

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

**MCDR inspection REPORT**

**Ranchi regional office**

**Mine file No :** BIH/ROH/LST/346/RRO

**Mine code :** 38BHR22015

- (i) Name of the Inspecting : **K03** ) **G. S. KANNAN**  
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Shri Sanjay Kumar Singh GM (Mines)  
Official with  
Designation
- (iv) Date of Inspection : 17/03/2020
- (v) Prev.inspection date : 17/09/2019

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **MURLI PAHARI**
- (b) **Registration NO.** : **IBM/209/2011**
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
- State : BIHAR
- District : ROHTAS
- Village : MURLI PAHARI
- Taluka : DEHRI-ON-SONE
- Post office : BANJARI
- Pin Code : 821303
- FAX No. : 06188-233242
- E-mail : sanjaysingh@kalyanpur.com
- Phone : 06188-233215, 233413
- (f) Police Station : Banjari
- (g) First opening date : 20/07/1992
- (h) Weekly day of rest : SUN
2. Address for : VILL-MURLIPAHARI  
correspondance : ROHTAS  
DIST-ROHTAS, PIN-821303
3. (a) Lease Number : BHR0139
- (b) Lease area : 53.38
- (c) Period of lease : 40
- (d) Date of Expiry : 01/01/2032
4. Mineral worked : LIMESTONE Main

## 5. Name and Address of the

Lessee : KALYANPUR CEMENTS LIMITED  
 AT BANJARI PO-BANJARI  
 ROHTAS, BIHAR ROHTAS BIHAR  
 Phone: 7221, 7205, 7433, 7215  
 FAX : 06188-7242

Owner : Sri Sunil Kumar Gupta, Director  
 Dlmia DSP Limited/ KCL 2&3  
 Dr. Rajendra Pd. Sarani  
 Kolkata(W.B.) India, 700001  
 ROHTAS BIHAR  
 Phone:  
 FAX :

Agent : Sanjay Kr. Singh  
 M/s Kalyanpur Cements Ltd.  
 At & PO- Banjari- 821303  
 Dist- Rohtas (Bihar) ROHTAS  
 BIHAR  
 Phone: 06188-233055  
 FAX :

## Mining Engineer

Name : DHARMENDRA KUMAR SINGH, Full Time  
 Qualification : B. E. (Mining)  
 Appointment/ : 12/10/2012  
 Termination date

## Mining Engineer

Name : SANJAY KUMAR SINGH, Full Time  
 Qualification : B.E.(MINING), FIRST CLASS MANAGER  
 Appointment/ : 01/12/2003  
 Termination date

## Manager

Name : SANJAY KR. SINGH  
 Qualification : B.E.(MINING), FIRST CLASS MANAGER  
 Appointment/ : 01/12/2003  
 Termination date

6. Date of approval of Mining Plan/Scheme of Mining	:	Fresh under rule 22 MCR1960	11/07/1989
		Mining Scheme rule 12 MCDR1988	27/11/1998
		Mining Scheme rule 12 MCDR1988	14/09/2007
		Renewal under rule 24 MCR1960	21/05/2012
		MP review under 17(1) MCR 2016	16/05/2018

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

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No Core Boreholes has been Proposed during the proposed plan period.	As per proposal, No boreholes have been drilled.	Violation has been issued under Rule 12(4). As conditions has been mentioned in the approved letter.
1b	Exploration over lease area for geological axis 1 or 2	No Additional exploration was proposed during 2018-2019 in the lease area.	No Additional exploration was carried out in the lease area for Geological axis - 1 during 2018-2019	Total 19 boreholes have been drilled in the lease area.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No Proposal for Exploration during 2018-2019.	Nil	
1d	Balance area to be explored to bring Geological axis in 1 or 2	No Exploration was proposed out at 100m X 100m grid interval. No Additional exploration was proposed during 2018-2019	No Exploration was carried out at 100m X 100m grid interval.	As per approved document 19 boreholes have been drilled so far in the lease area and 62.95 hectares has explored to G-1. 2.36 hectares is under G-2.
1e	Balance reserve as on 01/04/20	Reserves & Resources as on 01.04.2019 Proved Mineral Reserves (111) = 11760963 tons Feasibility Mineral Resources (211) = 490500 tons	Reserves & Resources as on 01.04.2019 Proved Mineral Reserves (111) = 12363413 tons Feasibility Mineral Resources (211) = 490500 tons	Due to less production, there is no change in Reserves and Resources.

1f	General remarks of inspecting officers on geology, exploration etc	It is part of Rohtas Limestone in Semri group of Vindhyan Sub group.	Formation comprises of shale and limestone beds overlain by shale and sandstone.	Lease is having alternate strata ranges from few cm to 1m. Hence borehole has to be drilled at closer interval to get quantity and quality
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Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Proposed to work in existing Pit-1 along the periphery from top downwards of the hill during 2018-2019 and 2019-2020.	Development has not been carried out as per the proposal	Violation has been issued under Rule 11(1)
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	It is proposed to form separate Bench's in Topsoil, Overburden and Mineral.	Separate Benches are formed for Topsoil, Overburden and Mineral.	
2c	Stripping ratio or ore to OB ratio	1 : 5.74	1 : 6.40	
2d	Quantity of topsoil generation in m3	It is no proposal to remove topsoil during 2018-2019	As per proposal. No topsoil has been generated.	
2e	Quantity of overburden generation in m3	During 2018-2019 it is proposed OB as 1932540 Cu.m	1557695 cu.m of OB have been removed.	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	Proposed to work in existing Pit-1 along the periphery from top downwards of the hill during 2018-2019 and 2019-2020.	1557695 cu.m of OB have been removed against 1932540 cu.m of OB waste proposal	

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## Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Proposed to work in existing Pit-1 along the periphery from top downwards of the hill during 2018-2019 and 2019-2020. Production proposed from 8th bench to 12th bench.	Production has not been carried out as per the proposal.	Violation has been issued under Rule 11(1)
3b	Quantity of ROM mineral production proposed	The total target of Production was 842400 tons during 2018-2019.	Production achieved during 2018-2019 is 239950 tons.	
3c	Recovery of sailable/usable mineral from ROM production	90%	90%	
3d	Quantity of mineral reject generation	There is no proposal to produced mineral rejects during 2018-2019	No mineral rejects has been generated	
3e	Grade of mineral rejects generation and threshold value declared.	Mineral reject- below the threshold value and outside the ore zone.	Mineral reject- below the threshold value and outside the ore zone.	
3f	Quantity of sub grade mineral generation.	There is no proposal to produced Sub Grade mineral Generation during 2018-2019	No Sub Grade mineral has been generated during 2018-2019	
3g	Grade of sub grade mineral generation	There is No proposal for Generation of Subgrade Mineral	No Sub Grade mineral has been generated during 2018-2019	
3h	Manual / Mechanised method adopted for segregating from ROM	Manual	Manual	

3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No Proposal	Nil	Only Manual Picking of Ore from Intercalated Waste.
3j	Provision of drilling and blasting in mineral benches	Spacing - 4.0 m Burden - 3.0 m Depth - 6-8 m It is Proposed to drill by 32mm to 115mm dia, crawler mounted down hole drill. Control Blasting is done by using delay detonator.	Drilling & Blasting are done as per proposal.	
3k	Provision of mining machineries in mineral benches	Hydraulic Excavators Dumpers Compressor Jack Hammer Tractor Dozer Water Tanker Electric generator	As per proposal machineries are available in field.	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Bench height of 6m was proposed in Mineral.	Benches are formed not as per proposal and height is more than proposal.	Violation has been issued under Rule 11(1)
3m	Total area covered under excavation/pits	30 hect area is under Pit	30 hect area is under Pit	
3n	Ore to OB ratio for the pit/mine during the year.	1 : 5.74	1 : 6.4	
3o	Total area put in use under different heads at the end of year	Landuse Pattern as on 01.04.2019 Mining area=30.00 hect OB Dump = 12.00 hect Roads = 1.00 hect	Landuse Pattern as on 01.04.2019 Mining area=30.00 hect OB Dump = 12.00 hect Roads = 1.00 hect	

3p	Production of ROM mineral during the last five year period as applicable	2018-2019 = 842400 tons 2017-2018 = No Proposal 2016-2017 = 900000 tons 2015-2016 = 1000000 tons 2014-2015 = 900000 tons	2018-2019 = 239950 tons 2017-2018 = Nil 2016-2017 = Nil 2015-2016 = Nil 2014-2015 = Nil
3q	General remarks of inspecting officers on method of mining etc.	Mechanised Method is Proposed	239950 tons has been achieved during 2018-2019 against 842400 tons of proposal

## Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	There is proposal for dumping in existing dump in NE during 2018-2019. It is also proposed to backfill the area.	As per proposal the dumping & backfilling is not done.	Violation has been issued under Rule 11(1)
4b	Location of topsoil, OB and mineral reject dumps	It is proposed to dump in dump yard in NE side during 2018-2019.	As per proposal the dumping is done in NE side and also unproposed Northern Side during 2018-2019.	Violation has been issued under Rule 11(1).
4c	Number of dumps within lease area and outside of lease area	Lease area = 2 Non Lease area = Nil	Lease area = 2 Non Lease area = Nil	Totally 2 old dumps are present in the lease area.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	There is no proposal of Dump.	Nil	
4e	Number of active and alive dumps.	Active Dump = 1 Alive Dump = Nil	There is 2 active dump within lease area against the proposal.	
4f	Number of dead dumps.	Dead Dumps = Nil	Dead Dumps = Nil	

4g	Number of dumps established.	No dumps have been established.	No dumps have been established.	
4h	Whether Retaining wall or garland drain all along dumps are there.	No Proposal	Retaining wall has been constructed along the dump	
4i	Length of Retaining wall or garland drain all along dumps	No Proposal	350m of Retaining wall has constructed.	
4j	Number of settling ponds	No Proposal	Nil	
4k	Specific comments of inspecting officer on waste dump management	It is proposed to stock in dump yard in NE side during 2018-2019.	As per proposal the dumping is done in NE side and also unproposed Northern Side during 2018-2019.	Retaining wall has been constructed along the dump

#### 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.	Partly temporary Back filling has proposed during 2018-2019 nearer to BP-1 & 13.	As per proposal partly backfilled has carried out.	
5b	Area under backfilling of mined out area	It is proposed to temporary backfill 1.00 hectares during 2018-2019	0.50 hectares has Backfilled against proposal	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	There is no topsoil generation.	There is no topsoil generation.	
5d	Total area fully reclaimed and rehabilitated	There is no proposal for fully reclaimed and rehabilitated.	Nil	Ore is not extracted upto the proved depth and no fully backfilling are proposed in the present plan period.



5e	General remarks of inspecting officers on backfilling and reclamation etc.	Partly temporary Back filling has proposed during 2018-2019 nearer to BP-1 & 13.	0.50 hectares has Backfilled against proposal of 1.00 hectare.	Ore is not extracted upto the proved depth and no fully backfilling are proposed in the present plan period.
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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).	It should be on or before 1st July every year.	Submitted for the year 2018-2019	
6b	Area available for rehabilitation (ha) .	No Proposal	Nil	
6c	afforestation done (ha).	Proposed 0.025 hect in 2018-2019	As per proposal it is not planted inside the lease area.	Violation has been issued under Rule 11(1).
6d	No. of saplings planted during the year	250 saplings proposed in 7.5m safety barrier area for 2018-2019	1200 saplings have planted outside lease area.	
6e	Cumulative no .of plants	250 saplings proposed in 7.5m safety barrier area for 2018-2019	1200 saplings have planted outside lease area.	
6f	Any other method of rehabilitation	No Proposal	Nil	
6g	Cost incurred on watch and care during the year	No Proposal	Nil	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	Proposed 1.00 hect for temporary backfill in 2018-2019	0.50 hectares has been backfilled	

6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No Proposal	Nil	
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	No Proposal	on Nil backfilled area	
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No Proposal	Nil	
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	No Proposal	Nil	
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	250 saplings proposed in 7.5m safety barrier area for 2018-2019	1200 saplings have planted outside lease area.	
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	Proposed 0.025 hect in 2018-2019	As per proposal it is not planted inside the lease area.	Violation has been issued under Rule 11(1).
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	No Proposal	Nil	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Bi-Annually Survey	Environment monitoring is carried out through own as well as private agency.	

6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	Environment monitoring is carried out through private agency.	1200 saplings have planted outside lease area.
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### Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	The total target of Production was 842400 tons during 2018-2019.	239950 tons has been achieved during 2018-2019	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical Process and Manual Picking of Ore from Intercalated Waste	Mechanical Process and Manual Picking of Ore from Intercalated Waste	
7c	Different grade of mineral sorted out at mines.	The Limestone of the lease area is cement grade. Total Carbonate varies from 76% to 80%	The Limestone of the lease area is cement grade. Total Carbonate varies from 76% to 80%	Low grade are Blended with High grade ores to get the desired plant feed materials.
7d	Any beneficiation process at mines .	Manually sizing and sorting are proposed	sorting and sizing is being done	Entire ROM is transported to crusher installed in Kalyanpur Cement Plant.
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	Entire ROM is transported to crusher installed in Kalyanpur Cement Plant.	239950 tons has been achieved during 2018-2019 against 842400 tons of proposal.	Low grade are Blended with High grade ores to get the desired plant feed materials.

### Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
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8a	Separate removal and utilization of topsoil (Rule 32)	There is no proposal for separately remove and utilized of topsoil	Nil, Topsoil generation is not there	
8b	Concurrent use or storage of topsoil	There is no topsoil generation.	There is no topsoil generation.	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	It is proposed to dump in dump yard in NE side during 2018-2019.	As per proposal the dumping is done in NE side and also unproposed Northern Side during 2018-2019.	Violation has been issued under Rule 11(1).
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	At present there is no proposal for restoring.	Nil	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No Proposal	Nil	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	250 saplings proposed in 7.5m safety barrier area for 2018-2019	As per proposal it is not planted inside the lease area. 1200 saplings have planted outside lease area.	Violation has been issued under Rule 11(1).
8g	Survival rate	80%	70%	
8h	Water sprinkling on roads to control airborne dust	Yes, it is proposed for water sprinkling on haul roads.	Water sprinkling on road is observed during the inspection.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	No vegetation, agriculture are observed in lease area	Surrounding area beyond lease area is greenery. River Son is passing nearer to the lease area.	

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Compliance of Rule 45:

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Sl.No.	Item	Propasals	Actual work	Remarks
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9a	Status of submission of Monthly and Annual returns	MR Submitted up to = February 2020 AR Submitted up to = 2018-2019	Both Annual & Monthly returns are submitting in online system. Submitted within the time limits	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer, Diploma Mining Engineer has shown	As per record Mining Geologist is not appointed.	Violation has been issued under Rule 55(1)(3)(iii).
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Land use Pattern as on 01.04.2019. Current working = 0.30 hect Dump = 12.00 hect Infrastructure = 1.010 hect	Landuse Pattern is filled as per approved Mining Plan	
9d	Scrutiny of Annual return on afforestation	2500 saplings have shown for 2018-2019.	No Saplings has planted inside lease area during 2018-2019	Violation has been issued under Rule 11(1).
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	There is no Mineral Rejects Generation	There is no Mineral Rejects Generation	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Limestone Stock as on 01.04.2019 ROM Closing stock = Nil Dispatches of cement grade = 239950 tons	Mine has produced 239950 tons of Production during 2018-2019	It is captive mine of M/s. Kalyanpur Cements
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Cost of Production & Ex. Mine Price has shown	It is captive mine of M/s. Kalyanpur Cements	
9h	Scrutiny of Annual return on fixed assets	Fixed Assets is given	Fixed Assets is filled	
9k	Scrutiny of Annual return on mining machineries	Machineries details given	As available in field	

**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
MCDR17 Rule 11(1)	23/06/2020		MCDR17 Rule 11(1)	23/06/2020	
MCDR17 Rule 12(4)	23/06/2020		MCDR17 Rule 12(4)	23/06/2020	
MCDR17 Rule 33	23/06/2020		MCDR17 Rule 33	23/06/2020	
MCDR17 Rule 55(1)(3)	23/06/2020		MCDR17 Rule 55(1)	23/06/2020	

**Date :**

**(G. S. KANNAN)**

Indian Bureau of Mines