

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

MCDR INSPECTION REPORT

Ajmer regional office

Mine file No : RAJ/AJM-315/Pb.Zn-1

Mine code : 34RAJ01001

- (i) Name of the Inspecting : **P022**) **PANKAJ KULSHRESTHA**
Officer and ID No.
- (ii) Designation : Assistant Controller Mine
- (iii) Accompanying mine : Shri Siyaram Meena, Manager & Shri Vijendra Kashyap,
Official with
Designation
- (iv) Date of Inspection : 08/04/2024
- (v) Prev.inspection date : 01/11/2019

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **KAYAR**
- (b) **Registration NO.** : **IBM/421/2011**
- (c) Category : A Fully Mechanised
- (d) Type of Working : Underground
- (e) Postal address
- State : RAJASTHAN
- District : AJMER
- Village : KAYAR
- Taluka : AJMER
- Post office : KAYAR
- Pin Code : 305023
- FAX No. : 0145-6626266
- E-mail : Nirmalendu.Kumar@vedanta.co
- Phone : 0145-6626232
- (f) Police Station : Gegal
- (g) First opening date : 12/01/1998
- (h) Weekly day of rest : SUN
2. Address for : M/S Hindustan Zinc Limited
correspondance Kayad Lead -Zinc Mine
Village: Kayad, Dist & Teshil : Ajmer
3. (a) Lease Number : RAJ1765
- (b) Lease area : 480.45
- (c) Period of lease : 50
- (d) Date of Expiry : 28/02/2048
4. Mineral worked : LEAD & ZINC ORE Main

5. Name and Address of the

Lessee : HINDUSTAN ZINC LTD.
 HINDUSTAN ZINC LTD. YASHAD
 BHAWAN YASHADGARH, UDAIPUR
 UDAIPUR RAJASTHAN
 Phone:01483-23331, 23332
 FAX :01483-23073

Owner : Sunil Duggal
 Hindustan Zinc Limited
 Yashad Bhawan, Swaroop
 Sagar Udaipur BHILWARA
 RAJASTHAN
 Phone: 0294-2529182
 FAX : 0294-2525765

Agent : Mr. Balwant Singh Rathore
 Kayad Lead -Zinc Mine
 Village: Kayad Dist &
 Teshil : Ajmer AJMER
 RAJASTHAN
 Phone: 0145-6626231
 FAX :

Mining Engineer
 Name : Chinni Ravi Tej, Full Time
 Qualification : B Tech Mining & 12.5 Years Exp
 Appointment/ : 15/09/2022
 Termination date

Geologist
 Name : Vijendra Kashyap, Full Time
 Qualification : MSC Geology
 Appointment/ : 12/06/2018
 Termination date

Manager
 Name : Manish Meghwal
 Qualification : BE Mining
 Appointment/ : 01/07/2024
 Termination date

6. Date of approval of Mining	:	Modif.of approved Mining Plan	05/12/2006
Plan/Scheme of Mining	:	Modif.of approved Mining Plan	07/05/2013
		MP modif under MCR 1960	20/05/2016
		MP modif under 17(3) MCR 2016	18/10/2016
		MP modif under 17(3) MCR 2016	03/11/2017
		MP modif under 17(3) MCR 2016	06/09/2019

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Nil	Nil	
1b	Exploration over lease area for geological axis 1 or 2	Underground+Surface No. of BH: 190 Meterage:55000 meter Grid:25mX12.5 m Depth(mRL):50	Underground+Surface No. of BH: 138 Meterage:66223 m	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	NA	The exploration is being done by HZL. Drilling agency is MAPL ,Plot No 110, Main Dhemu, Beside Railway Siding, P.O. Sitarampur-713359, Asansol, West Bardhaman, West Bengal, INDIA.	
1d	Balance area to be explored to bring Geological axis in 1 or 2	156 Ha	134.64 Ha	
1e	Balance reserve as on 01/04/20	Reserve-1396258MT Resources-5048993MT Total-6445251 As per approved MP dated 27/01/2023	Reserve-1396258MT Resources-5048993MT Total-6445251 As per approved MP dated 27/01/2023	
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	Block-3 Main Lens ,Sland K18 NE decline	Block-3 Main Lens and K18 NE Decline	

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	NA	Not applicable
2c	Stripping ratio or ore to OB ratio	NA	Not applicable
2d	Quantity of topsoil generation in m3	NA	Not applicable
2e	Quantity of overburden generation in m3	NA	Not applicable
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	NA	The development of deposit may be considered as satisfactory.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	NA	Not applicable as it is a U/g mine.	
3b	Quantity of ROM mineral production proposed	600499MT	564113MT	
3c	Recovery of sailable/usable mineral from ROM production	NA	Not applicable	
3d	Quantity of mineral reject generation	NA	Not applicable	
3e	Grade of mineral rejects generation and threshold value declared.	NA	Nil	
3f	Quantity of sub grade mineral generation.	NA	Not applicable	
3g	Grade of sub grade mineral generation	NA	Not applicable	

3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised	Mechanised	
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Nil	Not applicable	
3j	Provision of drilling and blasting in mineral benches	Nil	Nil, U/g mine	
3k	Provision of mining machineries in mineral benches	Nil	Nil, U/g mine	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	NA	Not applicable	
3m	Total area covered under excavation/pits	Not applicable	Not applicable	
3n	Ore to OB ratio for the pit/mine during the year.	NA	Not applicable, U/g mine	
3o	Total area put in use under different heads at the end of year	NA	Not applicable, U/g mine.	
3p	Production of ROM mineral during the last five year period as applicable	2019-20- 1200000 T 2020-21- 1200000 T 2021-22- 1200000 T 2022-23- 748456 T 2023-24 600499 T	2019-20- 2020-21- 2021-22- 2022-23 2023-24	1139071 T 1174824 T 931951 T 657185 T 564113 T
3q	General remarks of inspecting officers on method of mining etc.	na	The overall status of U/g mining may be considered as satisfactory.	

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 - NIL OB- NIL Waste Dump-1	Top soil - NIL OB- NIL Waste Dump-1	
4b	Location of topsoil, OB and mineral reject dumps	Top soil - NA OB - Nil Mineral Reject dump - Nil	Top soil - NA OB - Nil Mineral Reject dump - Nil	
4c	Number of dumps within lease area and outside of lease area	Inside lease Area Waste Dump-1 Ore Dump-1	Inside lease Area Waste Dump-1 Ore Dump-1	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Point Easting Northing 1 1403.8 10363.7 2 1416 10222 3 1557 10247.7 4 1535 10389	Point Easting Northing 1 1403.8 10363.7 2 1416 10222 3 1557 10247.7 4 1535 10389	
4e	Number of active and alive dumps.	Waste Dump-1 Ore Dump-1	Waste Dump-1 Ore Dump-1	
4f	Number of dead dumps.	Nil	Nil	
4g	Number of dumps established.	Nil	Nil	
4h	Whether Retaining wall or garland drain all along dumps are there.	Nil	Nil	
4i	Length of Retaining wall or garland drain all along dumps	Nil	Nil	
4j	Number of settling ponds	Nil	Nil	
4k	Specific comments of inspecting officer on waste dump management	NA	The overall status of waste dump management 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.	NA	NA, U/g mine
5b	Area under backfilling of mined out area	NA	Not applicable
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Nil	Nil
5d	Total area fully reclaimed and rehabilitated	Nil	Nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.	NA	Not applicable as it is a U/g mine.

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	Yes submitted	
6b	Area available for rehabilitation (ha) .	1 ha.	1 ha.	No additional area available for plantation and only Gap Filling plantation
6c	afforestation done (ha).	1 ha.	1 ha.	
6d	No. of saplings planted during the year	1500 nos.	1500 nos.	
6e	Cumulative no .of plants	46100 nos.	50600 nos.	
6f	Any other method of rehabilitation	Nil	Nil	
6g	Cost incurred on watch and care during the year	NA	Rs. 390000	

6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	NA	NA
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	NA	NA
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	NA	NA
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	NA	NA
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	Nil	Nil
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	1500 No.	Inside Lease: 1500 (Gap filling)
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	1 ha.	1 Ha.
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Plantation	Plantation

6p	Compliance of environmental monitoring (core zone and buffer zone)	Yes, Air, Noise, vibration and water quality testing to be done quarterly in proposed location.	Yes, Testing is being done as per proposal.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	NA	The overall 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	All ROM dispatched above Cutoff for further processing to RA Mine.	All ROM dispatched above Cutoff for further processing to Rampura Agucha	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Nil - All ore dispatch for processing	As above, all ore dispatched for processing	
7c	Different grade of mineral sorted out at mines.	NA	Not applicable	
7d	Any beneficiation process at mines .	Nil	Nil	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	NA	The present status of mineral conservation and benificiation may be considered as satisfactory.	

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
--------	------	-----------	-------------	---------

8a	Separate removal and utilization of topsoil (Rule 32)	Nil	Nil
8b	Concurrent use or storage of topsoil	Nil	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	OB-NIL Waste Dump-1 Reject-NIL	OB-NIL Waste Dump-1 Reject-NIL
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Waste Produced is backfilled in underground.	Waste Produced is backfilled in underground.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	NA	NA
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	1500 Nos. of saplings	1500 Nos. of saplings
8g	Survival rate	90%	90% survival
8h	Water sprinkling on roads to control airborne dust	Water sprinkling on roads.	Yes, Water sprinkling on roads is being done.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	NA	The overall status of aestheti 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, submitted regularly
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	<p>MIning Engineer : Shri Chinni Ravi Tej Geologist : Shri Vijendra Kashyap Manager : Shri Siyaram Meena</p>	As above
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	<p>Already exploited and abandoned by opencast (O-C) mining : 0 hect. Covered under current (O-C) Workings : 0 hect. Reclaimed-rehabilitated : 0 hect. Occupied by plant, buildings, residential, welfare buildings and roads : 6.520 hecets. Used for any other purpose (specify) Top Soil, Mineral Storage, Waste Storage, Plantation : 41.98 hecets.</p>	As above
9d	Scrutiny of Annual return on afforestation	<p>Number of trees planted during the year : 1500 with survival rate 90% Total no. of trees at the end of the year : 50600</p>	As above

9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	No reject generation as reported	No reject generation, entire ROM is sent for further processing.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Opening stocks : 7380 T Production : 564113 T Closing stocks : 12496 T	As above
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex-mine price of the ore produced reported as Rs. 7933.00	As above
9h	Scrutiny of Annual return on fixed assets	Value of Fixed Assets at the beginning of the year : Rs. 2236512402, Additions during the Year : Rs. 1558732094, Sold or discarded during the year : Rs. 5905323, Depreciation during the year: Rs. 1332517340, Net closing Balance: Rs. 2456821833 with estimated market value of Rs. 2456821833.	Seems to be correct.

9k	Scrutiny of Annual return on mining machineries	DUMPER (65.000t) -5, DUMPER (60T)- 1, DUMPER (30t)-4, LOAD HAUL DUMPER (9.4)-2, LOAD HAUL DUMPER (10.7)-4, BLAST HOLE DRILL (ELEC.)(102)- 2, ROCK DRILL (ELEC.)(45)-9, EXPLOSIVE VAN 5t-2, VENTILATION FAN 70 cum/h- 3, GENERATOR (DIESEL) 1000 KWH-1, PUMPS (ELEC.) 1600L/Min-4, WINDING ENGINE (ELEC.) 360kg.-1, OTHER HEM MACHINERY-15, AIR COMPRESSOR 25 cum/min- 2, AIR COMPRESSOR 12 cum/min- 1,MOTOR GRADER 100 HP-1	As above
----	--	--	----------

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)	12/04/2024	05/06/2024			

Date :

(PANKAJ KULSHRESTHA)

Indian Bureau of Mines