

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

**MCDR inspection REPORT
Jabalpur regional office**

Mine file No : MP/STN/LST-1

Mine code : 38MPR35001

- (i) Name of the Inspecting Officer and ID No. : **KQ06) NARESH KUMAR KATARIYA**
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine Official with Designation : MR. K.P.NIGAM, AGENT. MR. B.K.BANERJEE, GEOLIGIST. & MR
- (iv) Date of Inspection : 15-NOV-19
- (v) Prev.inspection date : 24-JAN-19

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **AMILIA**
- (b) **Registration NO.** : **IBM/5097/2011**
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
State : MADHYA PRADESH
District : SATNA
Village : AMILIA
Taluka : MAIHAR
Post office : MAIHAR
Pin Code : 485771
FAX No. : 07674-232580
E-mail : snsahr@sancharnet.in
Phone : 07674- 232042, 232089
- (f) Police Station : Maihar
- (g) First opening date : 01-OCT-74
- (h) Weekly day of rest : SUN
2. Address for correspondance : M/S KJS CEMENTS LTD.
VILLAGE -. AMALIA,
P.O. MAIHAR, DIST.SATNA (M.P.) 485771
3. (a) Lease Number : MPR0386
- (b) Lease area : 217.51
- (c) Period of lease : 20
- (d) Date of Expiry : 30-OCT-21
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	:	Mining Scheme rule 12 MCDR1988	13-JAN-97
Plan/Scheme of Mining	:	Renewal under rule 22 MCR1960	14-JUL-03
	:	Mining Scheme rule 12 MCDR1988	02-JUN-11
	:	Mining Scheme rule 12 MCDR1988	17-DEC-12
	:	MP review under 17(1) MCR 2016	31-MAR-17

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Not Proposed	Not Done	
1b	Exploration over lease area for geological axis 1 or 2	4 BH	NIL	Violation Pointed out for the same.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	The lessee company itself under the supervision of own Mining Engineer & Geologist. Expenditure in Lakh Rupees during the year: Not proposed	The lessee company itself under the supervision of own Mining Engineer & Geologist. Expenditure in Lakh Rupees during the year: Not proposed	
1d	Balance area to be explored to bring Geological axis in 1 or 2	Total 17 Bore holes proposed in 200mx 200m grid interval during 2017-18 to 2018-19 to bring G2 to G1.	Bore holes not done in the RY. 154 Ha. in G1 & 63.512 Ha in G2	Violation pointed out for the same.
1e	Balance reserve as on 01/04/20	Balance reserves as on 01.04.2019 Proved Reserve (111) 18067355.32 MT Probable Reserve (122) 3327300 MT Feasibility Mineral Resource (211) 4461064 Pre-Feasibility Mineral Resource (222) 3940200 MT	Balance reserves as on 01.04.2019 Proved Reserve (111) 15572662 MT Probable Reserve (122) 3327300 MT Feasibility Mineral Resource (211) 4461064 Pre-Feasibility Mineral Resource (222) 3940200 MT	

1f	General remarks of inspecting officers on geology, exploration etc	Total lease area not explored in G1. 154 Ha. in G1 & 63.512 Ha in G2. strict vision required for exploitation.
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Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	The working will be between Co-ordinates N2681705m to 2682480m and E479887 to 480460m.	Actual worked done between Co-ordinates N2681723m to 2682407m and E479887 to 480380m.	The mine-development was lagging from the proposal. Violation pointed out for the same.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Topsoil/OB 02 m Mineral 03 benches 1st bench 05 m 2nd bench 6m and 3rd bench 4.5m	Topsoil/OB 02 m Mineral 03 benches 1st bench 05 m 2nd bench 6m and 3rd bench 4.5m	Benches developed as per proposal.
2c	Stripping ratio or ore to OB ratio	1:0.76	1:0.16	Ore to OB ratio not as per proposal due to lagging in development. Violation for the same is pointed out.
2d	Quantity of topsoil generation in m3	80000 m3	NIL	The mine-development was lagging from the proposal and not as per the approved proposals of approved document. Violation for the same is pointed out

2e	Quantity of overburden generation in m3	303555 m3	200000 m3	The mine-development was lagging from the proposal and not as per the approved proposals of approved document. Violation for the same is pointed out.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Top soil and OB removed is required for systematic mine development. Violation for the same is pointed out.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One pit	One pit	
3b	Quantity of ROM mineral production proposed	1249988 MT	1248705.92 MT	
3c	Recovery of sailable/usable mineral from ROM production	90%	90%	
3d	Quantity of mineral reject generation	No Mineral rejects.	No Mineral rejects found.	
3e	Grade of mineral rejects generation and threshold value declared.	No Mineral Rejects, 34% CaO	No Mineral Rejects, 34% CaO	
3f	Quantity of sub grade mineral generation.	No Mineral sub grades	No Mineral sub grades	No Mineral sub grades reported as per provided records and AR.
3g	Grade of sub grade mineral generation	Not proposed	NIL	

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	NIL	
3j	Provision of drilling and blasting in mineral benches	Drilling & blasting will be done as per parameter spacing: 3.50m Burden: 3m Depth of hole: 7m Dia of hole: 110m Charge per hole: 20-25kg. Powder factor: 4.5-6.5	drilling & blasting spacing: 3.50m Burden: 3m Depth of hole: 7m Dia of hole: 110m Charge per hole: 20- 25kg. Powder factor: 4.5-6.5	
3k	Provision of mining machineries in mineral benches	Drilling machine: L-8 (DTH machine) drill with integral compressor 02 nos. Loading Machine: L&T- 800/ZXH650Hyd. Excavator 04 nos. Transportation : Dumpers 03 nos. 30t. & 06 dumpers 35t. Miscellaneous additional equipments/mac hines wil be deployed	Drilling machine: L-8 (DTH machine) drill with integral compressor 02 nos. Loading Machine: L&T- 800/ZXH650Hyd. Excavator 04 nos. Transportation: Dumpers 03 nos. 30t. & 06 dumpers 35t.	Pay loader, dozer with ripper, dewatering pump, water tanker, crane diesel tanker, diesel welding machine, rock breaker, shovel, drill machine, motor grader etc. Miscellaneous additional equipments/machine s deployed

3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Height of benches in overburden and mineral proposed 2-3m for OB & 4-6 m for mineral	Height of benches in overburden 2-3m and mineral 4-6 m	
3m	Total area covered under excavation/pits	Pit 49.4 ha. proposed for the plan period	Actual pit cover under excavation 48.00ha.	
3n	Ore to OB ratio for the pit/mine during the year.	1:0.76	1:0.16	Violation for the same is pointed out
3o	Total area put in use under different heads at the end of year	Mining: 49.4 ha. Roads: 1.00 ha. Infrastructure : 0.5 ha. OB/waste dump: 1.00 ha. Top soil preservation: 2.0 ha.	Mining: 48.00 ha. Roads: 1.00 ha. Infrastructure: 0.5 ha. OB/waste dump: 1.00 ha. Top soil preservation: 2.0 ha.	
3p	Production of ROM mineral during the last five year period as applicable	2014-15 = 1131750 2015-16= 1249996 2016-17= 1249875 2017-18= 1249988 2018-19= 1249988	2014-15 = NIL 2015-16= 959410 2016-17= 1166705 2017-18= 1245987 2018-19= 1248705	
3q	General remarks of inspecting officers on method of mining etc.			Eploration work is required to be done as per proposal. Strict monitoring is required for the same.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
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4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	The top soil in the ML area is sandy in nature 2018-19 proposed 80000m3 and OB/waste is inter bedded shale with clay pocket 2018-19 proposed 303555 m3	The top soil not generated during the year and OB/waste is generated 200000m3	Violation for the same is pointed out.
4b	Location of topsoil, OB and mineral reject dumps	Location of top soil, OB/waste dumps N 2682080-2682470 and E479840-479960	Actual location of OB/waste dump N2682469.69-2681894.56 and E 480053.52-480516.58	The top soil quantity generated very negligible and its used for plantation. Violation pointed out for the same.
4c	Number of dumps within lease area and outside of lease area	One dump proposed within lease area	One dump within lease area.	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	the development and the ultimate pit limit has been designed keeping in view of 7.5m barrier as per rule 111 of MMR 1961 ultimate mineable area will be 141.967 ha.	Within UPL	
4e	Number of active and alive dumps.	One active dump	One active dump	
4f	Number of dead dumps.	Not proposed	NIL	
4g	Number of dumps established.	One	One	

4h	Whether Retaining wall or garland drain all along dumps are there.	The garland drain and bund along with settling tank will be maintained in the boundary side and around the dump to prevent siltation of low lying areas and in rush of water into the mine.	Garland drain has been maintained along the dumps
4i	Length of Retaining wall or garland drain all along dumps	The size of drain is 1mX0.5m.	The size of drain is 200 X 1 X 1.
4j	Number of settling ponds	one	one
4k	Specific comments of inspecting officer on waste dump management		

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.	44 Ha.	48 ha.	
5b	Area under backfilling of mined out area	2.5 ha.	2.5 ha.	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	419582 M3	250000 M3	top soil generation is less than the proposed quantity. Violation pointed out for the same.

5d	Total area fully reclaimed and rehabilitated	4.50 ha.	2.5 ha.	compliance on reclamation and rehabilitation by backfilling has not been done as per proposal. Violation pointed out for the same.
5e	General remarks of inspecting officers on backfilling and reclamation etc.			compliance on reclamation and rehabilitation by backfilling has not been done as per proposal. It is required to be monitored strictly.

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).	Annual PMCP report it will be submitted before 1st day of July every year	The yearly report in respect of rule 26(2) of MCDR 2017 has not been submitted.	Violation pointed out for the same.
6b	Area available for rehabilitation (ha) .		the yearly report in respect of rule 26(2) of MCDR 2017 has not been submitted.	Violation pointed out for the same.
6c	afforestation done (ha).	Not proposed	NIL	the yearly report in respect of rule 26(2) of MCDR 2017 has not been submitted.Violatio n pointed out for the same.
6d	No. of saplings planted during the year			the yearly report in respect of rule 26(2) of MCDR 2017 has not been submitted.Violatio n pointed out for the same.

6e	Cumulative no .of plants			the yearly report in respect of rule 26(2) of MCDR 2017 has not been submitted.Violatio n pointed out for the same.
6f	Any other method of rehabilitation			the yearly report in respect of rule 26(2) of MCDR 2017 has not been submitted.Violatio n pointed out for the same.
6g	Cost incurred on watch and care during the year			the yearly report in respect of rule 26(2) of MCDR 2017 has not been submitted.Violatio n pointed out for the same.
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	8.0 ha.	2.5 ha.	As per recods provided during site visit. Violation pointedout for the same
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	4.5 Ha	2.5 Ha	Violation pointed out for the same.
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on on backfilled area	NA	NA	the yearly report in respect of rule 26(2) of MCDR 2017 has not been submitted. Violaion pointed out for the same.

6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	NA	NA	the yearly report in respect of rule 26(2) of MCDR 2017 has not been submitted. violation pointed out for the same.
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	Nil	Nil	the yearly report in respect of rule 26(2) of MCDR 2017 has not been submitted. Violation pointed out for the same.
6m	Compliance of rehabilitation of waste land within lease (i)afforestation			the yearly report in respect of rule 26(2) of MCDR 2017 has not been submitted.
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)			Violation pointed out for the same.
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Nil	Nil	the yearly report in respect of rule 26(2) of MCDR 2017 has not been submitted
6p	Compliance of environmental monitoring (core zone and buffer zone)	Nil	Nil	the yearly report in respect of rule 26(2) of MCDR 2017 has not been submitted
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			the yearly report in respect of rule 26(2) of MCDR 2017 has not been submitted. Violation pointed out for the same.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
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7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM mineral is intended for captive cement plant of the company at Amilia located near the lease area.	Entire ROM has been used for captive use as per records.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	mechanical	mechanical
7c	Different grade of mineral sorted out at mines.	The Limestone of the lease area is of cement grade.	Entire mineral used in cement plant as per provided records.
7d	Any beneficiation process at mines .	The ROM limestone will be sized in the crusher installed near the ML area.	Vibrating screening used when excess soil is mixed to lower SiO ₂ in crusher.
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues		

Environment:

Sl.No.	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	The soil in the lease area will be used for topping of the backfilled area and plantation will be done on soil dump.	The top soil used for plantation	

8b	Concurrent use or storage of topsoil	No action will be taken for utilization and proper stacking of top soil to be left at end.	No any stack of top soil.	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	One separate dump of OB/Waste	One separate dump of OB/Waste	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Not proposed	Not done.	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	The mined out land which will be fully exhausted by virtue of excavation up to full depth of mineralization will be simultaneously /progressively reclaimed by backfilling of OB & Waste generated during the course of mining.	The reclaimed area is partially backfilled & afforestation done on the backfilled area.	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	The 5 ha. area was proposed for plantation on backfilled area	The total 7452 saplings planted within mining lease in the year 2018-19 and nearly 2000 saplings planted outside of mining lease area as per provided records. Total about 5.0 Ha area covered with plantation.	5.0 ha area plantation not done at backfilled area. Violation pointed out for the same.
8g	Survival rate	Not proposed	80% as per provided records.	

8h	Water sprinkling on roads to control airborne dust	Regular water sprinkling will be maintained to control airborne dust.	Regular water sprinkling at roads found during visit of mine site.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	MR of Apr-18 to Mar-19 to be submitted and AR of 2018-19 to be submitted.	MR of Apr-18 to Mar-19 have been submitted and AR of 2018-19 has been submitted on 24.06.2019	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Name of the Mining Engineer: Mr. Ashok Singh Geologist: Mr. Biplab Kumar Banerjee Manager: Mr. Ashok Singh	Name of the Mining Engineer: Mr. Ashok Singh Geologist: Mr. Biplab Kumar Banerjee Manager: Mr. Ashok Singh	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Land use pattern as per AR- Pit area: 48 ha. Use for waste disposal: 4.0 ha. Infrastructure /road: 1.50 ha. Reclaimed area: 2.5 ha.	Land use pattern as per AR- Pit area: 48 ha. Use for waste disposal: 4.0 ha. Infrastructure/road: 1.50 ha. Reclaimed area: 2.5 ha.	

9d	Scrutiny of Annual return on afforestation	2000 saplings planted outside lease area.	Afforestation as per MP and AR 2000 saplings planted outside lease area.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	No any mineral reject generated during the year.	No any mineral reject generated during the year as per provided records.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM was proposed 1249988 t & actual production carried out 1248705 t	As per approved mining plan ROM was proposed 1249988 t & actual production carried out 1248705 t as per provided records.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	sale value,- captive used Ex. Mine price -Rs. 156.64/tone production costs- Rs. 156.64/tone	sale value,- captive used Ex. Mine price -Rs. 156.64/tone production costs- Rs. 156.64/tone
9h	Scrutiny of Annual return on fixed assets	Fixed assets as per AR: Value of Fixed Assets (in rupees) 246398631	Value of Fixed Assets (in rupees) 246398631 as per provided records.

9k	Scrutiny of Annual return on mining machineries	As per AR 2018-19 SHOVEL (HYDRAULIC) 6.500 CUM 1 nos. BACK HOE 4.500 CUM 1 nos. BACK HOE 1.900 CUM 1 nos. BACK HOE 1.900 CUM 1 nos. DUMPER 60.000 TONNE 7 nos. DOZER 180.000 HP 1 nos. MOTOR GRADER 120.000 HP 1 nos. ROCK DRILL (NONELEC.)110. 000 MM 1 nos. WHEEL LOADER 4.000 CUM 1 nos. WATER TANKER 10000.000 LITRE 1 nos.	provided as per AR 2018- 19 SHOVEL (HYDRAULIC) 6.500 CUM 1 nos. BACK HOE 4.500 CUM 1 nos. BACK HOE 1.900 CUM 1 nos. DUMPER 60.000 TONNE 7 nos. DOZER 180.000 HP 1 nos. MOTOR GRADER 120.000 HP 1 nos. ROCK DRILL (NONELEC.)110.000 MM 1 nos. WHEEL LOADER 4.000 CUM 1 nos. WATER TANKER 10000.000 LITRE 1 nos.
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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
MCDR17	Rule 11(1)	16-DEC-19			
MCDR17	Rule 26(2)	16-DEC-19			

Date :

(NARESH KUMAR KATARIYA)

Indian Bureau of Mines