

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

**MCDR INSPECTION REPORT**

**Bhubaneshwar regional office**

**Mine file No :** ORI/GEM/KHD/MCDR-7/BBS

**Mine code :** 86ORI07008

- (i) Name of the Inspecting : **DEY** ) **NARENDRA MOHAN DEY**  
Officer and ID No.
- (ii) Designation : Assistant Mining Engineer
- (iii) Accompanying mine : **SHRI DEBARAJ MEHER, LESSEE & SHRI K BEHERA, S I M, BH**  
Official with  
Designation
- (iv) Date of Inspection : 12/08/2017
- (v) Prev.inspection date : 09/07/2013

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **DEDAR**
- (b) **Registration NO.** : **IBM / 5787 / 2011**
- (c) Category : B Manual
- (d) Type of Working : Opencast
- (e) Postal address  
State : ORISSA  
District : KALAHANDI  
Village :  
Taluka :  
Post office :  
Pin Code :  
FAX No. :  
E-mail : debarajm@gmail.com / debra:  
Phone : 94371 88301 / 9778842838
- (f) Police Station : JUNAGARH
- (g) First opening date : 13/10/2003
- (h) Weekly day of rest : WED
2. Address for : AT & PO. CHICHAIGUDA, JUNAGARH  
correspondance DIST: KALAHANDI, ODISHA  
PIN: 766 014
3. (a) Lease Number : ORI0855  
(b) Lease area : 1.39  
(c) Period of lease : 20  
(d) Date of Expiry : 06/06/2023
4. Mineral worked : IOLITE Main

## 5. Name and Address of the

Lessee : DEBARAJ MEHER  
AT/PO CHICHEIGUDA DIST  
KALAHANDI, ORISSA  
KALAHANDI ORISSA  
Phone:  
FAX :

Owner : DEBARAJ MEHER  
AT/PO CHICHIEGUDA DIST  
KALAHANDI, ORISSA  
KALAHANDI ORISSA  
Phone:  
FAX :

6. Date of approval of Mining	:	Mining Scheme rule 12 MCDR1988	12/05/2010
Plan/Scheme of Mining	:	Mining Scheme rule 12 MCDR1988	20/04/2012
	:	Mining Scheme rule 12 MCDR1988	10/06/2013

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

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	SCHEME OF MINING APPROVED ON 10.06.2013 FOR THE PERIOD 2013-14 TO 2017-18. DURING SCHEME PERIOD ONLY 5 BH PROPOSED TO BE DRILLED IN THE YEAR 2013-14.	NO BORE HOLES DRILLED IN THE SCHEME PERIOD	VIOLATION UNDER RULE 11(1) OF MCDR, 2017 HAS BEEN POINTED OUT TO THE LESSEE, FOR NOT DRILLING BH DURING 2013-14 TO 2017-18 ( AS ON JULY, 2017)
1b	Exploration over lease area for geological axis 1 or 2	DURING THE SCHEME PERIOD 2013-14 TO 2017-18 NUMBER OF BH PROPOSED WAS 5 NOS IN THE YEAR 2013-14.	NIL HOWEVER EXISTING QUARRY HAVING DIMENSION OF 2664 SQ.M OCCUPYING 0.2664 HA AREA. MINERALISED AREA IS APPROX IMATELY BASED ON THE QUARRY EXPOSURE INFLUENCE 2700 SQ.M i.e 0.27 HA. ACCORDINGLY 20% OF AREA IS ALREADY EXPOSED BY THE QUARRY.	VIOLATION UNDER RULE 11(1) OF MCDR, 2017 HAS BEEN POINTED OUT TO THE LESSEE, FOR NOT DOING EXPLORATION 5 NOS OF BH IN THE YEAR 2013-14.
1d	Balance area to be explored to bring Geological axis in 1 or 2	WHOLE LEASE AREA 1.390 HA EXCLUDING THE ALREADY EXPOSED BY THE QUARRY 0.27 HA, BY PUTTING 5 BH DURING THE SCHEME PERIOD 2013-14 TO 2017-18.	NIL	VIOLATION UNDER RULE 11(1) OF MCDR, 2017 HAS BEEN POINTED OUT TO THE LESSEE, FOR NOT DRILLING 5 BH IN THE YEAR 2013-14 AS PROPOSED IN THE S O M.

1e	Balance reserve as on 01/04/20	AS PER S O M APPROVED ON 10.06.2013 THE RESERVEVES AS PER UNFC CLASSIFICATIO N AS FOLLOWS: 111: 338.8 KG, 122: 301.4 KG, 211: 326.04 KG, & 222 : 480.15 KG	RESERVE AS ON 01.03.2013 : 640.2 KG & REMAINING RESOURCES: 806.19 KG	
1f	General remarks of inspecting officers on geology, exploration etc		NO EXPLORATION CARRIED OUT BY MEANS OF DRILLING BOREHOLES DURING THE SCHEME PERIOD 2013-14 TO 2017-18 AS PROPOSED 5 NOS IN THE YEAR 2013-14. THE RESERVE HAS BEEN ESTIMATED AS PER THE EXPOSED QUARRY OF DIMENSION 72 M X 39 M X 8 M AND THEIR INFLUENCE.	VIOLATION UNDER RULE 11(1) OF MCDR,2017 HAS BEEN POINTED OUT TO THE LESSEE FOR NOT DOING EXPLORATION AS PER PROPOSAL IN THE S O M APPROVED ON 10.06.2013.

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Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	ONE EXISTING QUARRY PROPOSE TO BE DEVELOPED	DIMENSION OF THE QUARRY IS 72 M X 39 M X 08 M ON THE DATE OF INSPECTION QUARRY WAS FULLY FILLED WITH WATER DUE TO HEAVY RAIN.	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc		ONE EXISTING QUARRY OF DIMENSION 72 M LENGTH X 39 M BREADTH X 8 M DEPTH.	IT WAS OBSERVED THAT MINE WAS FULLY FILLED WITH WATER DUE TO HEAVY RAINS.

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Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
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3a	Number of pit proposed for production	ONE PIT PROPOSED FOR PRODUCTION AS 8 M PER S O M APPROVED ON 10.06.2013 FOR THE PERIOD 2013-14 TO 2017-18 AND PROPOSED FOR EXPANDED LATERALLY TOWARDS NORTH.	ONE EXISTING PIT HAVING DIMENSION 72 M X 39 M X 8 M	
3b	Quantity of ROM mineral production proposed	2016-17 : 133.1 KG 2017-18: 120.78 KG	2016-17: 31 KG 2017-18: 38.0 KG ( UPTO JULY, 2017)	
3c	Recovery of sailable/usable mineral from ROM production	2016-17: 133.1 KG 2017-18: 120.78 KG	2016-17: 31 KG 2017-18: 38 KG ( UPTO JULY, 2017)	FOR SALEABLE, BUYERS REQUIRE THE IMPORTANT QUALITIES WHICH MAKES THE STONE PRECIOUS ARE BEAUTY, RARITY AND DURABILITY. THE OTHER DESIRABLE FEATURES REQUIRED ARE BRIGHT COLOURS, CLARITY, TRANSPARENCY, HARDNESS, FREE FROM DEFECTS ( FISSURES, INCLUSIONS & ZONING), AND AMENABLE TO CUTTING & POLISHING.
3f	Quantity of sub grade mineral generation.	IOLITE PRODUCED FROM THE MINE IS FULLY MARKETED LEAVING BEHIND NO SUB-GRADE STONES.	NIL	
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 BENEFICIATION PROPOSAL IOLITE OCCURS IN POCKETS. A PART OF IOLITE RECOVERED DIRECTLY AND SORTED INTO VARIETIES IN NAKED EYE. REMAINING IOLITE STONES FROM THE EXCAVATED COLLUVIUMS PICKED UP / HAND SORTED AFTER WASHING. WASHING OF THE MINERAL IS VERY SMALL SCALE OPERATION CONSUMING WATER QUANTITY IS LESS. NO DISCHARGE OF WATER. THE OPERATIONS CONFINED TO TWO NUMBERS OF SMALL TUBS. RUN-OFF MINE SEMI-PRECIOUS STONE (IOLITE) TRANSPORTED TO THE LAPIDARY UNIT JEYPORE, RAJASTHAN.
- 3j Provision of drilling and blasting in mineral benches NO PROPOSAL OF DRILLING & BLASTING NIL
- 3k Provision of mining machineries in mineral benches ONE TRACTOR OF SAME AS MENTIONED. CAPACITY 1.5 CU.M FOR TRANSPORTATION AND ONE WATER PUMP OF CAPACITY 5 HP FOR DEWATERING.
- 3o Total area put in use under different heads at the end of year UNDER EXCAVATION : 0.2808 HA, USED FOR DUMP: 0.0128 HA, INFRASTRUCTURE : 0.0058 HA, OCCUPIED BY ROADS: 0.057 HA, GREEN BELT: 0.07 HA SAME AS MENTIONED.

3p	Production of ROM mineral during the last five year period as applicable	AS PER SCHEME OF MINING APPROVED ON 10.06.2013 FOR THE PERIOD 20013-04 TO 2017-18 THE PRODUCTION PROPOSAL WAS AS FOLLOWS.2013-14: 103.84 KG, 2014-15: 120.78 KG, 2015-16: 161.7 KG, 2016-17 : 133.1 KG & 2017-18: 120.78 KG	2013-14 & 2014-15 : NOT AVAILABLE 2015-16: 101 KG & 2016-17: 31 KG AND 2017-18: 38 KG ( UPTO JULY, 2017)	
3q	General remarks of inspecting officers on method of mining etc.	FULLY MANUAL AND MINING OPERATION IS GOING ON VERY SMALL SCALE AND MOST OF THE TIMES QUARRY REMAIN WATER LOGGED.	METHOD OF MINING PROPOSED MANUALLY WITH THE HELP OF COMMON IMPLEMENTS LIKE HAND SHOVEL, CROW BAR, HAMMER , PICK EXE ETC. LOADING IS ALSO DONE MANUALLY. NO DRILLING & BLASTING. AFTER HAND PICKING AND WASHING, IOLITE IS DESPATCHED TO THE LAPIDARY UNITS FOR FURTHER VALUE ADDITION	

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Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	SEPARATELY DUMPING PROPOSAL	YES, SEPARATELY DUMPED	
4b	Location of topsoil, OB and mineral reject dumps	OB DUMP NEAR SOUTHERN BOUNDARY OF THE LEASE	AS PER PROPOSAL OB DUMPED NEAR SOUTHERN BOUNDARY OF THE LEASE.	

4c	Number of dumps within lease area and outside of lease area	ONE DUMP WITHIN LEASE	ONE DUMP WITHIN LEASE AND NO DUMP OUTSIDE LEASE AREA
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	BEYOND ULTIMATE PIT LIMIT	AS PER PROPOSAL
4e	Number of active and alive dumps.	ONE ACTIVE DUMP	ONE ACTIVE DUMP
4f	Number of dead dumps.	NO DEAD DUMP	NIL
4h	Whether Retaining wall or garland drain all along dumps are there.	2016-17 & 2017- 18 : NO PROPOSAL	NIL
4k	Specific comments of inspecting officer on waste dump management		THERE IS ONE SMALL DUMP EXIST HAVING LENGTH 16 M X BREADTH 8 M X HEIGHT 3 M WITH TERRACE ONE LOCATED NEAR SOUTHERN BOUNDARY OF THE LEASE.

#### 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.	PROPOSAL FOR BACKFILLING TO BE STARTED FROM SOUTHERN SIDE OF QUARRY ALL ALONG LEASE BOUNDARY PROCEEDING TOWARDS NORTH	NO BACKFILLING	ORE HAS NOT BEEN EXHAUSTED FROM THE QUARRY.
5e	General remarks of inspecting officers on backfilling and reclamation etc.		THE MINE IS "B" CATEGORY MANUAL MINE. MINING OPERATION IS ON A VERY SMALL SCALE.	THE QUARRY IS NOT EXHAUSTED, SO BACKFILLING AND RECLAMATION HAS NOT BEEN STARTED.

#### 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 REPORT ON PMCP NOT SUBMITTED FOR THE YEAR 2016-17.	NOT SUBMITTED	VIOLATION UNDER RULE 26 (2) OF MCDR, 2017 HAS BEEN POINTED OUT TO THE PARTY FOR NON-SUBMISSION OF ANNUAL REPORT ON PMCP.
6e	Cumulative no .of plants	175 NO OF SAPLINGS DURING SCHEME PERIOD 2013-14 TO 2017-18 @ 35 PER YEAR	NIL	VIOLATION UNDER RULE 11(1) OF MCDR, 2017 HAS BEEN POINTED OUT TO THE LESSEE FOR NOT DOING AFFORESTATION AS PER PROPOSAL
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	DURING 2016-17 & 2017-18 AFFORESTATION WAS PROPOSED @ 35 SAPLINGS PER YEAR NEAR SOUTH EASTERN SIDE OF THE LEASE	NOT CARRIED OUT	VIOLATION UNDER RULE 26 (2) OF MCDR, 2017 HAS BEEN POINTED OUT TO THE LESSEE FOR NON-SUBMISSION OF YEARLY REPORT ON PMCP.

#### Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	2016-17: 133.1 KG 2017-18: 120.78 KG	2016-17: 31 KG 2017-18: 38 KG ( UPTO JULY, 2017)	IOLITE MARKETED PRIMARILY FOR ORNAMENTAL USE AFTER CUTTING, SHAPING & POLISHING IN THE LAPIDARY UNIT. AS FAR AS ASTROLOGICAL EXPECT CONCERNED, IOLITE STONE IS USED AS AN EMBLEM OF GOOD LUCK.

7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	MANUAL	MANUAL IOLITE OCCURS IN POCKETS. A PART OF IOLITE RECOVERED DIRECTLY AND SORTED INTO VARIETIES IN NAKED EYE. REMAINING IOLITE STONES FROM THE EXCAVATED COLLUVIUMS PICKED UP / HAND SORTED AFTER WASHING.	BEAUTY IS THE MOST IMPORTANT QUALITY AMONGST ALL WHICH IS ESSENTIALLY A SUBJECTIVE JUDGEMENT AND VARIES FROM BUYER TO BUYER.
7c	Different grade of mineral sorted out at mines.	NO SPECIFIC GRADE PROPOSED	BUYERS REQUIRE THE IMPORTANT QUALITIES WHICH MAKES THE STONE PRECIOUS ARE BEAUTY, RARITY AND DURABILITY. THE OTHER DESIRABLE FEATURES REQUIRED ARE BRIGHT COLOURS, CLARITY, TRANSPARANCY, HARDNESS, FREE FROM DEFECTS ( FISSURES, INCLUSIONS & ZONING) AND AMENABLE TO CUTTING & POLISHING. ON THE BASIS OF ABOVE QUALITY THE IOLITE STONE ARE BEING SOLD @ Rs. 6000 / -PER KG TO Rs.10,000/- PER KG AS INFORMED BY THE LESSEE.	
7d	Any beneficiation process at mines .	NO BENEFICIATION PROPOSED	IOLITE OCCURS IN POCKETS. A PART OF IOLITE RECOVERED DIRECTLY AND SORTED INTO VARIETIES IN NAKED EYE. REMAINING IOLITE STONES FROM THE EXCAVATED COLLUVIUMS PICKED UP / HAND SORTED AFTER WASHING. WASHING OF THE MINERAL IS VERY SMALL SCALE OPERATION, CONFINED TO TWO NUMBERS OF SMALL TUBS. WATER CONSUMPTION IS VERY LESS. NO DISCHARGE OF WATER.	

7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	IOLITE PRODUCED FROM THE MINE IS FULLY MARKETED LEAVING BEHIND NO SUB-GRADE STONES.
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**Environment:**

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	250 CU.M TOP SOIL PROPOSEED TO BE GENERATED DURING 2016-17.	TOP SOIL REMOVED QUANTITY NOT AVAILABLE.	
8b	Concurrent use or storage of topsoil	PROPOSED TO BE STACKED SEPARATELY NEAR NORTH-EASTERN SIDE OF THE QUARRY AND PROPOSED TO BE UTILISED IN PLANTATION WORK.	MAINTAINED AS PER PROPOSAL NEAR NORTH EASTERN SIDE OF THE QUARRY	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	PROPOSE FOR SEPARATE DUMP FOR OB / WASTE NEAR SOUTHERN BOUNDARY OF THE LEASE.	MAINTAINED AS PER PROPOSAL OB DUMPED NEAR SOUTHERN BOUNDARY OF THE LEASE	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	175 NO OF SAPLINGS PROPOSED TO BE PLANTED OVER AN AREA 0.13 HA DURING SCHEME PERIOD i.e 2013-14 TO 2017-18	NO PLANTATION DONE	LEASE AREA COVERED WITH AGRICULTURAL FIELD WITH SPARSE VEGETATION. VIOLATION UNDER RULE 11 (1) OF MCDR, 2017 FOR NOT CARRIED OUT PLANTATION , HAS BEEN POINTED OUT TO THE LESSEE.
8h	Water sprinkling on roads to control airborne dust	PROPOSED	MAINTAINED.	

8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	AESTHETIC BEAUTY IN AND AROUND MINES AREA HAS BEEN MAINTAINED.
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Compliance of Rule 45:

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Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	I HAVE INSPECTED THE MINE ON 12.08.2017	MONTHLY RETURNS FOR THE LAST 4 YEARS NOT RECEIVED IN THIS OFFICE. ANNUAL RETURNS FOR THE LAST 4 YEARS (2013-14 TO 2016-17) NOT RECEIVED IN THIS OFFICE	VIOLATIONS UNDER RULE 45 (5)(b)(iii) & 45(5)( c)(iii) OF MCDR, 2017 HAVE BEEN POINTED OUT TO THE LESSEE, FOR NOT SUBMITTING MONTHLY RETURNS & ANNUAL RETURNS RESPECTIVELY SINCE LAST 4 YEARS AT THIS OFFICE
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	ANNUAL RETURNS FOR LAST 4 YEARS HAVE NOT BEEN RECEIVED	DURING MY INSPECTION ON 12.08.2017, NO MINING ENGINEER / GEOLOGIST / MANAGER WAS PRESENT OR AVAILABLE AT THE MINE.	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	ANNUAL RETURNS FOR LAST 4 YEARS HAVE NOT BEEN RECEIVED IN THIS OFFICE.	DURING INSPECTION IT WAS OBSERVED THAT MINE WAS FULLY FILLED WITH WATER DUE TO HEAVY RAINS. HOWEVER, IT WAS INFORMED THAT THE LAND USED FOR AREA UNDER PIT : 0.2808 HA, USED FOR DUMP: 0.0128 HA, INFRASTRUCTURE: 0.0058 HA, OCCUPIED BY ROAD: 0.057 HA, GREEN BELT: 0.07 HA & AREA UN-TOUCHED: 0.9636 HA OUT OF TOTAL LEASE AREA 1.390 HA.	VIOLATION LETTER SENT TO THE LESSEE FOR NOT SUBMITTING ANNUAL REURNS.

9f	Scrutiny of Annual return on ROM stock and/or graded ore	ANNUAL RETURNS FOR LAST 4 YEARS HAVE NOT BEEN RECEIVED IN THIS OFFICE.	ON THE DATE OF MY INSPECTION, IT WAS SEEN THAT THE MINE WAS FULLY FILLED WITH WATER DUE TO HEAVY RAINS DURING LAST FEW DAYS. IT WAS INFORMED BY THE LESSEE THAT DURING 2015-16 IOLITE PRODUCTION WAS 101 KG, 31 KG DURING 2016-17 AND 38 KG DURING 2017-18 ( UPTO JULY, 2017).	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	ANNUAL RETURNS FOR LAST 4 YEARS HAVE NOT BEEN RECEIVED AT THIS OFFICE.	LESSEE INFORMED THAT THEY SELL THE IOLITE MAINLY FOR ORNAMENTAL USE @ Rs.6000 /- PER KG TO Rs.10000 /- PER KG DEPENDING ON QUALITY OF IOLITE i.e TRANSPARENCY, BRIGHT COLOUR & CLARITY ETC.	
9k	Scrutiny of Annual return on mining machineries	ANNUAL RETURNS FOR LAST 4 YEARS HAVE NOT BEEN RECEIVED IN THIS OFFICE.	IT WAS INFORMED BY THE LESSEE THAT ONLY ONE TRACTOR OF CAPACITY 1.5 CU.M AND ONE WATER PUMP OF 5 HP CAPACITY MINING MACHINERY ARE GENERALLY USED IN THE MINE.	VIOLATION LETTER SENT TO THE LESSEE FOR NOT SUBMITTING ANNUAL RETURNS AND MONTHLY RETURNS.

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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)	18/08/2017				
Rule 26(2)	18/08/2017				
Rule 27(2)	18/08/2017				
MCDR17 Rule 31(1)	18/08/2017				
MCDR17 Rule 33	18/08/2017				
MCDR17 Rule 35(2)	18/08/2017				
Rule 45(5)	18/08/2017				
Rule 45(5)(b)	18/08/2017				
MCDR17 Rule 55(1)(3)	18/08/2017				

**Date :**

**(NARENDRA MOHAN DEY)**

Indian Bureau of Mines