

INDIAN BUREAU OF MINES
MINERALS DEVELOPMENT AND REGULATION DIVISION
MCDR Inspection REPORT
Jabalpur Regional office

Mine code: 38MPR35313

(i)	Name of Inspecting officer	:	Mr. Ibrahim Sharief
(ii)	Designation	:	DCOM, IBM Jabalpur
(iii)	Accompanying mine official with Designation	:	Pravin Kumar Tiwari, Geologist Shashi Shekhar Ray, Mines Manager
(iv)	Date of Inspection	:	05.07.2024
(v)	Previous Inspection date	:	19.08.2023

PART-I: GENERAL INFORMATION

1	(a)	Mine Name	:	Baghai Limestone mines
	(b)	Registration Number	:	IBM/267/2011
	(c)	Category	:	Opencast fully mechanized Category A mine
	(d)	Type of Working	:	Mechanized
	(e)	Postal address	:	Baghai Limestone mines of M/s Prism Johnson Limited
		State	:	Madhya Pradesh
		District	:	Satna
		Village	:	Baghai
		Taluka	:	Rampur Baghelan
		Post Office	:	Bathiya
		Pin code	:	485111
		Fax	:	07672 – 275303
		email	:	registered.office@prismjohnson.in
		Phone No	:	07672-432600
	(f)	Police Station	:	Rampur Baghelan
	(g)	First Opening date	:	28.02.2011
	(h)	Weekly day of rest	:	Sunday
2		Address for Correspondence	:	Rajdeep, Rewa road, Satna, MP, 485001 Telephone 07672-432600
3	(a)	Lease Area	:	512.317 Ha
	(b)	Period of lease	:	30 years
	(c)	Date of Expiry	:	27.02.2041
4		Mineral Worked (Main)	:	Limestone
5		Name of address of the Lessee with Phone, email and fax number	:	Baghai Limestone Mines of M/s Prism Johnson Limited Rajdeep, Rewa road, Satna, MP, 485001 Telephone 07672-432600 Email: registered.office@prismjohnson.in

	Name of address of the Owner/Nominated Owner with Phone, email, fax number and Date of appointment	:	Vivek K.Agnihotri Executive Director-Cement Division, Prism Johnson Limited, Rahejas 2nd Floor, Main Avenue, V.P.Road, Santacruz(W), Mumbai,Pin-400054 Telephone 07672-432600 email- Vivek.Agnihotri@prismjohnson.in Date of appointment - 17.08.2015
	Name of address of the Agent with Phone, email, fax number and Date of appointment	:	Shri Vinod Shrivastava, VP Mines & MRM M/S Prism Johnson Limited Rajdeep, Rewa road, Satna, MP, 485001 Telephone 9584464612 email- vinod.shrivastava@prismjohnson.in Date of appointment – 28.09.2021
	Name of address of the Manager with Phone, email, fax number and Date of appointment	:	Shashi Shekhar Ray, Mines Manager M/S Prism Johnson Limited Rajdeep, Rewa road, Satna, MP, 485001 Telephone 9584460385 email- kousik.das@prismjohnson.in Date of appointment – 11.04.2024
	Mining Engineer Name Qualification Date of Appointment	:	Shashi Shekhar Ray, Mines Manager M/S Prism Johnson Limited Rajdeep, Rewa road, Satna, MP, 485001 Telephone 9584460385 email- kousik.das@prismjohnson.in Date of appointment – 11.04.2024
	Geologist Name Qualification, Date of Appointment	:	Shri Pravin Kumar Tiwari M.Sc. in Geology, APS University Rewa 12-10-2015
6	Date of approval of Mining Plan/Review of Mining Plan etc.	:	MP/Satna/Limestone/MPLN/MOD-37/2019-20 Dated 02.07.2020

PART- II: OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration:

S.No	Item	Proposals	Actual Work	Remarks
1a	Backlog of previous year	No Proposal	Not Applicable	G1 level exploration completed in entire potential area
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 the Geological axis in 1 or 2.	No Proposal	Nil	
1e	Balance reserves as on 01.04.2024	25441480 tones	25441480 tones	
1f	General remarks of Inspecting officer on geology, exploration etc.	G1 level exploration completed in entire potential area		

Development(2023-24)

S.N.	Item	Proposals	Actual Work	Remarks
2a	Location of Development w.r.t. lease area	Pit-01 504220 E to 504827 E and 2717414 N to 2717991 N Pit-03, 504300 E to	Pit-01 504056 E to 504753 E and 2716286 N to 2717853 N Pit-03, 504321 E to	Limestone production has occurred in the proposed area, & development has extended well from the Mineral excavation as per proposal.

		504700 E 2717500 N to 2717980 N	504708 E 2717521 N to 2717981 N	
2b	Separate benches in topsoil overburden and mineral (Rule 15)	Overburden and mineral is to be benched Separately.	Overburden and mineral is being benched separately.	
2c	Stripping ratio or ore to OB ratio	1:0.54	1:0.45	Well within the proposal
2d	Quantity of topsoil generation in m3	No proposal	Nil	
2e	Quantity of overburden generation in m3	1631091	479685	
2f	General remarks of Inspecting officer on development of pit w.r.t type of deposit etc.	Development has been carried out as per proposal.		

3. Exploitation FY 2023-24

S. N.	Item	Proposals	Actual Work	Remarks
3a	Number of pits proposed for production	02	02	Pit-01 & Pit-03
3b	Quantity of ROM mineral production proposed	3000000 Tonnes	2659944 Tonnes	Less production due to less demand from cement plant
3c	Recovery of Salable/usable minerals from ROM production	100%	100%	-
3d	Quantity of mineral reject generation	No Proposal	Not Applicable	
3e	Grade of mineral reject generation and threshold value declared	No Proposal	Not Applicable	
3f	Quantity of sub-grade mineral generation	No Proposal	Not Applicable	All the low-grade materials are consumed using sweetener
3g	Grade of sub-grade mineral generation	Not Applicable	Not Applicable	No sub grade
3h	Manual/Mechanized method adopted for segregation from ROM	No Proposal	Not Applicable	No beneficiation required
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	DTH	DTH	Controlled blasting technique adopted
3k	Provision of mining machineries in mineral benches	Shovel 2.9 cum- 3 No., 2.5 cum- 1 No., Dumper- 25 T- 22 No., Drill- 110 mm- 3 No., Dozer- 324 HP- 1 No., Motor Grader- 154 HP-1 No. Pumps- 4 No.	The above HEMM are deployed in the lease.	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes	Yes	As per proposal HEMM working going on

3m	Total area covered under excavation /pits (Ha.)	10.53	8.426		
3n	Ore to OB ratio for the pit/mine during the year	1:0.54	1:0.45	Within proposal	
3o	Total area put in use under different heads at the end of year	i. Covered under current (O-C) Workings- 63.21 Ha, ii. Reclaimed-rehabilitated- 25.58 Ha, iii. Used for waste disposal- 12.59 Ha, iv. Occupied by plant, buildings, residential, welfare buildings and roads-4.5 HA, v. Used for any other purpose- 10.55 Ha, vi. Work done under progressive mine closure plan during the year-8.29 Ha	90.85 Hectare	Within proposal	
3p	Production of ROM mineral during last five-years period, as Applicable	2019-20	3000000	1299687	As per the proposal
		2020-21	3000000	1299551	
		2021-22	2000000	1296406	
		2022-23	2000000	1299148	
		2023-24	3000000	2659944	
3q	General remarks of inspecting officer on method of mining etc.	Mining operations are being carried out by fully mechanized method of mining with deep hole drilling and Blasting is adopted			

4. Solid Waste Management-Dumping (FY2023-24)

S.N.	Item	Proposals	Actual Work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32,33)	No Proposal during this year	Concurrent backfilling followed by top soil spreading is going on.	Being done as proposed
4b	Location of topsoil, OB & mineral reject dumps	Topsoil:- No Proposal Waste dump:- No Proposal No Mineral reject	Concurrent backfilling followed by top soil spreading is going on. No Mineral rejects available.	
4c	Number of Dumps within lease area and outside lease area	No Proposal during this year	No Proposal during this year	
4d	Location of Dumps w.r.t. ultimate pit limit (Rule 16)	No Valid Proposal	Not Applicable	
4e	Number of Active & Alive dumps	Nil	Nil	
4f	Number of dead dumps	No Proposal during this year	No Proposal during this year	
4g	Number of dumps established	No Proposal during this year	No Proposal during this year	
4h	Whether Retaining wall or garland drain all along dumps are there	No new dump created	No new dump created	
4i	Length of Retaining wall or garland drain all along dump	No new dump created	No new dump created	
4j	Number of settling ponds	No Proposal of Settling Pond already constructed earlier	No Proposal already constructed earlier	

4k	Specific comments of inspecting officer on waste dump management	Backfilling is carried over mined out area.
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5. Solid Waste Management-Backfilling (FY 2023-24)

S.N.	Item	Proposals	Actual Work	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	Backfilling is carried out after complete exhaustion of mineral	Backfilling is carried out after complete exhaustion of mineral	
5b	Area under backfilling of mined out area	8.97 ha	8.29 ha	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	Concurrent backfilling followed by top soil spreading is proposed.	Concurrent backfilling followed by top soil spreading is going on.	
5d	Total area fully reclaimed & rehabilitated (Ha)	14.535 ha	17.29 ha	
5e	General remarks of inspecting officer on backfilling, reclamation etc	Backfilling is carried out after complete exhaustion of mineral, so for 17.29 ha area is backfilled		

6. Progressive Mine Closure Plan (FY 2023-24)

S.N.	Item	Proposals	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	Yes	The PMCP report is being submitted along with the annual return before 30.06.24.	
6b	Area available for rehabilitation (Ha)	8.97	8.29	
6c	Afforestation done (ha)	2.2	6.88	
6d	No. of saplings planted during the year	5500	17200	
6e	Cumulative no. of plants	55000	99612	
6f	Any other specific method of rehabilitation	No Valid Proposal	NA	
6g	Cost incurred on watch & care during the year	No Proposal	Not Applicable	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (L X B X D).	Pit 1 = 650x500x30 m (Approx) Pit 3=300x400x28 m (Approx)	Pit 1 = 640x552x30 m Pit 3=285x431x16 m	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Void filled by waste/tailings.	Pit 1= 3.444 Ha Pit 3 = 5.534 Ha	Backfilling is under progress according to the proposal 8.29 Ha backfilled during 2023-24	
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on the backfilled area.	Plantation over the backfilled area	6.88 Ha area has been covered by afforestation	
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir.	NIL	NIL	

6l	Compliance on reclamation and rehabilitation by backfilling (v) Any other specific means	Nil	Nil	
6m	Compliance of Rehabilitation of waste land within lease (i) Afforestation	Nil	Nil	
6n	Compliance of Rehabilitation of waste land within lease (ii) Area rehabilitated (ha) Method of rehabilitation	Nil	Nil	
6o	Compliance of Rehabilitation of waste land within lease (iii) Method of rehabilitation	Nil	Nil	
6p	Compliance of Environment monitoring (core zone & buffer zone)	Quarterly monitoring	Quarterly monitoring of air, water, and noise are being done core as well as buffer zone	
6q	General remarks of inspecting officer on PMCP compliance & progressive closer operations	monitoring of air, water, and noise are being done core as well as buffer zone. Plantation is being done to improve aesthetic beauty		

7. Mineral Conservation (FY 2023-24)

S.N.	Item	Proposals	Actual Work	Remarks
7a	ROM mineral dispatch or grade wise sorting within lease area	ROM produced is to be dispatch	ROM produced is being dispatched	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Not Proposed	Not Applicable	
7c	Different grade of mineral sort out at mine	Not Proposed	Not Applicable	
7d	Any beneficiation process at mines	Not Proposed	Not Applicable	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	Limestone upto the threshold value is being utilised and no mineral reject is generated. Low grade mineral is consumed with purchased sweetener.		

8. Environment (FY 2023-24)

S.N.	Item	Proposals	Actual Work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Yes, top soil is to be Separately removed and utilize	Yes, top soil is being Separately removed and utilized over backfilled area	
8b	Concurrent use or storage of topsoil	Yes	Yes, top soil is being Separately removed and utilized over backfilled area	
8c	Separate dumps for overburden waste rock, rejects and fines (Rule 33)	NA	NA	No mineral reject is generated
8d	Use of overburden, waste rock, rejects and fines dump for restoring the land to its original use	Yes	Yes	Backfilling under progress
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Yes, pits which are mined out is to be utilized for backfilling	Yes, pits which are mined out is utilized for backfilling	
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	Yes additional plantation of 5500 saplings to be planted	Yes, additional plantation of 17900 saplings planted during the year	
8g	Survival rate	80%	80%	
8h	Water sprinkling on roads to control airborne dust	Proposed	Water is sprayed on the roads to control airborne	

			dust. Permanent water sprinkler is installed on haul road	
8i	General remarks of inspecting officer on aesthetic beauty in and around mine area	Additional plantation of 17900 saplings done during the year		

9. Compliance of Rule 45 (2023-24)

S.N.	Item	Comments	Remarks
9a	Status of submission of monthly and Annual returns	The monthly return has to be filed online through the portal before the due date	The Annual and Monthly returns had been filed before the due date.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer, and Manager appointment submitted.	All the officers as mentioned had been employed
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	i. Covered under current (O-C) Workings- 63.21 Ha, ii. Reclaimed-rehabilitated- 25.58 Ha, iii. Used for waste disposal- 12.59 Ha, iv. Occupied by plant, buildings, residential, welfare buildings and roads-4.5 HA, v. Used for any other purpose- 10.55 Ha, vi. Work done under progressive mine closure plan during the year-8.29 Ha	The annual return on land use patterns for areas under pits, reclaimed areas, dumps, etc., is to be submitted in 2023-24.
9d	Scrutiny of Annual return on afforestation	plantation over 6.88 Ha area has been done with 17200 saplings	Plantation done
9e	Scrutiny of Annual return on mineral reject generation (Grade & Quantity)	Nil	Nil
9f	Scrutiny of Annual return on ROM stock and/or grade ore	Nil	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production costs	The sale price, including the calculation of Ex. mine price and production cost, -Rs. 306.87/-	
9i	Scrutiny of Annual return on Fixed assets	Fixed assets is provided in the annual return for 2023-24- Rs. 1201959968/-	
9k	Scrutiny of Annual return on mining Machineries	Shovel 2.5 cum- 5 No., 2.6 cum- 2 No., 0.9 cum- 1 No., Dumper- 50 T- 10 No., Drill- 110 mm- 3 No., Dozer- 324 HP- 1 No., Road roller- 15 T- 1 No., Motor Grader- 154 HP-1 No. Pumps- 3 No.	The above HEMM are deployed in the lease.

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

Date:

Name: IBRAHIM SHARIEF
Designation: Deputy Controller of Mines