

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

MCDR INSPECTION REPORT

Gandhinagar regional office

Mine file No : RAJ/UDP/R.PHOS-3

Mine code : 46RAJ26007

- (i) Name of the Inspecting : **G021**) **DATA RAM GURJAR**
Officer and ID No.
- (ii) Designation : Sr. Asst. Contrl. Mines
- (iii) Accompanying mine : Sh. Ravi Kumar Dave, Mine Manager
Official with
Designation
- (iv) Date of Inspection : 24-DEC-19
- (v) Prev.inspection date : 16-NOV-17

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **MATON ML NO.31/1968**
- (b) **Registration NO.** : **IBM/421/2011**
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address :
State : RAJASTHAN
District : UDAIPUR
Village : MATON
Taluka : GIRVA
Post office : MATON
Pin Code :
FAX No. : (0294) 523328
E-mail : amarsingh.gohil@vedanta.co
Phone : (0294) 2490446, (0294) 249
- (f) Police Station : HIRAN MAGRI
- (g) First opening date : 17-MAR-70
- (h) Weekly day of rest : MON
2. Address for : Maton Rock Phosphate Mine
correspondance : M/s Hindustan Zinc Ltd.
Maton,Girwa,udaipur(Raj.)
3. (a) Lease Number : RAJ0627
- (b) Lease area : 143.13
- (c) Period of lease :
- (d) Date of Expiry : 31-MAR-30
4. Mineral worked : ROCK PHOSPHATE Main

5. Name and Address of the

Lessee : Hindustan Zinc Ltd.
 Yashad Bhavan Udaipur
 UDAIPUR RAJASTHAN
 Phone:
 FAX :

Owner : Hindustan Zinc Ltd.
 Yashad Bhavan Udaipur
 UDAIPUR RAJASTHAN
 Phone:
 FAX :

Agent : Sri Vijay Prakash Joshi
 Baroi Pb-Zn Mine, Post-
 Zawar, District: Udaipur
 Rajasthan UDAIPUR RAJASTHAN
 Phone:
 FAX :

Mining Engineer

Name : Amar singh Gohil, Full Time
 Qualification : BE(mining)
 Appointment/ : 30-JAN-12 03-JUN-18
 Termination date

Mining Engineer

Name : RAVI KUMAR DAVE, Full Time
 Qualification : B Tech Mining
 Appointment/ : 04-JUN-18
 Termination date

Geologist

Name : Sunil Kumar Vashisth, Full Time
 Qualification : M.Sc Geology
 Appointment/ : 31-JAN-15
 Termination date

Manager

Name : Shri Amarsingh Gohil
 Qualification : Mining Engineering Ist Class Manager ce
 Appointment/ : 02-FEB-12 03-JUN-18
 Termination date

6. Date of approval of Mining : Mining Scheme rule 12 MCDR1988 05-SEP-06
 Plan/Scheme of Mining : Mining Scheme rule 12 MCDR1988 13-APR-15

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No exploration was proposed during the last year	No backlog of previous year	Nil
1b	Exploration over lease area for geological axis 1 or 2	No exploration was proposed during the last year 2018-19.	No exploratory work has been carried out.	Entire mineralised area has been explored up to G1 level up to the depth of 530mRL.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	During the RY 2018-19 no exploration was proposed.	During the year 2018-19 no exploration has been carried out.	During the year of 2017-18 total 8963m exploration drilling has been carried and total expenditures incurred is aboutRs. 9.37 crores.
1d	Balance area to be explored to bring Geological axis in 1 or 2	No such proposal was given in approved scheme of mining (approved on 10.04.2015)	All the mineralised area has been explored up to G1 level up to the depth of 530mRL	Nil
1e	Balance reserve as on 01/04/20	Not specified	Balance reserves as on 01.04.2019 is 3.52 million tonne	Nil
1f	General remarks of inspecting officers on geology, exploration etc			Entire mineralised area has been explored up to G1 level up to the depth of 530mRL.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t. lease area	NE-SW along the strike	As per proposal	Nil
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches have been proposed in OB & minerals.	Yes as per proposal	Nil

2c	Stripping ratio or ore to OB ratio	During the year 2018-19 1:22	1:0.0	Mining development & excavation temporarily discontinued from NOV'15 Onwards due to adverse marked condition.
2d	Quantity of topsoil generation in m3	No proposal	Nil	Nil
2e	Quantity of overburden generation in m3	707200 cum	Nil	Mining development & excavation temporarily discontinued from Nov. 2015 onwards due to adverse marked condition.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Mining development & excavation temporarily discontinued from Nov. 2015 onwards due to adverse marked condition.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One	One	Nil
3b	Quantity of ROM mineral production proposed	2018-19 89600 MT	Nil	No ROM production has been carried out during the year 2018-19.
3c	Recovery of sailable/usable mineral from ROM production	100%	Nil	No ROM production has been carried out during the year 2018-19.
3d	Quantity of mineral reject generation	No proposal	Nil	Nil
3e	Grade of mineral rejects generation and threshold value declared.	No proposal	Nil	Nil
3f	Quantity of sub grade mineral generation.	No proposal	Nil	Nil

3g	Grade of sub grade mineral generation	No subgrade mineral generation proposal	Nil	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	No proposal given.	None	Nil
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal	Nil	Nil
3j	Provision of drilling and blasting in mineral benches	Yes, drilling & blasting proposed.	None	Nil
3k	Provision of mining machineries in mineral benches	Yes, Diesel operated Shovel and Dumpers	As per proposal	Nil
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes	Yes as per proposal	Nil
3m	Total area covered under excavation/pits	Area proposed under mining at the end of SOM period i.e. 2019-20 will be 28.58 Ha.	At the end of year 2018-19 area put ot use 22.83 ha area.	After violation of rule 45(7) of MCDR party submitted revised return shwoing the correct land area utilisation at the end of year 2018-19.
3n	Ore to OB ratio for the pit/mine during the year.	1:22	1:0.0	No mine development & excavation has been carried out during the last year.
3o	Total area put in use under different heads at the end of year	As per approved SOM total 70.0 ha area will be used under different heads at the end of year 2019-20.	At the end of year 2018-19 Under Mining=22.83 ha,Waste disposal=8.42, Others=2.48 ha area	Nil

3p	Production of ROM mineral during the last five year period as applicable	180000 MT(2014-15) 124000 MT(2015-16) 175000 MT(2016-17) 134960 MT(2017-18) 89600 MT(2018-19) 79800 MT(2019-20)	141577.32 MT(2014-15) 56529.90 MT(2015-16) 8798 MT(2016-17) Nil (2017-18) Nil (2018-19) Nil (2019-20)	Nil
3q	General remarks of inspecting officers on method of mining etc.			Mining has been carried out by opencast mining method which is suitable to the type of deposit.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Separate dumping of OB was proposed. No top soil & mineral reject generation proposed.	No top soil & mineral reject generated. No mine development has been carried out duirng the last year hence no OB generated.	Nil
4b	Location of topsoil, OB and mineral reject dumps	OB/waste dump location proposal Site-II 9800 E-10420 E ; 9300N- 10100N Site-III 9100N - 9800N; 8600E - 9600E	No waste dumping has been carried out during the last year.	Nil
4c	Number of dumps within lease area and outside of lease area	3 within ML	3 within ML	Nil
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside of UPL	Outside of UPL	nil
4e	Number of active and alive dumps.	2	2	Nil
4f	Number of dead dumps.	1	1	Nil
4g	Number of dumps established.	01	01	Nil

4h	Whether Retaining wall or garland drain all along dumps are there.	No specific proposal given during the last year.	Garland drain along the dumps was observed.	Nil
4i	Length of Retaining wall or garland drain all along dumps	No specific proposal given during the last year.	Garland drain along the dumps was observed.	Nil
4j	Number of settling ponds	No proposal	Nil	Nil
4k	Specific comments of inspecting officer on waste dump management			No issue was observed related to 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.	No proposal during the last year.	Nil	Nil
5b	Area under backfilling of mined out area	No proposal during the last year.	None	Nil
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No top soil generation proposed during the last year	No top soil generated.	Nil
5d	Total area fully reclaimed and rehabilitated	No such proposal given for the last year.	None	Nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.			No backfilling proposed during the last year nor backfilling has been carried out.

Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
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6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	Annual report of PMCP shall be submitted up to 1st July for the last financial year.	PMCP report for the year 2018-19 submitted on time.	Nil
6b	Area available for rehabilitation (ha) .	No proposal given	Nil	Nil
6c	afforestation done (ha).	1.5 ha	1.5 ha.	Nil
6d	No. of saplings planted during the year	2250 nos.	2250 nos.	Nil
6e	Cumulative no .of plants	Not specified	Approximately 9000 nos. sapling planted during the year 2015-16 to 2018-19.	Nil
6f	Any other method of rehabilitation	No proposal	None	Nil
6g	Cost incurred on watch and care during the year	Not specified	About Rs. 4 lakh	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No proposal	None	Nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No proposal	Nil	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	No proposal	Nil	Nil

6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No such proposal	However at the pit bottom rain water accumulation was observed.	Nil
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No proposal	None	Nil
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	2250 sapling	2250 sapling	nil
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No proposal	Nil	Nil
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No proposal	Nil	Nil
6p	Compliance of environmental monitoring (core zone and buffer zone)	Proposed.	Environment monitoring is being carried out as per proposal	Nil
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			PMCP compliance are satisfactory.

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 dispatched after grade wise sorting.	Above 30% P205-1153.97 MT 25-30%P205-2328.36 MT Above20%-25% P205-27487.98MT	As per chapter 5 of approved Scheme of Mining (Approved on 10.04.2015), lessee can sell surplus ROM to the State Govt. Agent on a preferential basis (Currently RSMML) but as per item 5 of part VI of Annual Return 2018-19, domestic sale have been made to various private parties in contravention of proposal of approved scheme of mining as well as lease deed conditions hence violation of rule 11(1) of MCDR 2017 issued to the lessee vide this office letter dated 08.01.2020.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical	Mechanical	Nil
7c	Different grade of mineral sorted out at mines.	Above 30% P205, 25-30%P205, & Above20%-25% P205	As per proposal	Nil
7d	Any beneficiation process at mines	No proposal	None	Nil
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			No issue was observed related to mineral conservation.

Environment :

Sl.No.	Item	Propasals	Actual work	Remarks
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8a	Separate removal and utilization of topsoil (Rule 32)	No topsoil removal and utilization was proposed during RY 2018-19.	No top soil generated.	Nil
8b	Concurrent use or storage of topsoil	No proposal	No top soil generated.	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumps of OB/waste was proposed.	As per proposal.	Nil
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No such proposal was given	None at present	Nil
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal, however plantation was proposed over waste dumps over an area 1.5 ha.	Plantation has been carried out on old waste dumps over an area 1.5 ha.	Nil
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	During the last year plantation was proposed over waste dumps(1.5 ha area & 2250 nos.)	During the last year 2250 nos. plantation has been carried out over an area 1.5 ha on waste dumps.	Nil
8g	Survival rate	Not specified	Almost 100%	Nil
8h	Water sprinkling on roads to control airborne dust	Proposed	Water sprinkling was observed.	Nil
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Aesthetic beauty is good in and around mines area.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
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9a	Status of submission of Monthly and Annual returns	Monthly return submitted up to Feb 2020 AR submitted up to year 2018-19.	Return submitted on time.	Nil
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Details given in AR 2018-19	Found correct.	Nil
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Details given in AR are not matching with scheme of mining.	In annual return 2018-19 following discrepancies were observed: 1) Under item 12 of Part I, Lease area utilisation at the end of year 2018-19 is not matching with breakup of lease area given in approved Scheme of Mining. Hence violation of Rule 45(7) issued to the lessee vide this office letter dated 08.01.2020.	Lessee submitted the revised return on 18.02.2020 after necessary corrections.
9d	Scrutiny of Annual return on afforestation	Details given in AR 2018-19	Found correct.	Nil
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Details given that no mineral reject generation	Found correct	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	No ROM production reported in AR only dispatched shown from ROM stock to the various private parties.	As per chapter 5 of approved Scheme of Mining (Approved on 10.04.2015), lessee can sell surplus ROM to the State Govt. Agent on a preferential basis (Currently RSMML) but as per item 5 of part VI of Annual Return 2018-19, domestic sale have been made to various private parties in contravention of proposal of approved scheme of mining as well as lease deed conditions hence violation of rule 11(1) of MCDR 2017 issued to the lessee vide this office letter dated 08.01.2020.	Nil

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Details given in AR	Found to be correct.	Nil
9h	Scrutiny of Annual return on fixed assets	Fixed assets of Rs. 7697116 shwon in AR	Seems to be correct.	Nil
9k	Scrutiny of Annual return on mining machineries	Details given in AR	Found correct.	Nil

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)	08-JAN-20	MCDR17	Rule 11(1)	08-JAN-20
MCDR17	Rule 35(2)	08-JAN-20	MCDR17	Rule 35(2)	08-JAN-20
MCDR17	Rule 45(7)(a)	08-JAN-20			18-MAR-20
MCDR17	Rule 46(a)	08-JAN-20			18-MAR-20

Date :

(DATA RAM GURJAR)

Indian Bureau of Mines