

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

MCDR INSPECTION REPORT

Jabalpur regional office

Mine file No : MP/STN/LST-207

Mine code : 38MPR35098

- (i) Name of the Inspecting : **P012**) **MITHELESH PUROHIT**
Officer and ID No.
- (ii) Designation : Assistant Controller Mine
- (iii) Accompanying mine :
Official with
Designation
- (iv) Date of Inspection : 15-MAY-18
- (v) Prev.inspection date : 14-OCT-17

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **BHATIA**
- (b) **Registration NO.** :
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
State : MADHYA PRADESH
District : SATNA
Village : BHATIA
Taluka : MAIHAR
Post office : BHATIA
Pin Code : 485771
FAX No. : 07674-232580
E-mail : snsmhr@sancharnet.in
Phone : 07674- 232042, 232089
- (f) Police Station :
- (g) First opening date : 01-MAY-92
- (h) Weekly day of rest : SUN
2. Address for : M/S KJS CEMENTS LTD.
correspondance : VILLAGE -. AMALIA, P.O. MAIHAR
DIST. SATNA (M.P.) 485771
3. (a) Lease Number : MPR0615
- (b) Lease area : 10.43
- (c) Period of lease : 20
- (d) Date of Expiry : 29-MAY-22
4. Mineral worked : LIMESTONE Main

5. Name and Address of the

Lessee : KJS CEMENTS LTD.
VILLAGE -. AMALIA, P.O.
MAIHAR SATNA MADHYA
PRADESH
Phone:07674- 232042, 232089
FAX :07674-232580

Owner : KJS CEMENTS LTD.
A-7, Maharaniabag NEW DELHI
SATNA MADHYA PRADESH
Phone: NA
FAX : NA

6. Date of approval of Mining	:	Renewal under rule 24 MCR1960	22-DEC-04
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	21-JUN-11
		Mining Scheme rule 12 MCDR1988	08-MAY-12
		Mining Scheme rule 12 MCDR1988	27-AUG-13

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	3 boresholes in previous scheme period	none done.	No confirmatory evidence of the drilled boreholes could be submitted by representative of lessee.
1b	Exploration over lease area for geological axis 1 or 2	Exploration in the lease is over G1 and G2	As per approved document.	No confirmatory evidence of the drilled boreholes could be submitted by representative of lessee.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	NA	No drilling done.	No confirmatory evidence of the drilled boreholes could be submitted by representative of lessee.
1d	Balance area to be explored to bring Geological axis in 1 or 2	The entire lease area is under G1 and G2	The entire lease area is under G1 and G2	
1e	Balance reserve as on 01/04/20	212578 tonnes.	268755 tonnes as on 31.3.2018	
1f	General remarks of inspecting officers on geology, exploration etc	Three core holes were proposed during the previous scheme period. The cement grade mineralization is 10-12 meters in thickness.	No drilling done.	No confirmatory evidence of the drilled boreholes could be submitted by representative of lessee.

Development :

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

2a	Location of development w.r.t.lease area	Development was proposed in Quarry no. 2	The development in the Quarry no. 2 has been done on the northern and eastern side. No development has been done on the south part of the Quarry number 2.	No violation is being pointed out as violation of Rule 11(1), 55(i)(ii) was pointed out in earlier inspection dated 30/11/2016 and logical end is still pending. Further violation of rule 11(1) was pointed out in inspection dated 14.10.2017 and the logical end/compliance of the violation is still pending.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	One bench in top soil and two benches of height 4 & 6 meters in limestone.	No bench in topsoil , and two benches in limestone of height 8 & 2 meters exist in the Quarry no. 2. The Quarry no 1 has been back filled.	
2c	Stripping ratio or ore to OB ratio	Proposed stripping ratio 1:0.35	Actual stripping ratio 1:0.24	
2d	Quantity of topsoil generation in m3	68460 tonnes during the proposal period.	Actual 33100 tonnes during the proposal period.	
2e	Quantity of overburden generation in m3	Proposed 89514 tonnes.	Actual 61280 tonnes.	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	It was proposed to develop Quarry no. 2 upto depth to 10-12 meters with bench height of 4 & 6 meters.	Quarry no. 2 has been developed upto the depth of 10-12 meters. Bench height of 8 & 2 meters is existing in the Quarry no. 2. Backfilling has been done in the Quarry no. 1. No development has been done on the south part of the quarry no. 2.	No violation is being pointed out as violation of Rule 11(1), 55(i)(ii) was pointed out in earlier inspection dated 30/11/2016 and logical end is still pending. Further violation of rule 11(1) was pointed out in inspection dated 14.10.2017 and the logical end/compliance of the violation is still pending.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Development was proposed in Quarry number 2.	Development has been done in the Quarry number 2	No violation is being pointed out as violation of Rule 11(1), 55(i)(ii) was pointed out in earlier inspection dated 30/11/2016 and logical end is still pending. Further violation of rule 11(1) was pointed out in inspection dated 14.10.2017 and the logical end/compliance of the violation is still pending.
3b	Quantity of ROM mineral production proposed	Proposed ROM during the previous scheme period 447572 tonnes.	Actual reported ROM during the previous Scheme preiod 382220 tonnes.	
3c	Recovery of sailable/usable mineral from ROM production	The recovery of saleable/usable minerals from the ROM is 80%	Actual 80%	
3d	Quantity of mineral reject generation	NIL	NIL	
3e	Grade of mineral rejects generation and threshold value declared.	No mineral reject generated.	No mineral reject generated.	
3f	Quantity of sub grade mineral generation.	No subgrade generated.	No subgrade generated.	
3g	Grade of sub grade mineral generation	None envisaged.	None generated.	
3h	Manual / Mechanised method adopted for segregating from ROM	No segregation from ROM proposed.	No segregation from ROM done.	
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	None proposed.	None done.	

3j	Provision of drilling and blasting in mineral benches	Proposed.	Mining operations closed during the inspection.
3k	Provision of mining machineries in mineral benches	Proposed.	The mining operations closed during the inspections.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	As per approved document.	As per approved document.
3m	Total area covered under excavation/pits	6.7525 hect at the end of proposal period	6.60 hect at the end of proposal period.
3n	Ore to OB ratio for the pit/mine during the year.	Proposed 1:0.35 during scheme period.	Actual 1:0.24 during scheme period.
3o	Total area put in use under different heads at the end of year	6.7525 hect at the end of proposal period	6.60 hect at the end of proposal period.
3p	Production of ROM mineral during the last five year period as applicable	Proposed Mineral production for the year 2013-14, 2014-15, 2015-16, 2016-17 & 2017-18 is 84620 tonnes, 96300 tonnes, 96300 tonnes, 85560 tonnes, 84792 tonnes.	Actual reported Mineral production for the year 2013-14, 2014-15, 2015-16, 2016-17 & 2017-18 is 84605.820 tonnes, 96144.4 tonnes, 96174.9 tonnes, 85068.0 tonnes, 20227.07 tonnes.

3q	General remarks of inspecting officers on method of mining etc.	Open cast mining with backfilling in Quarry no. 1	Open cast mining is being done. Backfilling has been done in the quarry number 1.	No violation is being pointed out as violation of Rule 11(1), 55(i)(ii) was pointed out in earlier inspection dated 30/11/2016 and logical end is still pending. Further violation of rule 11(1) was pointed out in inspection dated 14.10.2017 and the logical end/compliance of the violation is still pending.
----	---	---	---	---

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 proposal for topsoil and OB not proposed only backfilling.	Backfilling has been done in the Quarry no.1. However one dump exist on the south side of the Quarry no. 2.	No violation is being pointed out as violation of Rule 11(1), 55(i)(ii) was pointed out in earlier inspection dated 30/11/2016 and logical end is still pending. Further violation of rule 11(1) was pointed out in inspection dated 14.10.2017 and the logical end/compliance of the violation is still pending.
4b	Location of topsoil, OB and mineral reject dumps	Backfilling proposed.	Backfilling is done in the quarry number 1. One waste dump exists on the south side of the Quarry number 2.	
4c	Number of dumps within lease area and outside of lease area	NIL	One dump inside the lease area.	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	NIL	One dump inside the ultimate pit limit.	

4e	Number of active and alive dumps.	NIL	One active dump.	
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.	None proposed.	None seen along the dump. The dump is situated inside the quarry number 2.	
4i	Length of Retaining wall or garland drain all along dumps	None proposed.	None seen during the inspection.	
4j	Number of settling ponds	None proposed.	None seen.	
4k	Specific comments of inspecting officer on waste dump management	Backfilling was proposed in the Quarry number 1 located on the eastern side of lease.	Backfilling is been done in the quarry no. 1, however a waste dump has also been developed onthe south side of the Quarry number 2.	No violation is being pointed out as violation of Rule 11(1), 55(i)(ii) was pointed out in earlier inspection dated 30/11/2016 and logical end is still pending. Further violation of rule 11(1) was pointed out in inspection dated 14.10.2017 and the logical end/compliance of the violation is still pending.

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.	aproxxx 2.5 hect in the east of the lease in quarry no. 1 is mined out.	Aproxxx 0.5 hect is backfilled in quarry number 1	
5b	Area under backfilling of mined out area	1.4 hect.	0.5 hect.	

5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Proposed.	Top soil used in the backfilling.
5d	Total area fully reclaimed and rehabilitated	NIL	NIL
5e	General remarks of inspecting officers on backfilling and reclamation etc.	Backfilling has been proposed in the Quarry no. 1 in the east of the lease area.	Backfilling has been done in the Quarry no. 1 in the east of the lease area.

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).	As per rule.	Submitted.	
6b	Area available for rehabilitation (ha) .	NIL	NIL	
6c	afforestation done (ha).	In 0.075 hect.	aproxx in 0.05 hect area in the east of lease.	
6d	No. of saplings planted during the year	It was proposed to plant 75 plants during the previous plan period.	Total 70 plants planted.	
6e	Cumulative no .of plants	none proposed.	Aproxx 90 plants.	
6f	Any other method of rehabilitation	None proposed.	None done.	
6g	Cost incurred on watch and care during the year	42 Lacs	Not submitted.	

6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	total 2.6 hect area avilable for backfilling.	Total 0.5 hect area has been backfilled in Quarry no. 1 located on the eastern side of the lease.
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	1.40 hect during the previous scheme period.	Total 0.5 hect backfilled in the quarry no. 1 located on the east of the lease.
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area	None proposd.	None done.
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	None proposed.	None done.
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	None proposed.	None done.
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	afforestation proposed on 0.075 hect during the previous scheme period.	Afforestation on 0.05 hect.
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	None proposed.	None done.
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	None propsoed.	None done.

6p	Compliance of environmental monitoring (core zone and buffer zone)	Proposed.	done.	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	Backfilling proposals in the Quarry no. 1.	Backfilling is done though the progress is lagging.	Backfilling is done though the progress is lagging.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM mineral dispatch.	ROM is dispatched to cement plant.	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	No segregation proposed.	No segregation done.	
7c	Different grade of mineral sorted out at mines.	No sorting proposed.	No sorting done.	
7d	Any beneficiation process at mines	None proposed.	None done.	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	The entire ROM is proposed to be used in the Cement plant.	The entire ROM is transported to the Cement plant.	

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Topsoil to be used in the backfilling.	Top soil used in the backfilling.	

8b	Concurrent use or storage of topsoil	Concurrent use.	Used in backfilling.	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	No proposal for seperated dumping.	Backfiling has been done in quarry no. 1. However one dump exists on the south side of the Quarry no. 2.	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Backfilling has been proposed in Quarry no. 1	Backfilling has been done in Quarry no. 1 located on the eastern side of the lease.	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Backfilling.	Backfilling in quarry no.1.	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	No information available.	as on date of inspection 90 plants exists.	
8g	Survival rate	80%	<80%	
8h	Water sprinkling on roads to control airborne dust	Proposed.	Mining operations closed on day of inspection as proposals for review of mining plan expired on 31.3.2018.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	The area has number of conjugate mining leases. The asthetic beauty of the area is normal.	The area has number of conjugate mining leases. The asthetic beauty of the area is normal.	The area has number of conjugate mining leases. The asthetic beauty of the area is normal.

Compliance of Rule 45:

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

9a	Status of submission of Monthly and Annual returns	As per submitted return for the year 2016-17 the cost of production is 209 Rs/tonnes.	The monthly and annual returns are submitted online.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	As per submitted AR for the year 2016-17 Mining Engineer in charge Raj Kumar Geologist in charge D.Roy	As on date of inspection no mining engineer and Geologist present.	No violation is being pointed out as violation of Rule 11(1), 55(i)(ii) was pointed out in earlier inspection dated 30/11/2016 and logical end is still pending. Further violation of rule 11(1) was pointed out in inspection dated 14.10.2017 and the logical end/compliance of the violation is still pending.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	AS per AR of 2016-17 6.305 hect.	AS on date of inspection 6.6 hect against proposal of 6.75 hect.	
9d	Scrutiny of Annual return on afforestation	15 saplings planted during the year 2016-17	Plantation seen in the lease area.	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	NIL	NIL	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	As per submitted return for the AR 2016-17 ROM stock is 16151 tonnes.	As on date of inspection no ROM stock was observed in the lease area.	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	The mine is a captive mine the ex mine price is equal to cost of production.	209 Rs/tonne	
9h	Scrutiny of Annual return on fixed assets	Fixed Assets (in Rs .) 5435148	No fixed installation observed in the lease.	

9k	Scrutiny of Annual return on mining machineries	BACK HOE 1.200 CUM 1 Non Electrical Opencast LOAD HAUL DUMPER 9.000 CUM 3 Non Electrical Opencast	No machinery observed in the lease area as mining operations closed as on date of inspection.
----	--	---	--

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

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

Date :

(MITHELESH PUROHIT)

Indian Bureau of Mines