

**INDIAN BUREAU OF MINES  
MINERALS DEVELOPMENT AND REGULATION DIVISION**

**Review and updation of Mining Plan REPORT**

**Jabalpur regional office**

**Mine file No :** MP/STN/LST-85

**Mine code :** 38MPR35112

- (i) Name of the Inspecting : **K006** ) **NARESH KUMAR KATARIYA**  
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : Mr. P. K. Upadhyay (agent), Mr. S K Jain (Geologist),  
Official with  
Designation
- (iv) Date of Inspection : 08-MAR-22
- (v) Prev.inspection date :

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **BHADANPUR (361.428HA)**
- (b) **Registration NO.** :
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address :  
State : MADHYA PRADESH  
District : SATNA  
Village : BHADANPUR  
Taluka : MAIHAR  
Post office : SARLANAGAR  
Pin Code : 485772  
FAX No. : N. A.  
E-mail : N. A.  
Phone : N. A.
- (f) Police Station :
- (g) First opening date :
- (h) Weekly day of rest : SUN
2. Address for : M/S MAIHAR CEMENT  
correspondance : P.O. SARLA NAGAR, MAIHAR,  
DIST. SANTA (M.P.) 485772
3. (a) Lease Number :
- (b) Lease area :
- (c) Period of lease :
- (d) Date of Expiry :
4. Mineral worked : LIMESTONE Main

## 5. Name and Address of the

Lessee : MAIHAR CEMENT  
 P.O. SARLA NAGAR, MAIHAR  
 SATNA MADHYA PRADESH  
 Phone: 07601-32043, 32067, 32068  
 FAX : 07674-322306, 0761-321881

Owner : CENTURY TEXTILES & INDUSTRIES LTD.  
 CENTUARY BHAWAN, DR. ANNI  
 BESENT ROAD, BAMBAY  
 AHMEDNAGAR MAHARASHTRA  
 Phone: 022-4300351  
 FAX : 022-4309491

6. Date of approval of Mining	:	Mining Scheme rule 12 MCDR1988	27-MAY-01
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	01-APR-06
		Mining Scheme rule 12 MCDR1988	28-JUN-10
		Modif. approved Mining Scheme	10-APR-12
		Mining Scheme rule 12 MCDR1988	06-APR-15
		Renewal under rule 24 MCR1960	22-APR-15
		MP review under 17(1) MCR 2016	06-MAR-20

## PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	NA	NIL	
1b	Exploration over lease area for geological axis 1 or 2	15 Hole	15 Hole	Exploration of 15 holes has been reported. The has been done in the year 2021-22.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Departmental	Departmental	
1d	Balance area to be explored to bring Geological axis in 1 or 2	Exploration under G-1 catagory in the approved plan period.	G1-160ha. G2- 50.0ha. G3-20.68Ha.	Exploration is under progress as per approved document.
1e	Balance reserve as on 01/04/20		Balance reserve as on 01.04.2021 is : 111-32.5 MT 211- 17.91 MT 332- 8.7MT 333- 23.325MT	
1f	General remarks of inspecting officers on geology, exploration etc			Exploration is under progress for depth. Most of the area in G1 & G2 and total 64 Ha. under non mineralized.

## Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	South Block pit-A & North Block pit-B2	South Block pit-A & North Block pit-B2	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Yes	Five Benches are maintained in the pit of North block. Three Benches In South Block	

2c	Stripping ratio or ore to OB ratio	1:0.22	1:0.067	
2d	Quantity of topsoil generation in m3	22500 M3	12500 M3	
2e	Quantity of overburden generation in m3	75000 M3	14341 M3	Mine development is lagging from the approved proposed development. Modificaiton in the document is approved from this office in which the lagging in the mine development is rectified and development location is updated as per production targets.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Mine development was lagging from the approved proposed development. The inspection was carried out for processing of Modificaiton in the approved document. The modification was done for rectification of the laggings in mine development and enhancement of production in the remaining approved five year block. Violation for deviation has been pointed out by DCOM vide letter on 24.08.2021 on basis of his inspection dated 19.07.2021.

## Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Two	Two pits developed as per approved document	The mine development in the pits was lagging from the proposed development. Modification in the approved document was applied for the same and approved from this office.
3b	Quantity of ROM mineral production proposed	1297350 Tonnes	398004 Tonnes	Mine production was less from the proposal. Modification in the approved document was applied for the same and approved from this office.
3c	Recovery of sailable/usable mineral from ROM production	90% recovery proposed in the approved document	more than 90% recovery as per AR and other reports.	
3d	Quantity of mineral reject generation	48489 Cum	36139 Cum	
3e	Grade of mineral rejects generation and threshold value declared.	CaO more than 34 %	CaO more than 34 %	The mineral rejects generated during excavation has been utilised for blending with the high grade mineral as per records.
3f	Quantity of sub grade mineral generation.	12973.5 T	3980 T	
3g	Grade of sub grade mineral generation	34- 38 Cao	34- 38 Cao	The sub grade mineral is utilised for blending with the high grade mineral as per records.

3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized	Mechanized
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Not proposed	Not done
3j	Provision of drilling and blasting in mineral benches	Yes	Yes
3k	Provision of mining machineries in mineral benches	Yes	Shovel- 3.9 Cum Back Hoe- 1.7 Cum, Dozer- 380HP Dumper-50T, Tipper 14 Cum, Front End Loader - 4.6Cum, & 1.3 Cum. Explosive vain -3.7T & 2.4T, Water Tanker- 10000Ltr.,
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Height of the benches is proposed 6-8 m	Height of the benches is observed 6m in the OB benches and 6-8 m in the Mineral benches
3m	Total area covered under excavation/pits	115.5 Ha.	114.75 Ha.

3n	Ore to OB ratio for the pit/mine during the year.	1:0.22	1:0.067	Mine development was lagging from the approved proposed development. The inspection was carried out for processing of Modificaiton in the approved document. The modification was done for rectification of the laggings in mine development and enhancement of production in the remaining approved five year block. The modification is approved from this office in which the lagging in the mine development is rectified and development location is updated as per production targets.
3o	Total area put in use under different heads at the end of year	192.56Ha	183.35Ha.	
3p	Production of ROM mineral during the last five year period as applicable	2016-17 1297222.5 2017-18 1297020 2018-19 1296429 2019-20 1294885 2020-21 1297350	2016-17 1295521 2017-18 1295814 2018-19 1038317.5 2019-20 635923 2020-21 398004	

3q General remarks of inspecting officers on method of mining etc.

Fully mechanised opencast method of mining was observed during inspection. Mine development & production was lagging from the approved proposal. The inspection was carried out for processing of Modification in the approved document.

---

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	seperate dumping of topsoil, OB and mineral rejects was proposed in the approved document.	seperate dumping of topsoil, OB and mineral rejects observed.	
4b	Location of topsoil, OB and mineral reject dumps	Yes	Top soil was stored near the boundary of the lease area in eastern part. 11 nos of OB dumps were observed. Mineral reject was stacked near cursher area.	
4c	Number of dumps within lease area and outside of lease area	11 dumps	11 dumps	All the dumps observed within the lease area.

---



4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Location of the 04 dumps was found within UPL and 07 dumps found in the out side the UPL. The dumps were proposed as temporary dumps within UPL.	Location of the 04 dumps was found within UPL and 07 dumps found in the out side the UPL. The dumps were proposed as temporary dumps within UPL.	Backfilling is proposed after full extraction of the mineral. 07 dumps will be established as per approved document.
4e	Number of active and alive dumps.	11 dumps	11 dumps	Rehandling of 04 dumps is proposed in future.
4f	Number of dead dumps.	NIL	NIL	
4g	Number of dumps established.	NIL	NIL	
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes	Yes	
4i	Length of Retaining wall or garland drain all along dumps	Not specified	1320Mtr. Retaining wall & 320Mtr. bund	
4j	Number of settling ponds	One	One	
4k	Specific comments of inspecting officer on waste dump management			Location of the 04 dumps was found within UPL and 07 dumps found in the out side the UPL. The dumps were proposed as temporary dumps within UPL. Retaining wall was observed around the dump and garland drain was maintained.

---

Solid Waste Management - Backfilling:

---

Sl.No.	Item	Propasals	Actual work	Remarks
--------	------	-----------	-------------	---------

---

5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	Full extraction of mineral before backfilling	Area not matured for backfilling.	
5b	Area under backfilling of mined out area	3.7 ha.	1.7 hect area backfilled and remaining area not matured for backfilling.	Backfilling was observed near 7.5 m barrier zone towards road for safety.
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Yes	As per records the top soil is partially used for plantation.	Top soil stack is observed during the inspection.
5d	Total area fully reclaimed and rehabilitated	NIL	NIL	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			1.7 hect area backfilled and remaining area not matured for backfilling. Full Reclamation & Rehabilitation was not observed in any part of the mine. OB dumps will be used for backfilling in the future as per approved proposal.

---

Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	Yes	Yes, submitted vide letter No. MCW/SKS/Mine21/23 Dated 28/06/2021	

---

6b	Area available for rehabilitation (ha) .	NIL	NIL	
6c	afforestation done (ha).	NIL	NIL	
6d	No. of saplings planted during the year	2000 nos	1800 nos	
6e	Cumulative no .of plants	Not specified	approx 3000 plants	
6f	Any other method of rehabilitation	Not proposed	Not done	
6g	Cost incurred on watch and care during the year	Not specified	No records	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	3.7 Hect	1.7 Hect	Remaining area not matured for backfilling due to lagging in mine development & production. Modification in the approved document is approved with incorporation of rectifications.
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	3.7 Hect	1.7 Hect	
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area	NIL	NIL	

6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Not proposed	NIL
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	Not proposed	NIL
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	01 Hect	01 Hect
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	NIL	NIL
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	NIL	NIL
6p	Compliance of environmental monitoring (core zone and buffer zone)	Yes	Yes

6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	PMCP report has been submitted by lessee. Total 1.7 hect area is backfilled after extraction of the leased mineral. Remaining area is not matured for backfilling. Afforestation in 1.0 Hect area is observed in the lease area in the 7.5 m barrier zone and some other area as proposed in the approved document.
----	---	---

---

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM mineral is proposed to be dispatched in the crusher.	ROM mineral is dispatched to the crusher as per records. Reject mineral is separated at the mine head for the blending.	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	As per analysis of the mineral. reject left in the mine head after blasting.	The sorted mineral blended with high grade mineral as and when required.	
7c	Different grade of mineral sorted out at mines.	Not proposed	Not done	Some mineral rejects observed near crusher area.
7d	Any beneficiation process at mines .	Not proposed	Not done	

---

7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	ROM mineral is dispatched to the crusher as per records. Reject mineral is separated at the mine head for the blending.
----	--	---

---

**Environment:**


---

Sl.No.	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Proposed	top soil was found stacked in the separate dump.	
8b	Concurrent use or storage of topsoil	Storage of topsoil and Concurrent use of topsoil proposed.	Storage of topsoil is observed. Concurrent use of topsoil is reported for plantation in the waste land.	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes	11 nos of umps for OB were observed.	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Yes	Backfilling was on progress. Total 1.7 hect area was found backfilled.	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Yes	Backfilling was on progress. Total 1.7 hect area was found backfilled. Plantation is proposed in future after completion of backfilling.	

---

8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	2000 trees & saplings	approx. 1800 trees and saplings as per records.	
8g	Survival rate	80 %	80%	
8h	Water sprinkling on roads to control airborne dust	Yes	Water sprinkling on the roads were observed during the inspection.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Plantation was proposed in the lease area after full extraction of the mineral & backfilling.	Backfilling on progress.	Plantation is observed in the barrier zone and some other area where mining is not possible due to statutory provisions.

---

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Yes	Annual retrun submitted for the year 2020-21. Monthly returns submitted.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Yes	Mining Engineer - Sh. Satish Garg Geologist- Sh. Saurabh Kumar Jain	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Yes	Pit area - 114.75Ha. Dump area - 14.89Ha. Backfilling area - 18.83Ha. Infrastructure -29.07Ha.	
9d	Scrutiny of Annual return on afforestation	Yes	2000 Nos, on benches and 1800 Nos. backfilling	

---

9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Yes	CaO % 34-38.	Mineral rejects are proposed to stack in the pit area and blending is proposed as and when required.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	NIL	NIL	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Yes	Ex. Mine Price - Rs 399.78 per tonne Cost of Production - Rs 399.78 per tonne	
9h	Scrutiny of Annual return on fixed assets	Yes	Total Fixed asset for three Mines is reported as 212.33 cr.	
9k	Scrutiny of Annual return on mining machineries	Yes	Shovel- 3.9 Cum Back Hoe- 1.7 Cum, Dozer- 380HP Dumper-50T, Tipper 14 Cum, Front End Loader - 4.6Cum, & 1.3 Cum. Explosive vain -3.7T & 2.4T, Water Tanker- 10000Ltr.,	

---



**Details of violations observed during current inspection and compliance position of violation pointed out**

Violation observed			Show cause position		
Rule NO.	Issued on	Compliance on	Rule NO.	Issued on	Compliance on

**Date :**

**(NARESH KUMAR KATARIYA)**

Indian Bureau of Mines