

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

MCDR INSPECTION REPORT

Ajmer regional office

Mine file No : RAJ/BLW- 56 /PB,ZN-1/6/12/200:

Mine code : 34RAJ06001

- (i) Name of the Inspecting : **DJ03**) **DILIP JAIN**
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine :
Official with
Designation
- (iv) Date of Inspection : 20-JUN-24
- (v) Prev.inspection date : 11-SEP-19

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **RAMPURA AGUCHA**
- (b) **Registration NO.** : **IBM/421/2011**
- (c) Category : A Mechanised
- (d) Type of Working : Underground
- (e) Postal address
- State : RAJASTHAN
- District : BHILWARA
- Village : AGUCHA
- Taluka : HURDA
- Post office : AGUCHA
- Pin Code : 311029
- FAX No. : 01483-233073
- E-mail : hzl.ram@vedanta.co.in
- Phone : 01483-23331, 23332
- (f) Police Station : Gulabpura
- (g) First opening date : 05-FEB-81
- (h) Weekly day of rest : MON
2. Address for : HINDUSTAN ZINC LTD.
correspondance RAMPURA AGUCHA MINE,
PO AGUCHA, BHILWARA
3. (a) Lease Number : RAJ0652
- (b) Lease area : 1200
- (c) Period of lease : 50
- (d) Date of Expiry : 12-MAR-30
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 : Shri Vinod Kumar
Rampura-Agucha Lead-Zinc
Mine Agucha, Bhilwara,
Rajasthan BHILWARA
RAJASTHAN
Phone: 01483-229012
FAX : 01483-229011

Mining Engineer
Name : Shri Vinod Saini, Full Time
Qualification : BE Mining
Appointment/ : 11-MAR-24
Termination date

Geologist
Name : Ranjan Gupta, Full Time
Qualification : MSc (Tech) Geology
Appointment/ : 01-MAY-17
Termination date

Manager
Name : Shri Basant Kishore Mahanta
Qualification : BE Mining
Appointment/ : 09-APR-24
Termination date

6. Date of approval of Mining	:	Existing rule 11 MCDR1988	25-JAN-93
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	15-MAY-97
		Mining Scheme rule 12 MCDR1988	06-JUN-01
		Modif.approved Mining Scheme	29-JUL-03
		Modif.approved Mining Scheme	17-SEP-03
		Mining Scheme rule 12 MCDR1988	27-FEB-06
		Modif.approved Mining Scheme	02-NOV-06
		Modif.of approved Mining Plan	04-MAY-09
		Mining Scheme rule 12 MCDR1988	11-JUL-12
		Modif.approved Mining Scheme	28-JUN-13
		Modif.approved Mining Scheme	09-APR-15
		MP review under 17(1) MCR 2016	22-FEB-17
		MP modif under 17(3) MCR 2016	27-MAR-18

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	During the previous year 2022-23, a total of 135 BHs with 37500 mts of drilling was proposed.	During the previous year 2022-23, a total of 231 BHs with 44168 mts of drilling was carried out.	No backlog of exploration in previous year 2022-23.
1b	Exploration over lease area for geological axis 1 or 2	During the reporting year (RY) 2023-24, a total of 96 BHs with 35000 mts of drilling was proposed.	During the reporting year (RY) 2023-24, a total of 265 BHs with 47811 mts of drilling was carried out.	Nil
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No proposal of exploration agency and expenditure.	Exploration agency: (1) Mining Associate Pvt. Ltd., Asansol, WB and (2) TDMA Pvt Ltd. Shop no 10-11, Sector 14 Market, Old Delhi Road, Gurgaon-122011, Haryana, Total Expenditure - Rs. 150820782.00	Nil
1d	Balance area to be explored to bring Geological axis in 1 or 2	An area of 15.50 hectare of G3 level was proposed to explore.	Exploration was mainly carried out as per proposal to upgrade resource to reserve.	As per approved document dated 30/03/2022, entire mineralized area (surface area) of 226.85 hectare has been explored under G1+G2 level of exploration.
1e	Balance reserve as on 01/04/20	Ass per approved RMP dated 30/03/2022, the position of reserve and resource was 42.67 and 34.51 million tons respectively.	The position reserve and resource as on 01/04/2024 as per approved MRMP dated 20/05/2024 was 44.35 and 24.82 million tons respectively.	Nil

1f	General remarks of inspecting officers on geology, exploration etc	Geologically the area belongs to the Bhilwara Supergroup of rocks. At present exploration is being carried out using latest technologies like directional drilling, core orientation etc.
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Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	A total of 40345 mts of lateral & vertical development at different levels have been proposed.	A total of 31691 mts of lateral & vertical development carried out during the RY at different levels.	Violation of rule 11(1) of MCDR, 2017 issued for shortfall in development.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	No proposal being an underground mine.	Not applicable.	Nil
2c	Stripping ratio or ore to OB ratio	No proposal being an underground mine.	Not applicable.	Nil
2d	Quantity of topsoil generation in m3	No proposal being an underground mine.	Not applicable.	Nil
2e	Quantity of overburden generation in m3	No proposal of OB generation. However, a quantity of 862819 CuM of waste generation has been proposed through UG development.	A total of 768299.00 CuM of waste has been generated through UG development during RY.	Low waste generation in account of less development for which the violation of rule 11(1) of MCDR, 2017 issued.

2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	Initially the mine was developed through open pit and the same was in working upto the year 2018. Now the development is being carried through U/g method which is best suitable method as the mineral zone is occurring at depth. Violation of rule 11(1) of MCDR, 2017 issued for shortfall in development.
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Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	The mining operations are proposed through U/g method.	One open pit exists in the lease area, but no mineral production through open pit during RY. Entire mineral production through U/g during RY.	Nil
3b	Quantity of ROM mineral production proposed	Year 2023-24: 6150000 MT.	Year 2023-24: 4930757 MT.	Less production in account of less development.
3c	Recovery of sailable/usable mineral from ROM production	Entire ROM is proposed to use for beneficiation i.e. recovery is 100%.	Entire ROM is used for beneficiation, hence the recovery was 100%.	Nil
3d	Quantity of mineral reject generation	No proposal of mineral reject (MR) generation during RY.	No mineral reject generation.	Mill tailing of 4356884.00 tons have been generated during RY.
3e	Grade of mineral rejects generation and threshold value declared.	No proposal of mineral reject (MR) generation during RY and threshold value is also not declared for the Pb-Zn minerals.	Not applicable as no MR generation during RY.	Nil

3f	Quantity of sub grade mineral generation.	No proposal of Sub-grade generation.	Not applicable as no sub-grade mineral generation during RY.	Nil
3g	Grade of sub grade mineral generation	No proposal of Sub-grade generation.	Not applicable as no sub-grade mineral generation during RY.	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	No proposal of ROM segregation as entire ROM is feedable to mineral processing plant.	Entire ROM is being fed to the mineral processing plant located within lease area.	Nil
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal of any fresh beneficiation study. Beneficiation facility of 6.5 MTPA is exists within lease area.	Beneficiation of entire ROM is being carried out in existing beneficiation plant.	Nil
3j	Provision of drilling and blasting in mineral benches	No proposal of drilling & blasting in mineral benches being an underground mine.	Not applicable.	Nil
3k	Provision of mining machineries in mineral benches	No provision of mining machineries in mineral benches being an underground mine.	Not applicable.	Nil
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Not applicable being production proposal from U/g.	Not applicable.	Nil
3m	Total area covered under excavation/pits	Year 2023-24: 180.13 Ha	Year 2023-24: 180.13 Ha	Nil
3n	Ore to OB ratio for the pit/mine during the year.	No proposal of Ore to OB ratio being production proposal from U/g.	Not applicable.	Nil

3o	Total area put in use under different heads at the end of year	A total of 1034.28 hectare area has been proposed put in use under different heads at the end of the year 2023-24.	As per annual return for the year 2023-24, a total of 1182.02 hectare area has been put in use under different heads at the end of the year 2023-24.	Violation of rule 11(1) of MCDR, 2017 issued for deviation in the land use area.
3p	Production of ROM mineral during the last five year period as applicable	2019-20: 6000000 2020-21: 6000000 2021-22: 6000000 2022-23: 6150000 2023-24: 6150000	2019-12: 3940098 2020-21: 4271819 2021-22: 4511121 2022-23: 4795130 2023-24: 4930757	All figures in tons.
3q	General remarks of inspecting officers on method of mining etc.			Modern and scientific mining methods are in practice for optimal exploitation of mineral wealth. Latest technologies and machineries are being deployed. The method of stoping is "Long Hole open Stoping and its variants with back filling" which is best suitable method for the type of the deposit.

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 proposal of top soil, MR and OB generation. Waste generated through U/g development proposed to use in height raising of tailing dam.	No top soil, MR and OB generation during RY. However, the waste generated through U/g development was used for height raising of tailing dam.	No top soil and OB generation as mining operations are being carried out through U/g.
4b	Location of topsoil, OB and mineral reject dumps	No proposal of top soil, OB and MR dumping/stacking.	Not applicable as no top soil, OB and MR generation during RY.	Nil
4c	Number of dumps within lease area and outside of lease area	Inside Lease area- One Outside lease area: NIL	Inside Lease area- One Outside lease area: NIL	Nil
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Existing waste dump outside UPL.	Existing waste dump outside UPL.	Nil
4e	Number of active and alive dumps.	No proposal of waste dumping. However, waste generated through U/g development proposed to use in height raising of tailing dam.	There exists one waste dump in lease area. The waste generated through U/g development was used for height raising of tailing dam.	Nil
4f	Number of dead dumps.	No proposal.	Not applicable.	Nil
4g	Number of dumps established.	Existing dump top and slopes are to be stabilized with plantation and geo-textile.	Part of different lifts of existing dump has been stabilized with plantation and geo-textile.	Nil
4h	Whether Retaining wall or garland drain all along dumps are there.	Garland drain all along dumps.	Previously constructed Garland and Retaining wall around the waste dump is being maintained on regular basis.	Nil
4i	Length of Retaining wall or garland drain all along dumps	No proposal during the RY.	Previously constructed Garland and Retaining wall around the waste dump is being maintained on regular basis.	Nil

4j	Number of settling ponds	No proposal	Not applicable as no proposal. Previously constructed settling ponds are being maintained.	Nil
4k	Specific comments of inspecting officer on waste dump management			Part of the existing waste dump has been stabilized and rehabilitated with plantation. Solar plan has also installed on the top of the dump. No issue related to waste dumping.

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.	Not applicable.	Nil
5b	Area under backfilling of mined out area	Tailing quantity of 2318494 tons was proposed to backfill in stope out area.	Tailing quantity of 1391519 tons was backfilled in stope out area during RY.	Violation of rule 11(1) of MCDR, 2017 issued for deviation in backfilling quantity.
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No proposal of top soil generation during RY.	No top soil has been generated during the RY.	Nil
5d	Total area fully reclaimed and rehabilitated	No proposal of full reclamation and rehabilitation of mine out pit.	No pi area is reclaimed and rehabilitated. Part of the matured waste dump area has been rehabilitated by soil capping, plantation and geo textile.	As per approved MRMP dated 20/05/2024 an area of 94 hectare of waste dump has been rehabilitated upto 2023-24.
5e	General remarks of inspecting officers on backfilling and reclamation etc.			No issue related to the 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).	As per rule 26(2) of MCDR, 2017 holder of mining lease shall submit PMCP before 1st day of July every year.	The PMCP report has been uploaded in AR for the year 2023-24. On examination of PMCP report it is observed that an area of 155 hectare has been rehabilitated, whereas in approved MRP dated 20/05/2024 same has been furnished as 94 hectares.	Show-cause notice issued for violation of rule 45(7) for wrong and false information under AR for the year 20203-24.
6b	Area available for rehabilitation (ha) .	No proposal.	None.	Nil
6c	afforestation done (ha).	Gap filling plantation over 15 hectare with 15000 number of saplings has been proposed over existing waste dump.	During RY 20203-24 an area of 15 hectare with 23000 number of saplings has been covered under plantation over existing waste dump.	Nil
6d	No. of saplings planted during the year	15000 numbers.	23000 numbers.	Nil
6e	Cumulative no .of plants	No proposal.	As per PMCP report for the year 2023-24, cumulatively 745250 number of plants have been planted at the end of the FY 20203-24.	Nil
6f	Any other method of rehabilitation	Waste dump area of 2.0 hectare was proposed to cover under Geo-textile during RY.	Wate dump area of 2.50 hectare was covered under Geo-textile during RY.	Nil
6g	Cost incurred on watch and care during the year	60 lacs for plantation.	75.0 lacs during RY.	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	Tailing quantity of 2318494 tons was proposed to backfill in stope out area.	Tailing quantity of 1391519 tons was backfilled in stope out area during RY.	Violation of rule 11(1) of MCDR, 2017 issued for deviation in backfilling quantity.

6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Tailing quantity of 2318494 tons was proposed to backfill in stope out area.	Tailing quantity of 1391519 tons was backfilled in stope out area during RY.	Violation of rule 11(1) of MCDR, 2017 issued for deviation in backfilling quantity.
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	No proposal.	Not applicable.	Nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal.	Not applicable.	Nil
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	No proposal.	Not applicable.	Nil
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	Gap filling plantation over 15 hectare with 15000 number of saplings has been proposed over existing waste dump.	During RY 20203-24 an area of 15 hectare with 23000 number of saplings has been covered under plantation over existing waste dump.	Nil
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	15 hectare of waste dump.	15 hectare of waste dump.	Nil
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	Plantation and Geotextile.	Plantation and Geotextile.	Nil
6p	Compliance of environmental monitoring (core zone and buffer zone)	Environment monitoring stations have been proposed in buffer and core zone.	Environment monitoring was carried out as per proposal and parameters are found within prescribed limit.	Nil

6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	The PMCP compliance is satisfactory. However, area of rehabilitation has not furnished properly, for which violation of rule 45(7) of MCDR issued.
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Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Entire ROM dispatch to captive beneficiation plant and no proposal for grade wise sorting.	Entire ROM dispatched to captive beneficiation plant located within lease area and no grade wise sorting during RY.	Nil
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	No proposal of grade wise sorting.	Not applicable.	Nil
7c	Different grade of mineral sorted out at mines.	No proposal of grade wise sorting.	Not applicable.	Nil
7d	Any beneficiation process at mines .	Beneficiation plant of 6.5 MTPA has been installed. The process includes crushing, grinding, classification , differential floatation of lead & zinc where the lead is floated initially, followed by zinc floatation.	Beneficiation of ROM is being carried out as per proposal.	Nil

7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	No issue related to the Mineral conservation & beneficiation as the entire ROM is usable and feedable to the beneficiation plant.
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Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal of top soil generation during 2023-24.	No generation of soil during the RY.	Nil
8b	Concurrent use or storage of topsoil	No proposal of top soil generation during 2023-24.	No generation of soil during the RY.	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes, proposal of separate disposal has been given for waste and mill tailing.	Waste and tailing has been disposed separately.	Waste material used for tailing dam height raising and tailing disposed in tailing dam.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Mill tailings proposed to utilized for backfilling of stoped out area.	Mill tailing utilized for backfilling of stoped out area.	Nil
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Gap filling plantation over 15 hectare with 15000 number of saplings has been proposed over existing waste dump.	During RY 20203-24 an area of 15 hectare with 23000 number of saplings has been covered under plantation over existing waste dump.	Nil
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	A total of 15000 number of saplings has been proposed over existing waste dump.	A total of 23000 number of saplings has been covered under plantation over existing waste dump.	Nil

8g	Survival rate	95%	95%	Nil
8h	Water sprinkling on roads to control airborne dust	Effective water sprinkling to be done to control airborne dust.	Water sprinkling has been observed over haul road to control airborne dust due to mining activity.	Nil
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			The aesthetic beauty in and around mine area is satisfactory.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	As per rule 45 of MCDR, 2017 monthly and annual return shall be submitted to RCOM.	Monthly and annual return for the RY as per rule 45 of MCDR, 2017 has been submitted.	Nil
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer- Nirmalendu Kumar Geologist- Ranjan Gupta Mine Manager- Sachin M Desmukh	Mining Engineer, Geologist and Mine manager has been appointed in the mine.	Nil
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Area under O/C mining -180.13 Ha, Reclaimed/Rehabilitated - 155 Ha, Waste disposal- 303.89 Ha, Infrastructure - 337.44 Ha, Tailing pond - 206.45 Ha, Work done under PMCP during the year - 15 Ha.	As per approved MRMP dated 20/05/2024 an area of 94 hectare has been furnished under rehabilitation. Whereas same has been furnished 155 hectare in AR.	Violation of rule 45(7) of MCDR, 2017 issued for the deviation in rehabilitated area.

9d	Scrutiny of Annual return on afforestation	Plantation within Lease- 23000 nos. Plantation Outside Lease- Nil	Found in order.	Nil
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Mineral Reject: NIL	No mineral reject generation.	Mill tailing of 4356884.00 tons (RA+kayad mine) has been generated during the RY.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM closing stock: 36185 tons. Lead concentrate closing stock: 8407.80 tons. Zinc concentrate closing stock: 28753.68 tons.	The details furnished in the AR appears in order.	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex Mine Price- Rs. 9635.28 Production cost- Rs. 9635.28	On examination of annual return it is observed that cost of production is not furnished correctly.	Violation of rule 45(7) of MCDR, 2017 issued for the deviation in cost of production.
9h	Scrutiny of Annual return on fixed assets	The value of fixed asset furnished in AR is Rs. 46165568142.00 .	The details furnished in the AR appears in order.	Nil
9k	Scrutiny of Annual return on mining machineries	Back hoe, Dumper, Water tanker, Motor Grader, Dozer, Crane, LHD, LPDT, Rock drill, Blast hole drill, Wheel Loader etc.	The information of mining machinery furnished appears in order.	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)	25-JUL-24				
MCDR17 Rule 31(4)	25-JUL-24				
MCDR17 Rule 45(7)(a)	25-JUL-24				

Date :

(DILIP JAIN)

Indian Bureau of Mines