

INDIAN BUREAU OF MINES

--:-- Inspection Report --:--

Part-I : General Information

1.1.1 Mine Details

Name of the Mine :	34RAJ26002	Lease Area (Ha) :	3620
Forest Area (Ha) :	1537	Mine Code :	34RAJ26002
Registration Number :	IBM/421/2011	Name of lessee :	HINDUSTAN ZINC LIMITED
Address of lessee :	YASHAD BHAWAN ,Opp Swaroop Sagar, UDAIPUR	Phone of lessee :	0294-6604000
Email of lessee :	Bharat.dave@vedanta.co.in	Fax Number :	N/A
Village :	Jawar	Taluka / Mandal :	Girwa
District :	Udaipur	Pincode :	313004
State :	Rajasthan	Post Office :	N/A
Nearest Police Station :	Zawar	Nearest Railway Station :	Zawar
Date of Grant of Mining Lease :	2050-08-30	Date of Mining Lease Execution :	2050-04-01
Date of opening in the mine :	Nilsss		

Nominated Owner Details			
Name of the Nominated Owner :	N/A	Nominated Owner Address:	N/A
Nominated Owner Mobile :	N/A	Nominated Owner Email :	N/A
Nominated Owner Fax Number :	Nil	Date of Nominated Owner Appointment :	Nil
Mining Engineer Details			
Name of the Mining Engineer :	Sri Balamurugan P	Qualification of Mining Engineer :	BE Mining
Address of Mining Engineer :	Zawar Mines, Udaipur313901, Rajasthan	Phone of Mining Engineer :	9602711468
Email of Mining Engineer :	Balamurugan.P@vedanta.co.in	Fax Number of Mining Engineer :	0294427232
Date of Mining Engineer Appointment :	2016-12-07		
Geologist Details			
Name of the Geologist :	Sri Satya Srikant Sahoo	Qualification of Geologist :	M.Sc. Tech. Geology
Address of Geologist :	Zawar Mines, Udaipur313901, Rajasthan	Phone of Geologist :	8789445640
Email of Geologist :	Satya.sahoo@vedanta.co.in	Fax Number of Geologist :	0294427232
Date of Geologist Appointment :	2025-04-01		
Mine Manager Details			
Name of the Mine Manager :	Sri Balamurugan P	Qualification of Mine Manager :	BE Mining
Address of Mine Manger :	Zawar Mines, Udaipur313901, Rajasthan	Phone of Mine Manger :	9602711468
Email of Mine Manger :	Balamurugan.P@vedanta.co.in	Fax Number of Mine Manger :	0294427232
Date of Mine Manger Appointment :	2022-05-30		

Mineral(s) granted in lease and proved for mining :	LEAD & ZINC ORE	Date of Approval of Mining Plan / Modified Mining Plan / ROMP with five-year period :	N/A
Method of mining :	Underground	Category :	MECHANISED
Nature of Use :	Captive		

Part-II : Other Information

2.1.1 : Inspection Details

Inspecting Officer :	DILIP JAIN
Designation :	SMG
Name of the Accompanying Official from Mine :	Sri Balamurugan P and Sri Satya Srikant Sahoo
Designation of the Accompanying Official :	Mine Manager and Geologist
Type of Inspection :	MCDR,STOP
Date of Inspection :	11/07/2025
Review year considered for MCDR Inspection :	2024-2025

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2.2.1 : Exploration Details

S.N.	Items for Reporting		As Per Approved Mining Plan	Actual	Deviation	Violation under Rule	Remark	Remark File
1	Number of Core Boreholes		329 BHs with 66000 mts of drilling.	452 BHs with 87931 mts of drilling.	Nil	No Violation	Nil	Nil
2	Number of DTH Boreholes		No proposal.	No DTH BHs during reporting year (RY) 2024-25.	Nil	No Violation	Nil	Nil
3	Number of exploratory pits / trial pits		No proposal.	No exploratory pits / trial pits during (RY) 2024-25.	Nil	No Violation	Nil	Nil
4	Number of exploratory Trenches		No proposal.	No exploratory trenches during (RY) 2024-25.	Nil	No Violation	Nil	Nil
5	Lateral exploration status for the lease area	G1	No proposal of lateral exploration.	Exploration has been carried out depthward due to the vertical or sub-vertical dipping of the ore body/m ineralization.	Nil	No Violation	Nil	Nil
6		G2	No proposal of lateral exploration.	Exploration has been carried out depthward due to the vertical or sub-vertical dipping of the ore body/m	Nil	No Violation	Nil	Nil

				ineralization.				
7		G3	No proposal of lateral exploration.	Exploration has been carried out depthward due to the vertical or sub-vertical dipping of the ore body/m ineralization.	Nil	No Violation	Nil	Nil
8		G4	No proposal.	Not applicable.	Nil	No Violation	Nil	Nil
9	UNFC category wise reported Resources/Reserves as per MP/MMP ROMP Total Reserves (111, 121 & 122) and Total Mineral Resources (331, 332 & 333 upto 334)		As per approved document dated 04/03/2025, the position of reserve and remaining resource as on 01/04/2024 was 15.00 and 33.92 million tons respectively.	As per annual return 2024-25, the position of reserve and remaining resource as on 31/03/2025 was 18.989 and 29.864 million tons respectively.	Nil	No Violation	Nil	Nil

2.3.2 : Development - Underground Details

S.N.	Items for Reporting	As Per Approved Mining Plan	Actual	Deviation	Violation under Rule	Remark	Remark File
1	Mode of Entry Shaft/ Adit/Incline/Decline	1.Central Mochia : Shaft (395 to	1.Central Mochia : Shaft (395 to	Nil	No Violation	Nil	Nil

		-58mRL), 2. West Mochia : Adit at 452mRL and shaft (452 to 25mRL) 3.Mochia Balaria Portal: Decline	-58mRL), 2. West Mochia : Adit at 452mRL and shaft (452 to 25mRL) 3.Mochia Balaria Portal: Decline				
2	Method of Working	Underground-Mechanized.	Underground-Mechanized.	Nil	No Violation	Nil	Nil
3	(i)Shaft	No proposal of Shaft sinking.	none for RY.	Nil	No Violation	Nil	Nil
4	(ii)Incline/Decline/Ramp	1200 meters	1040 meters	160 meters.	Rule 11(1)	Decline development of 1040 meters has been carried out against the approved proposal of 1200 meters.	Nil
5	(iii)Raises/Winzes	400 meters	431.60 meters	Nil	No Violation	Nil	Nil
6	(iv)Adit	No proposal.	None.	Nil	No Violation	Nil	Nil
7	(v)Haulage	No specific proposal on haulage drive development meters. The proposal has been consider under level (horizontal) development.	Haulage development meters considered under Drive/levels development.	Nil	No Violation	Nil	Nil
8	(vi)Cross-Cut	No specific	X-cut	Nil	No Violation	Nil	Nil

		proposal on X-cut development meters. The proposal has been consider under level (horizontal) development.	development meters considered under Drive/levels development.				
9	(vii)Ore-Drive/Levels	17000 meters	9370.20 meters	7629.80 meters	Rule 11(1)	Horizontal development of 9370.203886 meters has been carried out against the approved proposal of 17000 meters.	Nil
10	Number of stopes under development during the year	11 Stopes Blocks.	05 Stopes Blocks.	06 Stopes Blocks.	Rule 11(1)	Ore production has been carried out from 05 stope blocks against the approved proposal of 11 stope blocks.	Nil
11	Number of Levels	24 levels.	18 levels.	06 levels.	No Violation	Due to limited or less development, production could not be carried out from all proposed levels. Violation of Rule 11(1) is being pointed out for shortfall in development.	Nil
12	Level Interval (in Meter)	25 meters	25 meters	Nil	No Violation	Nil	Nil

13	Quantum of Ore Generated while Development during the year (inT)	240000 Tons	225497 Tons	14503.000 Tons	No Violation	Lower development ore generation is attributed to less development. Violation of Rule 11(1) is being pointed out for shortfall in development.	Nil
14	Ore Recovery in the development	100%	100%	Nil	No Violation	Ore is recovered during the development of ore drives and crosscuts in the orebody.	Nil
15	Quantity of waste generation in m3	247777	197056.15	50720.850	No Violation	Lower waste production is attributed to less development. Violation of Rule 11(1) is being pointed out for shortfall in development.	Nil

2.4.2 Exploitation - Underground Mine Details

S.N.	Items for Reporting	As Per Approved Mining Plan	Actual	Deviation	Violation under Rule	Remark	Remark File
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1	Number of levels for production	24 Levels	18 Levels	06 Levels	No Violation	Due to less development, production could not be carried out from all proposed levels. Violation of Rule 11(1) is being pointed out for shortfall in development.	Nil
2	Number of stopes for production	11 Stope Blocks	05 Stope Blocks	06 Stope Blocks.	No Violation	Violation of Rule 11(1) is being pointed out for shortfall in development.	Nil
3	Quantity of ROM mineral production from stopes	1860000 Tons	1021359 Tons	838641.000 Tons	No Violation	Due to less development, production could not be carried out from all proposed stope blocks resulting in less production. Violation of Rule 11(1) is being pointed out for shortfall in development.	Nil
4	Recovery of salable/usable mineral quantity from ROM production in T)	2100000 Tons	1246856 Tons	853144.000 Tons	No Violation	Due to less development, production could not be carried out from all proposed stope blocks resulting in less production.	Nil

5	Total Production (Development + stopes)	2100000 Tons	1246856 Tons	853144.000 Tons	No Violation	Due to less development, production could not be carried out from all proposed stope blocks resulting in less production. Violation of Rule 11(1) is being pointed out for shortfall in development.	Nil
6	Overall recovery in %	100%	100% as entire ROM is feedable to beneficiation plant.	Nil	No Violation	Nil	Nil
7	Quantity of mineral reject generation	1890000 Tons (Mill tailings).	1131682 Tons (Mill tailings).	Nil	No Violation	Mill tailing of 1131682 Tons generated during the RY has been reported as Mineral Reject.	Nil
8	Grade of salable/usable mineral quantity	>3.0 % (Pb+Zn)	5.44% (Pb+Zn)	Nil	No Violation	Nil	Nil
9	Manual / Mechanized method adopted for segregating mineral reject from ROM	Mechanized beneficiation of ROM.	Mechanized beneficiation of ROM.	Nil	No Violation	Nil	Nil
10	Any analysis or beneficiation study proposed & carried out for mineral reject	No proposal.	5.2 MTPA beneficiation plant is present within the lease area. The process includes mainly crushing and	Nil	No Violation	ROM from other mines, i.e., Balaria, Baroi, and Zawarmala, is also beneficiated in the same plant.	Nil

			grinding of ROM, Classification, differential floatation cell etc.				
11	Provision of drilling & blasting	Drilling by EHS and blasting by ANFO/ bulk emulsion	As per proposal.	Nil	No Violation	Nil	Nil
12	Provision of mining machineries underground	Twin Boom Jumbo, Loaders, LPDT, Grader, scaler and utility vehicles etc. has been proposed for mine development and stoping operation.	Deployment of Mining machinery has been found to be as per proposal in UG operations.	Nil	No Violation	Nil	Nil

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2.4.3 : Exploitation - Dump Working Details

S.N.	Items for Reporting	As Per Approved Mining Plan	Actual	Deviation	Violation under Rule	Remark	Remark File
1	Number of dumps proposed for production	No proposal.	Not applicable.	Nil	No Violation	Nil	Nil
2	Quantity of dump material handling Proposed (in Tonne)	No proposal.	Not applicable.	Nil	No Violation	Nil	Nil
3	Recovery of salable/usable mineral from dump production (in Tonne)	No proposal.	Not applicable.	Nil	No Violation	Nil	Nil
4	Production from dump(s) during the year	No proposal.	Not applicable.	Nil	No Violation	Nil	Nil
5	Quantity of mineral reject generation	1890000 Tons (mill tailing)	1131682.10 Tons (mill tailing)	Nil	No Violation	Less generation of tailings is observed due to reduced beneficiation of the ore, which is a result of lower production.	Nil
6	Grade of mineral reject generation and threshold value declared	The threshold value is not prescribed for Pb-Zn mineral.	0.46 % (Pb+Zn)	Nil	No Violation	Nil	Nil
7	Any analysis or beneficiation study proposed & carried out for mineral reject	No proposal.	Not applicable	Nil	No Violation	Nil	Nil
8	Manual / Mechanized method adopted for dump working	No proposal of dump working.	None during RY.	Nil	No Violation	Nil	Nil

2.5.1 : OB/Waste Dumps Details

S.N.	Items for Reporting	As Per Approved Mining Plan	Actual	Deviation	Violation under Rule	Remark	Remark File
1	Separate dumping of topsoil, OB & mineral rejects, fines, tailings (Rule 36,37)	No proposal of topsoil generation. Developmental waste was proposed to dispose in UG stopes as well as for tailing dam construction. Mineral reject (Mill tailing) has been proposed to dispose in Tailing Storage Facility (TSF-1).	No topsoil was generated during the reporting year. Waste was disposed of in underground voids, and mill tailings were disposed of in the Tailing Storage Facility (TSF-1).	Nil	No Violation	Nil	Nil
2	Location of Topsoil, OB/Waste, Mineral Reject dumps, Tailings and Fines	Top Soil: No proposal. Waste: Underground voids as well as for tailing dam construction. Tailing: Baroi tailing dam (TSF-1).	No topsoil was generated during the reporting year. Waste was disposed of in underground voids, and mill tailings were disposed of in the Tailing Storage Facility (TSF-1).	Nil	No Violation	Nil	Nil

3	Number of active & Inative dumps	No proposal of waste dumping.	Not applicable.	Nil	No Violation	Nil	Nil
4	Number of dead dumps	No proposal.	Not applicable.	Nil	No Violation	Nil	Nil
5	Number of dumps proposed for stabilished	No proposal.	Not applicable.	Nil	No Violation	A total of 2.69 hectares of old waste dump area has been rehabilitated in lease area.	Nil
6	Stabilization Technique (Terracing, plantation, geo-textiles etc.)	Not applicable as no active/dead waste dump in lease area.	Not applicable.	Nil	No Violation	Nil	Nil

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2.6.2 : Solid Waste Management - Backfilling (Underground) Details

S.N.	Items for Reporting	As Per Approved Mining Plan	Actual	Deviation	Violation under Rule	Remark	Remark File
1	For Underground, Percentage of Waste backfilled underground itself	About 98% of the waste is proposed to be used for backfilling underground voids, and the remaining waste is proposed to be used in the construction of the tailings dam.	The entire quantity of generated waste was disposed of in underground voids.	Nil	No Violation	Nil	Nil
2	For Underground, number of exploited stopes under filling/stowing	There was no specific proposal pertaining to the number of exploited stopes proposed for filling/stowing.	The details of backfilled stopes by waste and hydrofill is attached.	Nil	No Violation	Nil	Mochia backfilling details.pdf
3	For Underground, number of exploited stopes abandoned after filling	There was no specific proposal pertaining to the number of exploited stopes abandoned after filling.	Not applicable as no proposal.	Nil	No Violation	Nil	Nil
4	Total area fully reclaimed & rehabilitated	Not applicable being a underground mine.	Not applicable.	Nil	No Violation	Nil	Nil

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2.7.1 : Progressive Mine Closure Plan (PMCP) Details

S.N.	Items for Reporting	As Per Approved Mining Plan	Actual	Deviation	Violation under Rule	Remark	Remark File
1	Compliance on reclamation and rehabilitation by backfilling/Other means Total area and numbers of plantation proposed.	5 Hectare area with 5000 number of saplings.	5 Hectare area with 5000 number of saplings.	Nil	No Violation	Nil	Nil
2	Rehabilitation by making water reservoir	No proposal being an underground mine.	Not applicable.	Nil	No Violation	Nil	Nil
3	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	i) 5000 saplings ii) 5 Hectare iii) Plantation.	i) 5000 saplings ii) 5 Hectare iii) Plantation.	Nil	No Violation	Nil	Nil
4	Compliance of Environmental monitoring (core zone & buffer zone)	Environmental monitoring has been proposed in both the core and buffer zones.	Environmental monitoring is being carried out in both the core and buffer zones. A few reports have been checked, and the parameters were found to be within permissible limits.	Nil	No Violation	Nil	Nil

2.8.1 : Mineral Conservation Details

S.N.	Items for Reporting	As Per Approved Mining Plan	Actual	Deviation	Violation under Rule	Remark	Remark File
1	ROM Mineral dispatch or grade-wise sorting within lease area	ROM mineral dispatch. No grade wise sorting.	The entire ROM is dispatched to the mineral beneficiation plant located within the lease area.	Nil	No Violation	ROM from other mines, i.e., Balaria, Baroi and Zawarmala, is also beneficiated in the same plant.	Nil
2	Different grade of mineral sorted out at mines	Not applicable as no grade wise sorting.	Not applicable.	Nil	No Violation	Nil	Nil
3	Any beneficiation process at mines	A beneficiation facility of 5.2 million tons capacity exists within the lease area.	A beneficiation facility with a capacity of 5.2 million tons exists within the lease area. The process includes crushing and grinding of ROM, classification, differential flotation cells, and related operations.	Nil	No Violation	ROM from other mines, i.e., Balaria, Baroi and Zawarmala, is also beneficiated in the same plant.	Nil
4	For Underground, compliance of Rule 16 (Sub-grade mineral is below cut-off value for the lease) - Sub-grade generation	Not applicable, since no sub-grade generation occurred during	not applicable.	Nil	No Violation	Nil	Nil

	- Sub-grade brought to the surface	the RY 202425.					
5	Utilization of Mineral Rejects or Sub-grade (Blending at ROM stage, Blending after Processing etc.)	No proposal.	Not applicable.	Nil	No Violation	Nil	Nil

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2.9.1 : Environment Details

S.N.	Items for Reporting	As Per Approved Mining Plan	Actual	Deviation	Violation under Rule	Remark	Remark File
1	Separate removal and utilization of topsoil	No proposal of top soil generation.	No topsoil generation, being an underground mining operation.	Nil	No Violation	Nil	Nil
2	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Underground voids proposed to backfill by waste obtained through UG development.	As per proposal.	Nil	No Violation	Nil	Nil
3	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal.	Not applicale.	Nil	No Violation	Nil	Nil
4	Plantation & Survival rate	5 Hectare area with 5000 number of saplings. No proposal on survival rate.	5 Hectare area with 5000 number of saplings. Survival rate: 90%	Nil	No Violation	Nil	Nil
5	Water sprinkling on roads to control airborne dust	Water sprinkling over roads using a water tanker has been proposed to control airborne dust particles.	Water sprinkling is carried out through fixed sprinklers at the crusher and stockpile, and by two water tankers on roads to control airborne dust from mining activities.	Nil	No Violation	Nil	Nil

2.10 : Annual Return Details

S.N.	Items for Reporting	As Per Approved Mining Plan	Actual	Deviation	Violation under Rule	Remark	Remark File
1	Submission of Online Monthly and Annual returns in prescribed period or not	Monthly return to be submitted before 10th day of every month for preceding month and annual return to be submitted before 1 day of July for preceding financial year.	Monthly and annual returns of the reporting year (RY) 2024-25 has been submitted within stipulated time under MCDR, 2017.	Nil	No Violation	Nil	Nil
2	Appointment of Mining Engineer & Geologist as per provisions of Rule 55 of MCDR,2017	As per Rule 55 of the MCDR, 2017, a mining engineer and a geologist are to be appointed in the mine.	In compliance with Rule 55 of the MCDR, 2017, Mr. Bala Murugan P has been appointed as the Mining Engineer and Mr. Satya Srikant Sahoo as the Geologist for the mine.	Nil	No Violation	Nil	Nil
3	Whether incomplete or false or wrong returns submitted (Rule 45(7))	The cost of ore mineral produced has been furnished as	As per the expenses furnished in the annual return, the	Deviation in cost of production.	No Violation	Violation rule 45(7) is being issued.	Nil

		5992.84 per tons in annual return 2024-25.	cost of ore/mineral produced has been estimated at 7266.81 per ton.				
4	Status of Approval of FMPCP u/r 24, 25 of MCDR,2017	Not applicable as lease is valid up to the March 2030.	Not applicable.	Nil	No Violation	Nil	Nil
5	Notices and Returns for the lease area submitted or not where fine applicable	Notices and returns required to be submitted under various provisions of the MCDR, 2017.	Notices and Returns submitted as per MCDR, 2017.	Nil	No Violation	Nil	Nil
6	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	The cost of ore mineral produced has been furnished as 5992.84 per tons in annual return 2024-25.	As per the expenses furnished in the annual return, the cost of ore/mineral produced has been estimated at 7266.81 per ton.	Deviation in cost of production.	Rule 45(7)	The cost of ore mineral produced has been furnished as 5992.84 per tons in annual return 2024-25, whereas as per the expenses furnished in the annual return, the cost of ore/mineral produced has been estimated at 7266.81 per ton.	Nil

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2.11 : SDF Details

S.N.	Items for Reporting	As Per Approved Mining Plan	Actual	Deviation	Violation under Rule	Remark	Remark File
1	Start Ratings accorded for mine during last 3 years	As per Rule 35 of the MCDR, 2017, the holder of a mining lease is required to achieve at least a three-star rating.	A 4-star rating was achieved during the year 2022-23 & 2023-24. A 5-star rating has been filed for the year 2024-25. The validation process for the 2024-25 star rating is yet to commence.	Nil	No Violation	Nil	Nil

Part-III : Other Reports

3.1.1 : Upload Other Reports

S.N.	Reports File	Remark File Description
1	Mochia Stopping Report.pdf	Balaria Stopping report for stopes namely CM-P2 between -29 to -104 mRL, CWM-P1 & CWM-P2 between 57mRL to 27mRL and CWM-P1, CWM-P2and CWM-P3 between -23mRL to -48mRL.

Part-IV : Summary Details

4.1 : Summary of Violations

S.N.	Items for Reporting	As Per Approved Mining Plan	Actual	Deviation	Violation under Rule	Remark	Remark File
1	Development - Method of Underground : (ii)Incline/Decline/Ramp	1200 meters	1040 meters	160 meters.	Rule 11(1)	Decline development of 1040 meters has been carried out against the approved proposal of 1200 meters.	Nil
2	Development - Method of Underground : (vii)Ore-Drive/Levels	17000 meters	9370.20 meters	7629.80 meters	Rule 11(1)	Horizontal development of 9370.203886 meters has been carried out against the approved proposal of 17000 meters.	Nil
3	Development - Method of Underground : Number of stopes under development during the year	11 Stopes Blocks.	05 Stopes Blocks.	06 Stopes Blocks.	Rule 11(1)	Ore production has been carried out from 05 stope blocks against the approved proposal of 11 stope blocks.	Nil

4	Annual Return : Scrutiny of Annual return on sale value, Ex. Mine price & production cost	The cost of ore mineral produced has been furnished as 5992.84 per tons in annual return 2024-25.	As per the expenses furnished in the annual return, the cost of ore/mineral produced has been estimated at 7266.81 per ton.	Deviation in cost of production.	Rule 45(7)	The cost of ore mineral produced has been furnished as 5992.84 per tons in annual return 2024-25, whereas as per the expenses furnished in the annual return, the cost of ore/mineral produced has been estimated at 7266.81 per ton.	Nil
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Esigned by:  DILIP JAIN
Date: 14/08/2025 05:41:13 PM