

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

MCDR INSPECTION REPORT

Bhubaneshwar regional office

Mine file No : ORI/LST/KPT/MCDR-1/BBS

Mine code : 38ORI09006

- (i) Name of the Inspecting : **RAM**) **RAMKISHAN R**
Officer and ID No.
- (ii) Designation : Sr. Asst. Contrl. Mines
- (iii) Accompanying mine : Shri Himachal Acharya, Manager, Shri Sumanta Sahu, AG
Official with
Designation
- (iv) Date of Inspection : 14/10/2017
- (v) Prev.inspection date : 22/05/2015

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **AMPAVALLI**
- (b) **Registration NO.** : **IBM/4421/2011**
- (c) Category : A Mechanised
- (d) Type of Working : Opencast
- (e) Postal address :
State : ORISSA
District : KORAPUT
Village :
Taluka :
Post office :
Pin Code :
FAX No. : 06853-251375
E-mail : idcmining@yahoo.co.in
Phone : 09849982184
- (f) Police Station : Sunki
- (g) First opening date : 16/08/1993
- (h) Weekly day of rest : SUN
2. Address for : AT/PO: AMPAVALLI
correspondance : DIST:KORAPUT, ORISSA
764 039
3. (a) Lease Number : ORI0216
- (b) Lease area : 285.43
- (c) Period of lease : 20
- (d) Date of Expiry : 15/08/2013
4. Mineral worked : LIMESTONE Main

5. Name and Address of the

Lessee : IDCOL CEMENT LTD
 CEMENT NAGAR POST BARDOL
 BARGARH ORISSA
 Phone:06646- 30091,92,93,94
 FAX :06646- 30430

Owner : M/s IDCOL
 IDCOLPost Box No. 78,
 IDCOL House Ashok Nagar,
 Bhubaneswar- 751 001
 KORAPUT ORISSA
 Phone: 09849982184
 FAX : 06853-251 375

Manager

Name : SHRI HIMACHAL ACHARYA
 Qualification : B.Tech (Mining)
 Appointment/ : 06/04/2017
 Termination date

6. Date of approval of Mining	:	Mining Scheme rule 12 MCDR1988	06/10/2006
Plan/Scheme of Mining	:	Mining Scheme rule 12 MCDR1988	07/06/2010
	:	Renewal under rule 24 MCR1960	24/01/2014

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No such proposal in the approved document, however 19 boreholes were planned during the year 2016-17	No exploration carried out.	Violation given letter no: ORI/LST/KPT/MCDR-1/BBS/VOL-II/1763 dated 17/10/2017.
1b	Exploration over lease area for geological axis 1 or 2	No such proposal.	19 boreholes were planned during the year 2016-17 as a aprt of exploration.	Nil.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No proposal.	Direcorrrate of Mines & Geology carried out exploration.	
1d	Balance area to be explored to bring Geological axis in 1 or 2	224.649 ha needs to be explored.	exploration proposal given during review period.	
1e	Balance reserve as on 01/04/20	As per the approved document on 24.01.2014 the limestone reserves are 75.45 mi.tonnes and resources are 5.97 mi.tonnes.	after depletion and addition over the period the limestone reserves are 73.03 mil.tonnes and resources are 5.97 mi.tonnes as on 01.04.2017	total reserves and resources of limestone are 79 mi.tonnes.
1f	General remarks of inspecting officers on geology, exploration etc	No comments to offer.	No exploration has carried out during the year 2016-17.	Exploration needs to be carried out to establish the limestone resources further.

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	quarry-2 is proposed in the southern side of the lease area.	quarry-2 is developed in the southern side of the lease area.	Nil.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	No top soil generation is proposed. seperate benches in OB and mineral are proposed with bench height of 5m	No top soil is generated. seperate becnhes in OB and mineral are maintained with bench height of 5m	Nil.
2c	Stripping ratio or ore to OB ratio	1:0.03 t:cu.m.	1:0.038 t:cu.m.	Nil.
2d	Quantity of topsoil generation in m3	No proposal	Nil	
2e	Quantity of overburden generation in m3	11580 cu.m.	5200 cu.m.	variation is due to less development.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	No comments to offer.	development is concentrated in quarry-2 which is proposed during the year 2016-17.	Nil.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	one pit named as quarry-2	production is carried out from quarry-2 for the eyar 2016-17.	Nil.
3b	Quantity of ROM mineral production proposed	415689 tonnes	135650 tonnes	variation is due to less demand.
3c	Recovery of sailable/usable mineral from ROM production	80%	80%	Nil.
3d	Quantity of mineral reject generation	No proposal	Nil	Nil.

3e	Grade of mineral rejects generation and threshold value declared.	Nil.	Nil.	Nil.
3f	Quantity of sub grade mineral generation.	65635 tonnes	Nil	variation is due to irregular nature of ore deposit.
3g	Grade of sub grade mineral generation	+35-42% Cao	+32-42% Cao	Nil.
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised	Mechanised	Nil.
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No Proposal.	Nil	
3j	Provision of drilling and blasting in mineral benches	drilling by drill hole dia of 100 mm and blasting by emulsion explosives with delay detonation.	drilling by drill hole dia of 100 mm and blasting by emulsion explosives with delay detonation.	Nil.
3k	Provision of mining machineries in mineral benches	excavator: 1.2 cu.m. tippers: 10 tonnes, drill machine: 100 mm dia.	excavator: 1.2 cu.m. tippers: 10 tonnes, drill machine: 100 mm dia.	Nil.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	5 m bench height of each in OB and mineral are proposed.	5 m bench height of each in OB and mineral are maintained.	Nil.

3m	Total area covered under excavation/pits	Toatl area put under excavation for the review period i.e. up to 2017-18 is 13.167 ha	Toatl area put under excvaton for the eyar 2016-17 is 12.49 ha	Nil.
3n	Ore to OB ratio for the pit/mine during the year.	1:0.03 t.cu.m	1:0.038 t.cu.m.	Nil.
3o	Total area put in use under different heads at the end of year	Total Area put under differnt heads for the review period i.e. up to 2017-18 is : 25 Ha, pits: 13.167 ha, dumps: 2.061 ha,infra & Roads: 2.609 ha,others: 16.503 ha	Total Area area utilisation for the year 2016-17 is : 17.451 Ha, pits: 12.469 ha, dumps: 1.461 ha,infra & Roads: 2.609 ha,others: 0.891 ha	Nil.
3p	Production of ROM mineral during the last five year period as applicable	2012-13: 900804 tonnes 2013-14: 312539 tonnes, 2014-15: 437589 tonnes, 2015-16: 434546 tonnes, 2016-17: 437567 tonnes	2012-13: Nil 2013-14: Nil 2014-15: 43.72 tonnes, 2015-16: 251380 tonnes, 2016-17: 136650 tonnes	variation is due to want of environment clerance and less demand.
3q	General remarks of inspecting officers on method of mining etc.	No comments to offer.	production is carried out from quarry-2, but less production carried out due to less market demand.	Nil.

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)	No top soil generation proposed. seperate dumping for OB and mineral rejects proposed.	No top soil is generated. seperate dumping for OB and mineral rejects maintained.	Nil.
4b	Location of topsoil, OB and mineral reject dumps	no top soil generation proposed. one waste dump and mineral reject dump is proposed in the southernside of the lease area.	no top soil is generated. one waste dump and mineral reject dump is maintained in the southernside of the lease area.	Nil.
4c	Number of dumps within lease area and outside of lease area	with in lease area 1 waste dump.	with in lease area 1 waste dump.	Nil.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Oustdie UPL.	Outside UPL.	Nil.
4e	Number of active and alive dumps.	one waste dump.	One waste dump.	Nil.
4f	Number of dead dumps.	No proposal.	Nil	Nil.
4g	Number of dumps established.	No proposal.	Nil	
4h	Whether Retaining wall or garland drain all along dumps are there.	No such proposal for the year 2016-17.	Maintained.	Nil.
4i	Length of Retaining wall or garland drain all along dumps	No such proposal for the year 2016-17.	350 m length maintained.	Nil.
4j	Number of settling ponds	No such proposal.	one settling pond maintained.	Nil.
4k	Specific comments of inspecting officer on waste dump management	No comments to offer.	Protective measures are adequate around waste dump.	Nil.

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.	No proposal.	Nil.	Nil.
5b	Area under backfilling of mined out area	No proposal.	Nil	Nil.
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No proposal.	Nil	Area not matured for reclamation.
5d	Total area fully reclaimed and rehabilitated	No proposal.	Nil	Area not matured for reclamation.
5e	General remarks of inspecting officers on backfilling and reclamation etc.	No comments to offer.	Area not matured for reclamtion.	Nil.

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).	Submitted	Submitted	Submitted with in stipulated time period.
6b	Area available for rehabilitation (ha) .	No proposal.	Nil	Nil.
6c	afforestation done (ha).	0.5 ha	1.5 ha.	Afforestation carried out more than proposal.

6d	No. of saplings planted during the year	800	2500	Afforestation carried out more than proposal.
6e	Cumulative no .of plants	No such proposal.	4800	Nil.
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	No proposal.	Nil	
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 on backfilled area	No proposal.	Nil	
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	800 nos	2500 nos	planation carried out more than proposal..
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	0.5 ha	1.5 ha	As per proposal.
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Plantation	Plantation	As per proposal.
6p	Compliance of environmental monitoring (core zone and buffer zone)	quarterly monitoring of environmental parameters are proposed.	quarterly monitoring of environmental paramaetres are carried out.	As per proposal.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	No comments to offer.	Area not matured for reclamation.	Nil.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	proposed.	carried out.	Nil.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical	Mechanical	Nil.
7c	Different grade of mineral sorted out at mines.	+35-42% Cao +42%Cao (cement)	+35-42% Cao +42%Cao (cement)	Nil.

7d	Any beneficiation process at mines .	No proposal.	Nil
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	No comments to offer.	entire ROM is utilised in near by cement plant.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No top soil generation proposed.	No top soil generated.	
8b	Concurrent use or storage of topsoil	No proposal.	Nil	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	seperate dumps for OB and mineral reject are proposed.	seperate dumps for OB and mineral reject are maintained.	Nil.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal.	Nil	Area not matured for reclamation.
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)	800 nos proposed.	2500 nos plantation carried out.	
8g	Survival rate	No proposal	40%	
8h	Water sprinkling on roads to control airborne dust	water sprinkling is proposed.	water sprinkling is carried out to reduce air borne dust.	Nil.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	No comments to offer.	survival rate of plantation needs to be improved.	

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Submitted.	Submitted	Submitted with in stipulated time period.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Graduate Mining engineer: 1, Diploma Mining Engineer: 4 Geologist: 0	Graduate Mining engineer: 1, Diploma Mining Engineer: 4 Geologist: 0	Nil.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	pits: 15 ha, roads&infra: 3.8 ha	The land use status furnished in the annual return 2017-17 is found to be in order.	Nil.
9d	Scrutiny of Annual return on afforestation	2500 nos.	The status of planation furnished in the anual return is in order.	
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	ROM production: 135650 tonnes, stock: 0 tonnes	The production figures furnished in the annual return are verified & found to be correct.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	production cost: Rs.300	production cost: Rs.300
9h	Scrutiny of Annual return on fixed assets	fixed assets: Rs.10000	fixed assets: Rs.10000
9k	Scrutiny of Annual return on mining machineries	excavator: 1.2 cu.m. 3 nos, tipper: 25 tonnes 3 nos. drill machine: 1 no.	found in order.

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)	17/10/2017			
MCDR17	Rule 55(1)(3)	17/10/2017			

Date :

(RAMKISHAN R)

Indian Bureau of Mines