

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

MCDR INSPECTION REPORT

Gandhinagar regional office

Mine file No : RAJ/CHT/LST-13

Mine code : 38RAJ09013

- (i) Name of the Inspecting : **P022**) **PANKAJ KULSHRESTHA**
Officer and ID No.
- (ii) Designation : Assistant Controller Mine
- (iii) Accompanying mine : Shri Rajesh Kumar Ravi, Mining Engineer, Shri Manish
Official with
Designation
- (iv) Date of Inspection : 20/08/2024
- (v) Prev.inspection date : 20/10/2019

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **MANGROL**
- (b) **Registration NO.** : **IBM/418/2011**
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
- State : RAJASTHAN
- District : CHITTORGARH
- Village : MANGROL
- Taluka : NIMBAHERA
- Post office : MANGROL
- Pin Code : 312617
- FAX No. : 01477-20087,220562
- E-mail : maheem.kachhwaha@jkcement.co
- Phone : 01477-20087,220562
- (f) Police Station : Nimbahera sadar
- (g) First opening date : 10/06/2013
- (h) Weekly day of rest : WED
2. Address for : PO- MANGROL
correspondance DISTT CHITTORGARH
RAJASTHAN
3. (a) Lease Number : RAJ4468
- (b) Lease area : 132
- (c) Period of lease : 50
- (d) Date of Expiry : 03/05/2062
4. Mineral worked : LIMESTONE Main

5. Name and Address of the

Lessee : J.K.Cement Works
 Kailashnagar Nimbahera
 CHITTORGARH RAJASTHAN
 Phone:01477-220087
 FAX :01477-220027

Owner : KAILASH NATH
 50 MIG BUNGLOW W BLOCK JUHI
 KESHAV NAGAR KANPUR UP
 CHITTORGARH RAJASTHAN
 Phone: 0512-2371478-81
 FAX : 0512-2332665

Agent : MAHEEM KACHWAHA
 J.K.CEMENT WORKS NIMBAEHRA
 CHITTORGARH CHITTORGARH
 RAJASTHAN
 Phone: 01477-22087
 FAX : 01477-220027

Mining Engineer
 Name : P.K. JOSHI, Full Time
 Qualification : B.E. (Mining) FCC
 Appointment/ : 11/04/2013
 Termination date

Geologist
 Name : Manish Madhav, Full Time
 Qualification : M Sc Geology
 Appointment/ : 09/07/2015
 Termination date

Manager
 Name : R.C.Vyas
 Qualification : Diploma in mining and FCC
 Appointment/ : 11/04/2013
 Termination date

6. Date of approval of Mining : Fresh under rule 22 MCR1960 22/03/2010
 Plan/Scheme of Mining

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	NA	No backlog of previous year.	
1b	Exploration over lease area for geological axis 1 or 2	No such proposal	Not applicable	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No such proposal	Not applicable	
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	Not applicable	
1e	Balance reserve as on 01/04/20	26.98 Million Tonnes	26.982 Million Tonness	
1f	General remarks of inspecting officers on geology, exploration etc	NA	The overall status of Geology and exploration may be considered as satisfactory.	

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	ML8-9W,9-10S, ML 9-10S, ML 7-8, ML 6-7	ML8-9W,9-11S, ML 9-10, ML 7-8, ML 6-7	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Benches only in mineral	Benches only in mineral	
2c	Stripping ratio or ore to OB ratio	1:0.0	1:0.0	
2d	Quantity of topsoil generation in m3	34.97 cu.m.	27.97 cu.m.	
2e	Quantity of overburden generation in m3	No proposal	Not applicable	

2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	NA	The overall development of pit w.r.t type of deposit may be considered as satisfactory.
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Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One pit proposed	One pit	
3b	Quantity of ROM mineral production proposed	110000.00 t proposed during the year 2023-24	108254.50 t during the year 2023-24	
3c	Recovery of sailable/usable mineral from ROM production	110000.00 t	108254.50 t	Captive use
3d	Quantity of mineral reject generation	No proposal	Not applicable	
3e	Grade of mineral rejects generation and threshold value declared.	No proposal	Not applicable	
3f	Quantity of sub grade mineral generation.	No such proposal	Not applicable	
3g	Grade of sub grade mineral generation	No such proposal	Not applicable	
3h	Manual / Mechanised method adopted for segregating from ROM	No processing within lease area	As above	
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	NA	Not applicable	

3j	Provision of drilling and blasting in mineral benches	Yes, It was proposed to win the mineral with the help of drilling and blasting.	As above, Burden 3.5m Spacing- 4.5m, depth-8m Blasting charge/hole cap & Non cap, PF-10
3k	Provision of mining machineries in mineral benches	Yes, Hyd. excavator, drill machine, dozer and tipper	As above
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes	Yes, as above
3m	Total area covered under excavation/pits	24.23 hectares	23.984 hectares of area covered under pits.
3n	Ore to OB ratio for the pit/mine during the year.	1:0.00	1:0.00 during the year 2023-24
3o	Total area put in use under different heads at the end of year	Area under Pit : 24.23 hectares Area under Mineral reject: 6.85 hectares Area under Plantation :11.08 hectares Area undeer Reclamation: Nil Area under TO/B dump : Nil Area under building etc. : 1.668 hectares	Area under Pit : 23.984 hectares Area under Mineral reject: 6.85 hectares Area under Plantation :12.59 hectares Area undeer Reclamation: Nil Area under TO/B dump : Nil Area under building etc. : 2.928 hectares
3p	Production of ROM mineral during the last five year period as applicable	2019-20 : 1674357.58 t 2020-21 : 1498768.30 t 2021-22 : 1498775 t 2022-23 : 110296.10 t 2023-24 : 110000 t	2019-20 : 1389693.55 t 2020-21 : 974836.35 t 2021-22 : 1017878.29 t 2022-23 : 109329.07 t 2023-24 : 108254.5 t

3q	General remarks of inspecting officers on method of mining etc.	NA	The overall status of method of mining may be considered as satisfactory.
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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)	Top soil used in plantation program, mineral reject : No proposal	As above	
4b	Location of topsoil, OB and mineral reject dumps	NA	Not applicable	Top soil utilised in plantation program
4c	Number of dumps within lease area and outside of lease area	Witin lease area : 03 mineral reject stacks Out side lease area : No proposal	As above	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Mineral reject: Outside ultimate pit limit.	As above.	
4e	Number of active and alive dumps.	03 Mineral reject stacks	03 Mineral reject dumps	
4f	Number of dead dumps.	No proposal	Not applicable	
4g	Number of dumps established.	No such proposal	Not applicable	
4h	Whether Retaining wall or garland drain all along dumps are there.	Retaining wall- Yes Garland drain - No proposal	As above	
4i	Length of Retaining wall or garland drain all along dumps	Retaining wall : 109 meter	Retaining wall- 75 meter	Cummulative garland drain 1449 meters
4j	Number of settling ponds	No such proposal	Not applicable	
4k	Specific comments of inspecting officer on waste dump management	NA	May be considered as satisfactory.	

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

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).	Yes	As above	
6b	Area available for rehabilitation (ha) .	No such proposal	Not applicable	
6c	afforestation done (ha).	1.2 hectares	1.20 hectares	
6d	No. of saplings planted during the year	1500 nos.	During the year 2023-24 toal 9440 saplings planted	
6e	Cumulative no .of plants	10844 nos.	29788 nos.	
6f	Any other method of rehabilitation	No such proposal	Not applicable	
6g	Cost incurred on watch and care during the year	Rs. 375000 during the year 2023-24	Rs. 374352 incured during the year 2023-24.	

6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No such proposal	Not applicable
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No such proposal	Not applicable
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	No such proposal	Not applicable
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No such proposal	Not applicable
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No such proposal	Not applicable
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	1500 Nos.	9440 saplings plated during the year 2023-24.
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	1.20 hectares	1.20 hectares
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Plantation	Area rehabilitate by the way of plantation

6p	Compliance of environmental monitoring (core zone and buffer zone)	Yes.	Quarterly monitoring of ambient air quality and water quality is being done.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	NA	The present status of PMCP compliance and progressive closure operations may be considered as satisfactory.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	110000.00 t durin the year 2023-24	During the year 2023-24 total ROM production reported as 108254.50 tonnes.	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	No such proposal	Not applicable	
7c	Different grade of mineral sorted out at mines.	No such proposal	Not applicable	
7d	Any beneficiation process at mines .	No such proposal	Not applicable	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	NA	The present status of mineral conservation may be considered as satisfactory.	

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	50 tonnes	Total 40 tonnes of top soil reomved and utilised during the year 2023-24.	

8b	Concurrent use or storage of topsoil	Yes	Yes, for plantation purpose.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	No such proposal	Mineral reject is being stacked separately.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No such proposal	Not applicable
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No such proposal during the year 2023-24	Not applicable
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	1500 nos. of saplings within 1.20 hectares of area.	Planted 9440 saplings in 1.20 hectare of area.
8g	Survival rate	90%	90% survival rate achieved during the year 2023-24.
8h	Water sprinkling on roads to control airborne dust	Yes,	Yes water sprinkling on roads is being done .
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	NA	The present status of aesthetic beauty in and around mines area may be considered as satisfactory.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Yes	Yes as per rule.	

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer : Shri Rajesh Kumar Ravi Geologist : Shri Manish Madhav Mines Manager : Shri S.D.Vairagi	As above. However, Shri S.D.Vairagi, Mines Manager was on leave on the day of inspection as informed.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Area covered under pit : 23.984 hectares Area covered under Mineral reject dumps: 6.85 hectares	As above.
9d	Scrutiny of Annual return on afforestation	No. of trees planted 9440 (WML)	As above
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	NA
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM produced during the year 108254.50 t.	The above mentioned information seems to be correct.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex mine price : Rs.207.21, Cost of production : Rs.207.21	The above mentioned information seems to be correct.
9h	Scrutiny of Annual return on fixed assets	Rs. 2573942	The above mentioned information seems to be correct.
9k	Scrutiny of Annual return on mining machineries	Shove-1, Tipper-8 and drilling machine 1	The above mentioned mining machinery deployed in the mines.

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 :

(PANKAJ KULSHRESTHA)

Indian Bureau of Mines