

MCDR INSPECTION REPORT

General

S.N.	Particulars	Details
1	Name of the Mine Date of Inspection: Name of Inspecting Officer	Paraswani Limestone Mine 04/08/2017 Rudra N. Mishra (SMG)
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	Non- forest - 997.355 hect. Forest Land: Nil
3	Mine code	38MPR28017
4	IBM Registration Number under rule 45 of MCDR,1988	IBM/441/2011
5	Name of the Lease, Address, Phone, email and fax number	UltraTech Cement limited Hirmi Cement Works PO – Hirmi, Dist. BalodaBazar- Bhatapara Phone - 07726281217/18/19/20/21 Fax - 07726-281572
6	Village	Hirmi
7	Taluka/Mandal	Simga
8	District	BalodaBazar- Bhatapara
9	Pincode	493195
10	State	Chhattisgarh
11	Post Office	Hirmi
12	Nearest Police Station	Suhela
13	Nearest Railway Station	Tilda
14	Date of Grant of Mining Lease	15.12.1992
15	Date of Execution	22.02.1993
16	Date of opening of Mine	01.04.1993
17	Date of First Renewal, if applicable and its period & expiry	22.02.2013 for 30 years and valied up to 21.02.2043
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	09.02.2012
20	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Mr.Omprakash Purnamalka Ahura Centre, B Wing, 2nd floor, Mahakali Caves Road Andheri (E) Mumbai 400093. DOA: 18.07.2017
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Shri V. D. Mali UltraTechCement Ltd. Hirmi Cement Works, PO – Hirmi, Dist. BalodaBazar- Bhatapara 09826909505 Phone - 07726281217/18/19/20/21 Fax - 07726-281572 vijaykumar.mali@adityabirla.com DOA:15.03.2016

22	Name of the Mine Manager with Address, phone, email, fax number and date of appointment in mines	Shri O. R. Khelkar UltraTech cement ltd. Hirmi Cement Works, PO – Hirmi, Dist. BalodaBazar- Bhatapara 09826300229 Phone - 07726281217/18/19/20/21 Fax - 07726-281572 omprakash.khelkar@adityabirla.com DOA: 24.01.2014
23	Name of the Mining Engineer, Qualification and total experience with address, phone, email, fax number and date of appointment in the mine	Shri Abishek Bharatdwaj B. E Mining, Total experience:13years UltraTech cement ltd. Hirmi Cement Works, PO – Hirmi, Dist. BalodaBazar- Bhatapara 09826429066 Phone - 07726281217/18/19/20/21 Fax - 07726-281572 abhishek.bharadwaj@adityabirla.com DOA: 23.11.2012
24	Whether Geologist and Mining Engineer appointment in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Yes
25	Date of Approval of Mine Plan/Modified Mine Plan with five- year period and specific condition in approval letter, if any.	Date of Approval of Modified Mining Plan 12.08.2015.andvalid up to March 2018.
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 Scheme of Mining 28.08.2008
27	Mineral(s) granted in lease and approved for Mining	Limestone
28	Method of Mining (Opencast, Underground)	Opencast
29	Category (Fully Mechanised, Others or Manual)	Fully mechanised
30	Captive/Non-Captive	Captive mine

Exploration

S.N.	Item	Proposals (2016-17)	Actual Work (2016-17)	Remarks
1a	Backlog of previous year	NIL	NIL	Entire lease area explored in 150X 150 meter grid interval which is as per Guide line for the estimation of G1 Category of reserve hence no additional exploration proposed.
1b	Exploration over lease area for Geological axis 1 or 2.	G1	G1	
1c	Exploration Agency & Expenditure in Lakh Rupees during the year	NA	NA	
1d	Balance area to be explored to bring Geological axis in 1 or 2.	NA	NA	
1e	Balance reserves as on 01.04.2017		218.24 Mio Ton (111)	
1f	General remarks of Inspecting officer on geology, exploration etc.	The strikes of mine approx in North-east direction. ML area is more or less flat terrain.ML area comes under Chandi Formation. Nepania member on constitutes chief source of Cement grade limestone.		

Development

S.N	Item	Proposals (2016-17)	Actual Work (2016-17)	Remarks
2a	Location of Development w.r.t. lease area	North pit X= -241.75 to 1557.6 Y= 140.78 to 1125.73 286 RL to 242 RL South pit X= 27 to 421.76 Y= 2721.4 to 3059.6 284 RL to 260 RL	North pit X= -230 to 1498 Y= 134.2 to 1097.46 285 RL to 251 RL South pit X= 86 to 486.2 Y= 2600.8 to 2928.8 285.5 RL to 270.96 RL	
2b	Separate benches in topsoil overburden and mineral (Rule 15)	OB bench- 1 nos Mineral bench-5Nos	OB bench- 1 nos. Ore bench-4 Nos	
2c	Stripping ratio or ore to OB ratio	1:0.27	1:0.328	
2d	Quantity of topsoil generation in m ³	20134	25487	
2e	Quantity of overburden generation in m ³	486592	632951	
2f	General remarks of Inspecting officer on development of pit w.r.t type of deposit etc.	Thin parting of shale intercalation within limestone has degraded the quality of limestone in most of the limestone bands. Chocolate brown limestone is usually high in quality towards the top and the quality decreases gradually at depth. Development is in order.		

Exploitation

S.N	Item	Proposals (2016-17)	Actual Work (2016-17)	Remarks
3a	Number of pits proposed for production	02	02	
3b	Quantity of ROM mineral production proposed (2016-17)	4473000 MT	3529646MT	
3c	Recovery of Salable/usable mineral from ROM production	-----	3467193 MT	
3d	Quantity of mineral reject generation	273000 MT	62453MT	
3e	Grade of mineral reject generation and threshold value declared	<34% CaO	<30 % CaO	
3f	Quantity of sub-grade mineral generation	-	24500	
3g	Grade of sub-grade mineral generation	-	34-40% CaO	
3h	Manual/Mechanized method adopted for segregation from ROM	Mechanised	Mechanised	
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject		Regular analysis of sub-grade mineral and reject are being done.	

3j	Provision of drilling & blasting in mineral benches	For preparation of blast hole the primary drilling is done by 150 mm dia crawler mounted DTH drills. Specing-6 M. Burden- 4 M. Depth of hole 8.5 M Subgrade- 0.5 M Blasting is done in staggered pattern with SME, ANFO and NONEL.	For preparation of blast hole the drilling is done by 115& 150 mm dia crawler mounted DTH drills. Specing: 5-7 M. Burden:3.5-4.5 M. Depth of hole 5-9 M Subgrade- 0.5 M Blasting is done in staggered pattern with SME , ANFO and NONEL .	
3k	Provision of mining machineries in mineral benches	yes	yes	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes the height of OB bench- 0-4.5 m Ore bench 6-8 m	Top slicing of mix bench with 3.5 mtr height and OB bench- 0-4.5 mt. Ore bench 4-8 mt. height has been maintained.	
3m	Total area covered under excavation /pits	7.60Ha.	7.222 Ha.	
3n	Ore to OB ratio for the pit/mine during the year	1:0.27	1:0.328	
3o	Total area put in use under different heads at the end of year	Pit- 7.60 Ha Waste/reject- 2.49 Ha Others- Backfilling 3.678 Ha	Pit- 7.222 Ha Waste/reject- 3.855Ha Backfilling- 0.86 ha	
3p	Production of ROM mineral during last five-years period, as Applicable	2012-13	4200000	3823560
		2013-14	4473000	3391295
		2014-15	4473000	3898517
		2015-16	4473000	3175761
		2016-17	4473000	3529646
3q	General remarks of inspecting officer on method of mining etc	Working are being carried out a per approved documents.		

Solid Waste Management-Dumping

S.N.	Item	Proposals (2016-17)	Actual Work (2016-17)	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32,33)	Concurrent use of top soil proposed and separate dump for has been proposed.	Concurrent use of top soil is being done and separate dumping of OB & reject is being done.	
4b	Location of topsoil, OB & mineral reject dumps	Dump X : -971.2 to -1121.2 Y: 1456 to 1759.7 RL : 289 to 299 Peripheral dumping X : 876.6 to 1151.5 Y: 2224.9 to 2481.8 RL : 280 to 286	Dump X : -973.2 to -1115.7 Y: 1457 to 1768.2 RL : 289 to 295 Peripheral dumping X : 876.6 to 1151.5 Y: 2220 to 2475.1 RL : 280 to 283.5	
4c	Number of Dumps within lease area and outside lease area	03 nos within lease area	03 within lease area.	
4d	Location of Dumps w.r.t. ultimate pit limit (Rule 16)	Dump X : -971.2 to -1121.2 Y: 1456 to 1759.7 RL : 289 to 299	Dump X : -973.2 to -1115.7 Y: 1457 to 1768.2 RL : 289 to 295	
4e	Number of Active & Alive dumps	02	02	
4f	Number of deed dumps	01	01	
4g	Number of dumps established	01	01	
4h	Whether Retaining wall or garland drain all along dumps are there	Garland drain provided	Garland drain provided	
4i	Length of Retaining wall or garland drain all along dump	Length of garland drain all along dump is 400mtr.	Length of garland drain all along dump is 570mtr.	
4j	Number of settling ponds	01	01	
4k	Specific commends of inspecting officer on waste dump management	Waste is being dump at designated place as per approved documents.		

Solid Waste Management-Backfilling

S.N.	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	Backfilling has been proposed in mined out area.	Backfilling in progress.	
5b	Area under backfilling of mined out area	3.678 Ha	0.86 Ha	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	yes	yes	
5d	Total area fully reclaimed & rehabilitated	3.678 Ha	0.86 Ha	
5e	General remarks of inspecting officer on backfilling, reclamation etc	Backfilling and reclamation process is under progress.		

Progressive Mine Closer Plan

S. N.	Item	Proposals (2016-17)	Actual Work (2016-17)	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	Yes	Yes	
6b	Management of worked/mined out benches			
	i) Area available for rehabilitation (Ha)	3.678	0.86Ha	
	ii) Afforestation done (ha)	1.18	1.35	
	iii) No.of saplings planted during the year	2950	3540	
	iv) Cumulative no. of plants	177916 nos (2015-16)	185986	
	v) Any other specific method of rehabilitation	Plantation	Plantation	
	vi) Cost incurred on watch & care during the year	150000/-	212400/-	
6c	Compliance on reclamation and rehabilitation by backfilling			
	i) Voids available for backfilling (L*B*D)	350 x 170 X 30	300x 159 x 30	
	ii) Void filled by waste/tailings	3.678 Ha.	0.86 Ha	

	iii) Afforestation on the backfilling iv) Rehabilitation by making water reservoir v) Any other specific means	Nil	Nil	
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitation iii) Method of rehabilitation	NA Concurrent backfilling & plantation on dump.	NA Concurrent backfilling and plantation on dump.	
6e	Compliance of Environment monitoring (core zone & buffer zone)	Being done	carried out	
6f	General remarks of inspecting officer on PMCP compliance & progressive closer operations	PMCP report submitted and implementation is in order.		

Mineral Conservation

S.N.	Item	Proposals	Actual Work	Remarks
7a	ROM mineral dispatch or grade wise sorting within lease area	NA	Based on software & blast hole sampling result different grade material has been marked at site/map/blend plan.	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	None	None	
7c	Different grade of mineral sort out at mine	Based on software different grade material has been marked in slice plan.	Based on software & blasthole sampling result different grade material has been marked at site/map/blend plan.	
7d	Any beneficiation process at mines	As such, limestone beneficiation is not required except for screening the clayey-soil in the top bench	Screening (dry Separation) is being done to separate clayey-soil & shale in the limestone before crushing. By using pet cock the quality requirement of plant was decreases hence screen generation was also decreases during the year.	

7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	Screening (dry Separation) is being done to separate clayey-soil & shale in the limestone before crushing. It's a good Practices adopted. As such there is no problem of mineral conservations in the mines.
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Environment

S.N.	Item	Proposals	Actual Work	Remarks
8a	Separate removal and utilization of topsoil (Rule32)	Yes	Separate removal and utilization of topsoil is being done	
8b	Concurrent use or storage of topsoil	Yes	concurrent utilization of topsoil is being done	
8c	Separate dumps for overburden waste rock, rejects and fines (Rule 33)	Planned	Separate dumps for overburden/waste rock and rejects.	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	planned	Part of waste rock, rejects are being used for concurrent backfilling for restoring the land to its original use.	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	As per mining plan.	Being done.	
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	177916 nos (2015-16)	Total of 185986 nos. plantation in 58.66hect.area up to March 2017. Year-wise	
8g	Survival rate		80%	
8h	Water sprinkling on roads to control airborne dust	28KL and 8KL taker proposed for Water sprinkling on roads	Water sprinkling on roads is being done by 28KL and 8KL tanker to control airborne dust.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mine area	EMP parameters are regularly being monitored.		

Compliance of Rule 45

S. N.	Item	Comments				Remarks
9a	Status of submission of monthly and Annual returns	M.R. Submitted upto– July -2017				
		A.R. submitted upto- 2016-17				
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Yes				
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Area Under Pit: 153.358 ha Reclaimed area: 0.00 ha Use for waste disposal: 17.836ha Occupied by plant, building residential, welfare building and roads: 19.251ha				
9d	Scrutiny of Annual return on afforestation	3540 trees planted within Lease area; Survival rate : 80% Outside lease area: 57 , Survival rate: 69%				
9e	Scrutiny of Annual return on mineral reject generation (Grade & Quantity)	Grade <34%, Quantity: 62453 tonnes				
9f	Scrutiny of Annual return on ROM stock and/or grade ore	production : 3467193.00 tonnes				
9g	Scrutiny of Annual return on sale value, Ex.Mine price & production costs	Ex-Mine price: Rs. 271.52, which should have been Rs 257.72 cost of Production.				
9i	Scrutiny of Annual return on Fixed assets	Own Capital : Rs. 670341413.00				
9k	Scrutiny of Annual return on mining Machineries	Equipment	Nos	Capacity	Make & model	
Scrutiny of Annual return on mining Machineries	Dumper		4	55 MT	Komatsu-HD 465-7	
	Dumper		7	55 MT	BEML- BH 50	
	Excavator		3	6.5 CUM	Komatsu-PC 1250	
	Excavator		1	4.0 CUM	L & T -CK-300	
	Drill		2	150 mm	Atlas Copco-IDM-30	
	Drill		1	115 mm	DP1100i - Sandvik	
	Loader		1	3.0 CUM	Komatsu WA 380	
	Dozer		2	308 HP	Komatsu-D 155	
	Backhoe cum Rock breaker		1	324 HP	L & T CK-300(Excavator) Atlas Copco -HB 4200-(Breaker attachment)	
	Water Tanker		1	28 KL	BEML WS28	
	Water Tanker		1	8 KL	Tata-1612	

Details of Validations observed during current inspection and compliance position of earlier violation pointed out:-

No serious Violation observed and earlier Violation has been considered as complied.

Parawani Limestone Mine (997.355 ha) was also Validated for the evaluation of Star Rating of Mining Lease

Date: 09/08/2017

Name: Rudra N Mishra

Designation: Senior Mining Geologist