R. submitted up to till date-2016-17.		The lessee/ party has been submitted the online annual return on IBM website for the year 2016-17 on 29.6.17.
S. N.	Item	Details GIVEN in A.R.( 2016-17)	Observation of I/Officer /Actual reported in Returns	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer & Geologist have been appointed as per provision of rules as per category of mines.		
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Area under abanded & current O/c working- 8&25.14Ha, Reclaimed- 18Ha, Plantation- 2.0Ha, Infra-3.7Ha	--	
9d	Scrutiny of Annual return on afforestation	400Nos Plantation 434m fencing	--	
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	The OB/MR shown NIL	Advised to put MR in closing stock, which ever generated instead of backfill.	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	L/S-O/s-0, Salable Production & Dispatch-102760.3T, C/stock-0,	--	
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Ex Mine Price-448 & Cost of production- 451.6Rs/T, Captive use	--	
9i	Scrutiny of Annual return on fixed assets	The fixed assets given.	--	
9k	Scrutiny of Annual return on mining machineries	As proposed, given in returns.	----	

10- Details of violations observed during current inspection and compliance position of earlier violation pointed out:- The RMP was approved on 04.1.2017 for the period of 2017-18 to 2021-22. Presently no significant violation observed.