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PREFACE

It gives me great pleasure to present the Annual Report of the Directorate of Geology & Mining, Government of Mizoram, for the year 2025–2026, highlighting the major achievements and activities of the Directorate during the year.

The year under review marked significant progress in strengthening the institutional and technical capabilities of the Directorate. The notification of the Mizoram State Minor Mineral Policy, 2025, the Mizoram State Mineral Exploration Trust (SMET) Rules, 2025, and the District Mineral Foundation (Amendment) Rules, 2025 established a comprehensive framework for scientific, sustainable and transparent management of the State's mineral resources. Annual Report 2025-2026.pdf

The Directorate continued to modernize its technical infrastructure through the procurement of advanced exploration, laboratory and geotechnical equipment. Under the National Mineral Exploration Trust (NMET), key instruments such as the WD-XRF Spectrometer, DGPS and Press Pellet Machine were procured to strengthen mineral exploration and laboratory services. Financial assistance under the State Disaster Response Fund (SDRF) further enabled the procurement of advanced geotechnical equipment, including Ground Penetrating Radar (GPR), LiDAR, Drone with Mapping Software, Hand-held Rock Drill/Bolting Machine, Light Weight Deflectometer (LWD), Rock Direct Shear Apparatus, Digital UCS Apparatus, Rock Schmidt Hammer and Range Finders, significantly enhancing the Directorate's capability in landslide investigations, hazard assessment and disaster mitigation. The North Eastern Council (NEC) funded Information Technology and Resource Mapping Project also recorded substantial progress, strengthening GIS-based resource mapping and digital monitoring of mineral administration.

During the year, the Directorate provided scientific support for infrastructure development and disaster risk reduction through extensive geotechnical investigations, landslide hazard assessments and slope stabilization studies across the State. Continued efforts were also made towards scientific mineral administration, preparation of District Survey Reports and promotion of environmentally sustainable mining practices.

To strengthened its institutional capacity, Government has awarded approval for the establishment of three Zonal Offices at Aizawl, Champhai and Kolasib. Despite various operational challenges, the Directorate continued to ensure effective mineral administration while generating Government revenue exceeding Rs. 5.29 crore during the year.

These achievements reflect the dedication and professionalism of the officers and staff of the Directorate. I sincerely acknowledge the continued support of the Government

of Mizoram, the Ministry of Mines, Government of India, the North Eastern Council, the Directorate of Disaster Management & Rehabilitation, and all stakeholders associated with the Directorate.

I hope this report serves as a valuable record of the Directorate's achievements and reaffirms our commitment to the scientific exploration, sustainable development and responsible management of Mizoram's geological and mineral resources.



(J. CHAMLIANA)

Director
Geology & Mining

II

INTRODUCTION

The Directorate of Geology & Mining traces its origin to the Geology & Mining Cell, established under the Directorate of Industries in 1980. It was upgraded to the Geology & Mining Wing on 7 April 1986 and became a full-fledged Directorate on 1 September 2010 under the name Directorate of Geology & Mineral Resources, following its bifurcation from the erstwhile Directorate of Industries under the Commerce & Industries Department. The Directorate was subsequently renamed Directorate of Geology & Mining with effect from 17 February 2022, as notified in The Mizoram Gazette dated 18 February 2022 [Part-II(A)].

The Directorate is responsible for conducting geological investigations and mineral exploration to identify and assess the State's mineral resources, while regulating the scientific and sustainable extraction of minor minerals. It administers the Mizoram Minor Minerals (Concession and Prevention of Illegal Mining) Rules, 2023, the District Mineral Foundation Rules of Mizoram, 2023, as amended by the District Mineral Foundation (Amendment) Rules, 2025, and facilitates implementation of the Mizoram State Mineral Exploration Trust Rules, 2025. Through these functions, the Directorate promotes sustainable mineral development, generates revenue for the State Government, and contributes to the socio-economic development of Mizoram.

The Directorate also promotes scientific mineral exploration, conservation and efficient utilization of mineral resources, digital monitoring and regulation of mining activities, and implementation of State policies relating to minor minerals. In addition, it provides geological and geotechnical expertise for roads, highways, bridges, buildings, dams and other infrastructure projects to enhance their safety, stability and long-term sustainability.

The Directorate serves as the Nodal Agency for coordinating petroleum exploration activities undertaken by Oil and Natural Gas Corporation Limited (ONGC), Oil India Limited (OIL) and Vedanta Limited, facilitating coordination between these agencies and the State Government for effective implementation of petroleum exploration programmes.

The Directorate also plays a vital role in addressing geologically induced hazards such as landslides, land subsidence, slope failures and blasting-related issues, which are common in Mizoram due to its young, fragile geological formations and intense monsoonal rainfall. It provides technical support to civil administration and disaster management authorities through hazard assessment, geotechnical investigations and mitigation recommendations. It also assists infrastructure agencies by conducting geological and geotechnical assessments of landslide-prone areas, recommending appropriate stabilization measures, preparing blast designs for excavation in hard rock formations, and facilitating the issuance of statutory licences by the competent authorities, including the District Magistrate and the Petroleum and Explosives Safety Organisation (PESO).

III. LEGISLATIVE AND POLICY DEVELOPMENTS

1. The Mizoram State Mineral Exploration Trust Rules, 2025

The Government of Mizoram notified the Mizoram State Mineral Exploration Trust (SMET) Rules, 2025 to establish a dedicated institutional mechanism for the systematic exploration and planned development of the State's mineral resources. The Rules provide for the constitution of a Governing Body and an Executive Committee, and the establishment of the Mizoram State Mineral Exploration Trust Fund. To finance exploration activities, every holder of a Mining Lease or Mining Permit is required to contribute 2% of the royalty paid, while in cases of illegal mining, transportation or storage of minor minerals, a contribution equivalent to 2% of the fine imposed is also payable. The Trust aims to strengthen mineral exploration, geological investigations, research and development, laboratory infrastructure, capacity building, and the adoption of modern technologies for sustainable mineral development.

2. The District Mineral Foundation (Amendment) Rules, 2025

The District Mineral Foundation (Amendment) Rules, 2025 were notified to strengthen the governance, transparency and implementation of the District Mineral Foundation (DMF) in Mizoram. The amendments introduce significant changes relating to the composition and functioning of the Governing Council, transparency and accountability, utilization of DMF funds, and procurement procedures. They also require offenders involved in illegal mining, transportation or storage of minerals to contribute 10% of the fine imposed to the District Mineral Foundation in addition to the prescribed penalties. The amendments reinforce the efficient utilization of DMF funds for the welfare and socio-economic development of mining-affected areas in accordance with the Pradhan Mantri Khanij Kshetra Kalyan Yojana (PMKKKY).

3. Mizoram State Minor Mineral Policy, 2025

The Government of Mizoram also notified the Mizoram State Minor Mineral Policy, 2025 to provide a comprehensive framework for the scientific, sustainable and environmentally responsible development of the State's minor mineral resources. The Policy promotes systematic mineral exploration, scientific mining, mineral conservation and optimum utilization of mineral resources while ensuring environmental protection. It also emphasizes the adoption of modern technologies, e-governance, GIS-based resource mapping, digital monitoring of mining activities, prevention of illegal mining, and strengthening institutional capacity within the Directorate of Geology & Mining. The Policy further seeks to improve mineral resource management, enhance revenue generation through regulated mining, and ensure that mineral development contributes to the long-term economic growth and sustainable development of Mizoram.

IV. REPORT ON THE IMPLEMENTATION OF THE PROVISIONS OF THE RIGHT TO INFORMATION ACT, 2005 FOR THE YEAR 2025-2026

1.	No. of DDAs in the office	- 01
2.	No. of SPIOs in the office	- 01
3.	No. of SAPIOs in the office	- 01
4.	No. of applications received from within the State in writing, email, post, etc.	- 01
5.	No. of applications received from within the State via Mizoram RTI Online	- 07
6.	No. of applications received from outside the State in writing, email, post, etc.	- NIL
7.	No. of applications received from outside the State via Mizoram RTI Online	- NIL
8.	Total No. of RTI applications received during the year under report	- 19
9.	No. of information furnished	- 19
10.	No. of applications rejected/declined	- NIL
11.	No. of applications withdrawn by the applicant	- NIL
12.	No. of applications not collected by the applicant	- NIL
13.	No. of First Appeal received	- NIL
14.	Total amount collected for cost of providing information	- NIL

V. BASIC FUNCTIONS OF DIRECTORATE OF GEOLOGY & MINING

1. To administer, investigate, map, explore and develop the State's mineral resources, including minor minerals such as sand and stone, in accordance with the Mizoram Minor Minerals (Concession and Prevention of Illegal Mining) Rules, 2023. The Directorate grants mineral concessions, including Mining Leases and Mining Permits, to facilitate the scientific, sustainable and environmentally responsible exploration and extraction of minor minerals for building construction, road development and other infrastructure projects, while meeting public demand and generating revenue for the Government.

The Directorate also administers the collection and management of District Mineral Foundation (DMF) contributions in accordance with the District Mineral Foundation Rules of Mizoram, 2023, as amended by the District Mineral Foundation (Amendment) Rules, 2025, and facilitates the implementation of the Mizoram State Mineral Exploration Trust Rules, 2025 for the systematic exploration and sustainable development of the State's mineral resources. In addition, it promotes e-governance in mineral administration through digital monitoring of mineral transportation and implementation of the Star Rating system for mines.

2. Scientific and technical activities mainly includes :
- a) Geological, geotechnical and geophysical investigations for roads, highways, bridges, buildings, dams, hill slopes and other infrastructure projects.
 - b) Investigation and assessment of landslides, slope failures, land subsidence and other geological hazards, together with recommendations for mitigation and stabilization measures.
 - c) Preparation of geological and geotechnical feasibility reports, slope stability assessments and foundation investigations for Government departments and public agencies.
 - d) Laboratory analysis and testing of rocks, minerals, soils, coal and other geological materials using chemical, physical and instrumental analytical techniques.
3. Oil & Natural Gas – Monitoring and liaisoning with the Oil & Gas Exploration Agencies working in the State with an aim to harness the potential for the socio-economic development of the State . The Directorate is being collecting Petroleum Exploration License (PEL) Fees from the Exploration Agencies for Govt. revenue as governed by the Petroleum & Natural Gas (PNG) Rules, 1959.

The total revenue generated during 2025-2026 by the Directorate:

i) Minor Minerals	-	Rs.	4,74,27,317.00
ii) PEL Fees	-	Rs.	53,94,945.00
iii) Other Receipt (Laboratory)	-	Rs.	1,73,700.00
Grand Total	-	Rs.	5,29,95,962.00

VI. ORGANIZATIONAL SET UP AND PRESENT STATUS OF MAN-POWER IN DIRECTORATE OF GEOLOGY & MINING

The Directorate of Geology & Mining is a multi-disciplinary Geo-Scientific and Engineering field oriented Department consisting of four main Technical Sections namely – Geological, Mining, Drilling and Chemical sections in addition to the Establishment and Accounts Sections at the Head quarter. The Directorate has its own Headquarter office at Luangmual, Aizawl with 8 Nos. of staff quarters in the complex. The Directorate also established 10 (ten) Nos. Permanent Check Gates and 13 (thirteen) Nos. of Mobile Mobile check Gates in different parts of the State to monitor the transit of minor minerals.

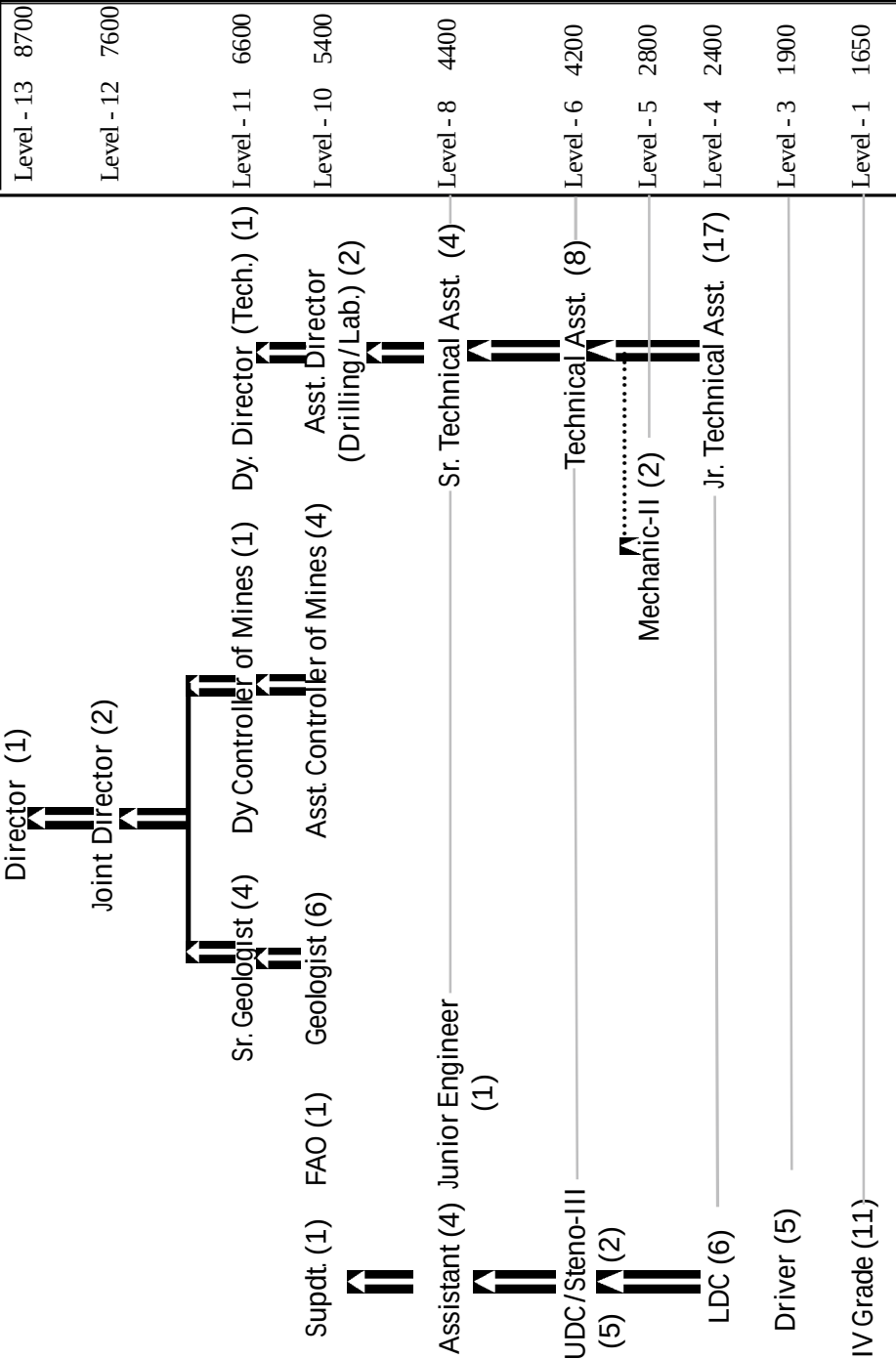
The total post strength of the Directorate is 88 Nos. both of Technical and non-Technical, out of which, 23 posts are Group-A Gazetted 24 posts are Group-B (Non-Gazetted) 30 posts are Group-C, and 11 (eleven) posts are Group-IV. Besides, the Directorate is engaging 1 (one) Computer Operator on Contract basis including 6 Nos. of Provisional Employees in the Department.

During 2025-26 the Directorate has great achievement in obtaining Government Approval for creation and establishment of 3 (three) Zonal Office at Champhai, Aizawl and Kolasib vide Memo No. A. 60011/83/2026-ESTAB-C&I Dated Aizawl, the 24th March, 2026. Proposal for creation of posts for Newly created Zonal Offices is under process.

Creation of Zonal/District Offices will enhance collection of Govt. revenue from mineral sector for safer and scientific mining, better assistance to District Civil Authorities in attending the geo-related disaster, construction of road infrastructures, in blasing-related issues to help mineral concession holders in preparing **Blast Design and Safety Guidelines as mandated by General Administrative Department (GAD), Govt. of Mizoram vide Memo. No. 60011/8/2018-GAD Dated Aizawl, the 11th August, 2022 issued to all Deputy Commissioners/District Magistrates in granting Explosive Licence under the Explosives Rules, 2008.**

During 2025-2026, one UDC was appointed. Meanwhile, one officer was promoted from Geologist at Level – 10 to Senior Geologist at Level – 11 and another officer from Assistant Director (Drilling/Laboratory) to Deputy Director (Technical). Besides, one LDC was promoted to UDC, one Junior Technical Assistant was promoted to Technical Assistant; and 2 (two) staff; one LDC and a Driver were regularized. The total filled up posts were 52 out of 88 sanctioned posts. During 2025-2026, two Technical Assistants (TA) attained Superannuation Pension.

PRESENT ORGANISATION STRUCTURE WITH NO. OF POSTS
UNDER DIRECTORATE OF GEOLOGY & MINING



PRESENT STATUS OF MANPOWER IN DTE. OF GEOLOGY & MINING

Sl. No.	Particulars	Level of Pay	Sanctioned Post	Filled up Post	Vacant Post
1	Director	13	1	1	0
2	Joint Director	12	2	2	0
3	Senior Geologist	11	4	1	3
4	Dy. Controller of Mines	11	1	1	0
5	Dy. Director (Technical)	11	1	1	0
6	Geologist	10	6	5	1
7	Asst. Controller of Mines	10	4	2	2
8	Asst. Director (D/L)	10	2	0	2
9	F.A.O.	10	1	1	0
10	Superintendent	10	1	1	0
11	Assistant	7	4	2	2
12	Sr. Technical Assistant	7	4	2	2
13	J.E.	7	1	1	0
14	U.D.C.	6	5	3	2
15	Technical Assistant	6	8	3	5
16	Steno-III	6	2	1	1
17	Mechanic-II	5	2	1	1
18	L.D.C.	4	6	2	4
19	Jr. Technical Assistant	4	17	11	6
20	Driver	4	5	5	0
21	IV Grade	1	11	6	5
Total			88	52	36
Group-wise			Sanctioned Post	Filled up Post	Vacant Post
Group A			23	15	8
Group B (Non-Gazetted)			24	12	12
Group C			30	19	11
Grade-IV Staff			11	6	5
Total			88	52	36

VII. ACHIEVEMENTS & ACTIVITIES OF DIRECTORATE OF GEOLOGY & MINING DURING 2025-2026

A. MINOR MINERAL INVESTIGATION, DEVELOPMENT AND ADMINISTRATION :

The primary responsibility of the Directorate is to administer the Mizoram Minor Minerals (Concession and Prevention of Illegal Mining) Rules, 2023 together with the District Mineral Foundation framework, the Mizoram State Mineral Exploration Trust framework and the State Minor Mineral Policy for scientific and sustainable development of mineral resources. These rules are administered by the Mineral Section within the Directorate, which has established 10 (ten) Permanent Check Gates to monitor the transportation of minor minerals and impose penalties for illegal transport within their respective jurisdictions. Additionally, 13 Mobile Check Gates have been set up in areas where minor mineral exploitation is taking place.

The Mineral Section within the Directorate acts as a regulatory and development agency promoting scientific mining while generating Government revenue by overseeing the investigation, development, and management of minor minerals, including sandstone, sand, brick earth, and others. This is accomplished through the granting of mineral concessions, such as mining leases and short-term mining permits, for the extraction of dimensional stones, boulders, coarse aggregates (road metal), river sand, and other materials, meeting public and construction sector demands for road, building, and bridge construction projects.

During 2025-2026, no new areas were investigated for potential mineral deposits due to budgetary constraints. However, the Directorate officers have been actively involved in conducting inspections related to Pre-Feasibility Studies for the grant of mining leases/permits, monitoring and inspecting illegal activities by route, preparing blast designs for explosive license approvals from the District Magistrate, conducting quarry hazard investigations, and overseeing district-level monitoring activities. Among the minor minerals, sandstone and siltstone are frequently quarried alongside river sand for construction purposes.

Despite the financial limitations for field monitoring (such as route-specific, district-specific, and mineral surveys), the Directorate has still managed to generate substantial revenue in the form of royalties, which are remitted to the Government Exchequer.

Highlights of major achievements of **Directorate of Geology & Mining (DGM), Mizoram under Minor Mineral Investigation, Development and Administration** during FY 2025-2026 are as follows: -

1. A significant milestone has been achieved by the Directorate of Geology & Mining through the proactive initiation and pursuit of **incentives for mining reforms**. Consequently, the Ministry of Mines, Govt. of India (through the Ministry of Finance) has recommended an outlay of **Rs.100.00 Crore** to the State Government of Mizoram under **Part-V (Mining Sector Reforms) of the Scheme for Special Assistance to States for Capital Investment (SASCI) 2025-26**. This substantial grant serves as a recognition of the State's successful implementation of reforms in the mining sector, and the State Government is currently prioritizing projects to utilize this outlay for further development.

2. The Directorate of Geology & Mining (DGM), Mizoram has implemented the **Pradhan Mantri Khanij Kshetra Kalyan Yojana (PMKKKY)**, under which a total amount of **Rs. 1,40,90,176.96 (Rupees One Crore Forty Lakh Ninety Thousand One Hundred Seventy-Six and Paise Ninety-Six Only.)** has been collected to date towards the **District Mineral Foundation (DMF) Fund**, in accordance with the provisions of the **District Mineral Foundation Rules of Mizoram, 2023 (as amended)**. The process of fund allocation and utilization has been initiated under the chairmanship of the respective Deputy Commissioners of all 11 districts of Mizoram, who serve as the Chairpersons of their respective District Mineral Foundation Governing Councils. Several meetings of the Governing Councils have also been convened under the chairmanship of the respective Deputy Commissioners, wherein strategies and priorities for the allocation and utilization of DMF funds have been deliberated and considered.

3. Under the **Mizoram State Mineral Exploration Trust (SMET) Rules, 2025**, the Directorate of Geology & Mining (DGM), Mizoram has collected a total fund of **Rs. 7,50,839.88 (Rupees Seven Lakh Fifty**

Thousand Eight Hundred Thirty-Nine and Paise Eighty-Eight Only). The fund is intended to be effectively utilized for financing the State's mineral exploration activities, thereby promoting systematic exploration, assessment, and development of mineral resources within Mizoram.

For the fiscal year 2025-2026, the revenue generated from minor minerals alone amounted to **Rs. 4,74,27,317/-** which has dwindled a bit as most of the major players in consuming minor minerals viz. Road Construction Agencies have finished National Highway (NH) constructions.

The revenue generated by the Mineral Section, including PEL Fees and other Receipt i.e. Laboratory, over the past seven (7) years is detailed below: Mining Plan with Environmental Management Plan, Mine Closure Plan, Blasting Design with Safety Guidelines etc. are prepared for the stakeholders for mineral extration and to obtain Explosive License from Petroleum and Explosives Safety Organisation (PESO) formerly known as Department of Explosives and from concerned District Magistrates under the Explosives Acts 1884 and the Explosives Rules, 2008 and the Ammonium Nitrate Rules, 2012.

STATEMENT OF FIGURES OF REVENUE FOR THE LAST SEVEN (7) YEARS:

Sl.No.	Financial Year	Minor Minerals (in Rs.)	PEL Fees (in Rs)	Total (in Rs.)
1	April 2019 - March 2020	3,47,43,176.00	1,76,53,510.00	5,23,96,686.00
2	April 2020 - March 2021	3,72,08,408.00	1,25,35,101.00	4,97,43,509.00
3	April 2021 - March 2022	5,36,34,087.00	95,77,381.00	6,32,11,468.00
4	April 2022 - March 2023	10,89,67,804.00	1,30,55,485.00	12,23,97,489.00
	Other Receipt during 2022-23 (Laboratories) = Rs. 3,74,200.00			

5	April 2023 - March 2024	11,25,69,183.00	1,24,99,890.00	12,54,91,153.00
	Other Receipt during 2023-24 (Laboratories) = Rs. 4,22,080.00			
6	April 2024 - March 2025	6,73,48,617.00	1,55,37,633.00	8,36,87,414.00
	Other Receipt during 2024-25 (Laboratories) = Rs. 8,01,164.00			
7	April 025 - March 2026	4,74,27,317.00	53,94,945.00	5,29,95,962.00
	Other Receipt during 2025-26 (Laboratories) = Rs. 1,73,700.00			
Grand Total :		46,18,98,592.00	8,62,53,945.00	54,99,23,681.00

1. The relevant Acts and Rules etc. with which the minor minerals are being administered are as follows :

- (1) The Mines and Minerals (Development and Regulations) Act, 1957
- (2) The Mizoram Minor Minerals Concession & Prevention of Illegal Mining Rules, 2023
- (3) The District Mineral Foundation Rules of Mizoram, 2023 (as amended in 2025)
- (4) The Mizoram State Minor Mineral Policy, 2025
- (5) The Mizoram State Mineral Exploration Trust Rules, 2025
- (6) The Occupational Safety, Health and Working Conditions Code, 2020
- (7) The Metaliferous Mines Regulations, 1961
- (8) The Explosives Act, 1884
- (9) The Explosives Rules, 2008
- (10) The Ammonium Nitrate Rules, 2012
- (11) The Explosives Substance Act, 1908
- (12) Forest & Environmental laws for EC/FC.
- (13) The Directorate General of Mines Safety (DGMS) Circulars issued from time to time.

2. District Survey Report :

On January 15, 2016, the Ministry of Environment, Forest and Climate Change (MoEF&CC), Government of India, introduced the resolution and framework for the District Survey Report (DSR) under Para 7(iii)(a) and Appendix (x). Subsequent amendments were made by the Central Government through a Notification dated July 25, 2018. The DSR is designed to be prepared for each district concerning all minor minerals and serves as a guide for the systematic and scientific utilization of natural resources, ensuring benefits for both current and future generations. The purpose of the DSR is to identify areas suitable for mining based on aggregation or deposition and to pinpoint areas of erosion and proximity to infrastructure where mining should be prohibited.

In accordance with the Hon'ble National Green Tribunal (NGT) order dated January 13, 2015, regarding sand mining, the creation of a policy on environmental clearance for mining leases in clusters—up to 5 hectares and 25 hectares for cluster mining—was mandated for the District Environmental Impact Assessment Authority (DEIAA), headed by the District Collector. To assist the DEIAA, the Government of Mizoram constituted the District Level Expert Appraisal Committee (DEAC) for all districts in Mizoram (Notification No. B.11015/5/2015-FST dated August 23, 2016), which is responsible for recommending projects and related activities. In collaboration with state governments, the MoEF&CC

also developed guidelines on Sustainable Sand Mining, which include provisions for environmental clearance for different mining clusters, along with monitoring mechanisms using updated technology and IT-enabled services to track mined material from source to destination.

The guiding principles for preparation of DSR are laid down in the **Sustainable Sand Mining Management Guidelines (SSMMG), 2016** and **Enforcement & Monitoring Guidelines for Sand Mining (EMGSM), 2020** issued by MoEF&CC, Govt. of India.

The DSR is a comprehensive compilation of data collected from detailed ground surveys, as well as data from other relevant departments. It includes information on the general geology of the area, mineral deposits, mining leases and permits, mining activities in the district, and the revenue generated from these activities. Additionally, the DSR provides data on climatic conditions, topography, terrain, landforms, forests, rivers, soils, and agriculture. It also facilitates the calculation of the annual rate of replenishment where applicable, allowing sufficient time for replenishment.

Preparation of DSRs also facilitates implementation of the Mizoram State Minor Mineral Policy, 2025 for scientific and sustainable mineral development.

A Sub-Divisional Committee was formed in each district to prepare the District Survey Reports. The Directorate initiated the preparation of DSRs and conducted field surveys in all 11 (eleven) districts. The draft District Survey Reports (DSRs) for Serchhip, Mamit and Hnahthial districts were submitted to the State Level Expert Appraisal Committee (SEAC) for appraisal. Subsequently, observations and comments were received for necessary corrections. The Directorate is incorporating the required revisions and is making every effort to resubmit the revised draft reports to SEAC at the earliest.

The Directorate of Geology & Mining is making persistent efforts to secure Environmental Clearances for all mining activities. The department has prioritized mandatory requirements such as the preparation of Form-1M Pre-Feasibility Reports (PFR), District Survey Reports (DSRs) in two sets - *for sand and minor minerals other than sand*, for all districts of Mizoram, and Mining Plans, to facilitate the process of obtaining Environmental Clearances for Category B2 mines and quarries.

3. Highlight of main activities under Mineral Section :

The following table highlighted the main activities under the scheme during the reporting year:

A. Pre Feasibility Survey (PFS) conducted for applied stone quarries for issuing Mining Lease/Permit	ML - 43 MP - 48
B. Site inspections for renewal of Mining Lease/Permit	00 locations
C. Safety Inspections & Investigation of existing Stone Quarries especially Explosives & Basting Problems	00 locations
D. Joint inspections for quarrying operations on safety	00 locations
E. Blast Design preparation & PFS for Explosive Licence	14 locations
F. Curbing illegal Mining at the mining sites	00 locations
Grand Total	105 locations

The Pre-Feasibility Survey (PFS) is conducted by Geologists/Mining Engineers within the Directorate of Geology & Mining (DGM) for every site applied for a Mining Lease or short-term Mining Permit. For short-term Mining Permits, the Geologists/Mining Engineers prepare safety guidelines for mining operations, which include dos and don'ts based on the Pre-Feasibility Report and existing mining laws. For Mining Leases involving permanent and systematic operations, a Mining Plan is required. The Mining Engineers in the Directorate prepare the Mining Plan, which includes both the Progressive Mine Closure Plan (PMCP) and the Final Mine Closure Plan (FMCP). These plans encompass systematic mining procedures, safety guidelines, blast designs, judicious use of explosives, and an Environmental Management Plan (EMP) that aligns with the National Green Tribunal (NGT) Guidelines and environmental norms. Mining Plans also incorporate principles of sustainable mining, mineral conservation and progressive reclamation consistent with the Mizoram State Minor Mineral Policy, 2025.

Additionally, for Mining Permit holders who wish to apply for an Explosive License (LE-3) from the Petroleum and Explosives Safety Organization (PESO), formerly known as the Directorate of Explosives, Government of India, or from the concerned District Magistrate, the Mining Engineers in the Directorate prepare Blast Design, Safety Instructions, and Restrictions under the Explosive Rules, 2008. These blast designs are critical for the safe and efficient use of explosives in mines/quarries for stone extraction, promoting sustainable mining practices. Road construction agencies (such as NHIDCL) also utilize the expertise of Mining Engineers for preparing blast designs necessary for formation-cutting operations that require explosives, as mandated by the concerned District Magistrates. These designs are based on spot verification and follow safety guidelines outlined by the Directorate General of Mines Safety (DGMS), the Mines Act of 1952, and the Metalliferous Mines Regulations of 1961, which apply to the extraction of minor minerals.

The Directorate also prepares Crackamite usage designs for rock breaking where the use of explosives is impractical due to proximity to human settlements or important structures. This method, involving rock breaking powder (Crackamite), is ideal for reducing public nuisance as it generates no noise and minimal vibration, making it suitable for producing dimensional/cubical stones in quarries.

It is important to note that the Directorate of Geology & Mining (DGM) has been actively engaged in the preparation of District Survey Reports (DSRs) and Environmental Management Plans (EMPs) as per the guidelines of the National Green Tribunal (NGT) and the Ministry of Environment, Forest and Climate Change (MoEF&CC). These reports are essential for obtaining Environmental Clearances for mining activities. However, since obtaining Environmental Clearance is not possible without an approved DSR, the Directorate sought a time extension from the NGT and the Hon'ble Supreme Court of India. The Standing Counsel for Mizoram at the Supreme Court advised that the engagement of NABET/QCCI consultants is not required. Instead, the Sub-Divisional Committees (SDCs) should be constituted, which can prepare the DSR in line with the Hon'ble Supreme Court's order dated November 10, 2021, in the case of State of Bihar & Ors. Vs Pawan Kumar & Ors. Efforts are underway to constitute SDCs for the 11 districts of Mizoram through the Environment, Forest, and Climate Change (EF&CC)

The Directorate is also promoting digital resource mapping and IT-enabled monitoring of mining activities in accordance with the State Minor Mineral Policy.

4. Grant of Mining Lease and Mining Permits during 2025-2026:

In accordance with the provisions of the Mizoram Minor Mineral Concession and Prevention of Illegal Mining (MMMCPIM) Rules, 2023 (effective from October 4, 2023), the Directorate grants Mining Leases/Permits for the extraction of minor minerals to bonafide residents of Mizoram, provided they hold a valid land pass and obtain a No Objection Certificate from the relevant Village Council/Local Council, as well as from the concerned National Highway (NH)/State PWD Authorities. Additionally, the location of the mining site must be situated away from public property.

The following table outlines the total number of Mining Leases and Mining Permits granted during the 2025-2026 period, including renewals for applicants:

Districts	Mining Lease	Mining Permit	Renewal	Total
Aizawl	19	14	136	169
Saitual	7	3	2	12
Lunglei	2	7	19	28
Hnahthial	1	0	0	1
Champhai	0	10	18	28
Khawzawl	1	2	4	7
Kolasib	4	4	27	35
Mamit	7	5	19	31
Serchhip	1	2	7	10
Lawngtlai	1	1	0	2
Siaha	0	0	0	0
G. TOTAL	43	48	232	323

MONTH	Mining Lease		Mining Permit		Renewal		Blast Design
	Granted	Rejected	Granted	Rejected	Granted	Rejected	
April, 2025	1	0	0	0	22	0	1
May, 2025	4	0	4	1	29	0	3
June, 2025	3	0	6	0	17	0	3
July, 2025	2	0	2	0	18	0	1
August, 2025	0	0	3	0	10	0	0
September, 2025	3	0	10	0	8	0	1
October, 2025	1	0	6	0	11	0	0
November, 2025	7	0	3	0	24	0	1
December, 2025	3	0	6	0	16	0	2
January, 2026	6	0	2	0	17	0	0
February, 2026	8	0	2	0	35	0	2
March, 2026	5	0	4	0	25	0	0
Total :	43	0	48	1	232	0	14

5. Quantity of Minor Mineral extraction:

Mining Lessees and Mining Permit Holders have been remitting royalties in accordance with the Second Schedule of the MM MCPIM Rules, 2023. District Mineral Foundation contributions were collected in accordance with the District Mineral Foundation Rules of Mizoram, 2023 as amended in 2025. State Mineral Exploration Trust (SMET) contributions, equivalent to 2% of the royalty and fine, as applicable, were collected in accordance with the Mizoram State Mineral Exploration Trust Rules, 2025. Meanwhile, penalties have been imposed on illegal extractors and transporters based on the volume of extraction and transportation. Royalty collection also serves as an important regulatory mechanism for ensuring scientific extraction, conservation of mineral resources and sustainable mining practices in the State. The following table presents the quantity of extraction :-

Quantity of Minor Minerals extracted during 2025 - 2026				
Normal Royalty (in Cu.m)		Fine (in Cu.m)		Brick Earth (in Cu.m)
STONE	SAND	STONE	SAND	NIL
4,39,613.24	806.98	40,356.94	48,335.01	

6. ACCRUAL OF REVENUE COLLECTION FROM MINOR MINERALS BY DIRECTORATE OF GEOLOGY & MINING DURING 2025-26:

The table below provides a month-wise breakdown of the revenue generated from minor minerals during 2025-2026:-

Revenue Receipt from Minor Minerals During 2025-2026

MONTH	STONE	SAND	MONTH WISE TOTAL
<i>April, 2025</i>	59,40,862.00	3,83,896.00	63,24,758.00
<i>May, 2025</i>	40,40,676.00	2,56,147.00	42,96,823.00
<i>June, 2025</i>	11,30,814.00	5,03,662.00	16,34,476.00
<i>July, 2025</i>	20,99,194.00	3,42,196.00	24,41,390.00
<i>August, 2025</i>	14,91,994.00	2,62,898.00	17,54,892.00
<i>September, 2025</i>	33,47,102.00	5,02,030.00	38,49,132.00
<i>October, 2025</i>	21,20,070.00	5,01,053.00	26,21,123.00
<i>November, 2025</i>	11,26,648.00	4,55,071.00	15,81,719.00
<i>December, 2025</i>	45,71,485.00	5,78,234.00	51,49,719.00
<i>January, 2026</i>	10,54,780.00	3,65,387.00	14,20,167.00
<i>February, 2026</i>	90,69,077.00	6,61,324.00	97,30,401.00
<i>March, 2026</i>	60,86,142.00	5,36,575.00	66,22,717.00
Total :	4,20,78,844.00	53,48,473.00	4,74,27,317.00

7. PROJECTS TAKEN UP BY THE DIRECTORATE:

- a. **National Mineral Exploration Trust (NMET) - “Procurement of machinery laboratory equipments/instruments etc. aimed at enhancing the exploration activities”**

The Directorate of Geology & Mining has been availing financial assistance from the Ministry of Mines, Government of India, under the National Mineral Exploration Trust (NMET) through the North-East Assistance Scheme for procurement of modern equipment, machinery and software for mineral exploration. The assistance was announced by Shri Pralhad Joshi, Hon'ble Union Minister of Coal & Mines, for strengthening mineral exploration activities in the North-Eastern States. Under this initiative, the Ministry of Mines

approved procurement of 22 items of equipment, machinery and software for the State of Mizoram at a total cost of Rs. 488.20 lakh, aimed at enhancing the Directorate's capabilities in mineral identification, exploration and laboratory analysis.

During 2025–2026, the Directorate procured three items, namely, a Wavelength Dispersive X-Ray Fluorescence (WD-XRF) Spectrometer costing Rs. 1,28,96,800, a Press Pellet Machine costing Rs. 3,90,000, and a Differential Global Positioning System (DGPS) costing Rs. 29,47,050. With these procurements, the Directorate has acquired 14 of the 22 approved items under the NMET assistance. For the remaining items, Government e-Marketplace (GeM) tenders have been floated for eight items, and purchase orders will be issued upon successful completion of the tendering process.

Following are the items that had been procured under NMET:

Sl. No.	Item	Qty	Cost (Rs.)
1	Digital Camera DSLR	1	1,24,999
2	Brunton Compass	10	1,00,000
3	Geologists Hammer	10	72,000
4	Scintilometer	1	6,00,000
5	Rock Processing Unit (polishing, grinding, mounting)	1	10,00,000
6	Press Pellet Machine	1	3,90,000
7	Hot Plates	1	10,000
8	Muffle furnace	1	1,00,000
9	Air Oven	1	55,000
10	DGPS (1 set)	1	16,00,000
11	WD-XRF	1	1,28,96,800
12	GIS Software	3	45,99,000
13	Bomb Calorimeter	1	2,00,000
14	DGPS (Additional set)	1	29,47,050



Garmin GPS Map 65s

DGPS Additional Set



**Pellet press - 40
TON-PPS-1040**



XRF Supper mini 200

b. NEC – “Application of Information Technology in monitoring the minor minerals exploitation and Resource Mapping” amounting to Rs. 469.0 lakhs.

The Secretary, North Eastern Council has accorded administrative approval in respect of the Project, **“Enhancement of State Revenue through Application of Information Technology in Monitoring Mineral Exploitations & Resource Mapping”** (vide Memo No. SandT-2552014(15)/2/2021-S and T dt. 31st March 2022) at a total cost of Rs. 469.00 Lakh (Rupees Four Crore Sixty Nine Lakh) only under NEC Scheme, Scheme for North Eastern Council-Special Development Project. The project is taken up mainly to protect environmental degradations by following the MoEF&CC, Govt. of India notifications S.O.141(E) dt. 15th January, 2016 and S.O.190(E) dt. 20th January 2016 notified as per Supreme Court ruling, 2012.

The NEC Project supports implementation of the Mizoram State Minor Mineral Policy, 2025 by strengthening e-governance, GIS-based resource mapping, digital monitoring of mineral transportation and scientific regulation of mining activities.

The Project comprises of:

S.No .	Name of work and location	Total Cost (in Rs.)	Work Agency	Status
1	Web Application Development	94,40,000.00	Lailen Consultancy Pvt. Ltd.	100%
2	Supply, Installation & Maintenance of Hardware	85,49,100.00	Lailen Consultancy Pvt. Ltd.	100%
3	Construction of 6 Nos. of RCC Check Gates	76,98,014.00	Modern Construction & Consultancy Services	100%
4	Mobile Application Development	57,58,450.00	Lailen Consultancy Pvt. Ltd.	95%
5	Construction/Fabrication of 10 Nos. of Mobile Check Gates	7,05,080.00	Work executed by Department	100%
6	Resource Mapping	1,02,42,900.00	Work executed by Department	99%



Semi mechanised Quarry at Sihfa area, Saitual District



Stone Quarry at Sakawrtuichhun, Aizawl District



Stone Quarry at Muallungthu area, Aizawl District



Stone Quarry at Luangmual, Lunglei District

B. GEOTECHNICAL INVESTIGATION & LANDSLIDE ENGINEERING

The Department assigned these Schemes under the supervision of one scheme officer. The government allocated fund for these two subjects separately and the works carried out during 2025-2026 are as follows:-

I. LANDSLIDE : The state of Mizoram consist of Tertiary rocks mostly sandstones, shales and siltstones. The constituent rocks are soft in nature as compared to the rocks of older formations of other States of India. The area expresses immature terrain and rugged topography as it is a part of the Himalayan terrain and suffered tectonic disturbances forming north-south trending hill ranges with steep slopes and intervening valleys. The rocks are folded forming longitudinal anticlines and synclines with transverse faults trending normally NNW-SSE directions. Subordinate structures like joints and fractures are common in each rock units. Landslide/mass movement and sinking are common during monsoon periods as the area receives heavy rainfall. Rain water falling on the earth enters into the soil and rocks through joints, fractures and fissures saturating soils and rocks, so that weathering processes are fast and finally affects the stability of ground which are in steep slopes causing landslides and mass movements etc.

Besides, developmental works cause landslides by removal of toe of slopes for construction of buildings, roads and highways which are considered man-made disasters.

Landslides have been investigated by studying the topographic conditions, constituent rock units, structure and the triggering factors and magnitude of the slide. By knowing the above, remedial measures are chalked out and suggestions were submitted to the Government and user agencies.

During 2025-2026, the Directorate conducted Landslide Disaster inspections at about **52 (fifty-two) locations** with or without disaster Team from DDMA.

Some of large scale landslide disasters investigations conducted with preparation of reports are mentioned below:

1. Champai Vengsang Landslide, Champhai District

A preliminary geotechnical investigation was conducted at Champai Vengsang following a translational landslide that affected a residential area and temporarily obstructed the road below the failure zone. The investigation included geological mapping, structural assessment, and evaluation of slope conditions, which revealed that inadequate surface drainage, accumulated debris, and disposal of excavated materials on the slope had significantly contributed to the instability. Based on the findings, both short-term and

long-term mitigation measures were recommended, including improvement of drainage, debris removal, slope reprofiling, bioengineering stabilization, and construction of a reinforced retaining wall to ensure long-term slope stability.

2. Chhungte Landslide, NH-6, Champhai District

A preliminary geotechnical investigation was undertaken at Chhungte Village following an active deep-seated translational landslide that partially blocked NH-6 and posed a significant hazard to traffic. Detailed geological and structural assessments indicated that prolonged rainfall, unfavourable geological structures, highly fractured sandstone-shale sequences, thick unconsolidated overburden, and road-cut excavation collectively contributed to the slope failure. The report recommended immediate drainage control and controlled debris removal, followed by comprehensive slope reprofiling, engineered retaining structures, and bioengineering measures to achieve long-term stabilization.

3. Mission Veng, Kawltheihuan, Aizawl

A joint geological inspection was carried out at Mission Veng, Kawltheihuan, following a shallow rotational landslide that affected residential properties. The investigation found that prolonged rainfall, inadequate drainage, and toe excavation associated with nearby construction activities were the primary factors responsible for the slope failure. Appropriate recommendations were made for construction of contour and

side drains to improve stormwater management, along with the construction of a properly engineered retaining wall to stabilize the affected slope and prevent further movement.

4. Dr. F. Lallianhlira Construction Site, Chawhpui Vengthlang, Aizawl

A preliminary landslide inspection was conducted at the construction site of Dr. F. Lallianhlira after continuous rainfall triggered slope failure adjacent to an ongoing excavation. The investigation observed seepage, thick soil cover on the upslope, and partial exposure of foundation columns of the neighbouring building, while the retaining structure for the excavation had not yet been completed. The report concluded that excavation without permanent slope support, combined with prolonged rainfall, contributed to the failure. Recommendations included effective covering of the exposed slope, construction of a retaining wall to support the neighbouring foundation, and removal of landslide debris during the dry season.

5. Installation of Protective Wire Mesh at Chanmari West, Aizawl

Protective rockfall mitigation works were undertaken at the rock slope below the Chief Minister's Bungalow, Chanmari West, through the installation of galvanized protective wire mesh over vulnerable rock faces. The work, carried out with the assistance of the Quick Reaction Team (QRT), Aizawl District Disaster Management Authority (ADDMA), included installation of a primary anchored wire mesh system and a

secondary barrier to intercept falling rock fragments and debris. The project significantly reduced the immediate rockfall hazard, and periodic inspection, maintenance of the installed system, and monitoring of adjacent unstable rock faces were recommended to ensure its continued effectiveness.

6. BCM Church, Mamte T, Thingfal, Lunglei District

Following a major landslide on 11 September 2025, the Directorate conducted a detailed geotechnical investigation at BCM Church, Mamte T, Thingfal, Lunglei District, on 15 October 2025 to assess the causes of slope failure and recommend suitable mitigation measures. Geological mapping, structural analysis, Rock Mass Rating (RMR), kinematic analysis and laboratory testing revealed that the site comprises highly fractured shale interbedded with siltstone, exhibiting fair rock mass quality (RMR 50–51) and susceptibility to planar sliding, wedge sliding and direct toppling. The investigation identified road cutting and widening along NH-02, repeated blasting, inadequate drainage, seepage from an overhead water tank and thick overburden as the principal factors contributing to the failure. The Directorate concluded that the site is structurally controlled and unsuitable for redevelopment, and recommended relocation of the church to a geologically safer location together with implementation of appropriate slope stabilization measures.

7. Samtlang, Aizawl District

A joint geotechnical investigation was conducted at Samtlang, Aizawl District, on

28 May 2025 to assess recurring slope instability affecting an RCC bridge above the playground and gully erosion near the Community Hall. The investigation revealed progressive slope movement that had displaced the bridge by approximately 9 inches, resulting in structural distress, while severe erosion along a natural drainage channel threatened the stability of the Samtlang–Lungleng Road. Geological assessment indicated that previous slope excavation, heavy rainfall and inadequate drainage were the principal causes of instability. The Directorate recommended improvement of surface drainage, sealing of ground cracks, construction of properly designed retaining structures, RCC drains and other slope stabilization measures to enhance the long-term stability of the affected infrastructure.

8. Hliappui Village, Saitual District

A preliminary geotechnical investigation was conducted at Hliappui Village, Saitual District, on 24 April 2025 following a landslide that damaged residential buildings and disrupted the widening of NH-102B. Geological mapping and kinematic analyses revealed that the slope, comprising interbedded sandstone, siltstone and shale, is structurally controlled and susceptible to planar sliding, wedge sliding and direct toppling. The instability was attributed to steep road-cut excavation, adverse geological structures and advanced weathering. The Directorate recommended revision of the slope stabilization plan incorporating multi-tier benching, engineered retaining structures, integrated drainage,

erosion control measures and rockfall protection to improve long-term slope stability.

9. Sihphir–Chamdur Road, Aizawl District

A joint geotechnical investigation was carried out on 16 June 2025 along the Sihphir–Chamdur Road to evaluate slope instability affecting the link road above the former Vantlang Quarry and a vulnerable culvert section. The investigation identified approximately 150 metres of roadway as being susceptible to planar sliding due to previous quarry excavation and unfavourably dipping sandstone and siltstone beds, while blockage of a culvert and the absence of a retaining structure threatened the adjoining RCC road. The Directorate recommended controlled road widening under geological supervision, rock bolting, construction of retaining structures and implementation of suitable slope protection measures to ensure long-term road stability.

10. CHC Ngopa, Saitual District

A preliminary geotechnical investigation was conducted at CHC Ngopa, Saitual District, on 1 July 2025 following a landslide that occurred on 24 June 2025 along NH-102B. The investigation found that the landslide affected several hospital facilities and was primarily caused by intense monsoon rainfall, over-steepened road-cut slopes, inadequate drainage and uncontrolled discharge of surface water. Geological mapping and kinematic analyses indicated that the failure was a shallow planar to wedge slide within interbedded sandstone and shale.

The Directorate recommended immediate drainage improvement, evacuation and monitoring of vulnerable structures, followed by comprehensive slope stabilization through engineered retaining structures, integrated drainage systems and bioengineering measures to minimize future landslide hazards.

11. Bualte, Lunglei District

A geotechnical investigation was conducted at Bualte, Lunglei District, on 16 October 2025 following a major landslide that occurred along NH-02 (Lunglei–Lawngtlai Road). The investigation comprised detailed geological mapping, aerial survey, Rock Mass Rating (RMR) assessment, laboratory testing and kinematic analyses to evaluate the causes of slope failure and assess future stability. The study found that the slope consists of highly fractured interbedded siltstone, sandstone and shale overlain by thick colluvial deposits, with a poor rock mass quality ($RMR = 38$). Geological and kinematic analyses indicated that the slope is structurally controlled and susceptible to planar and wedge sliding, while steep highway cut slopes, repeated blasting, toe cutting, highly fractured rock mass and prolonged heavy rainfall were identified as the principal factors contributing to the failure. The Directorate concluded that the slope remains conditionally unstable, particularly under saturated conditions, and recommended implementation of comprehensive slope stabilization and drainage measures to reduce the risk of future landslides and ensure the long-term stability of the highway corridor.

Sl. No.	Locality	Date of Occurrence	Date of Investigation
1	Dawrpui Vengthar		01.04.2025
2	Bawngkawn South		09.04.2025
3	Zemabawk, Berawtlang		02.05.2025
4	Zuangtui		13.05.2025
5	Chaltlang, Lily Veng	21.05.2025	21.05.2025
6	RCC Bridge, Samtlang		28.05.2025
7	Durtlang, Leitan	26.05.2025	28.05.2025
8	Dr. F.Lallianhlira Construction Site, Near Chawnpui Vengthlang Presbyterian Church		31.05.2025
9	Maubawk H/S Veng, Near Salvation Army Church	01.06.2025	01.06.2025
10	Maubawk, Dam veng (Vengthlang)	01.06.2025	01.06.2025
11	Presbyterian Biak In bul, Tuivamit		02.06.2025
12	Lungsir, Mamit		02.06.2025
13	Central Jail Veng		02.06.2025
14	Edenthar	01.06.2025	03.06.2025
15	Pu Lalhmingliana (L) Land, Near Pu roa Tuikhur, Zonuam, Aizawl	02.02.2025	03.06.2025
16	Mission Veng, Kawlthei huan Area	01.06.2025	04.06.2025
17	Below Pu Lalhruaitluanga Ralte House, Mission veng	01.06.2025	04.06.2025
18	Near Pu C.Vanlaltluanga House, Mission Veng	01.06.2025	04.06.2025
19	Venglui behind Dak Inpui		04.06.2025
20	Muthi	27.05.2025	05.06.2025
21	Rengtekawn (Old Builum Road)		05.06.2025
22	Kawnpui-I		05.06.2025
23	Kanan Veng, Below Dr. R.Lalthangliana Building		10.06.2025
24	Salem Veng		12.06.2025
25	Zarkawt/Vaivakawn (Below Chief Minister Bungalow)		13.06.2025

26	Near Vantlang Quarry, Sihphir-Chamdur Road		16.06.2025
27	Zonuam, Below Zonuam Presbyterian Church	31.05.2025	19.06.2025
28	Armed Veng		20.06.2025
29	Chaltlang Road		01.07.2025
30	Below Ramhlun Road		01.07.2025
31	Ngopa Town	24-06-2025	01.07.2025
32	Champhai Town	23-06-2025	03.07.2025
33	Lamlan Veng, Zemabwk		09.07.2025
34	Zemabawk East	30.05.2025	09.07.2025
35	Zemabawk, Bethel Veng		09.07.2025
36	Pu Chhantluanga Residence, Hunthar		21.07.2025
37	Pukpui, Lengpui Road		22.07.2025
38	Sihphir		19.08.2025
39	Tuirual		20.08.2025
40	Durtlang, Leitan		24.09.2025
41	Hmunghak		30.09.2025
42	Mamte T, Thingfal	11.09.2025	15.10.2025
43	Chhinga Veng		12.11.2025
44	Hunthar, NH-06 Road, Below Pi Vanlalruati's Residence	18.06.2024	13.11.2025
45	Thiak		15.12.2025
46	Tanhril		19.12.2025
47	Sinking Area, Falkland		02.02.2026
48	Melriat		11.02.2026
49	Zarkawt		18.02.2026
50	Chanmari		27.02.2026
51	Dinthar		25.03.2026
52	Project Pushpak, Thuampui	30.05.2025	09.06.2026

II. GEOTECHNICAL INVESTIGATION

During 2025–2026, Site-specific Geotechnical Investigations were carried out in **31 (thirty-one) locations** mentioned below:

Sl. No.	Location	Cause	Date of Investigation
1	Between Tuirini and Tuivawl	Geotechnical Investigation of road section	31.01.2025
2	Melthum	Geotechnical Investigation at Vanlalruata's building, near Trinity Hospital	06.04.2025
3	Vaivakawn	DGPS survey to detect ground water subsidence of disaster site	06.04.2025
4	Bungkawn Vengthar	Potential structural instability caused by ongoing works under RDSS Project	07.04.2025
5	Seling-Tuirini	Geotechnica Investigation of Seling-Tuirini road section	21.04.2025
6	Ngopa Venglai	Anthropogenic modification of slope through extensive toe cutting during road-widening operations	23.04.2025
7	Tuikual South	Vulnerable are below Pi Rosalind Vanlalpeki's residence.	13.05.2025
8	Tlangnuam Vengthar CP Road Near Neuromedics	Preliminary Geotechnical Investigation	19.05.2025
9	Chanmari West	Vulnerable area	20.05.2025
10	Tlangnuam Vengthar	Structural stability of ongoing construction of retaining wall near Pu C.Zadailova's house	28.05.2025
11	Zotlang	Vulnerable landcrack area near Zotlang Presbyterian Church	17.06.2025
12	Kulikawn, Ngaizel road	Disaster site	19.06.2025
13	Kulikawn East	Disaster site	19.06.2025
14	Vaivakawn, Zohnuai	Re-survey of DGPS to detect groundwater subsidence of disaster site	04.07.2025

15	Tlangnuam	PHED Water Tanky	11.07.2025
16	Melthum & Hlimen	Vulnerability & hazard of the area for future landslide susceptibility.	14.07.2025
17	Zemabawk North	Sub-surface soil and rock conditions	22.08.2025
18	Dinthar Veng Road	Sub-surface soil and rock conditions	22.08.2025
19	Khatla	Re-assessment of the structural stability of Commerce & Industries Building	04.09.2025
20	Assam Rifles, Venghlui	Assam Rifles Venghlui Disaster affected area	07.09.2025
21	Trinity Hospital, Silaimual	Building cracks formed by Pu C. Hmingchungnunga (L)	17.09.2025
22	Lawngtlai	Landslide/Major Monsoon Damagaes	06.10.2025
23	Tuikual North & Dinthar boundary	Slope failure	23.10.2025
24	Lawngtlai	Lawngtlai, L-III subsidence prone area	10.11.2025
25	Vankal	Preliminary Geotechnical Investigation	13.11.2025
26	Chanmari West	Installation of protective wire-mesh to restrain falling rocks	21.11.2025
27	Between Tuirial River and Keifang	Geotechnical Investigation of road Section along Tuirini-Tuivawl river	04.02.2026
28	Hlimen, Lungleng road	Spot verification of proposed AMRO's, Rehab Centre.	16.02.2026
29	Melthum	Disaster site	19.02.2026
30	Zonuam	Pu R. Lallungmuana's proposed building site near Woodland Hills	17.03.2026
31	Zotlang	Pu Vanlalchhuanga's proposed building site.	20.03.2026

III. GEOTECHNICAL INVESTIGATIONS OF FOUNDATIONS

These investigations are conducted on demand basis from Government Departments/Semi-Government, any other organization and private parties by transfer of financial expenditure. The following **9 (nine)** investigations were conducted during 2025-2026.

Sl. No.	Name of Client / Location	No. of Boreholes	Date of Investigation
1	Vaivakawn, Zohnuai	1	24.04.2025 - 30.04.2025
2	Falkland East	3	05.05.2025 - 13.06.2025
3	Edentharr	4	04.09.2025 - 17.10.2025
4	Pi C. Lalrampari Commercial Site, Bungbawla, Zemabaw	2	21.10.2025 - 05.11.2025
5	Lawngtlai, L -III	4	06.11.2025 - 06.12.2025
6	Pi Vanlalthuangi Chhangte Commercial Site, Hunthar	2	12.01.2026 - 20.01.2026
7	Zotlang Presbyterian Church Building	2	21.01.2026 - 28.01.2026
8	Vankal, Khawzawl	3	11.02.2026 - 28.02.2026
9	Dr. Benjamine Kiangte Commercial Site, Salem Veng	2	17.03.2026 - 30.03.2026



Core Drilling at Hunthar



**Core sample
in Hunthar**



Core Drilling at Falkland East



Core Drilling at Lawngtlai



**Core sample
in Lawngtlai**



Core Drilling at Vankal



**Core sample
in Vankal**



Core Drilling at Bungbanga



Bualte, Lawngtlai District



CHC Ngopa, Saitual District



Hliappui, Champhai District



Thingfal, Lawngtlai District

C. PROCUREMENT OF GEOTECHNICAL INSTRUMENTS UNDER STATE DISASTER RESPONSE FUND (SDRF)

During 2025–2026, the Directorate of Geology & Mining received financial assistance of Rs. 1,37,83,000 from the Directorate of Disaster Management & Rehabilitation, Government of Mizoram, under the State Disaster Response Fund (Recovery and Reconstruction) for procurement of advanced geotechnical instruments. The assistance was released vide Release Order No. B.13015/37/2021-DTE(DMR) dated 21 February 2025 to strengthen the Directorate's capacity in landslide investigation, hazard assessment, slope stability studies and disaster mitigation.

The approved instruments for procurement are:

1. Hand-held Rock Drill/Bolting Machine with Air Compressor
2. Drone with Mapping Software
3. Ground Penetrating Radar (GPR)
4. Range Finders (4 Nos.)
5. Light Weight Deflectometer (LWD)
6. LiDAR (Light Detection and Ranging)
7. Advanced Rock Direct Shear Apparatus
8. Digital Uniaxial Compressive Strength (UCS) Apparatus (600 kN Capacity)
9. Rock Schmidt Hammer

The total approved cost of the above instruments is Rs.1,37,83,345. Procurement of these advanced instruments will significantly enhance the Directorate's capability in scientific geotechnical investigations, landslide hazard assessment, slope stability evaluation and disaster mitigation, thereby strengthening technical support for infrastructure development and disaster risk reduction in the State.



UAV (Drone) with Zenmuse L2 LiDAR sensor & RTK & Image Processing Software



LWD-Light weight deflectometre



Soil direct shear test apparatus



Rock direct shear test apparatus

Rock bolting machine with compressor





Range finder

Ground Penetrating Radar



C. **LABORATORY**

The Laboratory facilities of DGM have three active sections viz. Soil Mechanics, Rock/Aggregate Mechanics and Chemical. The Directorate Laboratory provides a comprehensive range of analytical and testing services in support of geological investigations, mineral exploration, geotechnical studies and infrastructure development. The laboratory is equipped to undertake chemical, petrological and geotechnical analyses of rocks, minerals, soils, aggregates, building materials and water samples. It also carries out mineralogical and geochemical investigations, determination of engineering properties of rocks and soils, aggregate quality assessment, coal analysis, rare earth element (REE) analysis, and other specialized laboratory tests required for mineral exploration, construction projects and scientific research. These services are extended to Government Departments, Public Sector Undertakings, local authorities, academic institutions and private agencies on payment of the prescribed charges notified by the Government of Mizoram, thereby supporting scientific decision-making, quality assurance and sustainable development in the State. The various tests can be conducted with the current facilities by remitting the standard Schedule of Charges issued by the Govt. of Mizoram vide No.B.19011/51/94-IND, the 28th September, 2016.

During 2025-2026, **450** different samples were analyzed by the Directorate as follows:

Sl. No.	Particulars	No. of Test
	Soil	
1	Site Development & Slope Modification, AMC	106
2	Departmental	84
	Rock	
3	Site Development & Slope Modification, AMC	92
4	Departmental	48
5	Project (Resource Mapping)	87
6	Gemstone	24
7	Water Quality (XRF)	9
Total		450



**Rock cutting
apparatus**



**Rock cutting
apparatus**



Sieve shaker

**Point Load
apparatus**



Compression testing machine



Rock schmidt rebound hammer



D. PETROLEUM EXPLORATION :**(1) Status of Petroleum Exploration in Mizoram :**

Presently, one Pre-NELP Block, two NELP Blocks and one OALP Block in the State are being operated by the ONGC Ltd, OIL and VEDANTA Ltd. ONGC Ltd completed exploratory drilling in two locations and reported Gas finding at Meidum Well in Kolasib District on 1st February 2012 in Lower Bhuban Formation.

Sl. No.	Block No.	Commencement	Sq. Km.	Location	Remarks
1	AA-ONJ/2	27.11.2008	255	Tri-junction of Assam, Mizoram & Manipur	Pre-NELP Block. Operated by ONGC.
2	AA-ONN-2001/2	29.07.2003	2,660	Part of Kolasib, Mamit & Aizawl Districts	NELP Block, Exploratory drilling conducted at two locations. Operated by ONGC.
3	MZ-ONN-2004/1	22.05.2007	3,213	Part of Aizawl, Hnahthial and Serchhip Districts	NELP Block, Exploratory drilling conducted in four locations. Operated by OIL.
4	AA-ONHP-2017/14	02.02.2021	3	Part of Kolasib District	OALP Block. Operated by VEDANTA Ltd.

(2) Revenue Receipt from Petroleum Exploration Licence Fees (in Rs.) :

Sl.No.	Oil & Gas Exploration Agency	Name of Block	Amount Received (in Rs.)
1	Oil India Ltd. (OIL)	MZ-ONN-2004/1	NIL
2	ONGC	AA-ONJ/2	2,71,767
			1,02,000
			40,91,178
4	Vedanta Ltd.	AA-ONHP-2017/14	1,200
Total			44,66,145

Oil & Gas Exploration activities in Mizoram has been started since nearly two decades ago when ONGC and Govt. of Mizoram have signed Deed of Agreement on 5/9/2003 for its 1st Block : AA-ONN-2001/2 covering 5340 sq. km. (finally covers 2660 sq. km after relinquishment) at part of Kolasib, Mamit & Aizawl. Two (2) exploratory wells drilled at Meidum and Zanlawn. The well at Meidum strikes hydrocarbon but not of Potential Commercial merit while Zanlawn well is dry and operation of ONGC halted since 28/7/2020. Yet to drill third exploratory well at Hortoki and no extension granted from Ministry of Petroleum & Natural Gas (MoPNG)/ Directorate General of Hydrocarbons (DGH). The major obstacle in making physical progress and extension of PEL validity is construction of T-beam bridge across Chhimluangte river by MPWD. CONstruction of the said bridge was completed on 30th April, 2025, 2026 and extension of Petroleum Exploration License (PEL) to ONGC is awaited.

Subsequently ONGC have signed another Deed of Agreement for its 2nd block : AA-ONJ/2 on 5/9/2003 covering 255 sq. km of Assam – Manipur – Mizoram Tri-junction. Exploration activities continued till 30/12/2020 only with no discoveries in Mizoram except discovery of gas within Assam under this Block as reported in the 25th SGPB Meeting in Aizawl on 18th Sept, 2020 (through Video Conferencing).

The Government of Mizoram wants to speed up the exploration activities and wanted to know the black-and-white condition of hydrocarbon deposits at the earliest as public are also in suspense to know the actual mineral wealth of the State as far as hydrocarbon deposits is concerned. Earlier Joint Meeting of Hon'ble Minister, Commerce & Industries Dept, GoM with officials of DGH, ONGC, OIL and DGM Officials was held at Aijal Club on 22nd June, 2022 chaired by Principal Seretary, Commerce & Industries Department (Geology & Mining), Mizoram.

Oil India Ltd (OIL) entered and covers an area of 3213 sq. km in the Block: MZ-ONN-2004/1 after signing the Deed of Agreement on 22/5/2007 covering parts of Serchhip, Hnahthial and Aizawl. Drilled four (4) well at Maubuang, Keifang, Thenzawl & Phulmawi – all dry. Yet to drill its 5th exploratory well at Pangzawl-Thiltlang for which Ministry of Petroleum & Natural Gas (MoPNG) / Directorate General of Hydrocarbons (DGH) has granted for another 428 days extension wef 9/2/2022 till 29/1/2024. For this, approach road i.e. National Highway is under construction by NHIDCL and clearance (NOC) is required from NHIDCL for OIL to use the road for transporting heavy equipments up to Pangzawl-Thiltlang proposed drill site. Positive response was received from NHIDCL and State PWD Authorities during the latest Oil & Gas Review Meeting held on 3.2.2023 at GAD Conference Hall, MINECO Aizawl.

Till date there is no potential commercial discovery of hydrocarbon in Mizoram. There could be certain challenges ahead regarding construction of approach road or any other technical issues on the part of the Ministry of Petroleum & Natural Gas (MoPNG)/ Directorate General of Hydrocarbons (DGH) or even from the Exploration Agencies while Gov't of Mizoram is giving all out efforts.

E. REGIONAL (PROMOTIONAL) COAL EXPLORATION:

Regional (Promotional) Coal Exploration is being undertaken in collaboration with the **Central Mine Planning & Design Institute (CMPDI), Ranchi**, with full financial assistance provided by the **Ministry of Coal** under the **Central Sector Scheme (CSS)**. The exploration involves **G3-level** drilling activities at the **Rotlang West Block in Lunglei District**.

Commencing from **13th March 2025**, the exploratory drilling successfully completed on **31st July 2025**. A total of **15 boreholes** were drilled covering a cumulative depth of **4,680 metres**, fully achieving the awarded meterage. All non-coal core samples from boreholes are presently kept in safe custody at the DGM Office, Aizawl, while the core samples from **borehole No. 15**, which contained visible coal seams, have been sent to the **CSIR–National Metallurgical Laboratory (NML), Jamshedpur** for **Rare Earth Element (REE) analysis**.

The investigation confirmed the absence of viable conventional coal resources. Furthermore, the geochemical analysis of the core samples identified a localized 3-meter-thick zone containing trace occurrences of Rare Earth Elements (REE) and critical minerals, including marginal concentrations of Scandium and Potassium Oxide. While these initial indicators were noted in the laboratory results, they do not currently confirm a commercially viable deposit.

Looking ahead, DGM Mizoram has identified **Lamzawl** in **Saitual District** as a prospective site for the **next phase of**

coal exploration. Preliminary surveys have been completed and a proposal for opening a new G3 stage exploration block has been submitted to Central Mine Planning and Design Institute (CMPDI), Ranchi.

Following this initiative, the Central Mine Planning and Design Institute (CMPDI), Ranchi, formally **accorded its approval** for undertaking Regional (Promotional) Coal Exploration in the Lamzawl Block, Saitual District, vide Letter No. CMPDI/DG/532(A)/97 dated 29.01.2026. Pursuant to this significant approval, the Directorate of Geology & Mining (DGM), Mizoram, has initiated the requisite administrative formalities and is presently in the process of floating a tender for the execution of the proposed exploration programme.



First borehole, MRW-01 (P-05) spudding on 13th March 2025R at Rotlang West, Lunglei District



Coal Exploration Team, DGM with representatives of Maheswari Mining Private Ltd.



Site Visit by representatives of DGM, Mizoram



Last borehole MRW-15 (PBH-03). Drilling finished on 31st July 2025f
Rotlang West, Lunglei District

VIII BUDGETARY PROVISIONS DURING 2025-2026

The detail break up of the Budget outlay (BE&RE) for the Financial Year of 2025-2026 is given below:

REVENUE SECTOR:

Major Head : 2853-Non Ferrous Mining & Metallurgical Industries

Sub Major Head : 02-Regulation & Development of Mines

Object Heads of Account		Budget Estimate	Revised Estimate
Minor Head	001-Direction & Administration		
Sub Head	(01)-Direction	686.71	690.20
Minor Head	101-Survey & Mapping		
Sub Head	(01)-Ground Water Investigation	1.00	1.00
Sub Head	(02)-Geotechnical Investigation	1.20	1.20
Sub Head	(03)-Minor Mineral Investigation Dev.	26.70	39.09
Sub Head	(04)-Landslide Engineering & Disaster	3.00	3.00
Sub Head	(05)-Seismology & Earthquake Engineering	0.10	0.10
TOTAL OF MAJOR HEAD : 2853		718.71	734.59