

MCDR INSPECTION REPORT

1.0 GENERAL

SN	Particulars	Details
1(a)	Name of the Mine	Bhimdeol limestone Mine
1(b)	Name of Inspecting Officer & Designation	Sanjay M. Girhe, Sr. Mining Geologist
1(c)	Accompanying Mines Representatives	Sh. Pathak, Manager(Geology), Vinod Kumar Mines Manager & Surveyor
1(d)	Type of Inspection	ROMP/Star Ratings/MCDR
1(e)	Date of Inspection	02.02.2019
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	56.3517Ha – Non Forest Area Nil – Forest Area
3	Mine Code	38GUJ08348
4	IBM Registration Number under rule 45 of MCDR, 1988	IBM/5292/2011
5	Name of the lessee, Address, phone, email and fax number	GHCL LTD, Taluka-Sutrapada , Distt- Gir-Somnath-362275,
6	Village	Sutrapada
7	Taluka/Mandal	Sutrapada
8	District	Gir-Somnath
9	Pincode	362275
10	State	Gujarat
11	Post office	Sutrapada
12	Nearest police station	Sutrapada
13	Nearest Railway station	Somnath
14	Date of Grant of Mining Lease	05.06.2007
15	Date of Execution	15.09.2008 (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	13.11.2009
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	NA
20	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Shri Raman Chopra,B-38, Institutional area, Sector-1,Noida-201301 (U.P.),Email-rchopra@ghcl.co.in, 91-120-2535335 ,3358000 Date of Appointment-7.05.2012
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Sri Manish Kumar , GHCL LTD , At& Post - Sutrapada ,Distt-Gir-Somnath ,Gujarat-362275 , 9328849666,manishkumar@ghcl.co.in , 02876263480,6.02.2014
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Vinod Kumar , GHCL LTD , At& Post -Sutrapada ,Distt-Gir-Somnath ,Gujarat-362275 , 9099093139 vinodkumar@ghcl.co.in , Date of appointment-18.12.2014
23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Vinod Kumar , GHCL LTD , At& Post -Sutrapada ,Distt-Gir-Somnath ,Gujarat-362275 , 9099093139 vinodkumar@ghcl.co.in B.E(Mining), Second Class competency certificate,Experience-14years.
24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Yes, Shree R.K. Pathak appointed as Geologist, Date of appointment: 29/01/2012

25	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	Mining Plan approved vide letter No-682(23)(165)/2001/MCCM(N) UDP Dated 27.02.2002, No any specific condition in approval letter. Five year from date of opening of mines. Modified Mining Plan approved vide letter No-682(23)(735)/2010/MCCM(N) UDP Dated 28.07.2011
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-682(23)(735)/2010/MCCM(N) UDP Dated 06.06.2014 for period 2014-15 to 2018-19.
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)	Others
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 (2017-18)	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	G1 level area-22.55Ha G2 level area-19.36Ha G3 level area-14.44Ha	14 DTH boreholes were drilled
1c	Exploration Agency & Expenditure in lakh Rupees during the year	No Proposals for exploration on for G1 or G2 axis	Exploration done by company's drilling machine & Geologist team.	
1d	Balance area to be explored to bring Geological axis in 1 or 2	Five boreholes of 10m depth were proposed to prove continuity of limestone in depth at different locations.	14 boreholes were drilled to prove continuity of limestone in depth at different location in the year 18-19.	
1e	Balance reserves as on 01.04.2018...	<u>Reserves: (Million Tons)</u> Proved (111)-3.47 <u>Resources: (Million Tons)</u> Indicated Mineral Resources(332):1.57 Inferred Resources(331):1.57	<u>Reserves: (Million Tons)</u> Proved (111)-3.31 <u>Resources: (Mill Tons)</u> Feasibility(211):1.83 Indicated Mineral(332):1.57 Inferred Mineral (333):1.57	
1f	General remarks of inspecting officer on geology, exploration etc.	Entire lease area not explored fully as per UNFC Guidelines. Accordingly, exploration proposed by 36 boreholes in submitted Review of Mining Plan period.		

2.0 Development

SN	Item	Proposals (2017-18)	Actual work (2017-18)	Remarks
2a	Location of development w.r.t. lease area	Production proposed in Block-A & B from 46.5mRL to 43.5mRL in different pits	Development/production carried out at proposed locations with minor variations	--
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	No Proposals	No Top soil or overburden available so no separate benches in	--

			O.B or topsoil.	
2c	Stripping ratio or ore to OB ratio	No Proposals	No OB in the area.	--
2d	Quantity of topsoil generation in m3	As per proposal the area is devoid of topsoil in the area so there will be no generation of topsoil.	No topsoil has been generated in the area.	--
2e	Quantity of overburden generation in m3	No Proposals	Nil	--
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	There are total 07 existing pits area in the lease area of different dimensions where maximum dimension of pit No-4 (250m x 137m x 3.5m depth). Maximum depth of mineralisation established pit no-4 of 3.5m.		

3.0 Exploitation

SN	Item	Proposals (2017-18)	Actual work (2017-18)	Remarks
3a	Number of pits proposed for production	Total no of Pits-Eight(2,4,5,8,14, 17,19,20)	Working carried out at proposed locations with minor deviations	--
3b	Quantity of ROM mineral production proposed	166784MT	45971.81MT	--
3c	Recovery of salable/usable mineral from ROM production	150106 (Sized Limestone for Soada ash plant)	41374.62 (Sized Limestone for Soda ash plant)	--
3d	Quantity of mineral reject generation	8339 (Under sized limestone)	4597 (Under sized limestone)	--
3e	Grade of mineral reject generation and threshold value declared	Sized Limestone 50-100mm having CaCo3% >92%	Sized Limestone 50-100mm having CaCo3% >92%	--
3f	Quantity of sub-grade mineral generation	No proposal	Not applicable.	--
3g	Grade of sub-grade mineral generation	No proposal	No generation	--
3h	Manual / Mechanised method adopted for segregating from ROM	Manual	Manual sorting at mine head	--
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	Mild blasting proposed to be carried out as when required. Holes proposed to be drilled by jack hammer and blasted using ANFO and high explosives as booster charge.	Drilling & blasting carried out as per the proposals given in approved mining plan	--
3k	Provision of mining machineries in mineral benches	Hydraulic Excavator-1.0CuM bucket capacity, Rock breaker-Capacity 7MT/Hour Tipper-10-15MT capacity	Hydraulic Excavator-1.0CuM bucket capacity, Rock breaker-Capacity 7MT/Hour Tipper-10-15MT capacity	--
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed	Height of benches in overburden and mineral suitable for method of	No O.B so no bench in overburden. Bench in mineral suitable for	--

	in MP/SOM	mining.	mining proposed.	
3m	Total area covered under excavation/pits	16.242Ha	8.17Ha	--
3n	Ore to OB ratio for the pit/mine during the year	No OB	No OB	--
3o	Total area put in use under different heads at the end of year	Pit-16.242 Ha Infrastructure & Road - 2.958 Others-2.52	Pit-8.17 Ha Infrastructure & Road- 3.050 Others-3.050	--
3p	Production of ROM mineral during last five-year period, as applicable	2014-15: 166662MT 2015-16:166488MT 2016-17:166569MT 2017-18:166784MT 2018-19: -166731MT	2014-15: 37987MT 2015-16:40785MT 2016-17:36508MT 2017-18:46018MT 2018-19:41729MT	--
3q	General remarks of inspecting officer on method of mining etc.	Mechanised open cast working for shallow depth chemical grade limestone by using excavator & tipper combination with shallow drilling & blasting using jack hammer.		

4.0 Solid Waste Management-Dumping

SN	Item	Proposals (2017-18)	Actual work (2017-18)	Remarks	
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	No Proposal	Not required	Mining lease area completely devoid of any sort of OB & top soil.	
4b	Location of topsoil, OB & mineral reject dumps	No Proposal	Not required		
4c	Number of dumps within lease area and outside lease area	No Proposal	Not required		
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	No Proposal	Not required		
4e	Number of active & alive dumps	No Proposal	Not required		
4f	Number of dead dumps	No Proposal	Not required		
4g	Number of dumps stabilised	No Proposal	Not required		
4h	Whether Retaining wall or garland drain all along dumps are there	No Proposal	Not required		
4i	Length of Retaining wall or garland drain all along dump	No Proposal	Not required		
4j	Number of settling ponds	No Proposal	Not required		
4k	Specific comments of inspecting officer	Mining lease area completely devoid of any sort of OB & top soil and hence maximum items details are not applicable.			

5.0 Solid Waste Management-Backfilling

SN	Item	Proposals (2017-18)	Actual work (2017-18)	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	No Proposal	Not required	Maximum pits have not been mineral exhausted so far and hence not applicable reclamation & rehabilitation. Minor 0.10Ha area is reclaimed &
5b	Area under backfilling of mined out area	No Proposal	Not required	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	No Proposal	Not required	
5d	Total area fully reclaimed &	No Proposal	Not required	

	rehabilitated		rehabilitated
5e	General remarks of inspecting officer on backfilling, reclamation etc	Nil	

6.0 Progressive Mine Closure Plan

SN	Item	Proposals (2017-18)	Actual work (2017-18)	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.	To be submitted in stipulated time limit	Yes Submitted within time limit	--
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	Not required	--
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 Proposal	Not required	--
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	i) Afforestation- 400 ii) Area rehabilitated (ha) -0.4 iii) Method of rehabilitation-Plantation	i) Afforestation- 420 ii) Area rehabilitated (ha) - 0.4 iii) Method of rehabilitation-Plantation	--
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Regular monitoring in Core & Buffer Zone proposed for Ambient Air Quality, Surface water Quality, Ground water quality, Noise level, Noise vibration.	Monitoring carried out & monitoring results of these parameter found within limits	--
6f	General remarks of inspecting officer on PMCP compliance & progressive	PMCP report in prescribed form submitted within and PMCP works carried out as per the proposals. Aesthetic beauty around mine office is very excellent 7 different species of saplings have been planted.		

7.0 Mineral Conservation

SN	Item	Proposals (2017-18)	Actual work (2017-18)	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	166784 MT ROM proposed to be produced	Total chemical grade limestone despatched- 41416MT	Lagging in proposed production
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Manual	Manual	
7c	Different grade of mineral sorted out at mines	Chemical grade Lst: >92% CaCO ₃ < 4.0% SiO ₂ Cement Grade Lst: 44-52% CaO, MgO-3.5(Max)	Chemical grade Lst: >92% CaCO ₃ < 4.0% SiO ₂ Cement Grade Lst: 44-52% CaO, MgO-3.5(Max)	Sized Limestone 50mm-100mm for chemical grade limestone in Soda ash plant
7d	Any beneficiation process at mines	No Beneficiation proposed.	Not required.	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	Mineral is being conserved by utilizing Sized Limestone of 50mm-100mm of chemical grade limestone in Soda ash plant having t>92% CaCO ₃ & rest under sized limestone being stacked separately.		

8.0 Environment

SN	Item	Proposals (2017-18)	Actual work (2017-18)	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Proposed separate removal and utilization of topsoil.	Separate removal and utilization of topsoil done.	Concurrent use done with temporary storage
8b	Concurrent use or storage of topsoil	Yes	Yes, concurrent use done with temporary storage.	--
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Temporary stacking of Top soil proposed	Yes, Temporary stacking of Top soil done	--
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)	400	420	--
8g	Survival rate	30%	40%	--
8h	Water sprinkling on roads to control airborne dust	Water spraying on mines haul road, loading, unloading points proposed.	Regular water spraying carried out.	--
8i	General remarks of inspecting officer on aesthetic beauty in and around mines are	Aesthetic beauty in and around mine area is excellent as different species of saplings have been planted. Gardening also done very beautifully near to mines office.		

9.0 Compliance of Rule 45

S. N.	Item	COMMENTS	Remarks
	Status of submission of Monthly and Annual returns	M.R. Submitted upto – January-2019 A.R. submitted upto- 2017-2018	

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	Given	Mr. Vinod Kumar & R.K.Pathak appointed as Mining Engineer & geologist.	Both Mining Eng. & Geologist were present during inspection.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Given	Pit-8.17 Ha Infrastructure & Road-3.050 Others-3.050	Deviation observed w.r.t. proposed area in approved MP. Violation pointed out
9d	Scrutiny of Annual return on afforestation	420 Nos saplings planted with survival rate of 61%	Advised for more plantation & more survival rate in ML area	Violation of Rule 45(5)(C) of MCDR,2017 pointed out for the discrepancies observed in annual returns submitted for the year 2017-18. During the inspection it was advised to Mine representative to submit the AR & MR correctly for correct cost of production & Ex-mine price as per the guidelines in future.
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	Given as 4142 MT as mineral reject as undersized limestone, Grade<90% CaCo3	Advised to stack these undersized material on earmarked location	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Reported as opening Stock-Nil Closing Stock-Nil	Nil	
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Reported Ex-mine price-345.25/MT Sale Value-Not given Cost of production-345.25/MT	Cost of production & Ex-mine price are same. Sale value not furnished (Captive consumption)	
9i	Scrutiny of Annual return on fixed assets	Not Given	Nil	
9k	Scrutiny of Annual return on mining machineries	Hydraulic Excavator-1.0CuM bucket capacity, Rock breaker-Capacity 7MT/Hour Tipper-10-15MT capacity		

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 25.12.2013 and violations of rules 22(1), 23E(2), 42(1)(c)(ii), 45(5)(b) & 46 were pointed and the same were compiled. This inspection was carried out in connection with Review of Mining Plan/Evaluation of Star Ratings Templates/MCDR and during the inspection violations of rules 31(4), 35(2), 45(5)(C) & 54(a) were pointed out and accordingly violation letter was issued.
