



SUPREME AUDIT INSTITUTION OF INDIA
लोकहितार्थ सत्यनिष्ठा
Dedicated to Truth in Public Interest

**Report of the
Comptroller and Auditor General of India
on Functioning of Mines and Geology
Department**



**Government of Andhra Pradesh
Industries and Commerce (Mines) Department
Report No. 1 of 2025
(Performance Audit Report-Civil)**

Performance Audit Report on Functioning of Mines and Geology Department



**Government of Andhra Pradesh
Industries and Commerce (Mines) Department
Report No. 1 of 2025**

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Preface

This Report of the Comptroller and Auditor General of India has been prepared for submission to the Governor of Andhra Pradesh under Article 151 of the Constitution of India for the year ended 31 March 2022.

This Report of the Comptroller and Auditor General of India contains the results of Performance Audit on 'Functioning of Mines and Geology Department', covering the period 2017-18 to 2021-22.

The instances mentioned in this Report are among those which came to notice in the course of test audit for the period 2017-18 to 2021-22 as well as those which came to notice in earlier years, but could not be reported in the previous Audit Reports; matters relating to the period subsequent to 2021-22 have also been included, wherever necessary.

The Audit has been conducted in conformity with the Auditing Standards issued by the Comptroller and Auditor General of India.

Audit wishes to acknowledge the co-operation received from Industries and Commerce (Mines) Department, Government of Andhra Pradesh at each stage of audit process.

Executive Summary

Minerals are valuable natural resources being finite and non-renewable. Their exploitation is guided by long term national goals, perspectives and global economic scenario. Minerals are one of the main sources of revenue and major contributor for economic growth of the State Government. The State of Andhra Pradesh is well known globally for variety of rocks, industrial minerals and popularly called Ratna-Garbha.

In the State, the Mines and Geology Department is entrusted with both promotional and regulatory functions for overall development of mining sector and collection of mineral revenue to the State Exchequer. The Department oversees the functions of vigilance and monitoring of minerals production, survey and demarcation of areas, mineral revenue collection, mineral investigation and exploration and dissemination of mineral information.

The Performance Audit of Functioning of Mines and Geology Department was carried out to assess the effectiveness in accounting of mineral revenue and overall development of mining sector in the State. The audit objectives included systems and procedures for utilisation of funds meant for exploration activities and granting / renewal of mining leases; mechanism to ensure extraction of mineral within the approved limits and management of associated revenues; mechanism for prevention/ detection of unauthorised mining activities.

The scope of audit included Industries and Commerce Department (Mines), Director, Mines and Geology and other subunits of four districts (Krishna, Kurnool, Kadapa and Visakhapatnam) related to mining activities. Necessary inputs were obtained from Indian Bureau of Mines (IBM), Directorate General of Mines Safety (DGMS), State Environment Impact Assessment Authority (SEIAA), Andhra Pradesh Pollution Control Board connected with mining activities. Consultancy services were availed from Indian Institute of Science (IISc), Bengaluru for scrutiny of limestone leases in the selected mandals (Kolimigundla in Kurnool District and Jaggaiahpet in Krishna District).

The major findings of the Performance Audit are presented below:

A. Exploration of minerals and granting of mining leases

State Mineral Policy (SMP) in line with National Mineral Policy bringing out a roadmap with better regulations for mining activities and sustainable mining practices was yet to be formulated. Absence of SMP deprives the State from identifying and utilising mineral resources optimally and in an effective manner. ***It is recommended that the State Government should formulate the State Mining Policy with better regulations for achieving optimum utilisation of mineral wealth and for ensuring sustainable mining practices.***

Mining Plans were approved without duly considering the United Nations Framework Classification guidelines for arriving at mineral reserves, which inflated the mineral reserves and life of mining leases. Deficient scrutiny of mining plans submitted by prospective miners and ineffective coordination between Departments involved in approval of mining plans resulted in overestimation of mining life. ***It is recommended that Government should***

ensure that the mining plans are approved after evaluation by competent authority at all levels, to avoid inflated figures of mineral reserves projected by the prospective miners.

The mineral exploration fund did not receive the designated revenue and the funds at disposal were not utilised to the extent available for exploration of minerals. ***It is recommended that effective mechanism needs to be evolved for proper levy, collection, remittance of two per cent of seigniorage fee to designated fund of MERIT and to optimise the utilisation of funds for exploration of minerals.***

The system of receiving mineral concession application for mining lease to granting of lease was not transparent, as large number of applications received were not disposed of in time with necessary clearances and were pending for approval at various stages/ levels. The related vital records/ data were also not maintained. There was lack of coordination between different levels of approvals, as reconciliation of data on mineral concession application received and approved was not done at any level. The State Coordination cum Empowered Committee specially constituted by Government of Andhra Pradesh (GoAP) to monitor and minimise delay in processing and granting of mining lease was non-functional. ***It is recommended that the State Coordination cum Empowered Committee may be made functional to monitor and coordinate between various Departments for timely processing of mineral concession applications to avoid delay in granting of lease.***

There was lack of consistency in maintenance of data on inoperative leases. Prompt and timely action was not initiated on inoperative leases. The inaction on the part of Department resulted in idling of mining leases without being allotted to prospective miners for generation of revenue. There were instances of leases not being renewed within the stipulated time which allowed miners to hold leases illegally for extraction of minerals beyond lease period. Thus, the system of renewal and monitoring of inoperative mining leases at the Mines & Geology Department was ineffective. ***It is recommended that the State Government should ensure that the Mines and Geology Department periodically reviews and renews the leases within the lease period and resumes inoperative mining areas to avoid unauthorised mining activity beyond the lease period.***

The lease deed must be executed within the stipulated period from the date of grant/renewal of lease for minerals. However, mining lease deeds were not executed and registered for some of the leases which led to loss of revenue to Exchequer towards stamp duty and registration fees under Indian Registration and Stamp Act. ***It is recommended that Government should ensure that all the mining lease deeds are executed and registered under the Stamp Act to avoid loss of revenue to Exchequer.***

B. Removal of minerals and realisation of associated revenues

The Hon'ble Supreme Court held that minerals excavated without or in excess of quantity mentioned in Environment Clearance (EC) were illegal and cost of illegal quantity was to be recovered. The Department did not comply with the directions of Hon'ble Supreme Court and allowed the lessees to excavate minerals without EC and also in excess of permissible quantity. The cost of illegal excavated quantity was not recovered from the lessees. ***It is recommended that Government should develop an effective technology to prevent excess excavation of mineral over the approved limit, in compliance to the directions of Hon'ble Supreme Court to prevent illegal mining.***

The extraction of minerals required for government works by Engineering or other Departments were allowed without the requirement of clearance certificate from the Mines & Geology Department as per age old prevailing orders. As a result, the Department was not aware of the nature and quantity of mineral excavated, the amount of seigniorage fee to be received from the other user Departments and this also provided scope for illegal excavation of minerals. ***It is recommended that Government may revise the previous orders for removal of minerals, without clearance certificate for minerals utilised in government works, to avoid any kind of illegal excavation and to account for the minerals with definite revenue realisation.***

Mineral Revenue Assessment (MRAs) and Demand Collection Balances (DCBs), the critical records to assess the types of minerals, quantities removed, revenues realised and pendency were not prepared regularly either manually or on online mode. There were instances of non-levy of dead rent at the enhanced rate, short collection or non-forfeiture of security deposit, incorrect mineral classification of minor mineral as major mineral resulting in loss of revenue to the Department. ***It is recommended that Government may devise online systems or strengthen the existing Online Mineral e-Permit System to generate MRAs, DCBs and demand notices automatically, without human intervention and to ensure that the associated revenues as prescribed in the Acts & Rules are levied and collected appropriately to prevent any kind of loss to the Exchequer.***

C. Prevention and detection of unauthorised mining activity

Required number of inspections of mining lease areas were not conducted covering all the existing leases in a year to identify lapses, if any. The District Level Task Force constituted for effective vigilance to curb illegal mining and transportation of minerals was non-functional and State Level Task Force was not established. Action on the part of the Department, on the recommendations made by IBM/ DGMS for termination of leases which violated the laid down rules and instead allowed illegal mining, was not forthcoming. ***It is recommended that the inspection of mining leases may be given utmost priority by making the district/state level task force functional, for effective vigilance to curb illegal mining and transportation of mineral. Recommendations made by IBM/DGMS are to be implemented efficiently to enforce immediate action on illegal mining activities.***

Differential Global Positioning System (DGPS) survey was not completed for 57 per cent major mineral mining leases and 66 per cent minor mineral mining leases. Out of the registered vehicles, 38 per cent of the vehicles were not enabled with installation of Global Positioning System (GPS) and 40 per cent of permits were issued to the vehicles not enabled with GPS during the period of audit. There was installation of meagre number of Closed-Circuit (CC) Cameras and all of them were non-functional, in the entire State. This clearly affected the Department's efforts in curbing illegal mining activities. ***It is recommended that Government shall ensure that DGPS survey of all mining leases is completed, all vehicles involved in transportation of mineral are registered and equipped with GPS and CC cameras are installed in all the designated places for effective monitoring and prevention of illegal mining.***

In the case study of 11 limestone leases of the two selected mandals, the extracted quantity quantified by Technical Consultant IISc was varying (15 to 91 per cent) with that of the

recorded extracted quantity of the Department. In respect of five leases, the recorded extracted quantity by Department was more than the quantity estimated by IISc and for remaining six cases, the recorded extracted quantity was less than the quantity estimated by IISc. Thus, there was excess extraction of minerals in six cases than permitted and also excess recording of minerals than actually extracted. The IISc noticed huge dumps of mine spoils without any protection measures across the study sites. The environmental management was absent in most mines, and afforestation activities were observed to be poor across the sites. ***It is recommended that the Government must encourage use of advanced technology such as remote sensing technology to assess actual quantity of minerals extracted to facilitate detection of any kind of illegal mining activities.***

Chapter I

Introduction



Chapter I

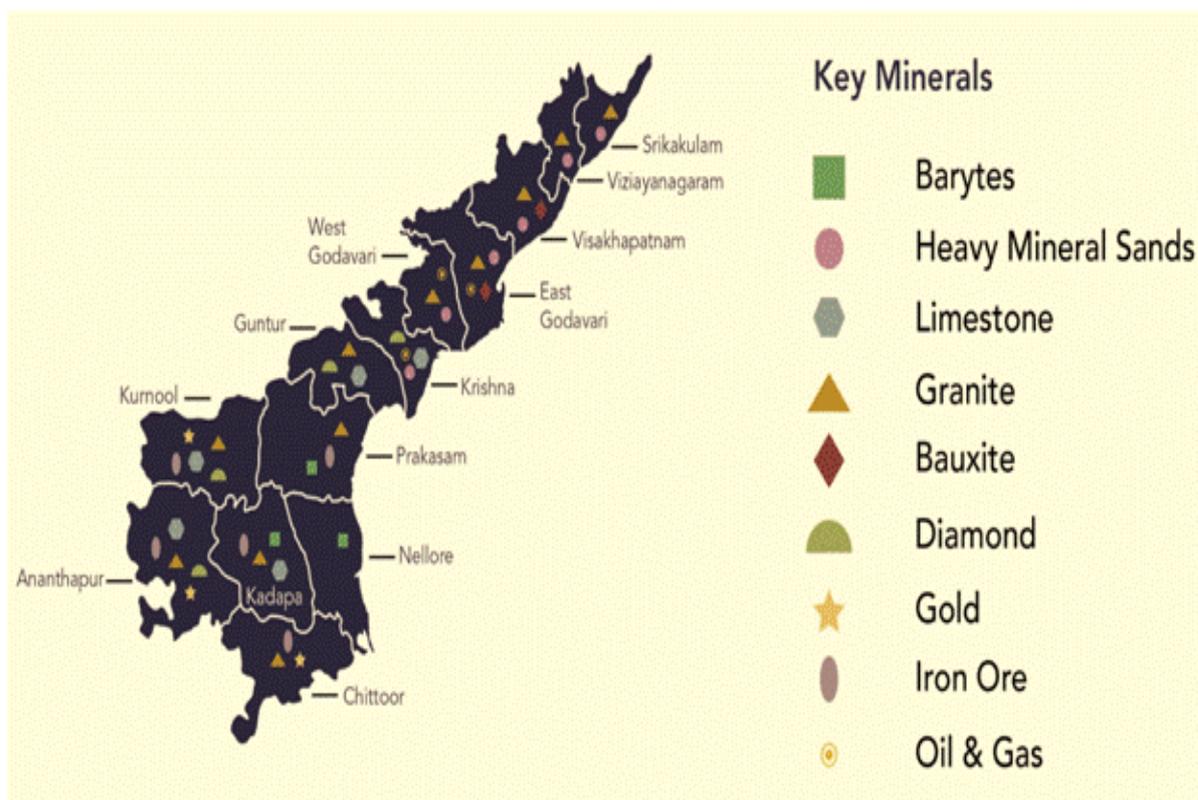
Introduction

1.1 Introduction to mineral resources

Minerals are broadly classified in two categories, *i.e.*, major and minor minerals. Minor minerals means¹ building stone, gravel, ordinary clay, ordinary sand other than sand used for prescribed purposes, and any other mineral which the Central Government may, by notification in the Official Gazette, declare to be a minor mineral. Major minerals include all minerals other than minor minerals.

The State of Andhra Pradesh has abundant major minerals *viz.*, Limestone, Iron ore, Ilmenite and minor minerals *viz.*, granite, road metal, barytes. State's varied geology has a rich and wide variety of minerals suitable for various mineral specific industries. The State is treasure house for 48 minerals and more specifically for Gold, Diamond, Bauxite, Beach Sand, Limestone, Coal, Dolomite, Quartz, Feldspar, Iron Ore, Granite and other building materials *etc.* The geographical distribution of main minerals in the State has been depicted in **Figure 1**.

Figure 1: Mineral map of Andhra Pradesh



Source: District wise mineral opportunities in Andhra Pradesh taken from Department's website

Andhra Pradesh is very rich in different types of minerals and the estimated quantities of important minor and major minerals available (as of 31 March 2021) in the State when compared to Nation as a whole is as detailed in **Table 1.1**.

¹ as defined in Section 3(e) of Mines and Mineral (Development and Regulation) Act, 1957

Table 1.1: Mineral profile of Andhra Pradesh*(Quantity in Million Ton)*

Sl. No.	Type of mineral	Mineral	Estimated quantity in India	Estimated quantity in Andhra Pradesh	Share of Andhra Pradesh (in percentage)
1.	Minor	Road metal*	981.11	181.44	18.49
2.		Barytes	49.47	42.60	86.11
3.		Dolomite	2,393.15	38.96	1.63
4.	Major	Limestone	87,388.75	831.23	0.95
5.		Iron Ore	6,835.70	22.11	0.32
6.		Manganese	112.49	2.41	2.14

Source: As per the information submitted by Mines & Geology Department, GoAP for compilation of Natural Resource Accounting (NRA) for the year 2020-2021.

Note: The NRA report for the year 2021-22 is yet to be published. * quantity in cum

There was huge variation in estimated quantity of limestone as per data submitted by Mines & Geology Department for compilation of Natural Resource Accounting and data (as of March 2020) published by Indian Bureau of Mines for Indian Minerals Year Book (MYB) 2022. The estimated quantity of limestone as per MYB 2022 was 2,27,589.26 Million Ton and 29,838.82 Million Ton for the Nation and Andhra Pradesh respectively. The variation in figures of limestone needs to be investigated and reconciled.

Further, the State reserve mineral map available in the public domain was last updated in 2014 which raises concerns for adequacy for planning current and future exploration and mining activities.

1.2 Framework for Governance and Management of mineral resources

The term ‘mining’ is broadly used to denote the extraction of minerals while for the minor minerals ‘quarrying’ is specifically used to indicate the extraction. Management of mineral resources is the responsibility of both Government of India (GoI) and State Government in terms of items listed under Union and State List² of the Seventh Schedule of the Constitution of India. Consequently, Mines and Minerals (Development and Regulation) Act, 1957 (MMDR Act) was enacted which gives Union the power (Section 2 of MMDR Act) to regulate mineral development for all minerals except minor minerals for which power was vested to the State Government (Section 15(1) of MMDR Act 1957).

The MMDR Act lays down the legal framework for regulation on mines and development of all minerals other than petroleum and natural gas. The Act was amended (January 2015) by GoI by Ordinance, 2015. Subsequently, the Mineral Conservation and Development Rules (MCDR), 2017, Mineral (Auction) Rules, 2015, Mineral Concession Rules 2016 etc., were also framed in line with various Acts and National Mineral Policy.

The MMDR Amendment Act 2015, brought the following major initiatives:

- Granting of mineral concessions shall be through auction³ for major minerals to ensure transparency.

² Union list: Serial Number 54 and State list: Serial Number 23

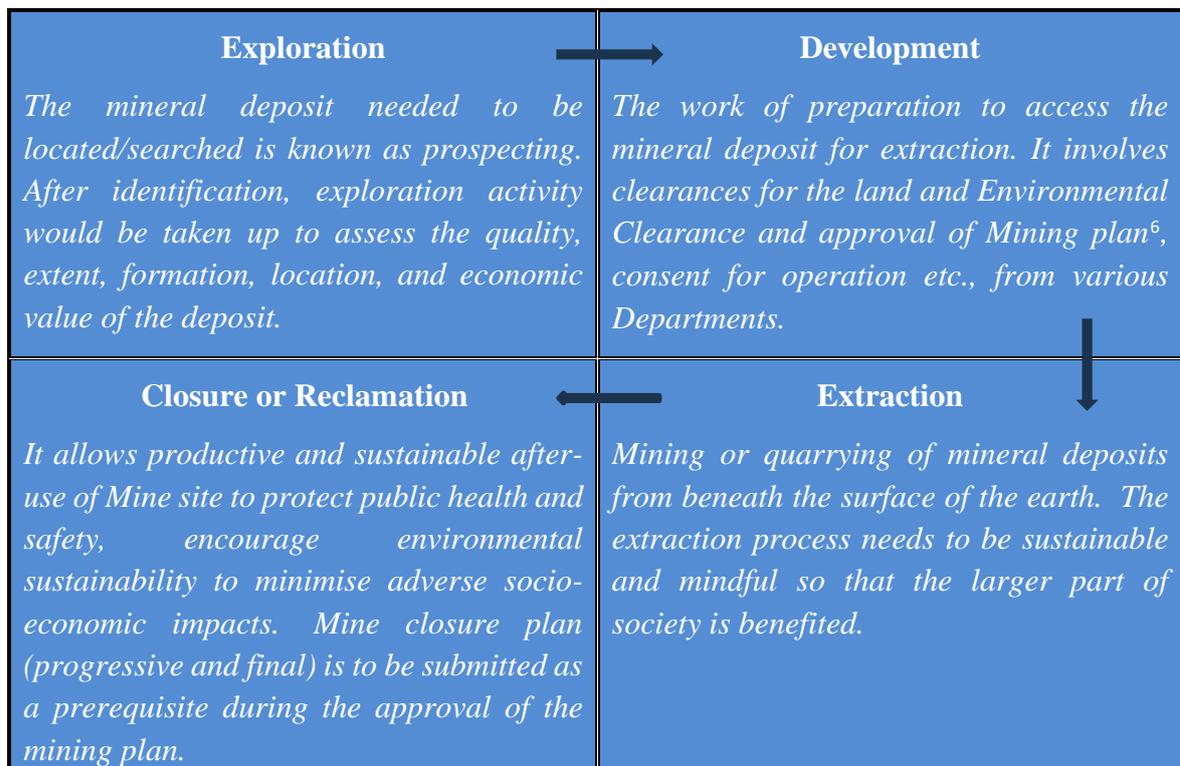
³ section 10 B and 11 of Mines and Minerals (Development and Regulation) Amendment Act, 2015

- Establishment of District Mineral Foundation⁴ (DMF) for the welfare of mining affected areas by using contributions from the mining activities.
- Establishment of National Mineral Exploration Trust⁵ (NMET) for regional and detailed mineral exploration in the country.

As per the provisions of MMDR Act, 1957, GoAP formulated Andhra Pradesh Minor Mineral Concession (APMMC) Rules, 1966 as amended from time to time.

1.3 Mining Process

Mining/ quarrying of mineral includes the complete process of identification of mineral deposit to reclamation of mining site. The mining process is broadly divided into four stages as detailed below:



1.4 Role of Departments involved in mining of minerals

The Mines & Geology Department is entrusted with both promotional and regulatory functions for overall development of mining sector and collection of mineral revenue to the State Exchequer. The Directorate of Mines and Geology oversee the functions of approval of mine plans for minor minerals, vigilance and monitoring of minerals production, survey and demarcation of areas, mineral revenue collection, mineral investigation and exploration and dissemination of mineral information.

⁴ section 9 (B) of Mines and Minerals (Development and Regulation) Amendment Act, 2015

⁵ section 9(C) of Mines and Minerals (Development and Regulation) Amendment Act, 2015

⁶ the mining plan is the plan of the lease hold area showing the nature and extent of the mineral body, spot or spots for mining operations, details of the geology including mineral resources and reserves of the area, details of proposed exploration program, method of excavation, handling of waste and mineral rejects, use of mineral and beneficiation of minerals, a tentative scheme of mining from year to year for five years, etc.

The Revenue and Forest Department issues No Objection Certificate⁷ (NOC) for the land leases meant for mining activity depending upon the jurisdiction. Andhra Pradesh Pollution Control Board (APPCB) issues Consent For Establishment (CFE) and Consent For Operation (CFO) of mines. State Environment Impact Assessment Authority (SEIAA) is the Environmental Clearance granting authority for mining lease of minor minerals and Ministry of Environment, Forest and Climate Change for major minerals. Indian Bureau of Mines (IBM) approves mining plan for major minerals.

1.5 Organisational Set up

The organisational set-up of the Mines & Geology Department is as shown in *Chart 1.1*.

Chart 1.1: Showing the organogram of Mines & Geology Department



Source: As per Department website

At the Government level, the Principal Secretary is the Head of the Department and at the Directorate level, the Director, Mines and Geology (DMG) is responsible for administration and implementation of the related Mining Acts and Rules.

At the District level, the Deputy Director of Mines and Geology (DDMG) is the district administrator and member convenor to District Mineral Foundation (DMF). The DDMG approves mining plans and processes Minor Mineral Concession Applications⁸ and is the authority for approval of Mineral Revenue Assessments of the leases falling within the district.

Assistant Director, Mines and Geology (ADMG) is in-charge of the unit office, submits proposal in respect of prospecting license, mining/quarry lease applications, inspection of areas applied for mining leases and inspection of Mineral Based Industries. Prevention of smuggling and illegal extraction, and transportation of minerals is one of the responsibilities of ADMG. Other responsibilities are finalisation of assessment, collection of Mineral Revenue (Royalties, Seigniorage fee, *etc.*) and other demands and pursuing collection of arrears.

⁷ G.O.Ms.No.163, Industries & Commerce (Mines-II) Department, dated 16.11.2017

⁸ other than Granite, Marble, Ordinary Sand and Mineral Dealer Licenses within the District

Assistant Director (AD) Vigilance shall work under the supervision of Joint Director of Mines and Geology (JDMG) and is in-charge of the Regional Vigilance Squad having jurisdiction of two or three districts. The AD (Vigilance) inspects the illegal mining areas and seizes vehicles during the checking of mineral traffic.

1.6 Trend of Revenue receipts

The budget estimates and actual revenue receipts from the minerals under “Major Head - 0853 non-ferrous mining and metallurgical industries” and revenue receipts as per Mines & Geology Department during the period 2017-22 was as shown in **Table 1.2**.

Table 1.2: Details of budget estimates, actual revenue receipts and receipts as per Mines & Geology Department

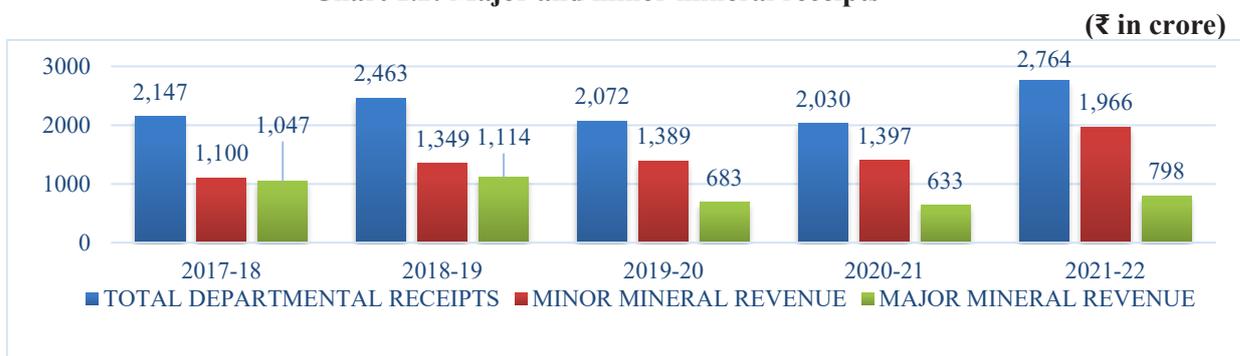
Sl. No.	Budget Estimate	Actual Revenue Receipt as per State Finance Accounts	Difference	Percentage of shortfall	Revenue receipt as per Department	Difference of Receipts as per Department and State Finance Account
	(A)	(B)	(C)=(A)-(B)	(D)=(C)/(A)X100	(E)	(F)=(E)-(B)
2017-18	2,200.00	2,156.36	43.64	2	2,147.48	(-) 8.88
2018-19	2,500.00	2,210.53	289.47	12	2,463.48	252.95
2019-20	3,950.00	1,897.12	2,052.88	52	2,072.07	174.95
2020-21	3,550.00	2,256.36	1,293.64	36	2,029.84	(-) 226.52
2021-22	3,550.00	2,983.00	567.00	16	2,764.23	(-) 218.77
Total	15,750.00	11,503.37	4,246.63		11,477.10	(-) 26.27

Source: Details furnished by the Department and State Finance Account

There was a significant shortfall in realisation of revenue which ranged between two to 52 per cent of the budgeted estimates. The short realisation of revenue when compared to estimated budget was more during 2019-20, though there was increase in revenue from ₹2,156.36 crore in 2017-18 to ₹2,983.00 crore in 2021-22.

Further, as per data furnished by the Mines & Geology Department, the actual revenue realised under major and minor minerals for the period 2017-22 was as shown in **Chart 1.2**.

Chart 1.2: Major and minor mineral receipts



Source: Details furnished by the Department

The revenue realised from minor minerals was on increasing trend when compared to major minerals, whereas there was drastic decrease during the period 2019-22 when compared with 2018-19. This was due to slowdown of activities amid global pandemic, as there was

sluggishness in cement industries which are major consumers of limestone. Thus, less consumption of limestone is one of the reasons for decrease in revenue under major minerals.

1.7 Audit Objectives

The Performance Audit was conducted to assess whether:

- Effective systems and procedures were in place for utilisation of funds meant for exploration activities and granting/ renewal of mining leases.
- Effective mechanisms were in place to ensure extraction of mineral was within the approved limits and associated revenues were properly assessed, collected, and deposited.
- Effective mechanisms were in place for prevention, detection of unauthorised mining activities and powers vested with the Department were effectively enforced as deterrent for minimising the same.

1.8 Audit Criteria

The Performance Audit (PA) drew audit criteria from the following Acts/ Rules:

- Mines and Minerals (Development and Regulation) Act, 1957 amended from time to time;
- Minerals (Other than Atomic and Hydrocarbons Energy Minerals) Concession Rules, 1960 and 2016;
- Andhra Pradesh Minor Mineral Concession Rules, 1966 as amended from time to time;
- Environment Impact Assessment Notification 2006;
- Andhra Pradesh District Mineral Foundation Rules, 2016, Mineral (Auction) Rules, 2015 and Andhra Pradesh Minor Mineral Auction (APMMA), Rules 2022;
- Mineral Conservation and Development Rules, 1988 and 2017;
- Granite Conservation and Development Rules, 1999;
- Manual of Mines and Geology Department, Andhra Pradesh, 1983;
- National Mineral Exploration Trust Rules, 2015;
- Mineral Exploration, Research, and Innovation Trust, Rules 2016;
- National Mineral Policy, 2019;
- Mineral (Evidence and Content) Rules, 2015;
- Metalliferous Mines Regulations, 1961;
- Government Orders, Circulars issued by Government and various judgements;
- Indian Bureau of Mines (IBM) Manual for Inspection of Mines, 2017, Notes on illegal mining issued by IBM;
- United Nations Framework Classification Guidelines, 2009.

1.9 Audit Scope and Methodology

The Performance Audit was taken up during June 2022 to January 2023 covering the period 2017-18 to 2021-22 with focus on the objectives mentioned above.

Two (Krishna and Kurnool) out of 13 districts⁹ (DDMGs) were selected based on the areas having more number of limestone leases, and completion of Differential Global Positioning System (DGPS)¹⁰ survey. Two more districts (Kadapa and Visakhapatnam) were selected using random sampling method. Thus overall, four¹¹ out of 13 DDMGs and eight¹² out of 22 ADMGs were covered during the present audit. Limestone being the highest revenue contributor of ₹1,780.88 crore (95 per cent) of total revenue (royalty) of ₹1,868.22 crore under major minerals during 2017-22 was selected for detailed scrutiny. Further, the audit of offices of the Principal Secretary, Industries and Commerce (Mines) Department, Director, Mines and Geology and other entities related to mining activities viz., Indian Bureau of Mines (IBM), Directorate General of Mines Safety (DGMS), State Environment Impact Assessment Authority (SEIAA) and Andhra Pradesh Pollution Control Board (APPCB) were also covered.

The audit included scrutiny of records/ files on mining leases to review the monitoring of mining activities and compliance of the statutes. Audit also visited and obtained inputs from agencies/ entities connected with mining activities and the inputs obtained were suitably incorporated in the report wherever necessary.

Audit engaged the Energy and Wetlands Research Group, Indian Institute of Science (IISc), Bangalore as Consultant to study the volume of Limestone mineral extracted from the mining leases using remote sensing technology from a technical perspective. The study covered areas in two mandals viz., Jaggaiahpet and Kolimigundla under the jurisdiction of two ADMGs (Nandigama and Banaganapalle), covering an average extent of each limestone lease of 180.85 hectares. The Department has communicated its concern over the fact that the study by the Consultant IISc Bangalore has been relied upon for auditing and that the assessment made by IISc was approximate and hence could not provide the accurate quantity of mineral extracted and the method was not practical. Audit's response is that the Remote sensing studies by technical experts, are reliable as a constructive tool, for assessing illegal mining situation. In this instance, the exercise has been useful in estimating the Limestone mineral extracted for the purpose of examining whether the quantity of mineral extracted was approximately as per the Mining Plan and facilitating detection of illegal mining activities.

The objectives, scope and methodology of audit were discussed at the level of Government in an Entry Conference held in June 2022. Exit Conference with the Government was held in March 2024 wherein, the major audit findings were discussed. The written replies of the Government and the responses given during the Exit Conference have been considered appropriately while finalising this Report.

⁹ in the erstwhile district setup of Andhra Pradesh

¹⁰ it is an enhancement to the global positioning system that provides improved location accuracy. It uses a network of fixed, ground-based reference stations to broadcast the difference between the positions indicated by the global positioning system satellite and the known fixed positions

¹¹ Kadapa, Krishna, Kurnool and Visakhapatnam

¹² ADMG Kurnool & Banaganapalle, ADMG Kadapa & Yerraguntla, ADMG Vijayawada & Nandigama and ADMG Visakhapatnam & Anakapalli

1.10 Compliance to recommendations of Public Accounts Committee

A Standalone Performance Audit (PA) on Functioning of the Directorate of Mines & Geology was conducted covering the period 2006-07 to 2011-12. The Audit Report¹³ included audit findings mainly on Administration and Management of Mineral Concessions, issues relating to environment and internal control, human resources, and other issues. The Public Accounts Committee (PAC) examined the report in 2015 & 2016. The PAC offered (February 2016) certain recommendations which include *viz.*, (i) the applications/mineral concessions cannot be kept pending for more than 30 days, (ii) a system be developed to ensure that mining leases are granted only after approval of the mining plans and the mining activities take place as per approved mining plans, (iii) the Government may consider the issue of seeking separate reports, for specific purpose, from the revenue authorities while issuing, renewing, and re-granting different mineral concessions duly stating the duration for which the mineral concessions are to be granted, (iv) provisions may be made for regular review of inoperative leases at fixed intervals for determining the leases to prevent blockage of mining areas.

In this regard, the Assistant Director (Administration) of Mines and Geology replied that all the recommendations of PAC were complied with.

However, the current audit revealed that the irregularities noticed earlier were still persisting. Thus, the Government/Department have taken ineffective punitive/corrective action on the recommendations made by PAC.

1.11 Audit Constraints

The Department did not provide basic records, statistical data on mineral-wise royalty and seigniorage fee earned, status of Mineral Concession Application, renewal of application at various stage of approval, dispatch of non-working leases, levy of penalty and number of triggers received for illegal mining. There was inconsistency in data furnished to audit on different occasions at various levels.

Due to non-availability of basic records and statistical data, the effectiveness of systematic plan in the Department could not be ascertained. The observations were made to the extent of records made available to Audit.

1.12 Acknowledgement

Audit acknowledges the cooperation of the Department in the production of the available data/records and the information required for the purpose of this Performance Audit. Audit also acknowledges technical inputs/ support extended by the Energy and Wetlands Research Group, Indian Institute of Science, Bengaluru. Audit has relied, *inter alia*, upon the Consultant's study for observations relating to estimating the volume of Limestone mineral extracted from the mining leases in two mandals, included in this Report.

¹³ C&AG's Report (Revenue Sector) No. 2 of 2014 and laid on the table of the House on 06.09.2014

Chapter II

Exploration of Minerals and Granting of Mining Leases



Chapter II

Exploration of minerals and granting of mining leases

State Mineral Policy for optimum utilisation of mineral wealth and sustainable development of mining sector was yet to be formulated. Mining plans were approved without duly adhering to the provisions of United Nations Framework Classification guidelines which resulted in adoption of incorrect estimated quantities and subsequently led to overestimation of mining life. Funds created specifically for exploration of minerals did not receive the designated revenue and available funds were not utilised optimally. Vital records and data on applications received for mining lease, timely disposal of applications with necessary clearances, applications pending for want of clearances, surrender or determining of leases, inoperative leases, were not maintained properly. The State Coordination cum Empowered Committee constituted to monitor and minimise delay in processing and granting of mining lease was non-functional. Action for closure of identified inoperative leases was not taken and unauthorised possession of leased land with lease holders was allowed. Leases were not renewed within the stipulated time which allowed unauthorised extraction of minerals. Some of the mining lease deeds were neither executed nor registered, thereby causing loss of revenue towards stamp duty to Exchequer. Thus, the Mines and Geology Department lacked effective system of processing, granting, renewal and monitoring of mining leases.

For conservation and development of minerals, it is necessary to carry out exploration of minerals which includes detailed investigations to collect precise information regarding any mineral available in or under any land, by the Central Government, State Government, Geological Survey of India (GSI) or any authorised agency. The GSI, Mines & Geology Department of the State, Andhra Pradesh Mineral Development Corporation and private companies are involved in the exploration activities.

As per Section 10(B)(3) of Mines and Minerals (Development and Regulation) Amendment Act 2015, in areas where the existence of mineral contents of any notified mineral is established in the manner prescribed by the Central Government, the State Government shall notify such areas for grant of mining leases for such notified mineral. Accordingly, the mining lease shall be granted by the State Government, within the parameters as may be prescribed by Central Government.

2.1 Exploration of minerals

The Minerals (Evidence and Content) Rules, 2015 prescribe various stages of exploration activities. The exploration for any mineral deposit involves four stages namely, Reconnaissance Survey (G4), Preliminary Exploration (G3), General Exploration (G2) and Detailed Exploration (G1) reflecting the degree of geological assurance.

The Mines & Geology Department had taken up major mineral exploration activities in respect of 17 blocks during the period of audit by utilising the exploration fund of

₹14.88 crore¹⁴. However, the exploration activities for minor minerals was not taken up by the Department.

Section 3.1 of National Mineral Policy¹⁵ (NMP) 2019, states that core function of State in mining would be facilitation and regulation of exploration and mining activities, making provision for development of infrastructure and tax collection. An Annual Business Plan/Road map for the development of mineral sector shall be brought out by the respective States. Mineral (Evidence and Content) Rules 2015 and State Government orders¹⁶ (April 2016) acts as guidance for the exploration activities of major and minor minerals respectively. However, both these rules direct that estimation of Reserve and Resources should be done as per United Nations Framework Classification (UNFC) guidelines¹⁷, 2009.

2.1.1 Formulation of State Mineral Policy

National Mineral Policy¹⁸ (NMP) 2019 was formulated with the objective to have a more effective, meaningful and implementable policy that brings in further transparency, better regulation and enforcement, balanced social and economic growth as well as sustainable mining practices.

The NMP spelt that regional and detailed exploration are to be carried out using state-of-the-art technologies. Extraction of mineral resources are to be taken up to meet the needs of domestic industry for the present and future. An adequate, effective legal and institutional framework promoting zero-waste mining with commitment to prevent sub-optimal and unscientific mining was to be framed. Mining shall be undertaken within the parameters of a comprehensive Sustainable Development Framework to ensure environmental, economic, and social considerations. Mine decommissioning and land reclamation are to be an integral part of mine development process and consistent approaches are to be adopted for efficient and effective mine reclamation and rehabilitation. Research and development in the mineral sector shall cover geological survey, exploration, mining, beneficiation, concentration of minerals to development of materials.

The NMP also emphasised that the core functions of State Government in mining would be facilitation and regulation of exploration, and mining activities, and to bring out an Annual Business Plan/Road map for the development of mineral sector. Grant of clearances for commencement of mining operations shall be streamlined, facilitated through an on-line public portal. Mineral bearing area/zone shall be earmarked as Mining Land in the land record by the States.

Audit noticed that in line with NMP, the Government of Andhra Pradesh (GoAP) had not formulated (except sand and manufacturing sand (M-sand) policy 2016) any Mineral Policy for exploration, extraction and reclamation of mining leases for minor minerals. Further, GoAP had not brought out the Annual Business Plan/Roadmap for development of mineral

¹⁴ MERIT and NMET funds are meant for regional and detailed exploration of the minerals and assessment of mineral reserves. MERIT fund of ₹8.42 crore for 10 blocks and NMET fund of ₹6.46 crore for seven blocks

¹⁵ initially framed in 2008 and subsequently amended in 2019

¹⁶ G.O.Ms.No.56, Industries and Commerce Department (M.II), dated 30.04.2016

¹⁷ UNFC guidelines provide a three-dimensional system which provide estimation for total mineral resources and mineable reserves

¹⁸ National Mineral Policy was initially formulated in 2008

sector as envisaged in NMP. Formulation of Mineral Policy becomes even more important after declaration (in 2015) of 31 major minerals as minor minerals by GoI.

Further, Audit noticed that States like Karnataka, Madhya Pradesh and Rajasthan have already formulated (between 2008 and 2015) State specific Mineral Policy to ensure scientific, systematic and sustainable development of mineral resources in their respective States.

The Director, Mines and Geology (DMG) accepted the audit observation and replied that State Mineral Policy was not formulated.

During the Exit Conference, the Government stated (March 2024) that for major minerals auction process have been adopted and whereas for minor minerals there was no exploration activities involved as Geologist conduct field survey and furnish data related to availability of minerals in the mines. It was further stated that the State does not have Mineral Policy and is studying other States Mineral Policies as well for drawing a Policy for the State.

Absence of State Mineral Policy deprives the State from identifying and utilising mineral wealth/resources optimally in an effective manner. A mineral policy is a road map to explore, extract, and to create opportunities for mining activities and to have sustainable development of the mining sector and the State as a whole.

Recommendation 2.1: *The State Government should formulate the State Mining Policy with better regulations for achieving optimum utilisation of mineral wealth and for ensuring sustainable mining practices.*

2.1.2 Approval of mining plans with incorrect mining resources or reserves

As per UNFC guidelines, mineral resources in an area are classified as Proved, Probable¹⁹ and other possible resources. The Proved and Probable is the economically mineable part of a mineral resource termed as mineral reserve as per UNFC. Only Proved and Probable resources should be considered while approving the mining plan. The details of resources shall be prepared and submitted in Form T²⁰ which shall be scrutinised and approved by Deputy Director, Mines and Geology (DDMG). Mineral reserve estimation has to be done in accordance with UNFC guidelines.

Audit noticed that while approving mining plan for minor minerals, two DDMGs (Kurnool and Kadapa) without verifying the contents of mining plan submitted by the prospective miners had also considered other possible resources in addition to Proved and Probable in respect of seven out of 80 test-checked cases (as detailed in *Appendix I*). Considering the reserves other than proved and probable in the mining plan provides wrong estimation of the mineable quantities, annual production quantity and mining life rather than the actual. The total mineable quantity should have been shown as 86.15 lakh cum (in respect of seven

¹⁹ the minerals of grade 111 are termed as the “Proved Reserve”, which is the economic viable part of the reserve with higher mining confidence based on feasibility study. The grades 121 and 122 termed as “Probable Reserves”, which represent the economic viable part of the reserve with high and moderate levels of mineral confidence respectively based on the prefeasibility study, other Possible resources are an estimate of the amount of mineral that may be available for extraction in an area

²⁰ Form T consists of the mechanism derived by GoAP to prepare the mining plan following UNFC guidelines for estimation of reserve and resources, feasibility report along with the financial analysis as per economic viability of the deposit

cases), however, in mining plan the mineable quantity was shown as 98.37 lakh cum due to incorrect consideration of other possible resources.

Thus, DDMGs have incorrectly approved the mining plans which resulted in incorrect exhibition of mineable quantity and provided scope for excess removal of minerals.

A detailed check of two mining plans revealed lapses on the part of DDMG in approving the mining plan without verifying the quantity of minerals projected by the prospective miner.

Case Study 1

(a) One prospective miner²¹ under the jurisdiction of DDMG Kurnool recorded the total mineral reserve of the quarry as 23,530 cum²² which included the reserve of 5,761 cum other than proved and probable. As per UNFC guidelines the estimated reserve should have been taken as 16,370 cum (22,131 cum²³ - 5,761 cum) excluding other possible resources. Based on the projected annual production of 1,200 cum per year, the mining life was calculated as 18.44 years (22,131/1,200). Considering the reserve other than proved and probable, the mining life should have been 13.64 years (16,370/1200). Thus, the mining life of the quarry was escalated by 4.80 years, thereby the quarry site would be unnecessarily under the custody of miner for additional 4.80 years.

(b) The DDMG is the authority to scrutinise and verify the mining plan for minor minerals. SEIAA being the granting authority of Environmental Clearance (EC) has to verify the correctness of the information produced by the prospective miner.

A prospective miner²⁴ under the jurisdiction of DDMG, Visakhapatnam adopted incorrect reserve quantity of 8,99,031 cum instead of estimated quantity (as per form T) of 2,99,264 cum. The projected annual production was 53,825 cum per year and the mining life was estimated as 17 years (8,99,031/53,825) instead of 5.55 years (2,99,264/53,825). Thereby the mining life was inflated by 11.50 years (as detailed in *Appendix II*). Thus, DDMG, without scrutiny, approved the mining plan with inflated mineral reserve and increased mining life by 11.50 years.

The miner, while applying for EC with SEIAA, submitted the mineral reserve as 5,71,695 cum instead of 2,99,264 cum, annual production as 57,015 cum per year instead of 53,825 cum per year and mining life of 10 years instead of 5.55 years. Thus, the information submitted to SEIAA was different from the approved mining plan. SEIAA²⁵ approved EC for the figures mentioned by the miner without considering the figures mentioned in the approved mining plan.

The DDMG accepted the audit observation and replied that the subject matter would be examined.

²¹ M/s Imperial Granites Private Limited

²² Proved: 12,008 cum; Probable: 5,761 cum; Other than proved and probable: 5,761 cum excluding buffer zone quantity of 1,399 cum i.e., 22,131 cum = 23,530 cum - 1,399 cum

²⁴ M/s Trendset Rocks for Road Metal & Building Stone

²⁵ the lessee should submit the application after grant of EC by SEIAA along with the copy of the Mining Plan

The above case studies show that the mining plans were approved without detailed and proper scrutiny of data/ information submitted by the prospective miners. Further, there was ineffective coordination between the Departments involved in the process for approving of mining plans and granting EC.

The Government replied (January 2024) that instructions²⁶ were issued to all DDMGs in the State to scrutinise the mining plans strictly in accordance with UNFC guidelines while approving the same.

Recommendation 2.2: *The State Government should ensure that mining plans are approved with proper evaluation by competent authority at all levels, to avoid inflated figures of mineral reserves projected by the prospective miners.*

2.1.3 Mechanism for collection remittance and utilisation of exploration funds

National Mineral Exploration Trust (NMET)²⁷ and Mineral Exploration, Research and Innovation Trust²⁸ (MERIT) are two funds created by GoI and GoAP for major and minor minerals respectively. The objective of the two funds is to carry out regional & detailed scientific mineral exploration, research & innovation activities and sustainable mining development by adoption of advanced scientific and technological practices in the mining sector.

(a) Levy, collection and remittance of royalty to MERIT fund

As per GoAP orders issued (January 2016), two *per cent* of Seigniorage Fee²⁹ (SF) shall be collected from minor mineral mining lease holders and remitted to MERIT fund to meet the expenditure for exploration activities of both major and minor minerals.

Despite request made by Audit to furnish information on Seigniorage Fee (SF) collected on minor minerals and remittance of two *per cent* of SF to MERIT Fund, DMG did not furnish the relevant records showing SF earned during audit period. However, statistical data on year-wise collection of two *per cent* of MERIT fund was provided. Due to non-production of records, Audit could not verify the correctness of SF earned on minor minerals and subsequent collection of MERIT.

In the absence of required documents and information, Audit considered the Finance Accounts of GoAP to arrive at the collection for MERIT. As per Finance Accounts, the total SF collection was ₹6,367.87 crore during the period 2017-22 and two *per cent* of SF to be collected for MERIT was ₹127.37 crore. However, as per the information furnished by the Department, only ₹82.31 crore was shown as amount credited to MERIT Fund. Thus, there was a short collection and remittance of ₹45.06 crore (₹127.37 crore - ₹82.31 crore) to MERIT Fund (as detailed in **Appendix III (A)**).

The Government replied (January 2024) that an amount of ₹40.46 crore was collected from other Departments through challans during the period 2017-18 to 2021-22. It was further stated that the levy and collection of MERIT shall take place only whenever the mineral

²⁶ office Memo. No. 19100/IAR/2023, dated 09.01.2024

²⁷ inserted (March 2015) by Ministry of Mines under MMDR Amendment Act, 2015

²⁸ Rule 5 of G.O. Ms. No. 18 Industries and Commerce Department (M.II), dated 13.01.2016

²⁹ seigniorage fee is a charge by the owner (State Government) of the mineral in consideration of exploitation of mineral resource by the lessee

quantity is removed and dispatched from the quarry. Therefore, the dead rent amount lapsed on account of non-dispatch of minerals, would not attract levy of MERIT.

However, Government did not furnish supporting documents for SF collected through challans. Further, the reply of the Government does not quantify the amount of dead rent which lapsed on account of non-dispatch of the mineral.

(b) Collection of royalty from Andhra Pradesh Mineral Development Corporation

As per Para 5(iii) and 6 of GoAP orders issued (January 2016), Andhra Pradesh Mineral Development Corporation (APMDC) shall deposit (from 2016 onwards) 10 *per cent*³⁰ of its sales turnover to MERIT fund in addition to two *per cent* on Seigniorage Fee (SF).

Scrutiny of records of DMG revealed that 10 *per cent* sales turnover from APMDC was not received towards MERIT since 2016. DMG requested (September 2019) APMDC for payment of contribution towards MERIT. In reply, APMDC requested (November 2019) the Secretary (Mines) to exempt from payment, as APMDC was contributing two *per cent* of SF and its financial position was very precarious.

However, no decision had been taken by the Government on the request of APMDC till March 2022. The inaction of the Government resulted in non-collection of MERIT fund amounting to ₹476.55 crore (10 *per cent* of sales turnover of ₹4,765.47 crore) during 2016-22 as detailed in *Appendix III (B)*.

The Government accepted the audit observation and replied (January 2024) that the matter is being pursued with APMDC for payment of 10 *per cent* of the sales turnover

Thus, overall ₹521.61³¹ crore was pending to be credited to MERIT Fund.

(c) Utilisation of MERIT fund

The Mines & Geology Department has a dedicated exploration wing known as MERIT wing responsible for overseeing exploration activities. GoI provides 50 *per cent* of the cost of exploration towards major minerals and balance cost is borne by GoAP out of MERIT fund in addition to minor mineral exploration.

Audit noticed that no expenditure was incurred towards exploration activities for minor minerals during the period 2017-22 out of MERIT fund, despite the Department having a dedicated exploration wing. Out of the total receipts of ₹82.31 crore in MERIT fund, ₹8.43 crore was spent on exploration activities for major minerals and ₹2.56 crore towards administrative expenses during 2017-22 with balance funds of ₹73.91 crore (inclusive of opening balance of ₹2.59 crore) lying in MERIT Fund (as detailed in *Appendix IV*).

During the Exit Conference, the Government stated (March 2024) that exploration activities are being carried out for major minerals, mainly on manganese. For minor minerals, it was replied that no exploration activities are being taken up and Government is disseminating other States Policy on exploration of minor minerals.

Thus, the Department did not focus on utilisation of revenue realised towards exploration activity of minor minerals and a very meagre amount was spent on exploration of major minerals. Further, due to non-receipt of SF amount of ₹521.61 crore, mineral exploration

³⁰ para 5(iii) and 6 of G.O.Ms.No.18, Industries and Commerce Department (M.II), dated 13.01.2016

³¹ ₹476.55 crore + ₹45.06 crore

activities could not be taken up to that extent. The objective of establishing MERIT had not been fulfilled.

Recommendation 2.3: *An effective mechanism needs to be evolved for proper levy, collection, remittance of two per cent of seigniorage fee to designated fund of MERIT and to optimise the utilisation of funds for exploration of minerals.*

2.2 Granting of mining leases

The mining lease is granted (Rule 10(1) to (3)) by GoAP for both major and minor minerals. For major minerals, the granting of mining leases is done through auction process since 2015. In case of minor minerals, the granting of lease was done based on the application received till March 2022 *i.e.*, prior to introduction of Andhra Pradesh Minor Mineral Auction (APMMA) Rules, 2022. The process for granting mining leases is as detailed below.

Sl. No.	Type of Mineral	Procedure to be followed for mining leases
1.	Major minerals	<p>The State Government issues a Letter of Intent (LoI)³² for mining lease to the preferred bidder after complying with various terms and conditions mentioned in the Notice Inviting Tenders issued by DMG.</p> <p>Lessee shall obtain approval of mining plan from IBM and Environmental Clearances (EC) from MoEF&CC / SEIAA / DEIAA and CFE (Consent For Establishment) from APPCB.</p> <p>The ADMG shall execute lease deed after approval of mining lease by State Government.</p>
2.	Minor minerals (Prior to introduction of APMMA Rules, 2022)	<p>On receipt of a valid application for grant of lease, ADMG shall send a copy of the plan along with details of the area applied for, to the Tahsildar concerned for issue of No Objection Certificate (NOC).</p> <p>The Tahsildar concerned shall send report to ADMG within a period of 20 days from the date of receipt. If no report is received from the Tahsildar within the time limit, the matter shall be referred to the Joint Collector, who in turn shall provide NOC for the area within next 10 days.</p> <p>The ADMG shall submit report along with recommendations of the Tahsildar to DMG/DDMG concerned within 15 days from the date of receipt of report from the Tahsildar.</p> <p>The DMG/DDMG shall either issue LoI or make recommendations to Government depending upon the delegation of powers within the period of 30 days.</p> <p>Consequent to the introduction of APMMA Rules 2022, all the previous applications for grant of quarry leases in government lands where LoI was not issued would become ineligible and the granting of the minor mineral mining lease would be through Auction.</p>

³² letter issued by the Department to the applicant as acceptance of Mineral Concession Application, for granting of the mining lease, subject to submission of documents and fulfillment of conditions mentioned therein

On receipt of LoI, the applicant has to approach respective Departments and submit the approved statutory documents³³ within the prescribed time frame³⁴. The Mining Plan and ECs are to be obtained from concerned authorities (as detailed in *Appendix V*).

Consequent to the submission of the statutory documents within the specified time frame, the grant order is issued by the Government/ Department. The lease comes into force from the date of the execution of lease deed.

2.2.1 Lack of data and absence of effective mechanism for granting of leases

As per GoAP orders issued (November 2017) on expeditious disposal of Mineral Concession Applications (MCAs), ADMG is responsible for getting required clearances, execution of lease deeds and collection of statutory levies for minor minerals on receipt of grant orders from lease granting authority. The DDMG is responsible for issue of LoIs for minor minerals, except 31 minor minerals in addition to Marble and Granite and approval of mining plans on receipt of applications from ADMG. The DMG is responsible for issue of LoIs for 31 minor minerals in addition to Marble and Granite on receipt of applications from ADMG with instructions to submit statutory documents and issue of grant order for lease.

(a) Effectiveness in maintenance of data on approval and grant of lease

To ascertain the effectiveness for systems/ process in place from the receipt of applications to granting of leases, the required data was called from the respective sampled offices for the period 2017-22. However, the test-checked offices (except for DDMG, Kadapa and Vijayawada) did not have complete information on receipt of application to granting of leases (as detailed in *Appendix VI (A)*).

Audit noticed the following lapses:

(i) Letter of Intent (LoI) to the lessees should be issued within 75 days³⁵ from the date of receipt of Mineral Concession Applications (MCAs).

During 2017-22, in four³⁶ out of eight ADMGs, 976 MCAs were pending for want of No Objection Certificate (NOC) from the Revenue Department. Further, ADMGs did not forward 372 MCAs to obtain LoI from lease granting authorities (DDMGs/DMG) despite receipt of NOC. The respective ADMGs did not take any action/ did not pursue for disposal of pending MCAs with respective authorities. Due to inaction of ADMGs, MCAs were pending for a period ranging between one to 10 years (as detailed in *Appendix VI (B)*). Out of total 1,348 MCAs (976 + 372), 294 MCAs were pending for more than five years. However, the Department did not furnish reasons for delay in processing of MCAs and also did not record any reasons in the concerned MCA files.

(ii) As per GoAP orders issued (November 2017) on expeditious disposal of MCAs, DDMGs shall inspect the ADMG offices quarterly to ensure that the directions of the Government for timely disposal of applications, are compiled with and the proposals are processed in accordance with the rules and regulations. The pendency in disposal of MCAs

³³ mining plan prepared by a Recognised Qualified Person, Environmental Clearance issued by SEIAA and Consent For Establishment issued by APPCB

³⁴ within one year for proposed lease area upto 25.00 Hectares and within two years for proposed lease area above 25.00 Hectares or within such other period not exceeding one year as may be allowed by DMG

³⁵ 20 days (Tahsildar) + 10 days (Joint Collector) + 15 days (ADMG) + 30 days (DMG/DDMG)

³⁶ Banaganaplle, Kadapa, Kurnool and Yerraguntla

at ADMG level shows that DDMGs are not effectively inspecting the offices of ADMGs in their jurisdiction to ascertain the status of pending MCAs and reasons for delay in disposal of MCAs.

(iii) The ADMGs were monitoring MCAs through excel data which lacked information regarding date of forwarding of MCA for NOC to Revenue Department and to DDMGs/DMG for granting approval for lease. In the absence of complete information, delay at various stages³⁷ could not be established and verified.

(iv) The DDMG Kurnool did not provide any information. In DDMG Kadapa (370 MCAs) and Vijayawada (107 MCAs), out of 477 MCAs received from ADMGs, lease was granted only in respect of 112 leases and other MCAs were pending for want of EC, approval of mining plan by granting authorities, *etc.* In DDMG Visakhapatnam, out of 101 MCAs issued with LoI, lease was granted for only 37 MCAs and status of other MCAs was not available with DDMG (as detailed in **Appendix VI (C)**).

(v) The DMG maintained only the individual files of MCAs received for approval. However, DMG did not have the consolidated data/information on number of MCAs received (from ADMG/DDMG), LoIs issued, approval of mining plans, submission of documents such as EC, pollution clearance certificates, *etc.*, and whether the MCAs were processed within the stipulated timeframe or not.

The Government accepted (January 2024) the audit observation and statements of instruction were issued to process the application in time. Government replied that due to lack of sufficient manpower, the statistical information was not readily available at the time of Audit. However, instructions were issued to the staff in DMG office to maintain the information up to date and produce at the time of Audit.

Thus, it is evident that there was lack of coordination between various levels of approvals and the system of granting of lease was non-transparent. Lack of data on status of MCAs at DMG level, deprives the Department in analysing the problems in early clearance of MCAs for grant of lease. This also indicates an ineffective system of data management and control over it.

(b) Non-functioning of State Coordination cum Empowered Committee

Government of Andhra Pradesh constituted (December 2009) State Coordination cum Empowered Committee (SCEC) under the chairmanship of the Chief Secretary to Government along with Principal Secretaries of concerned Departments³⁸ as member of the committee. The objectives of the SCEC were:

- Coordinate with Revenue Department for managing the land for purposes of concession.
- Ensure clearances/ NOCs/ approvals from Forest, Environment and other Departments in a streamlined way.
- Monitor process of approval of concessions and compliance with concession conditions.

³⁷ receipt of application, pending for NOC, forwarding to granting authority, granting of lease, execution of lease deeds, *etc.*

³⁸ Forest, Revenue, Information Technology and Communication, Industries and Commerce

- Ensure building up of a computerised data base, effectively integrated with other State level databases.

Audit noticed that despite the constitution of SCEC, no meetings were conducted during the period of audit.

The DMG replied that SCEC meetings were not conducted as there was no need for the Committee with the introduction of auction system from March 2022 for minor minerals.

The reply is not acceptable, as SCEC is responsible for monitoring and coordination between various Departments for quick and transparent approval of mining leases. The ineffective functioning of SCEC is one of the reasons for the delay in processing of MCAs and granting of leases.

It is evident from above that despite having a clear roadmap, well established systems and availability of inter-departmental committee, Mines & Geology Department could not ensure speedy and effective clearance of MCAs and granting of leases, thereby impacting mineral exploration and utilisation of mineral resources. One case has been highlighted as a case study below:

Case Study 2

In ADMG Kadapa, an applicant³⁹ applied (December 2014) for grant of quarry lease for removal of colour granite in an extent of 4.615 Hectare. The ADMG recommended (May 2015) for grant of lease to DMG. The DMG issued LoI (May 2015) with a condition to submit statutory documents. Accordingly, the applicant submitted (January 2016) approved mining plan, Consent For Establishment (CFE), Consent For Operation (CFO) and EC. The DMG granted (April 2016) lease for colour granite to the lessee and lease deed was executed (June 2016). Permits were issued for removal of colour granite.

Audit noticed that though LoI and the mining plan issued by DMG was for quarry of colour granite mineral, CFE, EC and CFO obtained from APPCB and SEIAA was for black granite mineral. Thus, DMG without verifying the contents of the application, approved the lease which resulted in mismatch in the mineral to be quarried.

Further, there was rate variation in seigniorage fee between colour and black granite based on their quality and types. The seigniorage fee of Black Granite varies between ₹3,000 to ₹2,350 per cum when compared to colour granite between ₹2,350 to ₹2,000 per cum of similar quality.

The ADMG Kadapa attributed (December 2022) the same to typographical mistake. DMG replied that the environmental authorities would be requested to issue rectified EC, CFE and CFO.

From the records made available, Audit could not ascertain whether the mineral being extracted is colour or black granite to assess the revenue loss to the Exchequer.

It is evident from the above that mining leases were granted by the concerned approving agencies without verifying MCAs in detail, which may lead to loss of revenue to the Exchequer.

³⁹ M/s CTP Granite & Exports

During Exit Conference, the Government stated (March 2024) that earlier there was a committee, however, after introduction of auction process this committee has become obsolete. However, this aspect would be looked into.

Recommendation 2.4: The State Coordination cum Empowered Committee may be made functional to monitor and coordinate between various Departments for timely processing of mineral concession applications to avoid delay in granting of lease.

2.3 Existence of inoperative leases

As per Rule 20 of Mineral (Other than Atomic and Hydrocarbon Energy Minerals) Concession Rules (MCR) 2016 and Rule 17 of Andhra Pradesh Minor Mineral Concession (APMMC) Rules 1966, mining operations should not be discontinued continuously for more than specific time period⁴⁰. The ADMG shall inspect the lease premises and send the proposal to lease granting authority⁴¹ for lapsing of a mining lease. The lease granting authority should act on the lapsed mining proposal received and record through an order issued by the State Government or Department and shall also communicate to the lessee.

The lessee may apply to the Government or Department, explaining the reasons for non-lapsing of lease at least three months (major minerals) or thirty days (for minor minerals) before the expiry of such period. Provided where the lessee has failed to make the application within the time stipulated above, the lease shall lapse on expiry of the period of two years or six months. The role of all the offices in determination and surrender of mining leases is as below:

Name of the Office	Major Mineral	Minor Mineral
ADMG	Initiate and forward the proposals to DMG after inspection and survey. Ensure whether the lessee has cleared all the dues payable to the Government under the lease upto the date of application.	
DDMG	No role of DDMG	Issue orders for minerals other than Marble, Granite and 31 minerals.
DMG	Forwards the proposals along with recommendations to the Government for orders.	Issue orders for Marble, Granite and 31 minerals.

2.3.1 Lack of consistency in data related to inoperative leases

To ascertain the effectiveness of systems/ process in place for the cancellation, lapsing of the mining leases, the required data for the period 2017-18 to 2021-22 was verified (*refer to Table 3.2*). The number of non-working leases as of December 2021 was 268 for major minerals and 2,805 for minor minerals, however, the same was reduced to 42 and 1,495 by the end of September 2022 respectively. The reasons for sudden decrease in number of leases on two different dates was not on record. Further, the action taken on lapsed leases either to renew or terminate duly collecting the revenue in arrears, if any, was not on record.

⁴⁰ discontinued for a continuous period of two years (in case of major minerals leases, 31 notified minor minerals, granite and marble) or six months (other minor mineral respectively)

⁴¹ Government in case of major minerals, DMG in case of 31 listed minor minerals along with granite and marble, DDMG in case of other minor minerals

Further, most of the ADMGs (five⁴² out of eight sampled ADMGs) either did not maintain any information or provided nil information in this regard. Hence, the correctness of the data on lapsed mining leases could not be verified.

During the Exit Conference, the Government stated (March 2024) that difference in figure may be due to Court cases or lease may not be feasible for mining. However, Government have been conducting special drive regarding inoperative leases and a monthly review meeting is being conducted in respect of inoperative lease. The leases which are not working for longer period are being issued notices to go for auction process.

However, the details of special drives conducted or minutes of the monthly review meeting conducted in respect of inoperative leases were not furnished to audit to verify the reasons for abrupt decrease in number of leases. The absence of data at various levels indicates an ineffective system of data management and control over it.

2.3.2 Ineffective system of processing of termination of inoperative leases

The ADMG, Yerraguntla had forwarded (between August to December 2020) proposal for termination/ lapsing of three minor mineral mining leases to DMG as the leases were inoperative. Five ADMGs⁴³ have forwarded (during 2012 to 2021) the proposals for termination/ lapsing of 50 major mineral mining leases to DMG as the leases were inoperative.

Audit noticed that no action has been initiated by DMG on the proposals to lapse inoperative leases submitted by ADMGs (as detailed in *Appendix VII*). Some of the major mineral mining leases were inoperative since 2004. Further, DMG did not have the consolidated data on lapsing/ termination of lease proposals received from ADMGs or the proposals sent to the Government recommending for lapsing of inoperative leases.

The Government accepted (January 2024) the audit observation and stated that the delay was caused due to non-initiation of action against non-working leases, due to lack of procedure and also due to lock down in COVID-19 pandemic.

This shows an ineffective system of coordination between different authorities, monitoring and processing of termination of inoperative leases which resulted in keeping the leases idle without operation. Had timely decision been taken for termination of inoperative leases, the leased areas could have been brought to auction system (after introduction of new Auction Rules, 2022 in respect of minor minerals) in respect of both major and minor minerals for augmenting the revenue.

2.4 Renewal of leases

The renewal process for major and minor minerals leases shall be in accordance with Minerals (other than Atomic and Hydrocarbon Energy Minerals) Concession Rules (MCR) 1960 & 2016 and Andhra Pradesh Minor Mineral Concession (APMMC) Rules, 1966 & 2022 as shown in *Chart 2.1*.

⁴² Anakapalli, Kadapa, Kurnool, Vijayawada and Visakhapatnam

⁴³ Anakapalli, Banganapalle, Kadapa, Kurnool and Yerraguntla

Chart 2.1: Showing the procedure for renewal of major/minor mineral mining leases

RENEWAL PROCESS	
MAJOR	MINOR
Application shall be made to the State Government at least prior to 12 months before the expiry of the lease (MCR 1960).	The application for renewal should be made to DMG at least 12 months prior to expiry of lease for Marble, Granite and 31 minor minerals. In respect of remaining minor minerals to DDMG at least 90 days prior to expiry of lease for renewal.
If the renewal application is not disposed by the State Government, the period of the lease shall be deemed extended by further period till order is passed (MCR 1960).	If the renewal application is not disposed by DDMG /DMG, the period of the lease shall be deemed extended by further period till order is passed (APMMC Rules).
The clause of renewal of the leases was omitted from the Act after the amendment to the Act in 2016 (MCR 2016).	The provisions of the renewal are still in force after the introduction of Andhra Pradesh Minor Mineral Auction Rules 2022.
The leases have to go through auction after expiry of the lease period (MMDR Amendment Act 2015).	

2.4.1 Lack of data and absence of effective mechanism for processing the renewal applications

(a) As per APMMC Rules, 1966, the renewal application received from the lessee prior to 12 months of the expiry of lease should be disposed of before expiry of the lease period. The DMG shall grant renewal for a period not exceeding 20 years subject to adherence to and non-violation of rules during the period of occupation by the lessee.

To ascertain the effectiveness of systems/ process in place for disposal of renewal application (in case of minor minerals), the required data⁴⁴ was called for in respective selected ADMGs/DDMGs and DMG for the period 2017-22.

Audit noticed that only ADMG Yerraguntla had maintained complete information on renewal of leases and other⁴⁵ ADMGs did not maintain the data. The ADMG Vijayawada maintained partial data on renewal of leases. In Yerraguntla, only four out of 44 applications received were granted renewal, 19 were rejected and 21 were still pending for approval. In Vijayawada, only 10 out of 46 applications were granted renewal. Similarly, in DDMGs, 31 out of 135 applications were granted renewal with 47 applications pending for approval (as detailed in *Appendix VIII*). The reasons for pendency and delay in approval of renewal were not on record.

The DMG did not maintain information about the status of renewal of applications for the entire State, instead at the instance of audit, the DMG requested the unit offices to furnish the required information.

In the absence of data availability, effectiveness of the system in place regarding processing of renewal of applications could not be ascertained. Audit could not quantify the number of

⁴⁴ number of applications received, renewal granted, application rejected and application pending

⁴⁵ Anakapalli, Banaganapalle, Kadapa, Kurnool, Nandigama and Visakhapatnam

leases rejected, and quantity of minerals extracted till rejection as the lease is deemed to be continued till final decision is made on the renewal application.

(b) The Rules related to the disposal of the renewal application contradict their own provisions as the renewal applications are to be disposed of by the Department before the expiry of lease period and there is also a provision that the leases shall be deemed to be continued till disposal of the application. The rules and regulations framed should bring better control in functioning of a system.

However, from the above it is seen that the rule of deemed continuation till disposal, is promoting inefficiencies in renewal of applications, allowing the Department to delay the disposal of renewal of applications and authorising the extraction of minerals which otherwise were ineligible for extraction as the same was rejected on a later date as discussed in case study No. 4 under **paragraph No.3.1.4(a)**.

During Exit Conference, the Government stated (March 2024) that after introduction of auction policy (March 2022) all the leases would be treated as deemed renewal. Subsequently, if the lessee goes for renewal, then the lessee has to pay 10 times of dead rent and only on payment of dead rent, the renewal of lease would be allowed.

2.4.2 Continuation of ineligible major mineral mining leases

For major mineral mining leases, GoI amended (Amendment Act, 2015) the Mines and Minerals (Development and Regulation), Act 1957 in January 2015. As per section 8(A), all mining leases shall be granted for a period of 50 years on and from the date of commencement of the Amended Act 2015. All mining leases granted before the commencement of Amendment Act, 2015 shall be deemed to have been granted for a period of 50 years. On the expiry of the lease period, the lease shall be put up for auction as per the procedure specified in this Act.

Further, under section 10(A)(2)(c) where the Central Government has communicated previous approval for grant of a mining lease, or if an LoI has been issued by the State Government to grant a mining lease, before the commencement of Amendment Act, 2015, the mining lease shall be granted subject to fulfilment of the conditions of the previous approval or of LoI within a period of two years from the date of commencement of the Amendment Act 2015.

Audit noticed that in four ADMGs⁴⁶, 14 leases (as detailed in **Appendix IX**) whose lease period expired during July 1987 to August 2014 were neither cancelled nor renewed/processed for allotment through auction as per the provisions of Amendment Act, 2015. Further, LoI was also not issued for these leases by State Government prior to January 2015. However, these were shown under the possession of the lessees in contravention to the Act provisions. Further, 12 out of 14 leases had expired between July 1987 and June 2007 and for the other two leases, neither were renewal applications received nor was LoI issued.

In this regard, Audit scrutinised three cases and observations are enumerated as under.

⁴⁶ Banaganapalle, Kadapa, Kurnool and Yerraguntla

Case Study 3

- (a) A mining lease was granted (December 1982) to a lessee⁴⁷ for extraction of multiple minerals⁴⁸ over an extent of 1,000 acres of government land for a period of 20 years (till December 2002). Meanwhile, 130 acres of land was terminated (June 2001) from lessee for allotment of said land to Telugu Ganga Canal Project (TGCP). Due to construction of TGCP, the lessee could not utilise even the balance extent of land during April 1998 to March 2002. The State Government issued (February 2003) orders and extended the lease for the balance land of 870 acres for four years upto December 2006.

Before expiry of extended lease period, the lessee filed (November 2005) renewal application with ADMG Kadapa. The ADMG communicated (March 2006) to DMG for grant of renewal as the lessee had submitted the mining plan for the period 2006-07 to 2010-11 approved by IBM. The details of grant of renewal of lease by DMG were not on record. The ADMG requested (May 2010) the lessee to erect the boundary pillars around the leased area. The lessee submitted (June 2010) that boundaries cannot be fixed without resurvey of land by the Revenue Department, as Telugu Ganga Canal is passing in the entire area.

The District Collector, Kadapa informed (January 2014) that the Divisional Forest Officer, Proddatur has submitted (January 2014) a detailed report to the District Collector and requested for cancellation of mining lease as the area falls in Reserve Forest area of "Sri Lankamalleswara Wildlife Sanctuary, Proddatur Range". However, final action taken in this regard was also not on record.

Subsequently, GoI has issued (March 2015) Mines and Minerals (Development & Regulations) Amendment Act 2015. As per Section 8(3) of the Act 2015, all the mining leases granted prior to commencement of Act 2015, shall be deemed to have been granted for a period of 50 years. Accordingly, ADMG recommended (July 2015) DMG for deemed extension of lease up to December 2032 (from 1982). The details of extension granted were not on record.

Meanwhile, the lessee approached (April 2015) IBM for approval of mining plan. The IBM rejected (August 2015) the mining plan on the grounds of non-demarcation of the lease area, anomaly in exploration and stated that working of lease without approved mining plan accounts for violation of Rule 13(1) of MCDR, 1988.

The issue of permits was blocked as the lessee did not pay mineral revenue (dead rent, surface rent, cess on surface rent and interest) of ₹41.30 lakh for the year 2015-16. As of March 2017, the arrears of mineral revenue increased to ₹44.78 lakh.

⁴⁷ V. Surya Prakash

⁴⁸ china clay, white clay, limestone, black marble, white shale and yellow ochre in the Survey Number 569 of Pullur Village, Khajipeta Mandal, Kadapa District

Finally, re-survey of leased area was completed in March 2018 and the mining lease area of 870 acres was demarcated. Meanwhile, the lessee expired (September 2018) and consequently, ADMG declared (December 2018) the successor⁴⁹ of earlier lessee as lessee of the mining lease. The ADMG belatedly recommended (January 2019) DMG to consider first renewal of mining lease for a further period of 20 years from December 2006 for an extent of 870 acres based on the revised sketch/ survey and to consider for extension of lease period upto 50 years from the date of initial grant of lease in the name of the successor lessee.

The ADMG after conduct (July 2021) of inspection of the site, noticed violations⁵⁰ and breaches committed by the lessee, and has sent (August 2021) a proposal to DMG for cancellation/lapse of the mining lease as the lessee has not paid the advance dead rent for the year 2021-22 and outstanding mineral revenue arrears accumulated to ₹1.09 crore as of March 2021.

Audit noticed that:

- As per Rule 22(4) of MCR, 1960, the State Government shall take decision to grant precise area for precise purpose and communicate such decision to the applicant. On receipt of the communication from the State Government of the precise area to be granted, the applicant shall submit a mining plan within a period of six months, or such other period as may be allowed by the State Government.

However, the Department despite knowing the fact that the extent of land measuring 130 acres was transferred (in June 2001) for TGCP, did not resurvey and demarcate the balance extent of land measuring 870 acres in favour of the lessee and did not enter into supplementary lease deed. The renewal application submitted (November 2005) by the lessee was not renewed and the Department allowed the lessee for extraction of minerals during December 2006 to September 2012.

- Despite rejection (August 2015) of mining plan by IBM, on the grounds of non-demarcation of the lease area, the Department did not initiate any action to either demarcate the lease area or to terminate the lease.
- The entire mineral bearing area was kept idle without operating the mine and was blocked, thereby causing loss of revenue to the State Government. Despite violation committed by lessee and non-payment of arrears pending since 2015, the mining lease was not cancelled as of January 2024. The details of outstanding revenue realised were not on record.
- In 2018, ADMG sent proposals for cancellation of lease due to non-payment of arrears and subsequently, in 2019, recommended for deemed extension in favour of successor of the lessee. In 2021, ADMG sent proposals to DMG for termination of lease due to breaches⁵¹ noticed.

⁴⁹ V. Jaswanth (S/o V. Surya Prakash) being successor to late Sri V. Surya Prakash

⁵⁰ the lessee has not conducted mining operations since April 2015 *i.e.*, more than six years and the lessee has not obtained dispatch permits since May 2015

⁵¹ not operating for more than six years, not obtaining the dispatch permit since 2015, not having EC, CFE, CFO and pending arrears, *etc.*

	Different course of proposals made at different times shows lack of commitment on the part of Department to settle the issue of demarcation of leased area and either to continue with the lease or to terminate. This caused idling of land without generating revenue.
(b)	A lease was granted (June 1987) to a miner ⁵² for an extent of 7.45 hectares over a period of 20 years (upto June 2007) for mining lease. Subsequently, the lessee applied (August 2006) for renewal of the lease for a further period of 20 years after the stipulated date. The ADMG submitted (June 2008) rejection proposals for renewal of lease to DMG. Action taken by DMG was not on record. Further, ADMG submitted (October 2012) the lapse proposals to DMG, as the lessee was not operating the mining lease since November 2004. Further, ADMG proposed (November 2018) not to consider for deemed extension of the lease ⁵³ . However, no action had been taken by DMG on the proposals as of March 2022.
(c)	A miner ⁵⁴ was granted (May 1978) a mining lease for limestone over an extent of 20.785 hectares for a period of 20 years (upto April 1998). The lessee filed application for renewal of lease (February 1997). The action taken by the Department in this regard was not on record. As the lessee had stopped operation since 2000, ADMG had sent proposals belatedly in August 2012 for lapse of lease with effect from November 2002 to DMG. However, no action was taken by DMG. Further, ADMG proposed (April 2018) not to consider for deemed extension as lease was not in operation, not having mining plan, EC and dues were payable to the Government. However, no action had been taken by the Department yet. Audit noticed that in both the cases (b) and (c) though ADMG had sent proposals for rejection of renewal application, DMG had not taken action to lapse the leases.

In the above cases, instead of lapsing the lease and proceeding for auction as per amended Act 2015, the Department allowed the ineligible lessees to continue the possession of mining areas. This inaction of the Department not only resulted in preventing the Department to proceed for auction of the said premises but also resulted in loss of revenue.

The Government replied (January 2024) that lease period in respect of eight leases⁵⁵ had been extended as per Government order (January 2023)⁵⁶ for 50 years under section 8(A)(5) of MMDR Act, 2015. In respect of remaining leases, Government replied that action is yet to be taken as per rules.

However, Government did not furnish copies of orders issued for renewal of leases. Further, it was evident that the ineligible leases continued without any proper action.

Recommendation 2.5: *The State Government should ensure that the Mines and Geology Department periodically reviews and renews the leases within the lease period and resumes inoperative mining areas to avoid unauthorised mining activity beyond the lease period.*

⁵² Smt. V. Krishna Veni for limestone (Survey Number 545/4) of Velpula Village, Vemula Mandal as the lease was not in operation, not having mining plan, EC and dues payable to the Government

⁵⁴ Sri S. A. Saleem (Sy. No. 279/1, 284 & 292/B) of Velpula Village, Vemula Mandal

⁵⁵ M/s Panyam Cements & Minerals Industries Limited and V. Surya Prakash

⁵⁶ G.O.Ms.No.5, Industries and Commerce Department (M.III), dated 25.01.2023

2.4.3 Non-registration of lease deeds

Section 8A (5) of MMDR Act 2015, stipulates that where mineral is used for captive purpose, period of lease shall be extended and be deemed to have been extended up to a period ending March, 2030 with effect from the date of expiry of the period of renewal last made or till the completion of renewal period, if any, or a period of 50 years from the date of grant of such lease, whichever is later. The GoAP amended⁵⁷ (March 2022) the Rule 4 of APMMC Rules 1966 mandating the extension of all existing minor mineral mining leases up to 31 March 2023.

As per Rule 7(13) of MCR 2016, the date of commencement of a mining lease shall be from the date of registration of mining lease deed. The lease deed must be executed within 30 days from the date of grant/renewal of lease for major minerals, 60 days in respect of Granite, Marble and 31 minerals and 90 days for other minor minerals. Further, as per Section 17 of Indian Registration Act, 1908, any lease beyond the period of one year shall compulsorily be registered. Stamp duty at the prescribed rates⁵⁸, depending upon the period of the lease, must be collected on leases, as mentioned in the Indian Stamp Act⁵⁹.

Audit noticed that during 2017-18:

- In four out of eight sampled ADMGs, for 31 out of 148 limestone (major mineral) leases, the lease deeds were not executed and registered under Registration Act (as detailed in *Appendix X (A)*). This resulted in loss of revenue of ₹16.25 crore to the Exchequer towards stamp duty and registration fee.
- In two out of eight sampled ADMGs, for 37 out of 503 minor mineral mining leases, the lease deeds were not executed and registered under Registration Act (as detailed in *Appendix X (B)*). This resulted in loss of revenue of ₹32.95 lakh to the Exchequer towards stamp duty and registration fee.

The concerned ADMGs (Kadapa, Kurnool, and Banaganapalle) replied that lease deed would be executed after receipt of the orders from the higher authorities.

- The DMG did not have the information of number of leases for which deeds have been executed/not executed in the State. During the Exit Conference, the Government stated (March 2024) that the issue would be examined.

Thus, non-registration of lease agreement not only postponed the accrual of revenue to the State Exchequer but would also allow the lessees to violate contractual obligations. Further, non-maintenance of data at DMG office showed that the monitoring mechanism in the Department is ineffective.

Recommendation 2.6: *The State Government should ensure that all the mining lease deeds are executed and registered under the Stamp Act to avoid loss of revenue to Exchequer.*

⁵⁷ G.O.Ms.No.13, Industries and Commerce Department (M.III), dated 14.03.2022

⁵⁸ for lease period exceeding five years and up to 10 years: two *per cent* on Average Annual Rent (AAR), for lease period exceeding 10 years and up to 20 years: six *per cent* on AAR, for lease period exceeding 20 years and up to 30 years: 15 *per cent* on AAR and for lease period exceeding 30 years: three *per cent* of the Market value. Registration fee is 0.1 *per cent* of AAR

⁵⁹ article 31 of Schedule I-A to Indian Stamp Act, 1899

Chapter III

Removal of Minerals and Realisation of Associated Revenues



Chapter III

Removal of minerals and realisation of associated revenues

Contrary to the directions of the Hon'ble Supreme Court, the Department allowed excavation of minerals without and in excess of quantity mentioned in environmental clearance. Minerals required for government works were extracted without required clearance certificate from the Mines and Geology Department. As a result, the quantum of seigniorage fee to be received from user Departments is not known and provides scope for illegal excavation of minerals. Mineral Revenue Assessments and Demand Collection Balance, the critical records to assess the types of minerals, quantities removed, revenues realised and pendency were not prepared regularly either manually or digitally. There was delay in implementation of levy of annual compensation fee, non/short levy and collection of dead rent at the enhanced rate. The minor mineral was treated as major mineral despite clarification given by Indian Bureau of Mines resulting in loss of revenue. The very objective of collection of security deposit and financial assurance is to act as deterrent, in case of breaches of contractual obligations and non-fulfilment of the mine closure plan. However, there was short collection or non-forfeiture of security deposit.

The lessee commences removal of minerals from the mines after obtaining necessary statutory clearances, approval of mining plan and grant of lease by the competent authority. The annual quantity fixed in the mining plan is the maximum permitted quantity of the mineral that can be extracted and transported from the mines.

Initially, the lessees have to pay a security deposit at the time of registration of lease deed. Dead Rent⁶⁰ for the first year shall be paid by the lessee at the time of execution of lease deed and in advance for the subsequent lease years. After extraction of minerals and while obtaining permit⁶¹, the lessees have to pay seigniorage fee/ royalty, exploration fund (NMET and MERIT), amount towards District Mineral Foundation⁶² (DMF), Consideration⁶³ amount, *etc.*, on the quantity and type of mineral proposed for removal in the permit.

The role of the Mines & Geology Department and other regulatory authorities for the grant of permits for removal of minerals, collection of revenues and inspection of mining leases is as shown in *Chart 3.1*.

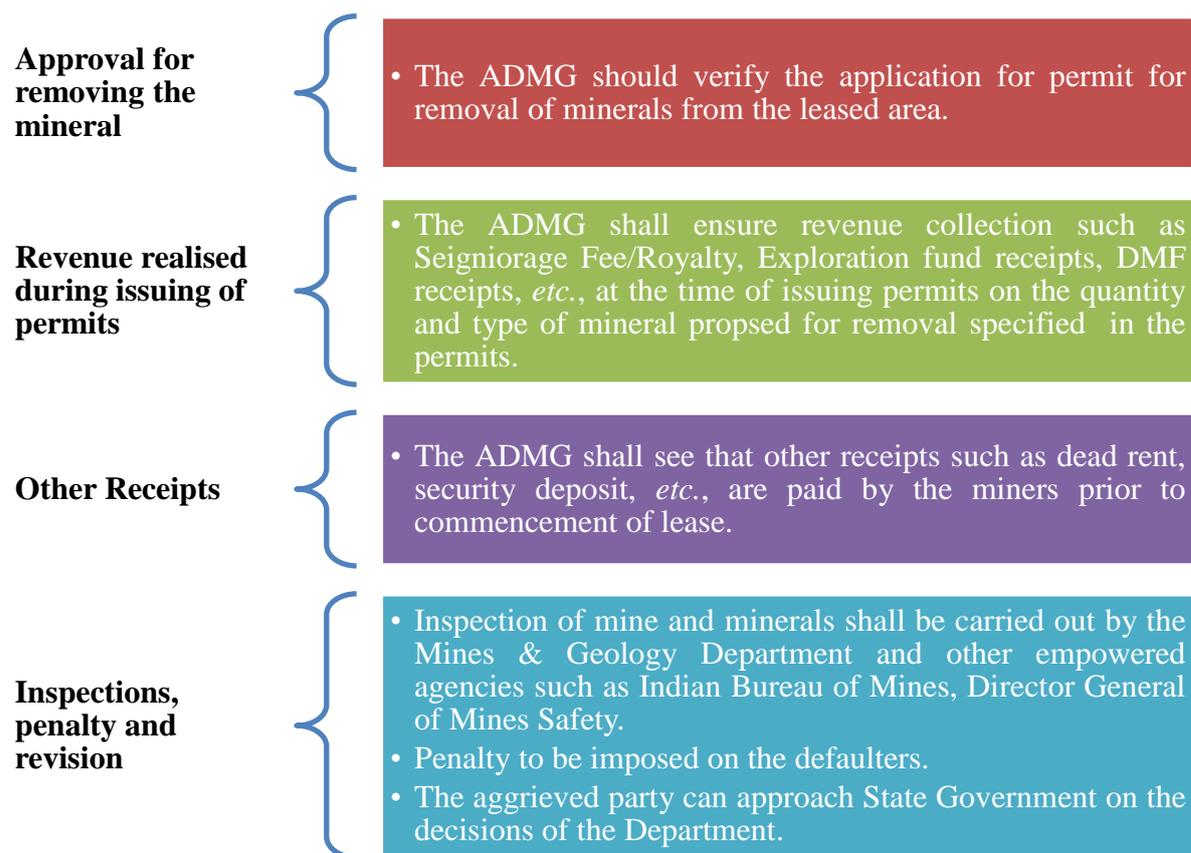
⁶⁰ dead rent is the minimum amount to be paid for the lease at the specified rates for different minerals

⁶¹ the permission taken by the lessee for dispatch of mineral is known as permits

⁶² the amendment in 2015 to MMDR Act brought the provision for establishment of District Mineral Foundation for the welfare of mining affected areas by using contributions from the mining activities

⁶³ levied (from June 2021) as per G.O Ms.No.42 at the time of issuing permit for minor minerals to mitigate the impact of disaster and epidemic by providing rehabilitation/ employment, health infrastructures, *etc.*

Chart 3.1: Showing the role of Mines & Geology Department in removal of minerals



3.1 Process and system for removal of minerals

As per Rule 34 of APMMC Rules 1966, the lessee needs to obtain permit from ADMG before removal of minerals from the granted lease area and after payment of the statutory levies. The application for the permit should contain information related to lease, type of mineral, extracted quantity, transportation of minerals, payment particulars and purpose⁶⁴ of extraction. Upto November 2014, these permits were issued through manual process.

In order to streamline the system, to make the process of issuing permits time efficient and to decrease the manual interventions in issuing the permits, GoAP launched (December 2014) Online Mineral e-Permit System (OMEPS) or e-permit system. OMEPS enables the lease/stake holders to take the permission for dispatch of mineral from their leased areas to stocks points or end user in Online mode.

3.1.1 Implementation of e-permit system

In e-permit system, details of the leases are compiled and uploaded by the Department and the lessees are provided with login credentials for application of permits. The levies to be paid are generated automatically for online payment by the lessee, after validation of the details filled. The permits are generated by the system automatically for despatching/transportation of the mineral.

Audit noticed that:

⁶⁴ own consumption or for sale. In case of sale, the name and address of the purchaser should be furnished

- The Department allowed permits in two modes *i.e.*, auto e-permit and normal e-permit. In auto e-permit, where the lessees have all statutory clearances, requisite information and receipt of payments, permits were generated automatically to despatch the minerals from the lease area. However, where there was no internet connectivity and leases where SEIAA clarified that EC for the leases is not required, normal e-permit system *i.e.*, manual intervention was followed. In these cases, the lessees can approach ADMGs for issue of normal e-permits.
- For minerals used in government works, the e-permit system was not followed, and the contractors engaged by Works/Engineering Departments were allowed to lift the mineral through manual procedure as was being followed since March 1999 (*detailed procedure discussed in paragraph 3.1.4*).
- Though there was increase in issue of auto e-permits compared to normal e-permits during 2017-22, still normal e-permits were continued as detailed in **Table 3.1**.

Table 3.1: Details of revenue realisation by both modes of e-permits

(₹ in crore)

Year	Number of e-permits			Revenue realised from			Total Revenue realised
	Auto	Normal	Total	Auto e-permit	Normal e-permit	Permits for Government works	
2017-18	3,368	31,661	35,029	314	621	454	1,389
2018-19	8,889	29,722	38,611	576	457	483	1,516
2019-20	24,823	20,945	45,768	804	250	422	1,476
2020-21	33,238	12,713	45,951	866	188	340	1,394
2021-22	40,157	10,499	50,656	990	166	432	1,588
Total	1,10,475	1,05,540	2,16,015	3,550	1,682	2,131	7,363

Source: Online mineral e-permit system (<https://www.mines.ap.gov.in/permit/>)

It can be seen from the above table that there was an increasing trend in revenue generation through auto e-permit system. This is a progressive step towards improving transparency and accountability in granting of permits.

Thus, despite lapse of more than eight years from the date of introduction of e-permits, the Department did not take steps to minimise the issue of normal e-permits to have transparency in issue of permits, revenue collection and avoid any kind of manual intervention.

During Exit Conference, the Government stated (March 2024) that without EC, the Department cannot issue permit as stated in the departmental manual. However, Government assured that the details mentioned in the audit observation would be verified and a detailed reply would be furnished.

3.1.2 Lacunae in e-permit system

The Online Mineral e-Permit System (OMEPS) facilitates the lessees to apply and obtain permits remotely as and when required on payment of all the statutory levies electronically and further allows the Department to deposit revenues to various heads. The system calculates revenues based on specific rates fixed by the Government from time to time. However, Audit noticed some deficiencies in OMEPS as detailed below.

(a) Discrepancies in data

The OMEPS portal depicts the list of leases on any given day and is updated by the authorised officials of DMG office.

The status of leases in the entire State on different dates of visit by Audit Team (as of 30 December 2021 and 27 September 2022) to DMG Office revealed variation in data maintained manually and in OMEPS as shown in **Table 3.2**.

Table 3.2: Showing the details of mining leases in the State

Date	Source	Major Mineral Mining Leases			Minor Mineral Mining Leases			Total leases
		Working	Non-working	Total	Working	Non-working	Total	
30 December 2021	DMG	166	268	434	2,791	2,805	5,596	6,030
	OMEPS portal	131	51	182	2,096	1,136	3,232	3,414
	Difference	35	217	252	695	1,669	2,364	2,616
27 September 2022	DMG	132	42	174	2,795	1,495	4,290	4,464
	OMEPS portal	143	40	183	2,260	1,225	3,485	3,668
	Difference	(-11)	2	(-9)	535	270	805	796

Source: Information provided by the Department and OMEPS portal of Mines and Geology Department

The above table indicates the inconsistencies of data between the manual records and OMEPS portal being maintained by DMG. This also indicates that the Department has no system to correctly ascertain basic details of number of working/non-working mining leases to assess the revenue realised and to be realised.

The response of the Government is awaited.

(b) Short collection of revenue due to non-adoption of higher value

As per Government orders⁶⁵, Seigniorage Fee (SF) for the Limestone Slab Black (minor mineral) applicable during the audit period (2017-22) is as detailed below:

From	To	Rate applicable (whichever is higher)
03.11.2016	10.02.2020	₹five per Sq. m or ₹100 per Metric Tonne (MT)
11.02.2020	31.03.2022	₹six per Sq. m or ₹110 per MT

The Government order stipulated that the higher rate between the two measuring units (Sq. m or MT) should be adopted for calculation of SF.

Scrutiny of records of ADMG Banaganapalle, revealed that for conversion of Sq.m to MT, ADMG had adopted a conversion factor of one MT equal to 14 Sq.m. Further, scrutiny of Mineral Revenue Assessment (MRA) of nine lessees revealed that the e-permit system was not programmed with the facility to convert one unit to another. As a result, the value of the mineral in auto e-permit system was arrived at, without adopting higher of the two rates, based on the rates of measurement units provided by the lessee.

⁶⁵ G.O. Ms. No. 100 Industries and Commerce Department (M.I), dated 31.10.2015, G.O. Ms. No. 156, Industries and Commerce Department (M.II), dated 03.11.2016, and G.O.Ms.No.11 Industries and Commerce Department (M.II), dated 11.02.2020

Audit calculated SF and noticed that there was short levy of SF of ₹80.25 lakh due to non-adoption of higher rate using conversion factor (One MT = 14 Sq. m) during 2017-22. Consequently, DMF (10 per cent of SF⁶⁶) and MERIT (two per cent of SF) were also short levied by ₹eight lakh and ₹1.60 lakh respectively (as detailed in **Appendix XI**).

The ADMG replied (December 2022) that MRAs would be revised and the amount would be collected.

During the Exit Conference, the Government stated (March 2024) that the Department had taken initiatives to get the accuracy of minerals removed, however, there was resistance from the lease holders. As a result, the Department was unable to measure the minerals removed/dispatched. However, MRAs would be verified and detailed reply would be furnished.

Thus, lack of required provisions in auto e-permit software resulted in a short levy of SF and associated revenues.

(c) Provision for auto deduction of amount towards exploration funds

Scrutiny of e-permit system or OMEPS revealed that for some of the minerals though royalty/SF were collected through online system, there was no provision for levy and collection of the corresponding NMET⁶⁷/MERIT while issuing permits. The non-provision of NMET/MERIT in e-permit system resulted in non-deduction of NMET (₹61 lakh) and MERIT (₹0.59 lakh) receipts of ₹62.08 lakh (as detailed in **Appendix XII (A) & (B)**) for the period 2017-22.

Automatic non-deduction of NMET and MERIT, while issuing permits is a serious lapse in the design of e-permit system.

During the Exit Conference, the Government stated (March 2024) that NMET and MERIT were collected manually, however, now a provision has been inserted in the online portal to collect NMET/MERIT in e-permit system.

However, Government did not furnish any convincing document to show that NMET and MERIT were collected manually and also proof that a provision has been made in the online portal for levy and collection of NMET and MERIT.

3.1.3 Non-adherence to Supreme Court directions

In compliance to Hon'ble Supreme Court of India orders (February 2012), the Ministry of Environment & Forests (MoEF), GoI informed (May 2012) all State Governments that all leases, irrespective of the size of the leases and nature of mineral henceforth would require prior Environment Clearance (EC). For minor minerals with lease area less than five hectares, the respective State Environment Impact Assessment Authorities (SEIAAs) would issue EC as notified by MoEF. The same was again reiterated in January 2016 by MoEF.

The Hon'ble Supreme Court of India held⁶⁸ (August 2017) that extraction of mineral over and above what is permissible under the mining plan or under the EC undoubtedly attracts the provisions of penalties (Section 12 (5) of MMDR Act). Further, penalty under the

⁶⁶ G.O. Ms. No. 157, Ind & Com.(M-II) Dept, dated 03.11.2016

⁶⁷ GoI Notification vide GSR 632(E) dated 14.8.2015, levied at two per cent of royalty collected on major minerals

⁶⁸ common cause vs the Union of India vide W.P.(Civil) No. 114/2014 dated 02.08.2017

provisions is applicable when any person raises, without any lawful authority, any mineral from any land. In that event, the State Government is entitled to recover from such person the mineral so raised or where the mineral has already been disposed of, the price thereof as compensation.

(a) Removal of mineral without Environmental clearance

As per the direction (February 2012/August 2017) of the Hon'ble Supreme Court, irrespective of size of the mining lease area, the quarrying /extraction of mineral is permitted only if prior EC has been obtained from the concerned authority and drawal of quantity in excess of permissible quantity as mentioned in mining plan is not allowed. The non-compliance shall be treated as illegal and penalty as per the provisions of the Act is to be levied.

Scrutiny of records of Mines & Geology Department revealed that the mining leases were categorised as leases of less than five hectares and more than five hectares.

Audit noticed that in contravention to the Hon'ble Supreme Court directions, three⁶⁹ ADMGs, allowed 55 lessees having lease area less than five hectares to remove minerals without obtaining ECs during the audit period. Similarly, seven ADMGs⁷⁰, allowed 104 lessees having lease area of more than five hectares to remove minerals without having ECs during 2017-22. The removal of minerals without obtaining ECs should have been treated as illegal.

However, the Department had not treated the removal of mineral without EC as illegal and had not recovered the cost of the mineral which resulted in non-levy of penalty⁷¹ of ₹19.74 crore in case of three minor minerals for area less than five hectares (as detailed in *Appendix XIII(A)*) and ₹229.47 crore in case of eight minerals for area more than five hectares (as detailed in *Appendix XIII(B)*). The Department should fix responsibility on the concerned officials for allowing removal of minerals by lessees without obtaining EC.

In response to Audit observation, SEIAA replied (April 2023) that the Hon'ble Supreme Court orders are valid for all leases operated irrespective of the extent of the lease or the lease granted before specific date. The reply of SEIAA is commensurate with the observation made by Audit.

During Exit Conference, the Government stated (March 2024) that due to miscommunication between SEIAA and the Department, penalty was not being imposed. The Government stated that all such issues would be reviewed and detailed reply would be furnished.

⁶⁹ Banaganapalle, Kurnool and Nandigama

⁷⁰ Anakapalli, Banaganapalle, Kadapa, Nandigama, Vijayawada, Visakhapatnam and Yerraguntla

⁷¹ penalty at the rate of the prevalent rule i.e., five times of the normal seigniorage fee. Normal seigniorage fee at the time of the audit was taken for the calculation

(b) Removal of mineral more than the quantity permitted

Audit noticed that during 2017-22 in three ADMGs⁷², four lessees have excavated minerals (Road metal and Gravel: 1,70,722 cum and Yellow Ochre: 30,350 MT) in excess of the quantity mentioned (Road metal and Gravel: 66,087 cum and Yellow Ochre: 19,950 MT) in EC. The excess quantity removed should have been treated as illegal as per the Hon'ble Supreme Court orders. As such, the lessee should be penalised for the excess quantity excavated. The cost of minerals that has to be recovered from the lessee as penalty amounts to ₹4.94 crore (as detailed in *Appendix XIV*). The Department should fix responsibility on the concerned officials for allowing removal of minerals by lessees in excess of permitted quantity.

During Exit Conference, the Government stated (March 2024) that due to remote location of lessee and lack of internet connection, removal of minerals more than quantity permitted occurred and due to lack of infrastructure, exception to the lessees are given. However, Government stated that a detailed reply would be furnished.

Allowing the lessees to extract minerals in excess of the quantity mentioned in EC shows lack of monitoring mechanism on the part of the Department.

3.1.4 Utilisation of minerals for government works

For minerals to be used in government works, the procedure detailed (March 1999)⁷³ by GoAP is being followed. As per the laid procedure, the contractors engaged by Works/Engineering Departments can lift the mineral without the production of clearance certificate from the Mines & Geology Department. Further, SF is deducted by the concerned Works/Engineering Department from the bills of the contractor for the minerals used in the works and subsequently, remitted to DMG account.

(a) Absence of monitoring mechanism for minerals consumed in government works

Audit noticed that the procedure followed for removal of minerals used in government works was in contravention to the procedure mentioned in rule 10(3)(b) of APMMC Rules, 1966. The rules stipulate that a statutory levy (Seigniorage Fee, Dead Rent, *etc.*) shall be paid by lessee before the mineral is removed from the leased area along with permit.

Due to the procedure of lifting of the mineral without permits/clearance certificate being followed for minerals used in government works, ADMGs were unaware of the nature and quantity of minerals utilised in government works along with SF to be received against the amount received.

The ADMG Kadapa and Yerraguntla replied (December 2022) that SF is being deducted by the consuming Departments from the work bills of the contractors and credited to the Mines & Geology Head of Accounts. The DMG stated that there is provision to deduct SF by the concerned Engineering Departments from the running account bills of the concerned works.

In the absence of information on nature and quantity of minerals removed/used, the revenue realised from the Engineering Departments (Water Resource Department, Roads &

⁷² Anakapalli, Visakhapatnam and Yerraguntla

⁷³ G.O. Ms. No. 23, I&CAG (PW: COD) Department, dated 05.03.1999

Buildings, etc.) could not be ascertained. Hence, the revenues receivable for minerals utilised for government works cannot be ascertained.

Further, Audit noticed that in case of permit system, revenues are realised prior to extraction/transportation of minerals. However, in respect of government works, revenues were realised after consumption of minerals which defers the revenue receipts of the Department. There was no mechanism in place to inspect extraction and subsequent transportation of minerals from lease area to work spot to prevent any instances of mis-utilisation/illegal utilisation of minerals, if any.

The absence of monitoring mechanism is encouraging the possibilities of illegal mining activities and the Department is not in a position to ascertain the legality of minerals extracted without permits, as is evident from the case study made in this regard.

Case Study 4

In ADMG Kadapa, a lease was granted⁷⁴ (March 2009) for a period of 10 years for quarrying road metal and building stone in seven acres of land. Prior to termination of lease period (March 2019), the lessee applied (January 2019) for renewal of lease within the prescribed time. Accordingly, inspection of the leased area was conducted (June 2019) by the Mines & Geology Department. During inspection, the Department measured the pits and noticed that the extracted quantity (65,329.99 cum) from the lease area was more than the quantity allowed in permit (20,642.00 cum) obtained by the lessee during the same period.

The lessee replied that the excess quantity of road metal of 44,687.99 cum was supplied to various contractors for use in government works. The Department enquired (July 2019 and June 2022) the concerned Engineering Departments to confirm the genuineness of the material used in the government works. However, there was no response from the Engineering Departments.

Pending receipt of response from Engineering Departments, the Department issued (July 2019) LoI to the lessee and granted (January 2021) renewal of lease (effective from May 2019) for another 15 years. Further, in the absence of the report related to the mineral utilised from the Engineering Departments, ADMG issued (December 2021) demand notice for payment of penalty of ₹2.94 crore towards SF together with five times of penalty, DMF, MERIT and consideration amount for the excess dispatched quantity of road metal. Subsequently, the renewal of lease granted (February 2022) was cancelled as the lessee failed to execute the quarry lease deed within the stipulated period.

The action taken against the lessee by the Department for collection of SF, penalty, etc., as mentioned in demand notice was not on record.

Thus, due to lack of mechanism for monitoring minerals removed and utilised in government works, the Department failed to identify the excess/unauthorised extraction of mineral over the permitted limit and lost the opportunity to curb revenue loss. Such incidents also give an opportunity to lessees to extract excess minerals over the permitted limit by stating that the excess mineral was removed for government works.

⁷⁴ in Survey Number 1596 of Gopagudipalli village, Ramapuram mandal

During Exit Conference, the Government accepted (March 2024) that this was the earlier practice, as per the orders issued in March 1999. It was further stated that Inter-departmental committee has since been constituted to look after mineral consumed in other Departments. The Department is also developing a portal that would sort out all these issues. The software to be developed would contain details of minerals consumed in other Departments.

(b) Non-realisation of DMF and MERIT for minerals consumed in government works

As per DMF Rules (GoAP orders issued in March 2016), all lease holders of major/minor minerals shall, in addition to royalty/SF pay to the respective DMF, an amount equivalent to 30 *per cent* of royalty/SF, if the lease has not been granted through auction. If the lease has been granted through auction, 10 *per cent* of royalty/SF would be levied. As per MERIT Rules, all lessees of minor minerals shall pay two *per cent* of SF at the time of removal of minerals for all permits issued from 2016 onwards. The rules do not provide any specific exemptions for levy and collection of DMF and MERIT for government works.

Audit noticed that:

➤ DMF and MERIT at prescribed percentages were not levied and collected from the contractors of government works by the concerned Engineering⁷⁵ Departments. As a result, there was non-levy and collection of DMF of ₹639.30 crore⁷⁶ and MERIT of ₹42.62 crore during 2017-22 (as detailed in *Appendix XV*).

➤ In other States⁷⁷ of the country, DMF was levied and collected for minerals consumed in government works without any specific exemption.

Thus, there was a loss of ₹681.92 crore due to non-levy of DMF and MERIT on the minerals used in government works.

During Exit Conference, the Government stated (March 2024) that after introduction of DMF and MERIT, initially DMF and MERIT were collected from the private party, however, not from other Government Department. The Government also stated that now, a portal is developed to estimate minerals consumed in other government works and integrated with government portal to streamline the process.

Recommendation 3.1: The State Government may revise the previous orders for removal of minerals, without clearance certificate for minerals utilised in government works, to avoid any kind of illegal excavation and to account for the minerals with definite revenue realisation.

⁷⁵ Water Resources Department, Roads & Building Department, APIIC, Polavaram Irrigation Project, etc.

⁷⁶ Seigniorage Fee realised during 2017-22 under government works was ₹2,131 crore

⁷⁷ Kerala, Karnataka, Telangana, Odisha, Maharashtra, Chattisgarh, Jharkhand and Goa

3.1.5 Short levy of penalty due to incorrect adoption of rate

In case of minor mineral mining leases (provisions as stipulated in Rule 26 of APMMC Rules, 1966), if any person carries out quarrying operations or transports minor minerals without any lawful authority, the penalty shall be levied at 10 times of SF along with normal SF (as amended by Government order July 2020).

Audit noticed that in ADMG Banaganapalle, penalty was imposed (January-March 2022) on 10 lessees for extracting and transporting minerals without permits. However, it was noticed that the penalty was incorrectly calculated based on the quantity measured in Sq.m instead of MT being higher of the two measuring units (*refer paragraph 3.1.2 (b)*). The rate of SF leviable for the minor mineral (LSS Black)⁷⁸ was ₹six per Sq.m or ₹110 per MT, whichever is higher. The non-compliance of stipulated rule to levy the higher rate resulted in short levy of penalty by ₹4.43 crore as detailed in *Appendix XVI (A)*.

Consequently, the short collection of SF in the form of penalty also resulted in short levy of DMF and MERIT of ₹three lakh and ₹0.60 lakh respectively. Further, consideration amount⁷⁹ was also not levied for the penalties amounted to ₹1.27 crore as detailed in *Appendix XVI (B)*. The adoption of incorrect rate resulted in a total non-levy of ₹5.73 crore⁸⁰ of penalty.

The Government accepted (January 2024) the audit observation and demand notices in respect of 10 defaulters were issued.

3.1.6 Non-assessment of DMF and MERIT

Government introduced DMF Rules⁸¹ in 2016 wherein it was mentioned that an amount at the rate of 30 *per cent* of SF/Royalty was to be levied and collected for the mineral extracted from the leases granted without auction and at 10 *per cent* for the leases granted through auction towards DMF. Further, DMF rates for granites were fixed at 12.5 *per cent* of SF during audit period⁸² and MERIT has to be levied at two *per cent* on SF.

Audit noticed that in four ADMGs⁸³ in 71 penalty cases (for different minerals) for various offences, the normal SF and penalty were levied and collected at applicable rates. However, the corresponding DMF and MERIT, which are charged on the normal SF, were not levied (as detailed in the *Appendix XVII*). The non-levy of DMF and MERIT amounts to ₹86.13 lakh and ₹6.05 lakh respectively.

In addition to above, Audit noticed that the Department did not maintain the data related to total penalty levied mineral-wise and year wise, the place of the occurrence of the unauthorised activity, head of account to which the SF collected in respect of penalties was accounted for. In the absence of above information, the genuineness of collections and deposit of mineral revenue could not be ascertained.

⁷⁸ G.O. Ms. No. 11, Industries and Commerce Department (M-II), dated 11.02.2020

⁷⁹ it's a levy at 50 *per cent* of SF for granite and 100 *per cent* of SF for remaining minor minerals as per orders effective from June 2021

⁸⁰ (₹4.43+₹1.27+₹0.006+₹0.03) crore

⁸¹ G.O.Ms.No.36, Industries and Commerce Department (M.II), dated 14.03.2016

⁸² G.O. Ms. No. 30, Industries and Commerce Department (M.II), dated 16.02.2017

⁸³ Kurnool, Kadapa, Visakhapatnam and Yerraguntla

During the Exit Conference, the Government stated (March 2024) that in this regard fresh circulars would be issued to assess the DMF and MERIT.

3.1.7 Levy of penalty for unauthorised extraction

As per Rule 26 (1) & (2) of APMMC Rules, 1966, if any person carries on quarrying operations or transports minor minerals in contravention of these rules, he shall be liable to pay as penalty, such enhanced seigniorage fee together with assessments as may be imposed by an Officer nominated by the Director of Mines and Geology (DMG). Such minerals may be seized by an Officer nominated by the DMG in this behalf in addition to the imposition of the penalty.

(a) Incorrect adoption of rule

As per amended Government order issued in March 2016, the person shall be punishable with imprisonment for a term which may extend to two years or with fine which may extend to ₹five lakh along with double the market value of the mineral or both.

Audit noticed that in ADMG Banaganapalle, in two cases⁸⁴, where minerals were transported (February 2020), penalty (*refer Para 4.2 where penalty was waived in one of the case*) was not levied as per the said provisions. Though prescribed rule was mentioned in the demand notices, double the market value was not levied and instead only the market value was levied which resulted in short levy of penalty⁸⁵ of ₹1.94 crore *as detailed in Table 3.3* below.

Table 3.3: Showing the short levy of penalty

Name of the ADMG	Quantity (in Sq. m)	Penalty		Short levy [#]	
		To be levied*	Levied	with fine	without fine
Banaganapalle	5,10,830	4.39	2.45	1.99	1.94

Source: Information furnished by the Department

*Two times the Market Value of ₹43 per Sq. m

Fine amount up to ₹five lakh which may be levied at the discretion of levying authority.

Consequently, the short levy of penalty also led to non-levy of DMF and MERIT of ₹2.61 lakh and ₹0.51 lakh respectively on the normal SF as detailed in *Appendix XVIII (A)*.

During the Exit Conference, the Government accepted (March 2024) the audit observation and stated that difference of amount would be collected, and instruction would be issued to the concerned ADMGs.

(b) Incorrect adoption of rate and rule

As per amended Government order issued in July 2020, the person shall be liable to pay 10 times of normal Seigniorage Fee (SF) as penalty in addition to the normal SF along with DMF and MERIT on the assessed quantities.

Audit noticed that in ADMG Banaganapalle, demand notices were issued (October 2020) to five persons for quarrying the minor mineral (LSS Black) from the lease premises of another lessee. As unauthorised persons were quarrying in the leased areas, penalty at 10 times of SF

⁸⁴ Sri Gowra Babu and Sri Mohammad Gous alias Syma

⁸⁵ calculated considering the minimum penalty *i.e.* leaving the amount of ₹five lakh

should have been levied. However, ADMG levied penalty at five times of SF which resulted in short levy of penalty.

Further, SF should have been levied in MT or Sq.m whichever is higher. However, ADMG has not converted the unit of measurement of mineral to higher value of SF instead levied in Sq. m which resulted in short levy of penalty of ₹9.22 crore (as detailed in the **Appendix XVIII(B)**). Consequently, the corresponding DMF and MERIT, which are charged on normal SF were short levied by ₹13.71 lakh and ₹2.74 lakh respectively (as detailed in **Appendix XVIII(C)**).

During the Exit Conference, the Government stated (March 2024) that the concerned ADMGs would be instructed to take necessary action.

3.2 Other sources of revenues

Apart from the Royalty/SF, levied and collected at the time of issue of permits, the Department shall also collect security deposits and other revenues⁸⁶ from the mining lease holders. The mineral revenue is to be assessed through Mineral Revenue Assessment⁸⁷ (MRA) for every financial year by ADMG concerned, in respect of both major and minor minerals dispatched or consumed by different lessees in the district. MRA contains the demand, collection, balances of revenue duly considering the arrears along with the quantity of mineral permitted to be extracted for the year.

3.2.1 Maintenance of records of Mineral Revenue Assessment and Demand Collection Balances

As per circular issued (March 2020) by Mines & Geology Department and Mines Manual, ADMG shall prepare and submit MRA pertaining to both major and minor minerals to concerned DDMG along with a copy of the preceding year's approved MRA. The MRAs shall be prepared to verify the individual lessee accounts and to ascertain the levies and collection of revenues from the lessee. The DDMGs or DMG after scrutiny shall approve the MRAs⁸⁸. A copy of the Mineral Dues Clearance Certificates shall be sent to the concerned ADMG for report on the status of the mineral revenue dues pertaining to existing/expired/cancelled leases/ pending court/vigilance cases, *etc.*, along with copies of approved MRAs for preceding four years by DDMG/DMG.

After MRAs are finalised by ADMGs, the assessments would be entered in a register called Demand Collection and Balances (DCB⁸⁹), which exhibits the details in respect of all MRAs under each ADMG. The DCB statements shall be forwarded to DMG by 15th April of subsequent year giving analysis of arrears pending recovery.

Audit noticed that MRAs and DCBs were not prepared regularly in all the eight sampled ADMGs. Due to irregular preparation of MRAs and DCBs, Audit could not verify whether MDCC were prepared and returns submitted to DMG as per the laid down procedures.

⁸⁶ Dead rent, Annual compensation fee, Financial Assurance, Interest on belated payments, application fee for various permits and licenses, Surface rent, cess on Surface rent, penalties, *etc.*

⁸⁷ as per the paragraph 16.8 of Mines Manual read with Circular Memo No. 1290/MR/2020 dated 13.03.2020

⁸⁸ DDMG, if the demand of Royalty/ Seigniorage Fee is within the limit of ₹50 lakh and DMG for above ₹50 lakh

⁸⁹ as per Para 16.10 of the Mines Manual of the Department

Scrutiny of DCB registers in selected offices revealed significant discrepancies in carrying forward of closing balance of previous year as the opening balance of current year. With such discrepancies, the authenticity and genuineness of DCB registers could not be ascertained.

The Government accepted (January 2024) the audit observation and stated that instructions have been issued to all the District offices to complete the preparation of MRAs and finalise the DCBs. Further, the Government replied that DCBs would be revised for the period 2018-19 to 2022-23 to avoid any lapses.

Thus, MRAs and DCBs were not prepared regularly either manually or generated through OMEPS portal.

3.2.2 Short levy of dead rent and interest

As per section 10 of APMMC Rule 1966, when a quarry lease is granted, the SF or dead rent whichever is higher shall be a charge on all minor minerals dispatched or consumed from the lease area at specified rates for different minerals. Dead rent for the first year shall be paid by the lessee at the time of execution of lease deed and in advance for the subsequent lease years. The dead rent is collected to ensure that even if there is no extraction of minerals from the lease area, a minimum revenue is ascertained. The SF leviable during the permits get adjusted with the dead rent already paid by the lessee.

(a) Loss of revenue due to misclassification of white shale

Government of India (GoI) notified⁹⁰ (February 2015) 31 major minerals as minor minerals, which includes 'White Shale'. Accordingly, GoAP fixed dead rent (November 2015) for the said minerals⁹¹ at ₹15,000 per hectare per annum up to 10 February 2020 and revised the rate to ₹65,000 per hectare per annum from 11 February 2020 onwards.

Scrutiny of records of ADMG Yerraguntla revealed that a lessee⁹² was holding two mining leases⁹³ in an extent of 83.79 hectares for a period of 20 years (from 2003 to 2023). The minerals excavated include White Shale along with associated minor minerals. The ADMG instead of classifying White Shale as minor mineral, treated it as major mineral. The misclassification of mineral resulted in short levy of dead rent of ₹1.13 crore (*as detailed in Appendix XIX*) during the period 2016-22.

Audit noticed that GoAP belatedly requested (June 2022) GoI for clarification regarding classification of white shale as major or minor mineral. The GoI clarified⁹⁴ (August 2022) to treat it as minor mineral only.

The Government replied (January 2024) that based on the clarification given by Central Government (August 2022), the State Government declared⁹⁵ (February 2023) the white shale and white clay as minor minerals and fixed the SF as ₹180 per ton and dead rent at

⁹⁰ Gazette No. S.O. 423(E) dated 10th February 2015

⁹¹ except mica, barytes, laterite, agate, diasporite and corundum

⁹² M/s Mangalore Mineral Traders

⁹³ one lease for an extent of 40.469 hectares in Survey No. 730, Mangapatnam village, and another lease for an extent of 43.320 hectares in Survey No.425, Chinthakunta village, Muddanur Mandal from 08.04.2003 to 07.04.2023

⁹⁴ letter No. 16/60/2022-mines VI, dated 26.08.2022

⁹⁵ G.O. Ms. No. 6, dated 10.02.2023

₹20,000 per hectare per annum. During Exit Conference, the Government stated (March 2024) that demand notices would be issued to the concerned lessee for realisation of short revenue.

Thus, incorrect classification of White Shale as major mineral for the period 2016-2022 resulted in loss of revenue of ₹1.13 crore, which otherwise would have accrued to the Government.

(b) Non levy of dead rent at enhanced rates for major minerals

As per MMDR Act, 2015, rates of dead rent for Iron ore and Limestone from September 2019 were fixed as detailed below:

(in ₹ per Hectare per annum)

Name of Mineral	Rate of Dead Rent		
	From 4 th year of lease #	5 th and 6 th year of lease	7 th year of lease
Limestone	800	2,000	4,000
Iron Ore	1,600	4,000	8,000

Dead rent is applicable for the leases granted other than auction route which came into effect from January 2015. All the major mineral mining leases were granted through auction from January 2015. Above dead rent rates were applicable from 2019 in respect of leases granted prior to 2015 which would have completed three years.

Audit noticed that in three ADMGs⁹⁶, for 10 leases granted during the period July 1972 to January 2012, the dead rent was not levied at enhanced rates during 2019-20 and 2020-21 in respect of the two major minerals viz., Limestone and Iron Ore. The non-levy of enhanced rates resulted in short levy of dead rent of ₹28.17 lakh (as detailed in the *Appendix XX*).

During the Exit Conference, the Government stated (March 2024) that GoI had kept the issue in abeyance, however, demand would be raised.

(c) Short levy of dead rent in respect of minor minerals

The GoAP amended⁹⁷ (February 2020) Rule 10 of the APMMLC Rules, 1966 and enhanced the rate of dead rent for all minor minerals.

Scrutiny of lease deeds and challans in ADMG, Kurnool and Anakapalli revealed that the dead rent was not levied at enhanced rates at the time of execution of lease deeds. The total short levy of dead rent amounted to ₹9.22 lakh for the year 2020-21 as detailed in *Table 3.4* below.

Table 3.4: Statement showing short levy of dead rent for minor minerals

(₹ in lakh)

Name of the office	Name of the Mineral	Lease execution date	Extent (in Hectare)	Dead Rent per Hectare (in ₹)	Dead rent to be levied/ collected	Dead Rent levied /collected	Short levy/ collection
Kurnool ⁹⁸	Dolomite	30.07.2021	73.11	20,000	14.62	10.97	3.65
	Road Metal	24.02.2020	3.93	65,000	2.55	1.96	0.59

⁹⁶ Banaganapalle: two leases, Kadapa: six leases and Yerraguntla: two leases

⁹⁷ G.O.Ms.No. 11 Industries and Commerce (M-II) Department, dated 11.02.2020

⁹⁸ Sri Balaji Works, Sri K.E. Prathap

Anakapalli ⁹⁹	Color granite	11.09.2015	13.58	1,30,000	17.65	12.67	4.98
Total							9.22

Source: Information collected from the Department

The ADMG, Kurnool replied (December 2022) that dead rent at enhanced rates would be collected. The ADMG, Anakapalli replied that the matter would be examined. The DMG replied that instructions would be issued to all unit offices to rectify such lapses.

(d) Short levy of interest

As per rule 49 of Mineral Concession Rules 2016, the State Government may without prejudice to the provisions contained in the Act and Rules made thereunder charge simple interest on belated payments at the rate of 24 *per cent* per annum on any rent, royalty, or fee from the 60th day of the expiry of the date fixed by the Government for payment of such royalty, rent and fee.

Audit noticed that in two ADMGs (Banaganapalle and Yerraguntla), the interest was short levied by ₹1.21 crore in respect of two lessees¹⁰⁰ for delayed remittance of dead rent as detailed in the **Table 3.5**.

Table 3.5: Statement showing short levy of interest for belated payment of various charges

(₹ in crore)							
ADMG offices	Year	Opening Balance of the arrears of Dead Rent	Collections	Closing Balance of the arrears of Dead Rent	Interest leviable at 24 <i>per cent</i>	Interest levied	Short levy of interest
Banaganapalle	2017-18	6.18	NIL	6.18	1.48	0.71	0.78
Yerraguntla	2020-21	2.19	NIL	2.19	0.52	0.09	0.43
Total		8.37	-	8.37	2.00	0.80	1.21

Source: Information furnished by ADMGs

The Government replied (January 2024) that as of May 2020, one of the firms¹⁰¹ had outstanding dues of ₹41.60 crore. The firm had remitted only ₹0.17 crore and had become sick (filed application before National Company Law Tribunal in December 2018). Another lease holder¹⁰² in DDMG, Yerraguntala had paid the Dead Rent arrears in different spells. The MRAs have been revised for the lease holder and accordingly the interest was charged based on payment made by the lease holder. Hence, there is no short levy of interest.

The reply is not acceptable, as no arrears were collected by the Department during the entire year and hence interest at 24 *per cent* was to be levied and collected.

3.2.3 Short collection and non-forfeiture of security deposit

As per Rule 14 of APMMC Rules, 1966, before the deed is executed, an applicant for a quarry lease shall deposit a sum equivalent to one year dead rent as Security deposit, for the due observance of terms and conditions of the lease. As per Rule 12 (5)(h)(xii) of Andhra Pradesh Minor Mineral Concession Rules 1966, if the lessee or the bidder makes default in

⁹⁹ M/s Tulip Granite Private Limited

¹⁰⁰ M/s Panyam Cement India Ltd in ADMG Banaganapalle and M/s India cement in ADMG Yerraguntala

¹⁰¹ M/s India Cements

¹⁰² M/s Panyam Cement India Limited

payment of any money due under the rules within the stipulated period or neglects to furnish security deposit or to execute the lease deed when required, DDMG may pass an order forfeiting all sums paid and cancel the quarry lease.

(a) Short collection of Security Deposit

The Industries and Commerce Department issued (February 2022) a gazette¹⁰³ notification and enhanced the existing security deposit of one time of dead rent to three times of dead rent. This was made applicable to all the new and existing lessees. The differential amount was to be collected from the existing lease holders within three months from the date of notification.

Audit noticed that in seven ADMGs¹⁰⁴, the differential amount of security deposit was not collected at enhanced rate in respect of 224 leases, resulting in short collection of ₹17.88 crore (as detailed in *Appendix XXI*).

Four ADMGs¹⁰⁵ replied (August/ December 2022) that differential amount towards security deposit would be collected. The ADMG Vijayawada replied that all the lessees shall deposit the differential security deposit. The remaining two ADMGs (Anakapalli and Visakhapatnam) replied (August 2022) that matter would be examined. DMG replied that all the unit offices were instructed to rectify such lapses pointed out by Audit.

During Exit Conference, the Government stated (March 2024) that there is a Court stay order on collection of Security Deposit.

The reply is not acceptable, as the respective ADMGs have accepted the audit observation and promised to recover the due amount and had not mentioned about any Court orders on the issue. Further, the Government did not furnish the details of stay order given by Court.

(b) Non-forfeiture of Security Deposit

Audit noticed that in six¹⁰⁶ ADMGs, the security deposit amount of ₹19.21 lakh received from 44 leases which lapsed between November 2006 to March 2022 was not forfeited for the breaches¹⁰⁷ by the lessee (as detailed in the *Appendix XXII*).

The Government accepted (January 2024) the audit observations and submitted that due to administrative reasons there was a delay in forfeiture of security deposit and instructions have been issued to forfeit the Security Deposit in respect of leases determined/expired.

3.2.4 Determination of annual compensation for leases granted

As per section 52 of Mineral Concession Rules, 2016 (effective from March 2016), the holder of a mineral concession shall be liable to pay annual compensation to the owner (State Government) of the land towards surface rights, as may be determined by an officer appointed by the State Government by notification in this regard. The annual compensation shall be payable on or before such date as may be specified by the State Government.

¹⁰³ G.O.Ms.No.8, Industries and Commerce Department (M-III) dated 16.02.2022

¹⁰⁴ Anakapalli, Banaganapalle, Kadapa, Kurnool, Vijayawada, Visakhapatnam and Yerraguntla

¹⁰⁵ Banaganapalle, Kadapa, Kurnool and Yerraguntla

¹⁰⁶ Anakapalli, Banaganapalle, Kurnool, Vijayawada, Visakhapatnam and Yerraguntla

¹⁰⁷ Stopping of mining operations for more than two years, non erection of boundary pillars, having mineral dues, non-submission of accounts, EC, CFE & CFO, etc.

Audit noticed that despite a lapse of seven years from the inception of rules, the State Government did not appoint Officer to determine annual compensation. During the audit period, annual compensation was not determined in respect of 144 major mineral mining leases measuring an extent of 7,649 hectares (as detailed in *Appendix XXIII*). Due to non-fixation of annual compensation by the State Government, the loss of revenue in the form of annual compensation could not be estimated.

During the Exit Conference, the Government accepted (March 2024) that the Department is collecting royalty and surface rent but not annual compensation fee. However, the Government stated that a detailed reply would be furnished.

Thus, despite there being a provision in the rules framed for levy of annual compensation, the State Government did not appoint an officer to determine the quantum of annual compensation to be levied for the surface rights given to the holder of mineral concessions. Thereby the State Government lost an opportunity to realise legitimate revenue.

Recommendation 3.2: The State Government may devise online systems or strengthen the existing Online Mineral e-Permit System to generate MRAs, DCBs and demand notices automatically, without human intervention and to ensure that the associated revenues as prescribed in the Acts & Rules are levied and collected appropriately to prevent any kind of loss to the Exchequer.

Chapter IV

Prevention and Detection of Unauthorised Mining Activity



Chapter IV

Prevention and detection of unauthorised mining activity

There was shortfall in inspection of mines/leases by Assistant Director of Mines and Geology (ADMG) and there was no monitoring mechanism to watch receipt of tour diaries by Director, Mines and Geology (DMG) and submission of review report on inspection of mines to Government. The State Level Task Force was not established. The District Level Task Force meant for effective vigilance to curb illegal mining and transportation of minerals was non-functional. The Department is yet to take action on the recommendations of Indian Bureau of Mines/Directorate General of Mines Safety for termination/ suspension of leases. Government has waived off penalty (in some cases seigniorage fee also) imposed/proposed by ADMG and approved by DMG without proper justification. Differential Global Positioning System survey of 40 *per cent* of the leases in the State was not completed. Many of the registered vehicles involved in transport of minerals were not enabled with installation of Global Positioning System (GPS) and permits were issued to the vehicles not enabled with GPS. Installation of meagre number of Closed Circuit Cameras and all of them being non-functional, non-installation of weighbridges to measure quantum of minerals transported in the entire State clearly showed ineffective efforts on the part of Department to curb/prevent illegal mining activities. The extracted quantity quantified by Technical Consultant IISc was varying with that of the recorded extracted quantity of the Department and environmental management was absent in most mines in the selected two mandals.

The Mines and Minerals (Development and Regulation) Act 1957, empowers State Government to make rules by notification for preventing illegal mining, transportation, and storage of minerals and for the purposes connected therewith. Such rules provide for establishment of check-posts for checking minerals under transit, establishment of weighbridges to measure quantity of minerals transported. The Act provides for inspection, checking and search of minerals at the place of excavation or storage or during transit.

Inspections related to mining activities are being conducted by various agencies for compliance with the permit system, labour norms and environmental protection. The agencies involved in inspection are Mines & Geology Department, Indian Bureau of Mines, Directorate General of Mines Safety and Environment agencies¹⁰⁸.

¹⁰⁸ MoEF & CC, SEIAA and Andhra Pradesh Pollution Control Board

4.1 Conduct of inspections of mining leases and minerals

As per Section 24 of Mines and Minerals (Development and Regulation) Act 1957, for the purpose of ascertaining the position of the working, actual or prospective, of any mine or abandoned mine or for any other purpose connected with this Act or the rules made thereunder, any person authorised by the Central or a State Government in this behalf, by general order, may enter and inspect any mine, survey and take measurements in any such mine, weigh, measure or take measurements of the stocks of minerals lying at any mine.

4.1.1 Conduct of inspections by the Department

As per clause 8.5 of Departmental Manual, 1983, the inspection of all the mines/quarries (both working and non-working) located in the jurisdiction of Mines & Geology Department should be covered over a period of one year without leaving any mine/quarry uninspected. Further, as per clause 8.7 and 8.8, tour diaries of the inspecting officers (ADMG/ DDMG/ AD (Vigilance)) for the inspections conducted during a month shall be consolidated and a review report shall be submitted to DMG by 10th of subsequent month for approval. On approval, the same shall be submitted to the Government by 15th of subsequent month. The tour diaries should contain the abstract for each month together with detailed reports in respect of working and non-working mines inspected.

Audit noticed that in five out of eight ADMGs¹⁰⁹ there was shortfall in inspection of the mines/leases during 2017-22. Out of 8,939 inspections to be conducted during 2017-22, only 5,953 were conducted. Thus, there was overall shortfall of 33 *per cent* in inspection as detailed in *Appendix XXIV*. Two ADMGs (Kadapa and Nandigama) did not furnish the data. In respect of ADMG Vijayawada, the number of inspections conducted were more than the number of leases.

The Government replied (January 2024) that shortfall of inspection during the year 2020-21 and 2021-22 was due to pandemic of COVID-19. The Government replied that the Departmental manual was revised and further instructions were issued (February 2019).

The Government did not furnish the reasons for non-conduct of inspections for the period 2017-20.

Thus, it is evident that periodic inspection of mines/quarries was not done though prescribed in departmental manual.

4.1.2 Functioning of District and State level task force

The GoAP ordered¹¹⁰ (March 2006) to constitute a State Level Task Force (SLTF) and District Level Task Force (DLTF) for effective vigilance with a view to curb illegal 'mining and transportation' of minerals in the State. A periodical meeting, once in quarter and month were to be conducted for SLTF and DLTF respectively.

The objectives for constitution of DLTF were to collect and review the information related to the illegal mining within their jurisdiction and to communicate the action taken to the Chairman¹¹¹ of SLTF. The SLTF is to be constituted to review the action taken by DDMGs/ADMGs/Forest officials for checking the illegal mining activities, to coordinate

¹⁰⁹ Anakapalli, Banaganapalle, Kurnool, Visakhapatnam and Yerraguntla

¹¹⁰ G.O.Ms.No.69, Industries and Commerce Department, dated 08.03.2006

¹¹¹ Secretary to Government and District Collector were the Chairman for SLTF and DLTF respectively

and discuss the pending issues with members¹¹². The action taken and recommendations of SLTF are to be communicated to the Central Government on a quarterly basis.

Audit noticed that though the State Government had issued orders for constituting SLTF, the same was not constituted even after a lapse of 17 years. The DLTF was mostly non-functional in test-checked districts. Non-functionality of DLTF highlights the inaction of the Department to utilise the existing provisions to curb and prevent illegal mining activities.

In DDMG, Kurnool DLTF meeting was conducted only once in August 2018 and in DDMG, Kadapa no meetings were conducted. DMG replied (June 2022) that SLTF did not exist in the State.

During the Exit Conference, the Government stated (March 2024) that there is district level task force which is working in the State. However, the Government stated that a detailed reply would be furnished.

The reply is not acceptable, as DLTF in test-checked districts was mostly non-functional during the audit period.

In the absence of SLTF and mere existence of DLTF without functionality, clearance of pending issues, coordination between other Departments to curb illegal mining activities, adherence to directions issued by other Departments would not be ensured.

4.1.3 Non-compliance to directions of regulatory agencies

The other regulatory agencies include Indian Bureau of Mines (IBM), which inspects major mineral mining leases and Directorate General of Mines and Safety (DGMS) which monitors compliance of labour norms and safety issues in the mining leases of major and minor minerals. The Ministry of Environment, Forest and Climate Change (MoEF&CC) and its subordinate offices (SEIAA) inspect the leases for compliance of the conditions mentioned in EC and other pollution related clearances. The power to inspect the mines related to compliance with the terms and conditions of Environmental clearances granted by SEIAA and DEIAA is vested with State Pollution Control Board (from November 2018).

(a) Continuation of leases despite termination orders by Indian Bureau of Mines

Section 24 of Mines and Minerals (Regulation & Development) Act, 1957 empowers IBM for entry and inspection of any mine for the purpose of ascertaining the position of the working, actual or prospective, of any mine or abandoned mine. The Act allows IBM to survey and take measurements in any such mine, weigh, measure or take measurements of the stocks of minerals lying at any mine.

As per IBM Manual for Inspection of Mines, 2017, IBM conducts inspection of major mineral mining leases for compliance of rules and adherence of the conditions mentioned in the mining plan or any other conditions imposed. The IBM informs the nature of violation and recommends to the State Government for levy of penalty or termination of lease after following the due procedure of serving notices to the lessee. The State Government should take proper action on the recommendations of IBM.

¹¹² the members of the task forces are the officers from Government, Mines & Geology Department, Forest and Police Department, APPCB, DGMS, IBM. DMG and DDMG are the member secretary/convenors for SLTF and DLTF respectively

Scrutiny of information obtained (October 2022) from Regional Office, IBM, Hyderabad, revealed that IBM had recommended termination of 196 leases in the entire State. However, Audit noticed that 13 leases (as detailed in the **Appendix XXV**), were still shown as leases in force as per the list of leases (September 2022) displayed in OMEPS portal provided by the Mines & Geology Department.

The Government replied (January 2024) that in one case¹¹³, lease was already deleted from OMEPS portal whereas in another case¹¹⁴, government has terminated the mining lease. In the remaining cases, termination of mining leases is still pending.

Further, a detailed scrutiny of the above 13 leases revealed that permits were given in four out of 13 leases though recommended (between October 2013 and October 2021) for termination by IBM as shown in **Table 4.1** below.

Table 4.1: Details of permits given to leases despite recommended for termination

Sl. No.	Lessee ID	Lessee Name	Details of IBM Recommendation	Latest Permit details		
				Permit number	Approved Quantity (in cum)	Created Date
1.	722030291	B. Sarada	Recommended for termination on 14.10.2013	PR07220302910005	900	9/13/2019 11:55:25 AM
2.	912870514	M/s. Dugar Insulation Private Limited	Recommended for termination on 07.06.2019	PR09128705140014	900	8/29/2022 5:07:24 PM
3.	1212070095	Sai Balaji Minerals		PR12120700950084	500	1/26/2022 12:18:17 PM
4.	1312060109	M/s Shiva Lakshmi Minerals		PR13120601090034	2000	12/14/2021 2:04:09 PM

Source: Information furnished by IBM

The Government accepted (January 2024) audit observation and stated that issuance of permits before dropping the action by the DMG would not be repeated in future. It was further stated that necessary instructions would be issued to all District Offices in this regard.

(b) Issue of permits despite stop orders given by Directorate General of Mines Safety

As per Regulation 34 of Metalliferous Mines Regulations, 1961, no mine shall be opened, work or re-opened unless a Manager¹¹⁵ of the mine is appointed.

Cross verification of information obtained from DGMS with records of DMG revealed that stop orders for 11 mining leases were issued by DGMS Bellary region for not appointing Managers for the mining leases (as detailed in **Appendix XXVI**). However, the Department allowed mining operations for the 11 miners.

The DGMS stated (December 2022) that the recommendations for stop order were forwarded directly to DMG. The DMG further stated that all ADMGs were instructed to furnish information related to violations identified by DGMS.

¹¹³ Sri K. Anjaneyulu

¹¹⁴ Sri Mohammed Hussain

¹¹⁵ being a person duly appointed and having such qualifications as are required by these regulations

The Government replied (January 2024) that ADMG, Chittoor and Palamaneru did not receive any communication from DGMS, Bellary region. Further, ADMG Chittoor and Palamaneru comes under the territory of DGMS, Chennai and not under the territory of Bellary region. Due to non-receipt of DGMS stoppage order, stop order was not issued.

The reply of the Government is not acceptable, as the DMG has received the stop orders directly from DGMS and had communicated to all ADMGs to furnish information related to violations identified by DGMS.

(c) Non-furnishing of consolidated returns

As per Rule 59 of MCR, 2016, a consolidated annual return of all mineral concessions granted or renewed under the Act and Rules made thereunder shall be furnished by State Government within two months of such grant or renewal to IBM and to DGMS not later than the 30th day of June following the year to which the return relates. The DGMS role is to look after the safety norms of employees/workers working in all the mines.

Audit noticed that consolidated returns of all the mineral concessions granted or renewed during the period of audit were not communicated to DGMS.

The DMG accepted the audit observation and replied that the information would be obtained from the concerned ADMGs.

The response from the Government is awaited.

This shows non-compliance of provisions by DMG. In the absence of communication of leases granted or renewed by the State Government, DGMS would not be in a position to analyse and inspect the mining leases for compliance with the safety norms.

Recommendation 4.1: *It is recommended that the inspection of mining leases may be given utmost priority by making the district/state level task force functional, for effective vigilance to curb illegal mining and transportation of mineral. Recommendations made by IBM/DGMS are to be implemented efficiently to enforce immediate action on illegal mining activities.*

4.2 Revision of penalties without proper justification

The Hon'ble High Court of Andhra Pradesh in its judgments¹¹⁶ (2015) clearly stated that the revisionary power vested with the Government through any rule should be exercised reasonably so as to stand the test of judicial scrutiny. The reasons recorded would alone disclose the justifiability of the exercise of such power, as application of mind by the authority at that time can only be revealed when the order records reason.

Audit noticed that in seven out of eight sampled ADMGs¹¹⁷, penalty amount of ₹84.18 crore was reduced by the Government to ₹9.85 crore in 31 cases, thereby reducing penalty by 88.30 *per cent* (as detailed in the **Appendix XXVII**) without any recorded reason or justification. Responsibility needs to be fixed for reducing the penalty without recording reasons or justification.

¹¹⁶ Writ Petition No. 40621 of 2015

¹¹⁷ Anakapalli, Banaganapalle, Kadapa, Kurnool, Vijayawada, Visakhapatnam and Yerraguntla. ADMG Nandigama did not furnish the information

During the Exit Conference, the Government stated (March 2024) that resurveys are conducted to assess the correctness before waiver of amounts.

The Reply is not acceptable, as in the documents produced to audit where revision orders were passed by Government, no reasons or justification was recorded. Audit scrutinised two such cases and found that the revision orders passed were not justifiable. Further, Government did not provide the information related to speaking orders or resurvey reports for the revision cases.

Case Study 5

In the case of a miner¹¹⁸, the vigilance wing recommended the Department to recover the seigniorage fee, penalty and fine of ₹26.34 crore for illegal mining/transportation of 54,655 MT of Barytes from mining lease area of APMDC, under Rule 26(1) of APMMC Rules, 1966. Accordingly, ADMG issued (October 2019) demand notice for payment of the said amount. The lessee applied for revision and the revisioning authority *i.e.*, Government allowed (December 2020) the application and set aside the demand notice without recording justification.

In ADMG Kadapa, in case of a miner¹¹⁹, the Vigilance wing inspected (July 2018) the unit in Chakrayapet and found stock of 8,485 cum of road metal at the premises. The unit did not produce proof of payment of seigniorage fee along with dealer's licence. Hence, the vigilance wing requested ADMG to recover an amount of ₹37.86 lakh towards seigniorage fee, penalty along with additional penalty of ₹10,000 for not having the licence. The ADMG accordingly issued (March 2019) notice for payment of ₹37.86 lakh. The miner belatedly obtained dealer license in August 2018 and quarry lease in April 2019 *i.e.*, after the date of inspection by the vigilance wing and applied (April 2019) for revision application with the Government. The revisioning authority allowed (July 2019) the revision application and set aside the demand notice without any recorded reasons.

It is evident from the above that the Government not only waived the penalty imposed by the Department but also the entire seigniorage fee without any justification, thereby causing loss of revenue. Further, creation of such precedence could lead to demands for similar unjustifiable revisions of penalty in future.

4.3 Strengthening of Department functioning through technological interventions

Technology plays a vital role in the development of any sector. In the mining sector, technological interventions are of paramount importance from exploration of minerals to removal of minerals, timely accounting of revenue, real-time monitoring on vehicle movement and to curb any kind of illegal mining.

Over a period of time, the mining activities have drastically increased, and the availability of sufficient manpower along with technological interventions plays an important role in delivering of mining activities in an efficient and effective manner.

¹¹⁸ M/s Pragathi Minerals

¹¹⁹ M/s Shirdi Sai Crushers

4.3.1 Availability of manpower

In the Mines & Geology Department, the officials at various levels are entrusted with designated jobs *viz.*, administrative work, granting of mining leases, approving mining plans, carry out inspections, issue show cause notices, issue demand notices *etc.*, and coordinate with other Departments for speedy disposal of MCAs and to curb illegal mining activities.

Audit noticed that in the district offices, 104 posts (24 *per cent*) were vacant out of 421 sanctioned posts and 99 posts (53 *per cent*) were vacant out of 187 sanctioned posts in the office of DMG. In district and DMG offices, no person for the post of Assistant Director (Mines), Assistant Director (Survey), Assistant Chemist was appointed and there was shortfall (26 *per cent*) in the post of Royalty Inspector. In addition to this, in DMG office, no person for the post of Assistant Mines Officer was appointed.

The DMG replied that the Department had submitted (December 2017) the proposals to the Government for sanction of 131 additional posts in various cadres, however, no orders have been received from the Government.

During the Exit Conference, the Government stated (March 2024) that the issue is under consideration and would be sorted out.

Thus, the Department was working with lower strength of manpower despite the fact that it was given the responsibility of regulating mining activity. The proposals for sanction of posts were still pending with the Government for more than six years.

In view of insufficient manpower, implementation of technology is vital. Day-to-day administrative work including flow of information should be computerised to the extent possible, so that the MRAs, DCBs and other important registers are generated seamlessly with least or no manual intervention.

4.3.2 Technological interventions for prevention of illegal mining activities

Mining activities can be monitored using modern technologies. This may include development of Mining Surveillance System (MSS), use of Geographic Information System (GIS), use of Differential Global Positioning System (DGPS) survey, Vehicle Tracking Monitoring System (VTMS), installation of Closed-Circuit (CC) cameras, *etc.* The status of implementation of technological interventions in the State are discussed in the following paragraphs.

(a) Conduct of Differential Global Positioning System survey

As per Mineral Auction Rules 2015, the State Governments shall identify and demarcate the area where a mining lease is proposed to be granted through auction by using DGPS and classify the same into forests land, land owned or not owned by the State Government. The DGPS is essential for preparation of mining plan, scheme of mining, *etc.* It also helps in knowing the correct location of lease boundary pillars and identifying whether the mining activity is within or beyond the lease boundary.

The IBM instructed (April 2010) to use DGPS survey to prepare the Geo-referenced mining lease map that can be imported into any Global Information System¹²⁰ database and enable the user/Department to analyse real time data through remote sensing, drone technology, *etc.*

For major minerals, GoAP instructed (June 2017) to complete DGPS survey for existing mining leases at the earliest. Further, GoAP amended (March 2018) APMMC Rules and specified that DGPS is mandatory for survey and demarcation of areas granted for minor mineral mining leases.

Scrutiny of information furnished by the Department on the status of completion of DGPS survey of the leases in the State revealed that as of September 2022, out of total 174 leases of major minerals, DGPS survey was completed for 100 leases (57 *per cent*) while in respect of minor minerals, DGPS survey was completed for 2,836 leases (66 *per cent*) out of 4,290.

During the Exit Conference, the Government stated (March 2024) that more than 80 *per cent* of leases have been covered under DGPS survey and geo-tagging are also done. The information regarding DGPS survey and geo-tagging made would be furnished to audit.

The reply is not acceptable, as the Government did not furnish the details of DGPS survey completed along with geo-tagging made.

The shortfall in completion of DGPS survey for both major and minor mineral mining leases shows that the Department lagged behind in fulfillment of the objectives of DGPS survey. Non-completion of DGPS survey would be the key bottleneck for auctioning of minor mineral mining leases and hence auctioning policy of minor minerals may not be fruitful. Further, completion of DGPS survey is the basis for generation of automatic triggers through remote sensing, drone technology, *etc.*

(b) Implementation of Vehicle Tracking Monitoring System

The GoAP issued (November 2017) guidelines on implementation of Vehicle Tracking Monitoring System (VTMS) in the State which stipulate that all mineral carrying vehicles are to be registered with the Mines & Geology Department. Owners of mineral carrying vehicles are to be directed to design, develop, install and maintain a GPS based VTMS for mineral carrying vehicles. Further, VTMS has to be integrated with the existing e-permit system of the Department to ensure that e-permits are issued only to GPS enabled vehicles which are registered with the Department.

Further, Government directed (November 2017) the Department to take all necessary required steps¹²¹ to make it mandatory to register all mineral carrying vehicles on the website of the Department with installed GPS within 120 days from the date of issue of the notification, to curb the illegal mining, storage and transportation of minerals.

The VTMS was launched (August 2018) by the Department and as of September 2022, 1.03 lakh vehicles were registered with the Department for transportation of minerals. However, only 0.64 lakh (62 *per cent*) vehicles were equipped with GPS during the period 2018-22. Further, out of 66.83 lakh permits issued between August 2018 and March 2022, 27.30 lakh

¹²⁰ GIS is a software tool that allows users to create interactive queries, analyse the spatial information, edit data, maps, and present the results of all these operations. GIS technology is a tool to combine various maps and remote sensing information to generate various models, which are used in real time environment

¹²¹ as per G.O.Ms.No.149, Industries and Commerce Department (M.II), dated 01.11.2017

(40 per cent) permits were issued to vehicles not equipped with GPS.

During the Exit Conference, the Government stated (March 2024) that due to lack of funds the Department is unable to implement the Vehicle Tracking Monitoring System completely.

(c) Review of Triggers received from Indian Bureau of Mines

The Ministry of Mines, through Indian Bureau of Mines, has developed¹²² (October 2016) the Mining Surveillance System (MSS), a satellite-based monitoring system¹²³ to use space technology for curbing illegal mining activity. The MSS is a satellite-based monitoring system which aims to establish a regime of responsive mineral administration, through public participation, by curbing instances of illegal mining activity. The MSS is a transparent & bias-free system, having a quick response time and capability of effective follow-up. The deterrence effect of ‘Eyes watching from the Sky’ has been extremely fruitful in facilitating all State Governments in curbing instances of illegal mining. The MSS checks a region of 500 m around the existing mining lease boundary to search for any unusual activity. Any discrepancy, if found is flagged-off as a Trigger. A mobile app has also been developed and launched to facilitate detection of illegal mining. All State Governments have been advised to implement the MSS for minor minerals within their States.

The triggers generated in respect of a State by IBM are forwarded to the DMG who in turn forwards them to the concerned ADMGs under whose jurisdiction the location of the trigger falls. The ADMGs after inspection of the location submits the action taken report to IBM through DMG.

Audit noticed that only ADMG Kurnool had the data regarding the number of triggers received during 2020-21 and 2021-22, locations inspected, and cases of illegal mining noticed. Out of 24 triggers received, after inspection three¹²⁴ cases of unauthorised/illegal mining were noticed (as detailed in *Appendix XXVIII*). ADMG has issued demand notices to the concerned for payment of SF/penalties. The other ADMGs did not maintain the data.

Further, verification of trigger information furnished by DMG and IBM revealed the following mismatches as detailed in *Table 4.3*.

Table 4.3: Showing mismatch between number of triggers received and action taken

Year	Information given by IBM		Information given by Department	
	Number of triggers detected	Number of trigger information sent to the State Department	Number of triggers received	Number of illegal mining identified
2017-18	Nil	Nil	Nil	Nil
2018-19	8	8	20	Nil
2019-20	Nil	Nil	15	Nil
2020-21	Nil	Nil	NIL	2
2021-22	28	28	Nil	Nil
Total	36	36	35	2

Source: Information furnished by Department and IBM

Audit observed that the data was not matching in any of the years during 2018-22, which shows lack of coordination between these agencies. As per IBM, action taken reports on 30

¹²² as per clause 7 of note on illegal mining issued by IBM

¹²³ in coordination with Bhaskaracharya Institute for Space Applications and Geo-informatics, Gandhinagar and Ministry of Electronics and Information Technology

¹²⁴ Trigger No.: APR (02-2020), APR (06-2020), and APR (11-2020)

out of 36 triggers were received and as per DMG, action taken reports on 35 triggers were forwarded to IBM.

The IBM replied (November 2022) that the triggers are generated by MSS which were directly forwarded to the State Government. The IBM further stated that action taken report was received in respect of 30 triggers only.

As such, there was no reconciliation mechanism between the agencies to ensure that triggers identified were inspected promptly and suitable action taken to curb the illegal mining pointed out by IBM.

During Exit Conference, the Government stated (March 2024) that action taken reports are being submitted on the triggers noticed and wherever illegal mining is noticed, stringent action is being taken.

(d) Installation of Closed-Circuit cameras and Weighbridges

The Government¹²⁵ instructed (February 2016) Commercial Tax Department to establish integrated check posts in the State of Andhra Pradesh for effective monitoring of vehicular movement along with installation/ establishment of Closed Circuit (CC) Cameras, Weighbridges on priority basis in a phased manner.

The very objective of the installation of CC Cameras and weighbridges at appropriate places was to monitor the vehicular movements on a real time basis to curb illegal mining activities.

(i) Regarding functioning of CC cameras, the Department informed that it was proposed to install CC cameras at ten check-posts¹²⁶. As a part of pilot project, six¹²⁷ check posts were proposed for installation of CC cameras. However, CC cameras were installed at only four check posts¹²⁸ and the same were non-functional (destroyed by miscreants) as on the date of audit. Further, the agency deployed for the installation of CC cameras was not able to work after the warranty period due to repeated incidents.

Thus, CC cameras installed even at very limited locations were non-functional and this mode of technology to have a real time check on illegal mining did not materialise.

(ii) The permits issued to transport minerals by each vehicle should mention the weight of the mineral lifted/transported. During inspection, the Department should ensure volume/weight of mineral carrying vehicles as per permits.

To assess the installation and functioning of weighbridges, Audit requested to furnish information on installed location and serviceability of weighbridges.

The DMG replied (October 2022) that the Weighbridge Empanelment application for installation of weighbridges was developed, however, it was stopped as agencies did not come forward for registration.

During the Exit Conference, the Government stated (March 2024) that initially CC cameras were installed, however, due to resistance from the villagers the same could not be materialised. The Government further stated that now the Department is using bio-metric

¹²⁵ memo No. 685/14. II (2)/2015 dated 01.02.2016 from the Ind & Com (M II) Department

¹²⁶ Itchapuram, Kodikonda, Naraharipeta, Nagalapuram, Palamaneru, Pondugala, Tadukupeta, Tana, Tungbhadra Bridge and Tada

¹²⁷ Betamcherla, Bugga, Dhone, Ibrahimpatnam, Piduguralla and Tada

¹²⁸ Betamcherla, Bugga, Ibrahimpatnam and Tada

system. Further, a volumetric system of measurement is being followed which doesn't require weighbridges.

The reply of the Government that volumetric system of measurement is being followed is not acceptable as royalty is paid based on the weightage in respect of many minerals (Example: Limestone). In the absence of weighbridges, the effectiveness of inspections conducted by Inspecting authorities to ensure the correctness of quantities of the minerals transported cannot be guaranteed. The non-establishment of weighbridges shows the lackadaisical attitude of Department towards establishment of reliable methods to curb any kind of illegal mining.

Thus, in spite of shortfall in manpower required for continuous physical monitoring of minerals removed, the Department did not complete DGPS survey for both major and minor minerals, did not enforce for GPS based VTMS for mineral carrying vehicles. Further, CC cameras installed in limited locations were non-functional, thereby preventing a check on illegal mining.

This shows that the Department has not utilised the available technological interventions for monitoring mining activities in the State. As such, the monitoring mechanism put in place by the Mines & Geology Department was inadequate.

Recommendation 4.2: *The State Government shall ensure that DGPS survey of all mining leases is completed, all vehicles involved in transportation of mineral are registered and equipped with GPS and CC cameras are installed in all the designated places for effective monitoring and prevention of illegal mining.*

4.4 Case Study

As a part of the Performance Audit, Audit collaborated with technical team from the Indian Institute of Science (IISc), Bengaluru, and engaged (April 2022) them as a Technical Consultant for estimating the volume of Limestone mineral extracted from the mining leases in two mandals viz., Jaggaiahpet and Kolimigundla using remote sensing technology under the jurisdiction of two ADMGs (Nandigama and Banaganapalle). Detailed field investigation has been carried out across the mining sites along with the officials of Mines & Geology Department and Revenue Officers. Selection of limestone was based on the following criteria:

Basis for selection of limestone for study	
<i>Mineral and its economic importance</i>	Limestone contributed the highest revenues in respect of major minerals. Limestone contributed revenue to a tune of ₹1,780.89 crore (95.30 per cent) against the total major mineral revenue of ₹1,868.22 crore during the period of audit.
<i>Average extent of mine</i>	Limestone leases have huge extent. The average extent of each limestone lease is 180.85 hectares.
<i>Relative Completion of DGPS survey</i>	The DGPS survey in respect of limestone leases was completed up to 72 per cent.

(a) Objective of case study

The objectives of the endeavor were to ascertain the following:

- Land cover dynamics: Spatio-temporal changes¹²⁹ in land cover (using remote sensing data on temporal scale) and Patch dynamics¹³⁰ of land cover.
- Mapping of quarry pits (spatial extent and location) in the said Mandals.
- Overlay of authorised quarrying data with mapped details to (i) assess the extent of quarrying operations *vis-a-vis* approved Quarry Plan, (ii) identify unauthorised quarry locations.
- Assessment of threats due to escalating anthropogenic¹³¹ activities in the vicinity.
- Adequacy of Environmental safeguards measures undertaken by quarry leaseholders.

(b) Criteria for field investigation

Field investigations were carried out using precision GPS¹³² (pre-calibrated) and Clinometer¹³³. The remote sensing data of the respective study areas were procured from National Remote Sensing Centre (NRSC), Hyderabad. The data was used to assist the interpretation of different land use types from remote sensing data. Topographic maps provided ground control points to rectify remotely sensed data. Survey of India (SoI) topo sheets (1:50000 and 1:250000 scales) were digitised to identify various land cover types. Pre-calibrated GPS (Global Positioning System-Garmin GPS unit) was used for field measurements. Ground control points were used to geometrically correct the remote sensing data and verify the classified land use information.

Field investigation further provided valuable inputs such as other dumps, extractable quantities, dips, quality of



¹²⁹ Spatio-temporal, or spatial temporal, is used in data analysis when data is collected across both space and time. It describes a phenomenon in a certain location and time

¹³⁰ patch dynamics, in ecology, a theoretical approach positing that the structure, function, and dynamics of an ecological system can be understood and predicted from an analysis of its smaller interactive spatial components (patches)

¹³¹ Scientists use the word “anthropogenic” in referring to environmental change caused or influenced by people, either directly or indirectly

¹³² GPS is used to locate the position and to map the spatial extent of a mine

¹³³ a clinometer is used to measure the relative heights concerning a fixed station (base station) and involves measuring angles across various depths, which helps in generating the elevation profile (contours) of the extracted region.

limestone, and depth of pit and bed. The compiled information aided in developing a contour profile of a mine.

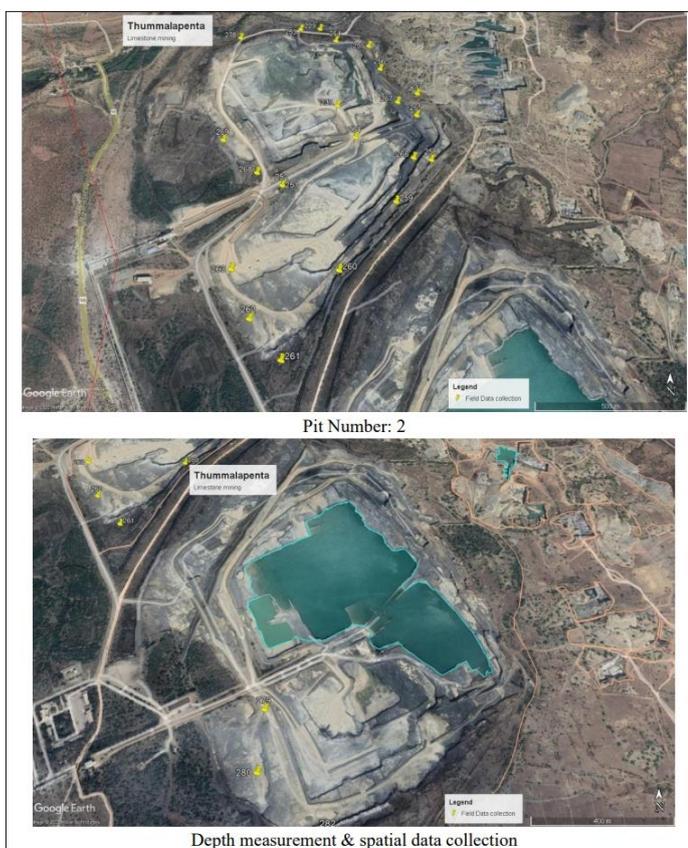
(c) Quantification of extracted volume of limestone

Volume of limestone extracted was quantified considering (i) inter contours volume computed and aggregated to get the total volume and (ii) considering difference of current terrain (Digital Elevation Mode) generated based on contours of field measurements) with the original terrain (based on contours of topographic map). The total quantity of mined material was computed considering mine volume and density (2600 kg/cum). Computed quantity at each location of quarry pits was compared to the quantity reported by the respective firm /agency.

4.4.1 Estimation of limestone extracted from the leases in sampled mandals

Quantification of limestone extracted at select mines of sampled mandals was carried out using temporal high resolution spatial data (Google earth), and latest (May 2022) remote sensing data¹³⁴ and SoI Topographic sheets. The Technical Consultant (IISc Bengaluru) identified that in Jaggaiahpet¹³⁵ and Kolimagundala Mandal, actual extraction and reported has a deviation up to 10 per cent. Technical Consultant suggested the deviation of the extracted quantity estimated by them as plus or minus five per cent.

Audit noticed from the report submitted by Technical Consultant that:



(a) The extracted quantity quantified by Technical Consultant was varying from the extracted quantity mentioned by the Department (excluding the margin of five per cent) in 11 limestone leases in both the mandals as detailed in the **Appendix XXIX (A)**. In respect of six cases, the extracted quantity estimated as per IISc was more (11.31 crore MT) than the quantity shown/recorded as extracted (11.06 crore MT) by the Department. As such, there was excess extraction of minerals of 25.73 lakh MT. This may indicate suspected excess extraction.

For any such cases, as per Rule 21(5) of MMDR Act, 1957, the State Government may recover penalty from such person for the mineral so raised, or, where such mineral has

¹³⁴ Sentinel 2A/B, acquired by the European Space Agency

¹³⁵ other than Ramco Cements at Survey number 367/P in Budawada

already been disposed of, the price thereof, and may also recover from such person, rent, royalty or tax, as the case may be.

In accordance with the rules mentioned above, Audit calculated the penalty on the differential excess extracted quantity in the above-mentioned six leases which amounts to ₹104.98 crore. Similarly, the royalty on the mineral amounts to ₹20.58 crore. Further, DMF and NMET worked out to ₹6.18 crore and ₹0.41 crore respectively (as detailed in **Appendix XXIX(B)**).

(b) Huge dumps of overburden¹³⁶ also known as mine spoil, were observed across the study sites, noticing absence of any protection measures. This drastically disturbed the system, was highly prone to erosion and could cause contamination of adjoining streams, rivers, and agricultural lands with substances that can leach out through rainwater. Environmental management was absent in most mines, and afforestation activities were observed to be poor across the sites. The agencies have poorly maintained the topsoil collected.

The IISc recommended to enrich the topsoil with organic matter to improve soil fertility. Regulatory agencies should ensure that post-production mine decommissioning and land reclamation activities are as per the proposal. Proper measures are to be implemented for storing overburden across the sites.

The DMG replied (June 2023) that the assessment made by IISc was approximate and the same could not provide the accurate quantity of mineral extracted and hence the method was not practical. Further, the Department replied that as per the amendments to Rule 34(A) of MCDR 2017, drone survey of major mineral mining leases was implemented, and the lessee should conduct (April or May) the drone survey and submit the survey report to IBM on or before 1st July every year and the drone survey was preferable. The Department also stated that in respect of four¹³⁷ cases the variation between the actual and the estimated extraction by the audit was 1.10 *per cent* only.

Further the Department contested (July 2023) that the method employed by Technical Consultant for estimation of the volume extracted is not prescribed in the rules and the action recommended may not be initiated.

During the Exit Conference, the Government stated (March 2024) that the findings and the methodology adopted by the Consultant (IISc) would be verified and a detailed reply would be furnished for the variation in data.

Audit's response is that the Remote sensing studies by technical experts, are reliable as a constructive tool, for assessing illegal mining situations. In this instance, the exercise has been useful in estimating the Limestone mineral extracted for the purpose of examining whether the quantity of mineral extracted was approximately as per the Mining Plan and facilitated detection of illegal mining activities. Further, the Department has not shown any data to contradict the finding of Technical Consultant and neither commented upon the details of the method employed nor furnished reasons as to how the same was not correct to

¹³⁶ overburden is physically, nutritionally, and microbiologically an impoverished habitat

¹³⁷ sl.no 2,4,5 and 6 in the Appendix XXIX (B)

ascertain the volume. Further, the Department is silent regarding the shortfall noticed by the Technical Consultant at mine site.

The objective of the audit through this case study was to show that the technology can be very helpful in detecting the extracted quantity from the mining leases and the prevention, detection and inspections can be made hassle free.

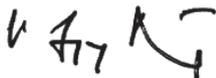
Recommendation 4.3: The State Government must encourage use of advanced technology such as remote sensing technology to assess actual quantity of minerals extracted to facilitate detection of any kind of illegal mining activities and Regulatory agencies should ensure that post-production mine decommissioning and land reclamation activities are as per the mining plan.

Vijayawada
The 03 May 2025


(SARAT CHATURVEDI)
Principal Accountant General (Audit)
Andhra Pradesh

Countersigned

New Delhi
The 07 May 2025


(K. SANJAY MURTHY)
Comptroller and Auditor General of India

Appendices and Glossary

Appendix I
(Paragraph 2.1.2 and Page No. 11)

Consideration of other possible mineral reserves against the UNFC guidelines

Sl. No.	DDMG Office	Name of the lessee	Extent (in Hectares)	Proved (in cum)	Probable (in cum)	Total reserve (E+F) (in cum)	Other than Proved and Probable (in cum)	Quantity of mineral shown in Mining Plan (in cum)
A	B	C	D	E	F	G	H	I= G+H
1.	Kurnool	G.Natarajan	1.00	4,410	4,191	8,601	4,191	12,792
2.		M/s Imperial Granites Private Limited	2.00	12,008	5,761	17,769	5,761	23,530
3.		M/s CTP Granites & Exports	4.60	12,89,964	2,75,112	15,65,076	2,97,748	18,62,824
4.	Kadapa	M/s Galaxy Enterprises	5.00	1,64,801	32,620	1,97,421	32,620	2,30,041
5.		Abbireddygari Suvarna	4.90	17,00,340	2,91,930	19,92,270	2,91,930	22,84,200
6.		M/s Haroon Granites	5.00	21,03,732	2,92,896	23,96,628	2,92,896	26,89,524
7.		M/s Haroon Granites	5.00	21,39,324	2,97,616	24,36,940	2,97,616	27,34,556
Total			27.50	74,14,579	12,00,126	86,14,705	12,22,762	98,37,467

Source: Compiled based on data furnished by the Department

Appendix II
(Paragraph 2.1.2 and Page No. 12)

Statement showing the calculation of quantity as per mining plan

Sl. No.	Resources and reserves	Quantity (in cum)	
		As approved	To be adopted
Mining plan approved by DDMG			
A	Geological Resources	4,82,095	4,82,095
B	Reserve Blocked under Buffer Zone	70,634	70,634
C	Reserve Blocked under Safety Slopes	1,12,197	1,12,197
D	Total reserve Blocked (B+C)	1,82,831	1,82,831
E	Reserve Available for quarrying (A-D)	2,99,264	2,99,264
F	Reserve taken for calculation of Mining life	8,99,031	2,99,264
G	Estimated Annual production	53,825	53,825
H	Estimated Mining Life (F/G)	17 Years	~ 5.5Years
Environmental Clearance approved by SEIAA			
K	Reserve taken (in cum)	5,71,695	2,99,264
L	Annual production (in cum per year)	57,015	53,825
M	Mining Life	10 Years	~ 5.5Years

Source: Compiled based on data furnished by the Department

Appendix III (A)
(Paragraph 2.1.3 (a) and Page No. 13)

Statement showing short collection of Mineral Exploration Research and Innovation Trust Fund

(₹ in crore)

Year	Seigniorage Fee collections		MERIT		
	Departmental Figure	Finance Accounts	To be Collected (Cx2/100)	Collected	Short collection (D-E)
A	B	C	D	E	F
2017-18	582.77	1,135.84	22.72	20.02	2.70
2018-19	614.53	1,180.00	23.60	12.79	10.81
2019-20	693.93	1,116.82	22.34	16.19	6.16
2020-21	712.63	1,277.87	25.56	15.90	9.67
2021-22	741.96	1,657.34	33.15	17.41	15.74
Total	3,345.82	6,367.87	127.37	82.31	45.06

Source: Compiled based on data furnished by the Department

Appendix III (B)
(Paragraph 2.1.3 (b) and Page No. 14)

Non collection of Mineral Exploration Research and Innovation Trust Fund from Andhra Pradesh Mineral Development Corporation

(₹ in crore)

Year	Sales turnover	MERIT to be collected (10 per cent of sales turnover)
2016-17	565.80	56.58
2017-18	675.18	67.52
2018-19	765.14	76.51
2019-20	1,124.46	112.45
2020-21	781.92	78.19
2021-22	852.97	85.30
Total	4,765.47	476.55

Source: Information related to Sales turnover collected from APMDC

Appendix IV
(Paragraph 2.1.3 (c) and Page No. 14)

Statement showing the receipts and expenditure under Mineral Exploration Research and Innovation Trust Fund

(₹ in crore)

Year	Opening Balance	Receipt	Administrative expenditure	Exploration Expenditure		Total Expenditure	Closing Balance
				Major	Minor		
2017-18	2.59	20.02	0.94	0.20	--	1.14	21.47
2018-19	21.47	12.79	0.41	0.32	--	0.73	33.53
2019-20	33.53	16.19	0.39	0.70	--	1.09	48.63
2020-21	48.63	15.90	0.36	--	--	0.36	64.17
2021-22	64.17	17.41	0.46	7.21	--	7.67	73.91
Total		82.31	2.56	8.43	--	10.99	--

Source: Compiled based on data furnished by the Department

Appendix V
(Paragraph 2.2 and Page No. 16)

Statement showing various environmental clearance granting authority

Area of Lease (in Hectare)	Category of Project	Authority to grant Environmental Clearance
0 – 5	‘B2’	DEIAA
> 5 and < 25	‘B2’	SEIAA
≥ 25 and < 50	‘B1’	SEIAA
≥ 50	‘A’	MoEF&CC

Source: Compiled based on data furnished by the Department

Appendix VI (A)
(Paragraph 2.2.1 (a) and Page No. 16)

Statement showing the information on Mineral Concession Application for grant of lease

Name of the Office	MCAs received	MCAs pending for want of NOC	MCAs Pending inspite of having NOC	Number of lease deeds executed for MCAs received during the period of audit
ADMG Kurnool	NP	99	96	NP
ADMG Banaganapalle	NP	524	114	NP
ADMG Kadapa	NP	262	123	NP
ADMG Yerraguntla	NP	91	39	NP
ADMG Vijayawada	NP	NP	NP	NP
ADMG Nandigama	NP	NP	NP	NP
ADMG Visakhapatnam	NP	NP	NP	NP
ADMG Anakapalli	NP	NP	NP	NP
DDMG Kurnool	NP	NP	NP	NP
DDMG Kadapa	370	110	76	68
DDMG Vijayawada	107	106	104	63
DDMG Visakhapatnam	NP	101	37	37
DMG	NP	NP	NP	NP

Source: Compiled based on data furnished by the Department

NP – Not Provided/Produced

Appendix VI (B)
(Paragraph 2.2.1 (a) (i) and Page No. 16)

Statement showing year wise analysis of pendency of Mineral Concession Application

Duration of Pendency	Number of MCAs pending with Revenue authorities for want of NOC		Number of MCAs pending with ADMG even after receiving NOC from Revenue authorities	
	Government land	Patta land	Government land	Patta Land
> 10 Years	26	--	23	2
> 5 Years	164	9	64	6
1-5 Year	569	29	230	16
Between one month to one Year	157	22	25	6
Total	916	60	342	30

Source: Compiled based on data furnished by the Department

Appendix VI (C)
(Paragraph 2.2.1 (a) (iv) and Page No. 17)

Statement showing status of issue of Letter of Intent/Environmental Clearances granted by DDMG and DMG

Name of the Office	Number of leases for which MCAs received	Number of LoI issued	Mining plan approved and submitted	Environment Clearance submitted	Pollution certificates submitted	Number of leases granted
DDMG Kurnool	NP	NP	NP	NP	NP	NP
DDMG Kadapa	370	110	76	68	68	68
DDMG Vijayawada	107	106	104	63	57	44
DDMG Viskhapatnam	NP	101	37	37	37	37
DMG	NP	NP	NP	NP	NP	NP

Source: Compiled based on data furnished by the Department; NP-Not Produced

Appendix VII
(Paragraph 2.3.2 and Page No. 20)

Statement showing the inaction in lapsing of inoperative leases

Name of the ADMG Office	Forwarded to DMG		Proposals forwarded during the period	Number of proposals	Total
	Major	Minor			
Kadapa	10	---	2012-2016	1	10
			2017-2022	9	
Yerraguntla	9	3	2017-2022	12	12
Anakapalli	9	---	2007- 2011	5	9
			2012-2016	3	
			2017-2022	1	
Banaganapalle	3	---	2017-2022	3	3
Kurnool	19	---	2012-2016	1	19
			2017-2022	18	
Total	50	3			53

Source: Compiled based on data furnished by the Department

Appendix VIII
(Paragraph 2.4.1 (a) and Page No. 21)

Statement showing the information regarding renewal of applications

Name of the Office	Number of applications received for renewal	Number of renewals granted	Number of applications rejected	Number of applications pending
ADMG Kurnool	NP	NP	NP	NP
ADMG Banaganapalle	NP	NP	NP	NP
ADMG Kadapa	NP	NP	NP	NP
ADMG Yerraguntla	44	4	19	21
ADMG Vijayawada	46	10	NP	NP
ADMG Nandigama	NP	NP	NP	NP
ADMG Visakhapatnam	NP	NP	NP	NP

ADMG Anakapalli	NP	NP	NP	NP
DDMG Kurnool	51	8	14	6
DDMG Kadapa	33	3	17	13
DDMG Vijayawada	36	5	3	28
DDMG Viskhapatnam	15	15	0	0
Total	225	45	53	68

Source: Compiled based on data furnished by the Department
NP-Not Produced

Appendix IX
(Paragraph 2.4.2 and Page No. 22)

Statement showing ineligible leases

Sl. No.	Lease ID Number	Lease period upto	Extent of lease (in Hectares)
1.	1322671167	27.07.1987	15.292
2.	1322721168	21.07.1992	13.743
3.	1322721171	21.07.1992	9.526
4.	1322721170	21.07.1992	25.880
5.	1322741173	08.02.1994	31.627
6.	1322741172	29.05.1994	42.720
7.	1322741169	18.10.1994	44.549
8.	1122780175	30.04.1998	20.777
9.	1312920031	16.09.2002	7.490
10.	1322851166	04.11.2005	17.693
11.	112820090	12.12.2006	352.080
12.	1122870174	10.06.2007	7.450
13.	Not Available	28.07.2014	4.490
14.	1312940049	02.08.2014	2.190

Source: Compiled based on data furnished by the Department

Appendix X (A)
(Paragraph 2.4.3 and Page No. 26)

Statement showing details of non-registration of lease deeds for major mineral mining leases

(₹ in crore)

ADMG Office	Total number of leases	Total number of lease files scrutinised	Number of leases for which lease deed was not executed	Amount of Stamp duty to be collected	Registration fee to be collected	Total loss of revenue
Banaganapalle	50	40	11	6.59	0.05	6.64
Kurnool	67	40	08	3.66	0.02	3.68
Nandigama	12	12	04	1.81	0.05	1.86
Yerraguntla	19	14	08	3.98	0.09	4.07
Total	148	106	31	16.04	0.21	16.25

Source: Compiled based on data furnished by the Department

Appendix X (B)
(Paragraph 2.4.3 and Page No. 26)

Statement showing details of non-registration of lease deeds for minor mineral mining leases

(Amount in ₹)

ADMG Office	Total number of minor mineral mining leases	Number of leases for which lease deed not executed	Amount of Stamp duty to be collected	Registration fee to be collected	Total loss of revenue
Anakapalli	406	26	29,32,449	2,23,346	31,55,795
Yerraguntla	97	11	1,17,866	21,694	1,39,560
Total	503	37	30,50,315	2,45,040	32,95,355

Source: Compiled based on data furnished by the Department

Appendix XI
(Paragraph 3.1.2 (b) and Page No. 31)

Statement showing short levy of seigniorage fee and associated revenue

(Amount in ₹)

Year	Despatch (in Sq. m)	Conversion to Metric Ton	Seigniorage fee (SF) to be levied	Seigniorage fee levied	Short levy of SF	Short levy of DMF (10 per cent of SF)	Short levy of MERIT	Total Short levy
2017-18	7,14,070	51,005	51,00,500	35,70,350	15,30,150	1,53,015	30,603	17,13,768
2018-19	11,63,800	83,129	83,12,857	58,19,000	24,93,857	2,49,386	49,877	27,93,120
2019-20	11,85,500	84,679	85,00,357	60,18,500	24,81,857	2,48,186	49,637	27,79,680
2020-21	7,30,440	52,174	57,39,171	43,82,640	13,56,531	1,35,653	27,131	15,19,315
2021-22	87,500	6,250	6,87,500	5,25,000	1,62,500	16,250	3,250	1,82,000
Total	38,81,310	2,77,237	2,83,40,385	2,03,15,490	80,24,895	8,02,490	1,60,498	89,87,883

Source: Compiled based on data furnished by the Department

Note: Leases given on auction basis

Appendix XII (A)
(Paragraph 3.1.2 (c) and Page No. 31)

Statement showing non-collection of NMET fund

(₹ in crore)

Sl. No.	Name of the Mineral	Royalty collected	NMET		
			To be collected	Collected	Short collection
1.	Garnet (Abrasive)	8.64	0.17	0	0.17
2.	Ilmenite	12.30	0.25	0	0.25
3.	Rutile	2.70	0.05	0	0.05
4.	Sillimanite	5.09	0.10	0	0.10
5.	Zircon	2.02	0.04	0	0.04
Total		30.75	0.61	0	0.61

Source: Compiled based on data furnished by the Department

Appendix XII (B)
(Paragraph 3.1.2 (c) and Page No. 31)

Statement showing non-collection of MERIT fund

(₹ in lakh)				
Name of the Mineral	Seigniorage fee	MERIT to be Collected	MERIT collected	Short collection
River Sand	29.70	0.59	0	0.59

Source: Compiled based on data furnished by the Department

Appendix XIII (A)
(Paragraph 3.1.3 (a) and Page No. 32)

Removal of minerals without having environmental clearance for lease area less than five hectares

(Amount in ₹)

Name of the ADMG Office	Name of the Mineral	Despatched Quantity (cum /Sq.m) [#]	Cost of Mineral to be recovered*
Banaganapalle	LSS (Black)	20,48,610.00	6,14,58,300
	Road Metal	3,942.00	17,73,900
Kurnool	Black Granite	1,734.60	2,99,21,850
Nandigama	Road Metal	2,31,730.00	10,42,78,500
Grand Total		22,86,016.60	19,74,32,550

Source: Compiled based on data furnished by the Department

LSS Black in Sq. m, Road Metal in cum and Black Granite in cum

* LSS Black at 30 per Sq. m, Black granite at ₹17,250 per cum and Road Metal at ₹450 per cum

Appendix XIII(B)
(Paragraph 3.1.3 (a) and Page No. 32)

Removal of minerals without having environmental clearance for lease area more than five hectares

(Amount in ₹)

Name of the ADMG Office	Name of the Mineral	Despatched Quantity (Cum/MT/Sq.m)	Cost of mineral to be recovered
Anakapalli	Building Stone	200	90,000
	Gravel	54,000	1,21,50,000
	Road metal	10,66,163	47,97,73,350
	Road Metal & Building Stone	11,53,200	51,89,40,000
Banaganapalle	LSS (Black)	18,32,700	5,49,81,000
	Road metal	1,56,698	7,05,14,100
Kadapa	Road metal	14,950	67,27,500
Nandigama	Gravel	39,791	89,52,975
	Road metal	14,15,731	63,70,78,950
Vijayawada	Gravel	11,640	26,19,000
Vishakapatnam	Apatite and Vermiculite	120	2,64,000
	Colour Granite	20,927	36,09,90,750
	Gravel	12,300	27,67,500
	Road metal	16,200	72,90,000
Yerraguntla	Dolomite	2,63,250	13,16,25,000
		Total	229,47,64,125

Source: Compiled based on data furnished by the Department

Vermiculite in MT, LSS Black in Sq. m and others in cum

* Building stone, road metal at ₹450 per cum, Gravel at ₹225 per cum, LSS Black at ₹30 per Sq. m, colour granite at ₹17,250 per cum and Apatite and Vermiculite at ₹2,200 per MT

Appendix XIV
(Paragraph 3.1.3 (b) and Page No. 33)

Loss of revenue due to excavation of mineral in excess of permitted quantity mentioned in environmental clearance

(Amount in ₹)

Name of the ADMG Office	Name of the Mineral	Quantity permitted to be extracted as mentioned in EC (cum/MT) [#]	Quantity actually extracted (cum/MT) [#]	Difference (cum/MT) [#]	Cost of the mineral to be recovered*
Anakapalli	Road Metal	64,105	1,65,200	1,01,095	4,54,92,750
	Gravel	NIL	1,650	1,650	3,71,250
Yerraguntla	Yellow Ochre	19,950	30,350	10,400	31,20,000
Visakhapatnam	Gravel	1,982	3,922	1,940	4,36,500
Total					4,94,20,500

Source: Compiled based on data furnished by the Department

Yellow Ochre in Metric Ton, Road Metal and Gravel in cum

* Yellow Ochre at ₹300 per MT, Gravel at ₹225 per cum and Road Metal at ₹450 per cum

Appendix XV
(Paragraph 3.1.4 (b) and Page No. 35)

Statement showing non levy of DMF and MERIT on government works

(₹ in crore)

Year	Receipts from government works (Other Departmental Receipts)	DMF (at 30 per cent of Receipts)	MERIT (at two per cent of Receipts)	Total of DMF and MERIT
2017-18	454	136.20	9.08	145.28
2018-19	483	144.90	9.66	154.56
2019-20	422	126.60	8.44	135.04
2020-21	340	102.00	6.80	108.80
2021-22	432	129.60	8.64	138.24
Total	2,131	639.30	42.62	681.92

Source: Compiled based on data furnished by the Department

Appendix XVI (A)
(Paragraph 3.1.5 and Page No. 36)

Statement showing short levy of seigniorage fee and penalty due to incorrect adoption of rate

(Amount in ₹)

Sl. No.	Quantity (in MT)	Quantity estimated in square metre (1 MT = 14 Sq.m)	Seigniorage fee as per		Penalty		
			Sq.m (₹6)	MT (₹110)	To be levied (as per MT)	Levied (as per Sq.m)	Short levied
A	B	C = (B) x 14	D = (C) x ₹6	E = (B) x ₹110	F = (E) x 10 + (E)	G	H = (F) – (G)
1.	34,608	4,84,514	29,07,084	38,06,880	4,18,75,680	3,19,77,924	98,97,756
2.	22,260	3,11,640	18,69,840	24,48,600	2,69,34,600	2,05,68,240	63,66,360
3.	20,446	2,86,247	17,17,464	22,49,060	2,47,39,660	1,88,92,104	58,47,556

4.	22,232	3,11,245	18,67,488	24,45,520	2,69,00,720	93,37,350	1,75,63,370
5.	5,850	81,900	4,91,400	6,43,500	70,78,500	54,05,400	16,73,100
6.	3,069	42,966	2,57,796	3,37,590	37,13,490	28,35,756	8,77,734
7.	3,050	42,700	2,56,200	3,35,500	36,90,500	28,18,200	8,72,300
8.	1,750	24,500	1,47,000	1,92,500	21,17,500	16,17,000	5,00,500
9.	1,300	18,200	1,09,200	1,43,000	15,73,000	12,01,200	3,71,800
10.	1,160	16,240	97,440	1,27,600	14,03,600	10,71,840	3,31,760
Total	1,15,725	16,20,152	97,20,912	1,27,29,750	14,00,27,250	9,57,25,014	4,43,02,236

Source: Compiled based on data furnished by the Department

Appendix XVI (B)
(Paragraph 3.1.5 and Page No. 36)

Short levy of DMF, MERIT and consideration amount due to short levy of seigniorage fee on penalty of LSS Black mineral

(Amount in ₹)

Sl. No.	Name of the lessee (Sri/Smt.)	SF Calculated	SF to be calculated	DMF to be levied	DMF levied	Short Levy of DMF	MERIT to be levied	MERIT Levied	Short Levy of MERIT	Consideration amount not levied (100 per cent of SF)
1.	A Chandra Mohan	29,07,084	38,06,880	3,80,688	2,90,708	89,980	76,137	58,142	17,995	38,06,880
2.	G Srinivasulu	18,69,840	24,48,600	2,44,860	1,86,984	57,876	48,972	37,397	11,575	24,48,600
3.	D Dastagiri	17,17,482	22,49,060	2,24,906	1,71,748	53,158	44,981	34,350	10,631	22,49,060
4.	K Shiva Nagi Reddy	18,67,488	24,45,520	2,44,552	1,86,749	57,803	48,910	37,349	11,561	24,45,520
5.	Apathi Bhaskar Naidu	4,91,400	6,43,500	64,350	49,140	15,210	12,870	9,828	3,042	6,43,500
6.	G Mallikarjuna Reddy	2,57,796	3,37,590	33,759	25,780	7,979	6,752	5,156	1,596	3,37,590
7.	Apathi Rajasimha Naidu	2,56,200	3,35,500	33,550	25,620	7,930	6,710	5,124	1,586	3,35,500
8.	Vadla Subramanyam	1,47,000	1,92,500	19,250	14,700	4,550	3,850	2,940	910	1,92,500
9.	Vunnam Purushotham	1,09,200	1,43,000	14,300	10,920	3,380	2,860	2,184	676	1,43,000
10.	K Naga Subbarayudu	97,440	1,27,600	12,760	9,744	3,016	2,552	1,949	603	1,27,600
Total			1,27,29,750			3,00,882			60,175	1,27,29,750

Source: Compiled based on data furnished by the Department

Note: Leases given on auction basis and for SF calculated/to be calculated, Refer Appendix XVI (A)

Appendix XVII
(Paragraph 3.1.6 and Page No. 36)

Statement showing non-levy of DMF and MERIT

(Amount in ₹)

Name of the ADMG office	Number of cases	Seigniorage Fee collected	DMF			MERIT		
			To be levied	Levied	Non-levy	To be levied	Levied	Non-levy
Yerraguntla	30	1,55,34,009	44,75,703	0	44,75,703	3,10,680	0	3,10,680
Kadapa	27	51,82,935	15,54,881	0	15,54,881	1,03,659	0	1,03,659
Kurnool	6	53,13,420	13,09,442	0	13,09,442	1,06,268	0	1,06,268

Vishakapatnam	8	42,42,447	12,72,734	0	12,72,734	84,849	0	84,849
Grand Total	71	3,02,72,811	86,12,760	0	86,12,760	6,05,456	0	6,05,456

Source: Data furnished by the Department

DMF to be levied: Granite - 12.5 per cent at Yerraguntla and all other minerals - 30 per cent

Appendix XVIII (A)
(Paragraph 3.1.7 (a) and Page No. 37)

Non-levy of DMF and MERIT on seigniorage fee due to incorrect application of rule

(Amount in ₹)

Sl. No.	Name of the lessee (Sri/Smt)	Name of the Mineral and Quantity		Seigniorage Fee	Non-levy of DMF			MERIT		
					To be levied	Levied	Non-levy	To be levied	Levied	Non-levy
1.	Gowra Babu	LSS Black (Sq.m)	5,10,290	25,51,450	2,55,145	0	2,55,145	51,029	0	51,029
2.	Mohammad Gouse	Rehmatti (Cum)	540	18,900	5,670	0	5,670	378	0	378
	Total		5,10,830	25,70,350	2,60,815	0	2,60,815	51,407	0	51,407

Source: Compiled based on data furnished by the Department

Note: Seigniorage fee for LSS Black calculated at ₹five per sq.m and Rehmatti at ₹35 per cum.

Appendix XVIII (B)
(Paragraph 3.1.7 (b) and Page No. 38)

Short levy of penalty due to incorrect adoption of rate and rule

(Amount in ₹)

Name of the lessee	Quantity in		Seigniorage Fee as per		Penalty		
	Sq m	MT*	Sq. m (₹6)	MT (₹110)	To be levied #	Levied **	Short levied
S ROSAMMA	6,99,300	49,950.00	41,95,800	54,94,500	6,04,39,500	2,09,79,000	3,94,60,500
O BALI REDDY	7,69,125	54,937.50	46,14,750	60,43,125	6,64,74,375	2,76,88,500	3,87,85,875
O BALI REDDY	1,47,000	10,500.00	8,82,000	11,55,000	1,27,05,000	52,92,000	74,13,000
B C KULLAYAPPA	1,26,000	9,000.00	7,56,000	9,90,000	1,08,90,000	45,36,000	63,54,000
V LAKSHMAMMA	3780	270.00	22,680	29,700	3,26,700	1,36,260	1,90,440
Total	17,45,205	1,24,657.50	1,04,71,230	1,37,12,325	15,08,35,575	5,86,31,760	9,22,03,815

Source: Compiled based on data furnished by the Department

*Conversion factor of One MT= 14 Sq.m

₹110 per MT+10 times of Seigniorage Fee

** ₹6 per Sq.m + five times of Seigniorage Fee

Appendix XVIII (C)
(Paragraph 3.1.7 (b) and Page No. 38)

Short levy of DMF and MERIT on penalty due to incorrect adoption of rate and rule

(Amount in ₹)

Name of the lessee	Seigniorage Fee Levied (₹110 per MT)	DMF			MERIT		
		To be levied	Levied	Short levy	To be levied	Levied	Short levy
S ROSAMMA	54,94,500	5,49,450	0	5,49,450	1,09,890	0	109,890
O BALI REDDY	60,43,125	6,04,313	0	6,04,313	1,20,863	0	120,863
O BALI REDDY	11,55,000	1,15,500	0	1,15,500	23,100	0	23,100
B C KULLAYAPPA	9,90,000	99,000	0	99,000	19,800	0	19,800
V LAKSHMAMMA	29,700	2,970	0	2,970	594	0	594
Total				13,71,233			2,74,247

Source: Compiled based on data furnished by the Department

Appendix XIX
(Paragraph 3.2.2 (a) and Page No. 39)

Statement showing loss of revenue due to treating white shale as major mineral
(Amount in ₹)

Year	Dead rent to be levied*	Dead rent levied	Short levy of dead rent
Lease 1 (Extent 43.32 hectares)			
2016-17	6,49,800	86,640	5,63,160
2017-18	6,49,800	86,640	5,63,160
2018-19	6,49,800	86,640	5,63,160
2019-20	6,49,800	1,36,825	5,12,975
2020-21	28,15,800	1,73,280	26,42,520
2021-22	28,15,800	MRA not prepared	NA
Total			48,44,975
Lease 2 (Extent 40.469 hectares)			
2016-17	6,07,035	80,939	5,26,096
2017-18	6,07,035	80,939	5,26,096
2019-20	6,07,035	1,27,822	4,79,213
2020-21	26,30,485	1,61,878	24,68,607
2021-22	26,30,485	1,61,878	24,68,607
Total			64,68,619

Source: Compiled based on data furnished by the Department

*at ₹15,000 per hectare upto 2020-21 and at ₹65,000 per hectare from 2020-21 onwards

Appendix XX
(Paragraph 3.2.2 (b) and Page No. 40)

Statement showing short levy of dead rent in respect of major mineral
(Amount in ₹)

Name of the ADMG Office	Name of the Mineral	Area in Hectares	Dead Rent (per Hectare)	Dead Rent to be levied	Dead Rent actually levied by the Department	Short Levy
Kadapa	Iron	665.328	8,000	53,22,624	26,61,312	26,61,312
Yerraguntla	Iron	21.853	8,000	1,74,824	87,412	87,412
	Limestone	9.510	4,000	38,040	15,112	22,928
Banaganapalle	Limestone	19.052 [#]	3500*	66,682	21,349	45,333
Total				56,02,170	27,85,185	28,16,985

Source: Compiled based on data furnished by the Department

9.526 (2019-20) + 9.526 (2020-21) = 19.052

* for 2019-20 & 2020-21, Dead rent taken as 3,000 and 4,000 respectively. Hence, average figure of 3,500 taken as Dead Rent

Appendix XXI
(Paragraph 3.2.3 (a) and Page No. 42)

Statement showing short collection of security deposit
(Amount in ₹)

Name of the ADMG Office	Number of cases	Security deposit to be collected at enhanced rate	Security deposit collected as per old rates	Short collection of Security deposit
Vishakapatnam	58	11,41,53,795	2,72,57,634	8,68,96,161
Anakapalli	53	6,07,82,007	1,67,23,870	4,40,58,137
Banaganapalle	44	2,35,66,218	46,61,954	1,89,04,264
Vijayawada	38	1,40,89,803	28,85,665	1,12,04,138
Kurnool	20	1,77,81,579	47,95,030	1,29,86,549
Kadapa	6	54,51,300	14,72,200	39,79,100
Yerraguntla	5	10,33,656	2,42,980	7,90,676
Grand Total		224	23,68,58,358	5,80,39,333

Source: As computed by the Department

Appendix XXII
(Paragraph 3.2.3 (b) and Page No. 42)

Statement showing non-forfeiture of security deposit

(Amount in ₹)

Name of the ADMG Office	Number of leases for which Security Deposit not forfeited	Security Deposit not forfeited
Vishakapatnam	13	5,20,300
Anakapalli	12	4,70,000
Vijayawada	7	3,22,600
Kurnool	6	4,30,500
Banaganapalle	3	1,32,900
Yerraguntla	3	45,000
Grand Total	44	19,21,300

Source: Compiled based on data furnished by the Department

Appendix XXIII
(Paragraph 3.2.4 and Page No. 43)

Statement showing extent of land on which annual compensation fee not levied

Sl. No.	Name of the ADMG Office	Number of leases	Extent of land (in hectare)
1.	Kurnool	63	1,483.50
2.	Banaganapalle	30	3,786.19
3.	Yerraguntla	17	299.36
4.	Anakapalli	13	124.60
5.	Kadapa	13	1,364.55
6.	Nandigama	6	573.08
7.	Vishakapatnam	2	17.74
	Total	144	7,649.02

Source: Compiled based on data furnished by the Department

Appendix XXIV
(Paragraph 4.1.1 and Page No. 46)

Statement showing inspections conducted by the Mines & Geology Department

Sl. No.	Name of the ADMG Office	Year	Number of leases in the corresponding period	Number of leases for which inspection was conducted	Shortfall in inspections	Percentage of shortfall
1.	Yerraguntla	2017-18	186	92	94	51
2.		2018-19	175	84	91	52
3.		2019-20	175	87	88	50
4.		2020-21	132	97	35	27
5.		2021-22	126	32	94	75
6.	Kurnool	2017-18	679	831	(-) 152	--
7.		2018-19	722	61	661	92
8.		2019-20	612	99	513	84
9.		2020-21	606	90	516	85
10.		2021-22	608	25	583	96
11.	Banaganapalle	2017-18	485	350	135	28
12.		2018-19	498	366	132	27
13.		2019-20	518	315	203	39

14.		2020-21	530	300	230	43
15.		2021-22	541	100	441	82
16.	Kadapa	2017-22	NP	NP	NA	NA
17.	Nandigama	2017-22	NP	NP	NA	NA
18.	Visakhapatnam	2017-18	165	156	9	5
19.		2018-19	167	160	7	4
20.		2019-20	160	168	(-) 8	--
21.		2020-21	163	158	5	3
22.		2021-22	121	132	(-) 11	--
23.	Anakapalli	2017-18	357	658	(-) 301	--
24.		2018-19	347	719	(-) 372	--
25.		2019-20	385	151	234	61
26.		2020-21	NP	NP	NA	NA
27.		2021-22	NP	NP	NA	NA
28.	Vijayawada	2017-18	139	194	(-) 55	--
29.		2018-19	NP	--	--	--
30.		2019-20	135	175	(-) 40	--
31.		2020-21	99	172	(-) 73	--
32.		2021-22	108	181	(-) 73	--
			8,939	5,953	2,986	

Source: Compiled based on the Information furnished by the Department
NP:Not produced, NA: Not available

Appendix XXV (Paragraph 4.1.3 (a) and Page No. 48)

Statement showing continuance of leases after recommendation for termination order by Indian Bureau of Mines

SL. No.	Name of the Office	Primary Mineral	Lease Id	Name of the Lessee	Date of recommendation for termination/ discontinuance
1.	Dachepalli	Limestone	722020294	Katteboina Anjaneyulu	14.10.2013
2.	Dachepalli	Limestone	722030291	B.Sarada W/O Late B. Amaralingeswara Rao	14.10.2013
3.	Markapur	Iron Ore	822100029	UBR Minerals; Mgp.P.Udaya Bhaskar	24.09.2018
4.	Anantapuramu	Iron Ore	1212070095	Sai Balaji Minerals	07.06.2019
5.	Kurnool	Iron Ore	1312080118	Buggana Sanjeeva Reddy	07.06.2019
6.	Nandigama	Limestone	622100003	Hemadri Cements Limited	07.06.2019
7.	Kurnool	Limestone	1312060109	Siva Lakshmi Minerals	07.06.2019
8.	Kurnool	Limestone	1312070706	N.Kavita Rani (N S Ramagiri Murthy)	07.06.2019
9.	SPSR Nellore	Vermiculite	912870514	Dugar Insulations India (P) Ltd	07.06.2019
10.	Banaganapalle	Limestone	1322071225	Kamal Mineral Company	15.07.2020
11.	Banaganapalle	Limestone	1322081227	Dalmia Cement (Bharat) Limited	15.07.2020
12.	Kurnool	Limestone	1312980268	S.Mohammed Hussain	13.10.2021
13.	Vizianagaram	Manganese Ore	212070030	M.K. Mining Corporation (A.S.V. Prasad)	13.10.2021

Source: Compiled based on data furnished by the Department

Appendix XXVI
(Paragraph 4.1.3 (b) and Page No. 48)

Statement showing issue of permits in violation to DGMS stop orders

Sl. No.	Lessee id	DGMS Recommended for suspension in the year	Latest Permit Details		
			Permit number	Approved Quantity (in Cum)	Issue date and time
1.	1011080622	2018-19	PR10110806220023	2,000.000	22.09.2022 3:58:01 PM
2.	1021040133	2018-19	PR10210401330070	45.530	09.10.2022 09:03
3.	1021070002	2018-19	PR10210700020067	105.295	29.07.2022 7:47:59 PM
4.	1021120142	2018-19	PR10211201420094	264.853	06.05.2022 00:12
5.	1021140125	2018-19	PR10211401250230	50.234	09.12.2022 16:27
6.	1021150298	2018-19	PR10211502980177	26.768	27.09.2022 5:23:40 PM
7.	1021160522	2018-19	PR10211605220011	332.451	28.03.2021 1:04:51 PM
8.	1021160523	2018-19	PR10211605230021	47.586	16.08.2021 10:11:12 AM
9.	1021160524	2018-19	PR10211605240003	97.482	02.09.2022 10:55
10.	1021200596	2021-22	PR10212005960019	120.914	14.09.2022 10:40:38 AM
11.	1021180555	2021-22	PR10211805550166	31.213	20.09.2022 4:22:40 PM

Source: Compiled based on data furnished by the Department

Appendix XXVII
(Paragraph 4.2 and Page No. 49)

Statement showing revision of penalty orders issued by Government without justification

(Amount in ₹)

Sl. No.	Name of the ADMG office	Number of cases	Original Penalty levied	Revised Penalty amount	Difference between original penalty and revised
1.	Kadapa	4	34,86,76,791	82,75,443	34,04,01,348
2.	Yerraguntla	9	25,55,10,442	1,24,19,480	24,30,90,962
3.	Kurnool	6	7,77,29,959	2,20,12,529	5,57,17,430
4.	Visakhapatnam	4	8,70,50,833	4,84,84,741	3,85,66,092
5.	Anakapalli	4	4,00,04,823	16,56,718	3,83,48,105
6.	Banaganapalle	3	3,03,28,320	41,95,680	2,61,32,640
7.	Vijayawada	1	25,38,086	14,17,024	11,21,062
Total		31	84,18,39,254	9,84,61,615	74,33,77,639

Source: Information furnished by the Department

Appendix XXVIII
(Paragraph 4.3.2 (c) and Page No. 53)

Action taken on triggers by ADMG Kurnool

Trigger No	Date of issue of Show Cause notice/Demand notice	Action taken
APR (02-2020)	25.08.2021 (SCN)	The office has issued demand notice vide letter No. 2399/M-SU.S/2021 dated 18.10.2022
APR (06-2020)	20.07.2020 (Demand Notice)	The lessee has gone for revision under Rule 35A of APMMC and the Government has reduced the penalty in December 2020 and the complete amount is not paid for which the office had intimated the lessee.
APR (11-2020)	25.08.2021 (SCN)	The office has issued demand notice vide letter No. .2399/M-SU.S/2021 dated 18.10.2022

Source: Information furnished by ADMG Kurnool

Appendix XXIX (A)
(Paragraph 4.4.1 (a) and Page No. 57)

Statement showing variation in the extracted quantity

Sl. No.	District	ADMG office	Name of the Lessee	Extent (in Hects)	Extracted quantity (in MT)			Deviation percentage
					Calculated with Scientific Methods	With five per cent variation (+) or (-)	As provided by the Department	
1.	Krishna	Nandigama	M/s. Ramco Cements Limited	124.330	0	0	4,099.00	Can not be calculated
2.				160.000	37,115.00	38,970.75	4,31,513.00	91
3.			M/s Hemadri Cements Limited	38.445	18,90,799.00	17,96,259.05	17,62,420.00	(-2)
4.				38.690	49,30,962.00	46,84,413.90	45,19,542.00	(-4)
5.			M/s. Kakatiya Cement Sugar & Industries Limited	121.460	1,19,79,248.00	1,13,80,285.60	1,11,69,122.00	(-2)
6.			M/s. The KCP Limited	368.350	2,25,17,225.00	2,13,91,363.75	2,10,73,597.00	(-2)
7.			M/s. Ultratech Cements Limited	629.220	3,23,88,675.00	3,07,69,241.25	2,94,24,721.00	(-5)
8.	Kurnool	Banaganapalle	M/s. The Ramco Cements Limited	491.550	20,919.60	21,965.58	60,592.82	64
9.				255.000	2,27,640.14	2,39,022.15	2,82,094.57	15
10.			M/s. UltraTech Cements Limited	844.939	4,53,92,815.00	4,31,23,174.25	4,26,22,309.00	(-1)
11.				395.150	1,52,009.00	1,59,609.45	3,36,646.00	53

Source: Compiled based on the data furnished by IISc and Department

Appendix XXIX (B)
(Paragraph 4.4.1 (a) and Page No. 58)

Calculation of penalty based on the findings made by IISc Bengaluru

(Amount in ₹)

Sl. No.	Name of the Lessee	Extracted Quantity (in MT)			Minimum difference	Penalty (Difference x Market Value)	Royalty (₹80 per MT)	DMF (30 per cent of Royalty)	NMET (two per cent of Royalty)	Total
		By IISc.	#Variation of five per cent	As per Department						
A	B	C	D	E	F	G	H	I	J	K
1.	M/s Hemadri Cements Limited	18,90,799	17,96,259	17,62,420	33,839	1,38,06,312	27,07,120	8,12,136	54,142	1,73,79,710
2.	M/s.Kakatiya Cement Sugar & Industries Limited	49,30,962	46,84,414	45,19,542	1,64,872	6,72,67,776	1,31,89,760	39,56,928	2,63,795	8,46,78,259
3.	M/s.The KCP Limited	1,19,79,248	1,13,80,286	1,11,69,122	2,11,164	8,61,54,912	1,68,93,120	50,67,936	3,37,862	10,84,53,830
4.	M/s.Ultratech Cements Limited	2,25,17,225	2,13,91,364	2,10,73,597	3,17,767	12,96,48,936	2,54,21,360	76,26,408	5,08,427	16,32,05,131
5.	M/ UltraTech Cements Limited	3,23,88,675	3,07,69,241	2,94,24,721	13,44,520	54,85,64,160	10,75,61,600	3,22,68,480	21,51,232	69,05,45,472
6.	M/ UltraTech Cements Limited	4,53,92,815	4,31,23,174	4,26,22,309	5,00,865	20,43,52,920	4,00,69,200	1,20,20,760	8,01,384	25,72,44,264
Total			11,31,44,738	11,05,71,711	25,73,027	104,97,95,016	20,58,42,160	6,17,52,648	41,16,842	132,15,06,666

Source: Compiled based on the data furnished by IISc and Department

Difference was calculated by decreasing the extracted quantity arrived by IISc by five percent (as error) and with the departmental value.

Glossary

Acronym	Full Form
AD	Assistant Director
ADMG	Assistant Director Mines and Geology
APMDC	Andhra Pradesh Mineral Development Corporation
APMMA	Andhra Pradesh Minor Mineral Auction
APMMC	Andhra Pradesh Minor Mineral Concession
APPCB	Andhra Pradesh Pollution Control Board
CC	Closed-Circuit
CFE	Consent For Establishment
CFO	Consent for Operation
DCB	Demand Collection Balance
DDMG	Deputy Director of Mines and Geology
DEIAA	District Environment Impact Assessment Authority
DGMS	Directorate General of Mines and Safety
DGPS	Differential Global Positioning System
DLTF	District Level Task Force
DMF	District Mineral Foundation
DMG	Director Mines and Geology
EC	Environmental Clearance
GIS	Geographic Information System
GoAP	Government of Andhra Pradesh
GoI	Government of India
GPS	Global Positioning System
GSI	Geological Survey of India
IBM	Indian Bureau of Mines
IISc	Indian Institute of Science
JDMG	Joint Director of Mines and Geology
LoI	Letter of Intent
MCA	Mineral Concession Applications
MCR	Mineral Concession Rules
MCDR	Mineral Conservation and Development Rules
MERIT	Mineral Exploration Research and Innovation Trust
MMDR	Mines and Minerals (Development and Regulation)
MoEF	Ministry of Environment & Forest
MoEF&CC	Ministry of Environment Forest and Climate Change
MRA	Mineral Revenue Assessment
MSS	Mining Surveillance System
MT	Metric Tonne
NMET	National Mineral Exploration Trust
NMP	National Mineral Policy
NRA	Natural Resource Accounting
NRSC	National Remote Sensing Centre

NOC	No Objection Certificate
OMEPS	Online Mineral e-Permit System
PA	Performance Audit
PAC	Public Accounts Committee
SCEC	State Coordination cum Empowered Committee
SEIAA	State Environment Impact Assessment Authority
SF	Seigniorage Fee
SLTF	State Level Task Force
SoI	Survey of India
Sq m	Square Meter
TGCP	Telugu Ganga Canal Project
UNFC	United Nations Framework Classification
VTMS	Vehicle Tracking Monitoring System

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