

FIFTEENTH KERALA LEGISLATIVE ASSEMBLY

COMMITTEE
ON
PUBLIC ACCOUNTS
(2023-2026)

FIFTY FIFTH REPORT

(Presented on *26th June* 2024)



SECRETARIAT OF THE KERALA LEGISLATURE

THIRUVANANTHAPURAM

2024

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on

Paragraphs relating to Industries Department contained in the Report of the Controller and Auditor General of India for the year ended 31st March 2016 (Economic Sector)

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COMMITTEE ON PUBLIC ACCOUNTS (2023-2026)

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INTRODUCTION

I, the Chairman, Committee on Public Accounts, having been authorised by the Committee to present this Report, on their behalf present the 55th Report on paragraphs relating to Industries Department contained in the Report of the Comptroller and Auditor General of India for the year ended 31st March 2016 (Economic Sector).

The Report of the Comptroller and Auditor General of India for the year ended 31st March 2016 was laid on the Table of the House on 08th August, 2017.

The Committee considered and finalised this Report at the meeting held on 08th May, 2024.

The Committee place on records our appreciation of the assistance rendered to us by the Accountant General in the examination of the Audit Report.

Thiruvananthapuram
26th June 2024



SUNNY JOSEPH

Chairman,
Committee on Public Accounts.

REPORT

INDUSTRIES DEPARTMENT

2. Licensing and monitoring of quarrying of minor minerals

2.1 Introduction

The Industries Department through Department of Mining and Geology (DMG) issues permits¹ and leases² for quarrying of minor minerals³ which include building stones, gravel, ordinary clay, ordinary sand other than sand used for prescribed purposes and any other mineral declared by Central Government as minor mineral.

In addition, the DMG issues movement permits and dealer's licence for stocking and selling of minor minerals.

The role of the DMG also includes inspection of mines and quarries and implementation of rules and regulations by virtue of the powers vested with it under the Mines and Minerals (Development & Regulation) Act, 1957, the Minerals Concession Rules, 1960, the Kerala Minor Mineral Concession (KMMC) Rules, 1967 and 2015, and collection of revenue on both major as well as minor minerals. DMG is also responsible, through the Kerala Minerals (Prevention of Illegal Mining, Storage and Transportation) Rules, 2015 for curbing illegal mining and clandestine movement of minerals.

Forest/Environmental Clearances (EC)/No Objection Certificates (NOC) required for issuing quarrying permits/leases include:-

- 1 Quarrying Permit is a short term permit not exceeding one year at a time limited to a maximum further period of two years. It is given at district level.
- 2 Quarrying Lease is a mining lease for minor minerals granted for a minimum period of five years and maximum of twelve years. It is given at Directorate level for which a lease deed is to be executed.
- 3 Building stones, gravel, ordinary clay, ordinary sand other than sand used for prescribed purposes and any other mineral declared by Central Government as minor mineral.

- EC from the Ministry of Environment and Forest (MoEF)/ State level Environment Impact Assessment Authority (SEIAA), wherever applicable.
- NOC from the District Collector based on the recommendation of the District Expert Committee constituted by Government in this regard, for extraction of ordinary clay and ordinary sand.
- NOC from revenue authorities if the quarrying area is 'poramboke'⁴ land/revenue land.
- NOC from Forest Department if the quarrying area is forest land.
- Consent from the Kerala State Pollution Control Board (KSPCB) to operate quarries in the case of granite building stone (GBS).

Role of the Revenue Department includes issuance of survey map of the area, issuance of certificate of demarcation of boundaries, issue of certificate to the effect that the land has not been assigned for any other purpose, issue of possession and enjoyment certificate, issue of NOC in respect of quarrying in Government *poramboke* land and rendering of assistance in the implementation of KMMC Rules.

In addition to the above, quarry operators should have valid licence from Local Self Government Institutions (LSGI) as per Section 232 of The Kerala Panchayat Raj Act, 1994 and valid explosive licence.

2.2 Audit Objectives

To examine whether:

- licences were issued in accordance with rules and regulations;
- monitoring of compliance with the terms and conditions of licence including environmental aspects was conducted at all levels; and

⁴ 'Poramboke' means unassessed lands which are the property of the Government.

- existing system was adequate and effective in curbing illegal quarrying operations.

2.3 Audit criteria

Audit criteria are derived from:

- The Mines and Minerals (Development and Regulation) Act, 1957 and rules framed there under;
- Kerala Minor Mineral Concession Rules, 1967 and 2015;
- Kerala Minerals (Prevention of illegal mining, storage and transportation) Rules, 2015;
- Kerala Environment Policy, 2009;
- Various circulars and government orders issued in connection with quarrying and related activities;
- Directions issued by KSPCB in their consent to operate based on Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981;
- Directions issued by SEIAA/ MoEF based on Environmental Impact Assessment (EIA) notifications and Environment Protection Act, 1986;
- Courts orders; and
- EIA notifications.

2.4 Audit scope and methodology

The Performance Audit covering the period from 2011-12 to 2015-16 was conducted during February to July 2016 to evaluate adherence to rules and regulations in issuance of permits/leases in respect of quarrying/mining operations of minor minerals other than river sand⁵ in the State and its monitoring, with emphasis on environmental aspects.

5 Revenue Department issues permits for mining of river sand which is governed by The Kerala Protection of River Banks and Regulations of Removal of Sand Act, 2001 and Rules made there under and hence not covered under this performance audit. A Compliance Audit on "Receipts and utilisation of River Management Fund" concerning sand mining issues has appeared in the Audit Report (para 4.3) on General & Social Sector for the year ended March 2015.

Out of the 14 districts in the State, five⁶ were selected for audit using IDEA package, in addition to which, three Regional Mineral Squads⁷ were also selected for audit. All lease orders issued in the test checked districts during the period of audit were covered. Ten per cent of the permit files in the five districts were selected based on systematic sampling method and five per cent of the illegal mining and transportation cases through random sampling.

In addition to the selected units, audit also covered the offices of Industries, Environment, Revenue and Local Self Government Departments in the Secretariat, KSPCB at Thiruvananthapuram and its district level offices (field offices) in the selected five districts, State level Environment Impact Assessment Authority (SEIAA), Thiruvananthapuram and Department of Environment and Climate Change (DoECC), Thiruvananthapuram, Collectorates in the selected five districts, Commercial Taxes check posts in the districts of Thrissur, Kozhikode and Wayanad, M/s Kochi Metro Rail Corporation Ltd. and Project Implementation Unit of NHAI at Palakkad.

The audit objectives, audit criteria and audit scope and methodology were discussed with the representatives of the above mentioned Departments and agencies during the Entry Conference held on 21 April 2016. Files and records relating to quarrying permits/leases and Registered Metal Crusher Units (RMCU) issued in the selected five districts and in the Directorate of Mining and Geology, Thiruvananthapuram were verified. Joint physical verification of sites with departmental officials was conducted in selected sites/cases for checking compliance of conditions mentioned in quarrying permits/leases/licences and the effectiveness of monitoring by various agencies such as Department of Mining and Geology (DMG), Revenue Department, LSGIs, KSPCB, SEIAA and Forest Department.

Audit findings were discussed with representatives of Industries, Environment, Forest, Revenue and Local Self Government Departments, SEIAA and KSPCB in an

6 Pathanamthitta, Ernakulam, Thrissur, Kozhikode and Wayanad.

7 Kerala Mineral Squads are located at Thiruvananthapuram, Thrissur and Kozhikode under the control of Deputy Director, Directorate of Mining and Geology.

exit conference conducted on 7 March 2017 and their replies have been appropriately incorporated in the Audit Report.

Details of quarrying permits/ leases granted and illegal cases detected during the period from 2011-12 to 2015-16 are furnished in Table 2.1.

Table 2.1

Quarrying permits/ leases granted and illegal cases detected

Category	2011-12	2012-13	2013-14	2014-15	2015-16	Total
Number of quarrying permits granted	2,401	2,331	1,797	1,538	2,992	11,059
Number of quarrying leases granted for granite building stone including granite dimension stone	75	18	6	21	9	129
Illegal cases detected by DMG	3,870	4,569	4,458	4,191	3,733	20,821

(Source: Department of Mining and Geology)

Illegal cases detected include illegal quarrying, illegal transportation and illegal storage of minor minerals. It has no correlation with the number of quarrying permits/leases.

Audit findings

2.5 Non-imposition of restrictions on quarrying ordinary earth

As per the Office Memorandum (June 2013) of MoEF, the concerned State Environment Impact Assessment Authorities (SEIAA) were directed to prohibit excavation activity in respect of ordinary earth deeper than two metres from ground level and within 15 m of any civil structure.

However, we observed that the provision was not included in KMMC Rules which regulates quarrying activities in the State. So, a person could extract ordinary earth from his own land for construction of buildings. Only removal of earth from the site required transit passes from DMG. We noticed following instances where unscientific quarrying of earth caused loss of property and life which shows the necessity of making provisions for regulating quarrying of ordinary earth:

- Unscientific excavation of hill (February 2015) for construction of a building for Hill Top Public School, situated at Thiruthammalthazham in Kozhikode district led to land slide and death of two people.
- Land slide occurred (June 2015) during heavy rain at a site, close to MC Road at Karamala near Muvattupuzha town in Ernakulam district where earth was excavated from five to six months back and led to loss of property.

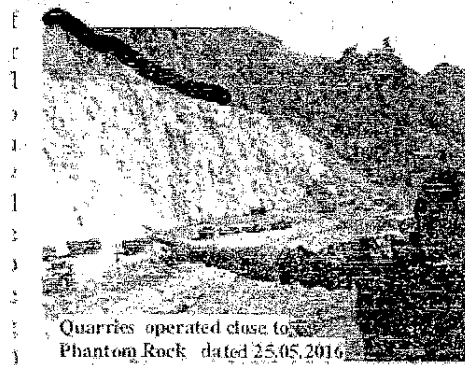
2.6 Non-identification of sensitive areas to be excluded while granting quarrying permits

The Principal Secretary, LSGD requested the Centre for Earth Science Studies (CESS)⁸ to formulate an opinion based on a rapid environment impact assessment study on the functioning of Athani hard rock quarry in Padinjarathara Grama Panchayath in Wayanad district. The study report recommended (February 2008) that in view of the landslide proneness of the region, Grama Panchayath should dissuade operation of quarries at higher elevation, disallow more than one quarry within an area of two square kilometre and ensure that the distance between two operational quarries is not less than one kilometre. As per the report, terrain disfigurements influenced the weather pattern and distribution of species locally. The report suggested identification of a few quarry sites by the district administration after proper studies for extensive mining, instead of allowing quarries in ecologically fragile highlands.

We noticed that the Government failed to implement the recommendation of the study. Quarrying, especially GBS was possible anywhere in the State except in forest land, if a private party was in possession of either a private land or an NOC from Revenue Department for quarrying in poramboke land. Further, DMG/Government did not identify the areas that had become sensitive as a result of excessive exploitation of GBS or where quarrying posed a threat to the environment or was near the sites of archaeological/tourism importance as evidenced from the following:

⁸ Now known as National Centre for Earth Science Studies under Ministry of Earth Sciences, GoI

- At the time of site visit to Ambalavayal Panchayath in Wayanad district, we noticed that a hill had been extensively quarried. We also observed that, 17 quarries were functioning in addition to abandoned quarries nearby. Thus, more than one quarry lease/permit had been granted within two square kilometre.
- District revenue authorities of Wayanad issued NOC for quarrying in Government land subject to the condition that no quarrying was to be carried out in such a way that it adversely affected Phantom Rock, a noted tourism spot. However, we observed that DMG had issued no such orders in respect of private lands and had issued quarrying permits in areas close to Phantom Rock as there were no specific provisions in KMMC Rules prohibiting quarrying near such sites of importance.



- In Thrissur district, Honourable High Court of Kerala prohibited (June 2015) quarrying operations close to Muniyattukunnu, a place noted for dolmens⁹, in Mupliyam village. Accordingly, 12 quarries had to be closed (June 2015).

We observed that the Environmental Clearance (EC) conditions issued by SEIAA Tamilnadu, a neighbouring State which shares Western Ghats with Kerala, have placed restrictions on quarrying in Western Ghats in that the total extent of nearby quarries (existing, abandoned and proposed) located within 500 m radius from the periphery of a quarry shall not exceed 25 ha within the mining lease period of an application. The DMG, Government of Kerala (GoK) had not adopted similar restrictive measures.

⁹ Prehistoric megalithic tombs consisting of a capstone supported by two or more upright stones to form a barrow.

In the exit conference, the Additional Chief Secretary (ACS), Industries Department accepted the audit observation and assured that identification of ecologically fragile high lands and sites of archaeological / tourism importance would be done in future.

[Audit paragraphs 2 to 2.6 contained in the Report of the Comptroller and Auditor General of India for the year ended 31st March 2016 (Economic Sector)].

[Notes received from the Government on the above audit paragraphs are included as Appendix II]

Excerpts from the discussion of Committee with officials concerned.

1) The Senior Audit Officer brought to the notice of the Committee that there were 123 villages notified as Ecologically Sensitive Areas (ESA) on Western Ghats. However, it should be clarified the date on which such a notification was issued, she added.

2) The Committee pointed out that as per the Central Government notification dated 4th September 2015, the agricultural land and residential areas in Kerala had been excluded from the eco-sensitive zone and enquired whether it was noticed by the department. The Director, Mining and Geology replied that mining was not allowed in those 123 villages, notified as ESA.

3) The Committee pointed out that eventhough the 123 villages had been exempted from ESA, as per Central Government notification, the mining permission was not granted to those 123 villages and commented that it was illegal to deny permission for mining activities in those exempted villages. The Director, Mining and Geology replied that it had been decided not to grant permission for mining in the above 123 villages. He further informed the Committee that the Hon'ble High Court had also given instructions in that regard.

4) The Committee pointed out that there were no such directions given by the High Court and commented that if the Committee accepted the department's contention that all the lands of these 123 villages in Kerala were ESA, they would impose restrictions not only for quarrying activities but also for many other activities. The Director, Mining and Geology replied that it was specified in the report that the activities in "red" category could not be carried out in those areas. The Committee asked the department to exhibit the report having such a suggestion and opined that in the report submitted by Kasthurirangan regarding the conservation of the Western Ghats, the 123 villages in Kerala had been notified as ESAs. After that, the Kerala State Biodiversity Board published in its website the list of villages declared as ESA as per the notification issued by the Central Government on 04-09-2015 based on the report of Oommen V. Oommen Committee. The Director, Mining and Geology informed that a reply would be submitted after examining the matter in detail. The Committee directed the department to re-think and re-consider the matter. The Director, Mining and Geology agreed to do so.

5) The Committee wanted to know why the government had sanctioned 17 quarries within two square KM, violating environmental impact assessment study report which recommended to disallow more than one quarry within 2 sqkm. The Director, Mining and Geology replied that the quarries were not functioning now.

6) The Committee enquired why the orders prohibiting quarrying near tourist spots were not issued in respect of private lands though the same was issued in respect of government lands. The Senior Audit Officer interferred and wanted to know about the audit objection regarding the quarrying in the near by areas of phantom rock, wayanad, mentioned in the audit para. The Director, Mining and Geology Department replied that the said quarries were

not functioning then and after 2015 only quarries with environmental clearance were allowed to operate in Kerala.

7) Then the Committee enquired whether the identification of ecologically fragile high lands and sites of archaeological/tourism importance had been done. The Director, Mining and Geology replied that as per the rule, no quarry should be operated within 50 metres of places of archaeological/tourism importance and added that the Hon'ble Supreme Court had stayed the National Green Tribunal's verdict that, there should be a distance of 200 meters between the quarry and the nearest building. It was further submitted that the Central Government was conducting a study through the Department of Mining and Geology regarding the said distance limit.

8) When the Committee enquired about the minimum mandated distance between a quarry and a residential building, the Director, Mining and Geology replied that it had been fixed at 50 meters.

Conclusion/Recommendation

9) **The Committee directs the department to furnish a report on the present status of normal, economic, construction, mining related activities allowed in the villages exempted from the purview of Ecologically Sensitive Areas.**

2.7 Absence of a streamlined system for issuing quarrying permits

Government of India (GoI), Honourable Supreme Court and the GoK had issued guidelines/stipulations to be followed as prerequisites for granting of permits. But these guidelines/stipulations were not followed while granting quarrying permits as detailed below:-

- **Non-auctioning of Government land for quarrying**

Government ordered¹⁰ (December 2010) that in order to bring in transparency in the allotment of Government sites for quarrying operations, right to quarry could be

auctioned and, medium or long term leases would be given by Revenue Department for quarrying in *poramboke* lands through a simplified auction system. Further, Additional Chief Secretary (Revenue) would examine all aspects.

We observed that Government did not issue concrete orders in this regard and the DMG issued permit/lease to private parties who produced an NOC from Revenue Department, without conducting auction. The non-auctioning of Government land prevented the possibility of getting more revenue for the Government through auctioning, in addition to seigniorage¹¹ charge. We noticed instances where leases/permits were given for quarrying in government land without auction based on NOCs issued by Revenue department which are detailed in **Appendix -III(1)**.

Government replied (March 2017) that the Revenue department has entrusted the Centre for Management Development for conducting a study in this matter and that a decision would be taken on receipt of the study report.

- **Extension of exemption to existing quarrying permit holders**

A Mining Plan shall incorporate comprehensive details such as plan of the precise area showing the nature and extent of minor minerals body, spots and extent for excavation, detailed cross section, detailed plan for excavation, details of geology and lithology¹² of the precise area, precise area showing natural water courses, forest limits, assessment of impact of mining on forest and environment including air and water pollution, details of restoration by afforestation, land reclamation and other measures under Mine Closure Plan and EC for cluster of minor mineral leases. As per directions (May 2011) of Ministry of Mines, GoI, mining plan submitted by an applicant and duly approved by State Government is a pre-requisite for commencement of quarrying. Honourable Supreme Court in its judgement¹³ (February 2012) recommended provision for preparation of approved Mining Plan in the rules governing mining of minor minerals by States and also stressed on the necessity of EC for all

11 Compensation for destruction, removal or appropriation from Government land earth, sand, metal, laterite, lime shell and other notified articles.

12 General physical characteristics of rocks in a particular area

13 IA in SLPC No.19628-19629 of 2009.

quarry operations irrespective of area or period of lease/permit. Further, Clause 13.1 of Kerala State Environment Policy, 2009 stipulated EIA by competent agencies prior to the allocation of sites for mining and quarrying activities.

We noticed that

- GoK did not frame or modify rules in consonance with the Gol directions or the Honourable Supreme Court judgement making approved mining plan a pre-requisite for granting quarrying permits. Further, quarrying leases and permits were issued without submission of a mining plan. The new rules were framed only in February 2015, wherein mining plan was included as a prerequisite for granting lease.
- As per the revised KMMC Rules and orders issued by GoK, existing quarrying permit holders of GBS were exempted from submitting mining plan and EC. This was against the spirit of the Honourable Supreme Court order and Kerala State Environment Policy.

GoK replied (March 2017) that at present the department was insisting upon mining plan and EC for grant of any type of concession¹⁴ for mining of minerals.

We presume that the GoK started insisting upon obtaining EC only after the Honourable Supreme Court upheld (December 2016) its earlier direction (February 2012) requiring EC for all quarrying activities.

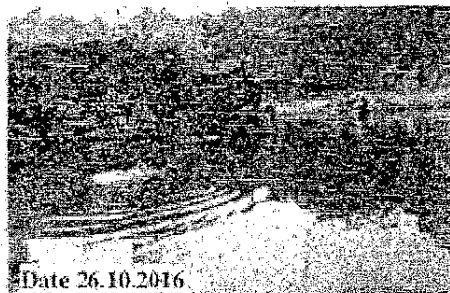
- **Non-adherence to Kerala Environment Policy, 2009 while issuing quarrying permits**

GoK approved (December 2009) the Kerala Environment Policy, 2009 which provides a framework in which conservation and development can be achieved simultaneously. Section 13 of the policy inter alia provides for restoration of the mined and abandoned areas by those responsible for their damage, ensuring compulsory land filling and tree planting in the mined area, prevention of mining and quarrying of

¹⁴ Land granted by an authority for some specific purpose.

hills, etc.

- As per Section 13.3 of the policy, restoration of the mined and abandoned areas are to be done by those responsible for their damage and as per Section 13.4 compulsory land filling and tree planting in the mined areas are to be ensured. We noticed that DMG which issued quarrying permits did not convey the conditions to the permit holders at the time of granting permit. Neither the DMG nor KSPCB maintained data regarding the number of trees planted after expiry of the permit period as against those cut and removed prior to quarrying. During site visits we noticed seven¹⁵ abandoned quarries which were not restored by land filling/plantation of trees.



- Section 13.8 of the policy intends to prevent mining and quarrying of hills. No restriction was imposed by DMG on quarrying in hills. During joint site verification of locations in Pathanamthitta, Ernakulam and Wayanad districts we noticed quarrying of hills.



GoK replied (March 2017) that the staff of the DMG neither had the competence to monitor the compliance nor powers to enforce environmental laws and

¹⁵ Arackapady village in Ernakulam district, Kakkattoor in Ernakulam district, Padimon in Pathanamthitta district, Koodal village in Pathanamthitta district, Ambalavayal panchayath in Wayanad district, Mupliyam in Thrissur district and Poolekkode village in Kozhikode district.

hence DMG had no role in enforcing policy related matters. GoK also stated that it was to be monitored by the KSPCB and SEIAA. But in the exit conference the representatives of both SEIAA and KSPCB stated that they were not monitoring post quarrying activities which indicated lack of co-ordination among various agencies in quarrying and post quarrying activities.

Recommendation No. 1: Government may strengthen its agencies and improve co-ordination among the agencies to ensure compliance with the Kerala Environment Policy, 2009.

- **Absence of provision requiring Environment Management Plan for quarrying in cluster situation**

Mining Plan includes Environment Management Plan¹⁶ which is also a part of EC. Honourable Supreme Court in its judgement¹⁷ (February 2012) observed the necessity of cluster¹⁸ approach in mining so that State Government or mine owner's associations may facilitate implementation of Environment Management Plan (EMP) in such cluster of mines. In Kerala there are quarries operating close to each other or to abandoned quarries.

GoK replied (March 2017) that EIA notification, 2006 has prescribed procedure for issue of EC for quarrying of minor minerals including cluster situation when the distance from the periphery of one lease is less than 500 m from the periphery of another lease and insists preparation of EMP for grant of EC in cluster situation.

However, we noticed that GoK did not frame any rule or issue guidelines making EMP and EC mandatory in respect of cluster mining before granting of quarrying permits.

¹⁶ An environment management plan (EMP), is a site-specific plan developed to ensure that all necessary measures are identified and implemented in order to protect the environment and comply with environmental legislation. It is also referred to as an impact management plan and is usually prepared as part of EIA reporting. It translates recommended mitigation and monitoring measures into specific actions that will be carried out by the proponent.

¹⁷ IA in SLPC No.19628-19629 of 2009.

¹⁸ As per Ministry of Mines Guidelines (May 2011), where large numbers of small mines are situated and worked out in clusters, at such places the provisions of quarrying of minor minerals should be done in a systematic and scientific manner. The programme of restoration and reclamation of the mined out area and rehabilitation must be made jointly in phased manner in the abandoned areas in an entire cluster of the minor mineral.

[Audit paragraph 2.7 contained in the Report of the Comptroller and Auditor General of India for the year ended 31st March 2016 (Economic Sector)].

[Note received from the Government on the above audit paragraph is included as Appendix II]

Excerpts from the discussion of Committee with officials concerned.

10) To the query of the Committee as to why the permission for quarrying was given to private parties without conducting any auction, the Director, Mining and Geology replied that mining activities were permitted in revenue land if there was a No Objection Certificate from the district collector and in the case of private land, it would be permitted, if a possession certificate was available. He added that the Revenue Department had amended it and decided to implement auction system in the allotment of Government land for quarrying operations. He further stated that the study on this matter was ongoing.

11) The Senior Audit Officer pointed out that the Centre for Management Studies had been entrusted with conducting a study on the matter and enquired whether the study had been done. The Director, Mining and Geology clarified that the statement was made by the Revenue Department.

12) The Committee enquired Why such conditions for restoration of mined/abandoned areas as compulsory land filling, tree planting etc. were not insisted at the time of granting permit as envisaged in the Kerala Environment Policy 2009. The Director, Mining and Geology Department replied that in the judgement of Deepak Kumar vs State of Haryana case, on 27-02-2012, the Hon'ble Supreme Court had clarified that no mineral mining activities should be allowed without getting prior environmental clearance. Thereafter, the law came into effect in Kerala as well. The Kerala Minor Mineral Concession Rules of 2015

were amended so as to incorporate Environment Clearance as a mandatory requirement for granting permission for mining activities. To obtain environmental clearance, proper mining plan should be submitted first and it should clearly be specified as to how the quarry operations would start and also the conditions to be followed in each year. Moreover, the permit holder would submit a scheme to be implemented after 5 years along with a final mine closure plan. It would be submitted one year prior to the closure of the mine. The mining plan should contain specific details of reclamation, proper closure of mines and environmental management plan also. This system had been followed since 2015 for granting permission for mining in the state, he added. The Committee enquired whether it had been ensured after quarrying, the Director, Mining and Geology replied in the affirmative. The Committee wanted to know why the DMG had not imposed any restriction on quarrying in hills as per the provisions of Kerala Environment Policy. The Director, Mining and Geology replied that at present, licenses were being issued only after getting environmental clearance. Quarries could operate only after obtaining environmental clearance from the Central Government or environmental clearance from the State Environment Impact Assessment Authority (SEIAA). When asked about the mechanism to monitor the post quarrying activities, the Director, Mining and Geology replied that it was decided to implement a drone survey system within two years.

13) The Senior Audit Officer pointed out that SEIAA and Kerala State Pollution Control Board had said that they would not take any responsibility in the enforcement of law in that regard, and enquired if the department was not responsible, which agency would take the responsibility in that regard. The Deputy Director, Mining and Geology stated that the SEIAA was the authority to make the decisions on the issuance of environmental clearance and the Pollution Control Board was supposed to check the compliance to it's standards. He added that SEIAA had to check and ensure that the quarried areas were planted with trees and made eco-friendly.

14) To the query of the Committee whether it was applicable to existing quarries or the new ones, the Deputy Director, Mining and geology informed that, it was applicable to all quarries, which had obtained mining permits after 2015. To the Committee's query regarding the details of the quarries which obtained mining permits before 2015, the Deputy Director, Mining and Geology replied that only the quarries that had received permission under the Act in 2015 were operating at present. When asked about the number of quarries closed down, the Deputy Director, Mining and Geology informed that a quarry license was generally issued for a maximum period of 12 years and on expiry of the term the quarries had to be closed. So there was no exact calculation.

15) To the Committee's query regarding the new quarries which obtained the permits, the Deputy Director, Mining and Geology Department replied that at present there were around 570 quarries in operation. Before 2015, around 250 quarries were working in a single district and thereafter it was reduced to 25-30. He added that the number of quarries was decreasing and the demand for quarry products were increasing, causing a huge disparity in the demand and supply which led to over exploitation in the existing quarries to overcome the disparity.

16) The Committee commented that rubble was not available for construction of various projects like National Highways, Vizhinjam Port and also for the construction of sea wall in rough coastal areas. The Deputy Director, Mining and Geology answered that out of 25 quarries in the Thrissur district, 5 had to be stopped in the context of Assigned Land.

17) When the Committee pointed out that many quarries were functional in Tamil Nadu, the Deputy Director, Mining and Geology stated that in Tamil Nadu there were no problems regarding the Assigned Land since they had

vast area of land. The Committee enquired why the department discouraged those who brought quarry materials from Tamil Nadu in the back drop of environmental issues related to mining operations in Kerala. The Deputy Director, Mining and Geology replied that such matters were dealt with by the Police Department.

18) The Committee suggested that since products from quarry were required for the development of roads, ports, construction of seawalls etc, the Mining and Geology Department should take a strong action in regard to their transportation. The Deputy Director, Mining and Geology replied that Minerals could be brought only if royalty was paid to the Mining and Geology Department and added that they could not direct the Police Department not to take action against the overloaded vehicles and the vehicles coming without proper pass.

19) The Committee evaluated that quarry products were needed for the development of Kerala and the most essential of them was rubble. It was also needed to prevent sea erosion in general and for the development of Vizhinjam port in particular. But adequate number of quarries were not operating in the State. So there should be a mechanism to take a lenient view from the part of Police and Motor vehicles Departments on the transportation of legally imported rubble and other quarry products from other States. Otherwise, it would impede the developmental activities of the State.

Conclusions/Recommendations

20) The Committee suggests that urgent steps should be taken for the speedy implementation of the Drone Survey System being planned by the Government with the aim of monitoring post quarrying activities in the State.

21) The Committee understands that the scarcity of quarry

products is a major concern of construction Industry of the State. One of the viable options to fill the gap between the increasing demand and scarce supply of quarry products is to implement an effective mechanism for transporting rubble and similar quarry products from other States. So, the Committee recommends that a lenient view should be taken by the Home and Motor Vehicle departments to ensure smooth inter-state transportation of rubble and quarry materials from other States which is lawfully carried out.

2.8 Consolidated Royalty Payment System led to reduction in royalty and indiscriminate quarrying

As per Rule 4(1) of the KMMC Rule, 1967 quarrying permit is a short term permit to extract and remove minor minerals not exceeding 10,000 MT in quantity under one permit. But as per Rule 3 of KMMC Rules, 2015 no limit was prescribed on the quantity that can be quarried under one quarrying permit. The permit holder has the option to pay royalty based on the area of quarrying and number of passes used for transportation. We noticed that the system paved the way for unscientific quarrying as noted below:

2.8.1 Lack of restriction on the number of mineral transit passes that can be issued for quarrying areas between 40 to 50 Are

As per Schedule V of KMMC Rules, 1967 there was a limit on issuance of mineral transit passes with respect to area of excavation under Consolidated Royalty Payment System (CRPS)¹⁹ for laterite building stones (LBS) and granite building stones (GBS). We noticed that during revision of the rules in 2015, though the limit for quarrying permit under CRPS (for LBS and GBS) was restricted to a maximum of 5,000 mineral transit passes up to an area of 40 Are²⁰ at the rate ₹100 per mineral transit pass, there was no such restriction prescribed with respect to area between 40 to 50 Are. Due to this, permit holders under this category could obtain unlimited

¹⁹ As per KMMC Rules, 2015 CRPS is a mode of advance payment of consolidated royalty depending upon the extent of quarrying land limiting the number of passes according to the extent of land to a maximum of 50 Are.

²⁰ 1 Are = 100sqm

number of passes on payment of a consolidated royalty of seven lakh rupees without restriction on the quantity extracted, which led to short realisation of revenue. Out of 13 cases verified in the five test checked districts, we noticed that;

- In Thrissur district, 9,000 passes were issued to one Sri P. V. Mathai for quarrying 40.47 Are of land in Mulayam village on payment of a consolidated royalty of seven lakh rupees which resulted in loss of royalty of rupees two lakh²¹.
- In Pathanamthitta district, 11,000 mineral transit passes were issued to Sri. S. Sunilkumar, M/s SKG Granites, Kavungal for quarrying 47.02 Are of land in Aruvappulam village on payment of a consolidated royalty of seven lakh rupees which resulted in loss of royalty of four lakh rupees.²²

GoK replied (March 2017) that Government has decided to amend the KMMC rules restricting issue of mineral transit passes to 7,000 numbers for areas between 40 to 50 Are.

2.8.2 Reduction in revenue due to collection of royalty based on Consolidated Royalty Payment System

As per KMMC Rules, 2015, every applicant for a quarrying permit shall pay royalty in advance to Government at the rates specified in Schedule I or IV²³ as the case may be. In the case of payment of royalty under CRPS for GBS and LBS, the competent authority may permit an applicant to opt for this system. Under the CRPS, the royalty is paid on slab rate based on the quarry area and number of passes, irrespective of the carrying capacity of the vehicle.

Audit examination revealed that different types of vehicles with varying capacities were used for moving GBS depending on the accessibility to location and machinery used for loading GBS.

21 Royalty on 9000 passes at the rate of ₹ 100 per pass worked out to ₹ 9 lakh. Royalty paid as per CRPS was ₹ 7 lakh. Therefore the difference was ₹ 2 lakh.

22 Royalty on 11000 passes at the rate of ₹ 100 per pass worked out to ₹ 11 lakh. Royalty paid as per CRPS was ₹ 7 lakh. Therefore the difference was ₹ 4 lakh.

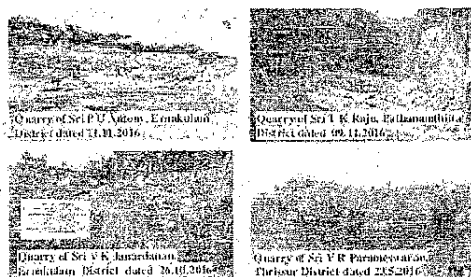
23 As per Schedule I royalty is paid against quantity mined and as per Schedule IV royalty is paid based on area and number of passes.

The royalty received under CRPS per load was ₹ 100 which was equal to the royalty of 4.167 MT²⁴ of GBS. But trucks carrying more than 5 MT (and even 15 MT) were being used for transportation of GBS. DMG could easily assess the royalty based on the cumulative quantity despatched. If so, the royalty received would be commensurate with the quantity despatched.

GoK in reply (March 2017) accepted the views of Audit and stated that with the introduction of mining plan, the quantity of mineral that could be extracted would be regulated.

2.8.3 Quarrying without bench cutting in violation of KMMC Rules

As per Rule 10 of KMMC Rules, 2015 in the case of quarries of GBS, where the depth of pit exceeds six metres, the sides of open workings shall be sloped, stepped or benched²⁵ or secured by the permit holder in such a manner so as to prevent slope failure. During joint physical verification of four sites we noticed that as the quarrying area under CRPS was small, the permit holders were quarrying the area without bench cutting in violation of the KMMC Rules, 2015 as evidenced from the following photographs.



2.8.4 Excessive extraction from lease areas registered as Registered Metal Crusher Unit and resultant short collection of royalty

The Director of Mining and Geology grants quarrying lease for GBS for a particular year limiting the quantity to be quarried as per KMMC Rules. As per an

24 ₹100 per pass works out to 4.167 MT with royalty at the rate of ₹24 per MT.

25 Sloped, stepped and benched quarrying are various methods adopted in open quarries to ensure safety during operation depending upon the stability of the slope of the quarries.

insertion made (March 2002) in KMMC Rules, 1967 and subsequently included in the KMMC Rules, 2015, lease holders have the option to pay consolidated royalty based on jaw size or power of crusher installed, irrespective of the quantity quarried.

A test check of 79 cases that had opted for consolidated payment of royalty based on RMCU showed that the quantity extracted was more than the annual permissible limit specified by DMG and the royalty paid with respect to quantity was short by ₹ 12.21 crore²⁶ comparing to the consolidated royalty paid as per Schedule I²⁷ of KMMC Rules, 1967/2015. We observed that lack of restrictions in extraction of GBS under RMCU resulted in indiscriminate extraction of GBS from lease areas.

GoK replied (March 2017) that Government was forced to opt for consolidated upfront royalty payment system as it was difficult to monitor and enforce quantity based payments with the existing manpower and the ensuing implementation of electronic mineral transit pass gives it an opportunity to revisit the issue.

The reply was silent on the excessive extraction of GBS which was far more than the prescribed limit sanctioned by the Director of Mining and Geology and may cause damage to the environment.

[Audit paragraphs 2.8 to 2.8.4 contained in the Report of the Comptroller and Auditor General of India for the year ended 31st March 2016 (Economic Sector)].

[Notes received from the Government on the above audit paragraphs are included as Appendix -II]

Excerpts from the discussion of Committee with officials concerned.

22) When enquired about the details regarding the above mentioned

26 For the year 2013-14, Consolidated Royalty collected as per RMCU for a quantity of 4805894 MT was ₹ 1.96 crore whereas the royalty as per Schedule I worked out to ₹ 7.69 crore at the rate of ₹ 16 per MT ; For the year 2015-16, Consolidated Royalty collected as per RMCU for a quantity of 5168080 MT was ₹ 5.92 crore whereas the royalty as per Schedule I came to ₹ 12.40 crore at the rate of ₹ 24 per MT

27 ₹ 16 per MT as per KMMC Rules, 1967 and ₹ 24 per MT as per KMMC Rules, 2015.

audit paragraph, the Deputy Director, Mining and Geology Department replied that as per the rules, the quarry owner had to pay the royalty based on the quantity of minerals produced from the quarry. But during 2002, it was decided to finalize the consolidated royalty on the basis of a slab prepared area wise or the size of machine jaw used. The Director, Mining and Geology informed that the government was incurring a huge loss due to that and had forwarded a proposal for amendment to the Government, stating that the royalty system would be more appropriate than the slab system. He added that it was the updated status with regard to the audit paragraph.

23) The Committee enquired whether the department had taken any measures to prevent excess extraction, then the Deputy Director, Mining and Geology answered that from 2015 onwards environmental clearance and mining plan had been made mandatory for the quarry operations. An operating permit would be granted only if a detailed mining plan containing the nature of the quarry, the area and the quantity of mineral to be mined in each year was presented. He added that there was a precise monitoring system in the Mining and Geology Department for the proper evaluation of the quantity of minerals that can be extracted with in a 5 year period the quantity left over and fine to be imposed if more quantity was mined and transported.

Conclusion/Recommendation

24) No comments

2.9 Issuance of permits in violation of KMMC Rules

2.9.1 Issuance of permits for more than the prescribed period

As per Rule 8 of KMMC Rules, 1967 and Rule 13 of 2015, no person shall be eligible for a permit on a particular area of contiguous land owned and possessed by him if he has availed permits for quarrying up to a maximum period of three years in different spells on the same land.

We noticed that that this provision was violated by four quarries each in Pathanamthitta and Thrissur districts and five quarries in Ernakulam district, where the quarries were given permits for periods exceeding three years. The Department did not have a data base to check the number of times the permit of each quarry was renewed. Thus, DMG was unaware of the period for which a quarry was working.

GoK replied (March 2017) that with the implementation of e-governance project, such details would be computerised.

2.9.2 Granting of quarrying permits under CRPS violating KMMC Rules, 2015

As per Schedule IV of the KMMC Rules, 2015, payment of royalty under CRPS is limited to an area of 50 Are. If the area is above 50 Are, as per Schedule I royalty is leviable based on the quantity quarried. The Geologist, District office of Mining and Geology, Wayanad issued quarrying permits violating the condition in seven cases²⁸ where the area exceeded 50 Are, by payment of a lump sum royalty of rupees seven lakh, instead of the royalty based on quantity.

GoK replied (March 2017) that Director, Mining and Geology has been directed to take disciplinary action in this matter.

[Audit paragraphs 2.9 to 2.9.2 contained in the Report of the Comptroller and Auditor General of India for the year ended 31st March 2016 (Economic Sector)].

[Notes received from the Government on the above audit paragraphs are included as Appendix II]

Excerpts from the discussion of Committee with officials concerned.

25) The Committee enquired the details regarding the action taken against the officers granting quarrying permits violating KMMC Rules, the Deputy Director, Mining and Geology replied that it needed to be checked in detail. The

²⁸ Shri. Thomas O D., Shri. M P Kuriakose, Shri. Elyas T V., Shri. David P V., Shri. Renjith K., Shri. Babu K P and Shri. Sudheesh A T.

Committee expressed its strong displeasure and pointed out that when the officials representing the department concerned in the Public Accounts Committee meeting, they were bound to understand the facts and submit correct answers. The Committee further pointed out that reply given on 30.11.2019 stated that an officer who had issued such permit was on leave on account of accident and then the Committee enquired about it's current status. The Deputy Director, Mining and Geology Department replied that there were two or three cases of similar nature and a detailed reply regarding the present status would be made available within a week.

Conclusion/Recommendation

26) The Committee expresses its strong displeasure over the slothful attitude of the department officials in furnishing well informed replies before the Committee without thoroughly analysing the facts and directs the department to submit a detailed report to the Committee urgently about the action taken against the officials who had granted quarrying permits by violating KMMC Rules.

2.10 Quarrying in forest/ assigned forest land

- **Quarrying in forest land**

As per Rule 5 of KMMC Rules, 1967 quarrying in forest land is not permissible without the consent of the Forest Department. In Thrissur district, a granite quarry was functioning in forest land for the last 20 years, in Peechi village. The Forest Department failed to identify the quarry and issued a stop memo only in December 2015 when public complaints were received in this regard.

- **Functioning of quarry in assigned forest land**

As per Rule 3 of the Kerala Land Assignment (Regulation of Occupation of Forest Lands Prior to 01 January 1977) Special Rules 1993, assigned forest land could

be used only for cultivation, house sites or shop sites. Two quarries and three crusher units were functioning in assigned forest land in Mulayam village of Thrissur district from 2012-13 onwards. The Forest department failed to identify the same in time and issued a stop memo only in May 2016.

In the exit conference, the Assistant Conservator of Forest stated that the forest land/ assigned forest land could not be identified as the forest land was scattered.

The statement was not acceptable as the Forest department failed to monitor violation of the KMMC Rules.

GoK replied (March 2017) that if a map of the forest/assigned forest land with buffer zone (non-mining zone) was issued by Forest department, it would help the Department of Mining and Geology to avoid issue of mineral concession in such areas.

Recommendation No.2: Responsibility may be fixed for allowing quarrying activities in forest/assigned forest land:

[Audit paragraph 2.10 contained in the Report of the Comptroller and Auditor General of India for the year ended 31st March 2016 (Economic Sector)].

[Note received from the Government on the above audit paragraph is included as Appendix II]

Excerpts from the discussion of Committee with officials concerned.

27) The Committee enquired about the issuance of permit to a quarry operated in forest land. The Deputy Director, Mining and Geology replied that for granting quarrying permit, the applicant should submit the possession certificate, sketch, assigned / non-assigned land certificate and in the case of paddy field the related documents from the Revenue Department. Mining permit was issued on the basis of the said documents. He added that no permit was granted for mining on forest land.

28) When the Committee asked whether the mining on forest land was undetectable, the Deputy Director, Mining and Geology replied that the official who checked the records of the Revenue department might have thought that it was a private land. The District Collector issued stop memos to 5 quarries in Thrissur district last day stating that it was assigned forest Land, which the Tahsildar had certified as non-assigned land.

29) To the enquiry of the Senior Audit Officer whether the maps of such areas were made available to the Mining and Geology Department from the Forest Department, the Deputy Director, Mining and Geology replied in the negative and added that in some cases, the Forest department itself identified certain areas as forest land and demarcated them.

30) The Committee directed to seek an explanation from the Forest Department regarding the matter.

Conclusions/Recommendations

31) The Committee directs the Forest Department to submit a comprehensive report about the quarrying activities occurred in the forest/ assigned forest land for the period from 2010 to 2020 covering all the districts by including the actions taken to prevent such illegal acts.

32) The Committee directs that in order to identify the forest land and the assigned forest land, the Forest Department should make available a map specifying the buffer zone to the Department of Mining and Geology at the earliest.

2.11 Non-observance of MoEF directions

2.11.1 Granting of leases to mine areas exceeding five hectare

As per item 1(a) of the schedule appended to the EIA notification, 2006, mine lease area exceeding five hectare requires Environmental Clearance from SEIAA. Audit examination revealed that,

- Five quarrying leases, each having an area of less than five hectare, were sanctioned to M/s Inchappara Sand & Granites Pvt. Ltd. in Pathanamthitta district by DMG during 2011-12 without EC, circumventing the stipulations even though the total quarrying lease area exceeded five hectare.
- M/s K.J.Vasudevan Nair Granites of Thrissur district and M/s Poabs Granites Pvt. Ltd. of Kozhikode district obtained EC only for the area newly added to the existing lease and not for the original leased land which exceeded five hectare in area in each case.

GoK replied (March 2017) that the department failed to notice the area mentioned in the lease applications and on detecting the mistakes, DMG instructed the lease holders to submit EC. No record of any such instructions issued to the lease holders was, however, furnished to Audit.

[Audit paragraphs 2.11 to 2.11.1 contained in the Report of the Comptroller and Auditor General of India for the year ended 31st March 2016 (Economic Sector)].

[Notes received from the Government on the above audit paragraphs is included as Appendix II]

Excerpts from the discussion of Committee with officials concerned.

33) The Committee enquired why the officials of DMG had not conducted any site visit prior to the granting of lease. The Deputy Director, Mining and Geology replied that a notification was issued in 2006 stating that environmental clearance was mandatory for lease of land of more than 5 hectares for mining. But the State became aware of this matter only after obtaining the order of Hon'ble Supreme Court in Deepak Kumar Vs. state of Haryana and others case in 2012.

34) When the Committee enquired about the details specifically pointed

out by C&A.G. on the matter, the Deputy Director, Mining and Geology replied that those quarries had stopped their operations in 2015.

Conclusion/Recommendation

35) No Comments

2.12 Extraction of GBS from Government poramboke land using forged NOC

Quarrying in Government poramboke land requires NOC from Revenue Department. We noticed that DMG sanctioned (February 2011) lease²⁹ to extract GBS over an area of 0.3440 ha of Government poramboke land in Vengoor West Village, Kunnathunadu Taluk in Ernakulam District for 12 years, based on an NOC bearing No.K.Dis-12559/2006 dated 03.07.2007 signed by the Tahasildar, Kunnathunad. Revenue Department later (March 2012) detected that the NOC produced was fake and so DMG issued a stop memo. The lease was cancelled (September 2013) by the Director of Mining and Geology and based on the directions of District Collector a case was registered by Vigilance and Anti Corruption Bureau, Ernakulam which was in progress.

We observed that there was no mechanism in DMG to verify the genuineness of NOCs.

GoK replied (March 2017) that in order to avoid forgery of NOC, DMG would cross check with Revenue department in future.

[Audit paragraph 2.12 contained in the Report of the Comptroller and Auditor General of India for the year ended 31st March 2016 (Economic Sector)].

[Note received from the Government on the above audit paragraph is included as Appendix II]

Excerpts from the discussion of Committee with officials concerned.

36) When enquired about the details regarding the current status of the vigilance case, the Deputy Director, Mining and Geology assured the Committee

that a detailed reply would be submitted before the Committee within one week after thorough examination of the said matter.

Conclusions/Recommendations

37) The Committee directs the department to submit the present status of the case registered by Vigilance and Anti Corruption Bureau, Ernakulam regarding the extraction of GBS for 12 years over an area of 0.3440 ha of Government Poramboke land in Vengoor West Village, Kunnathunadu Taluk in Ernakulam District making use of a forged NOC at the earliest.

38) The Committee further directs the department to furnish the details regarding the measures taken to verify the genuineness of NOCs issued by the Revenue Department for mining and quarrying so as to check the possibilities of forgery.

2.13 Quarrying in land assigned for agricultural purposes

As per Kerala Land Assignment Rules, 1964 read with Government order³⁰ (August 2010), land assigned for agricultural purpose cannot be utilised for quarrying purpose. Audit scrutiny revealed that in Ernakulam district, eight permits for quarrying GBS were issued during 2014-15 by the District office of Mining and Geology violating the above condition. We observed that Revenue authorities issued certificates to holders of such assigned land for obtaining quarrying permits though quarrying of GBS was not permissible in these lands.

Industries Department replied (March 2017) that Revenue Department was finalising their stand in that matter.

Recommendation No.3: Responsibility may be fixed in granting quarrying permits in assigned agricultural land.

[Audit paragraph 2.13 contained in the Report of the Comptroller and Auditor General of India for the year ended 31st March 2016 (Economic Sector)].

[Note received from the Government on the above audit paragraph is included as Appendix II]

Excerpts from the discussion of Committee with officials concerned.

39) The Committee enquired about the action taken against the officers responsible for granting quarrying permits in assigned agricultural land. The Deputy Director, Mining and Geology Department replied that in the judgement on the issue of Mukunnimala in Thiruvananthapuram, Hon'ble High Court had directed the Government to decide whether the land assigned as agricultural land could be used for quarrying. He added that no such activities were going on there at present.

Conclusions/Recommendations

40) The Committee directs the department to submit the details regarding the action taken against the officers responsible for granting quarrying permits in assigned agricultural land.

2.14 Ineffective monitoring

Quarry operators are required to obtain consent from KSPCB, EC from SEIAA and quarrying permit/lease from DMG before commencing their operation. These consents/clearances require observance of certain conditions stipulated under various Acts/Rules/circulars/conveyed conditions. As per GoK instructions (March 2014) the authority empowered to give clearance, licence, permit, consents has to ensure that no violation thereof is involved. This requires physical verification by the agencies concerned. An analysis of the verifications conducted on adherence to conditions is narrated below:

- **Monitoring compliance of conditions mentioned in the consent of KSPCB and SEIAA**

While issuing consent to operate, KSPCB conveys certain conditions to the quarry operators based on Water (Prevention and Control of Pollution) Act, 1974, Air (Prevention and Control of Pollution) Act, 1981 and Environment Protection Act 1986. Further, lease holders with a minimum area of five hectare for quarrying GBS require EC from SEIAA. The EC contains certain conditions to be followed by the lease holders.

We observed that KSPCB which issued 1,358 numbers of consents and SEIAA which issued 71 numbers of ECs in the selected five districts did not have a system for periodical monitoring of compliance with the conditions specified in the consent.

- **Non-monitoring of adherence to KMMC Rules by DMG**

DMG issues quarrying permits/leases and the permit/lease holders have to adhere to various conditions specified in the permits/leases. We conducted joint site inspection at 27 quarries and found violation of Rules in 21 of them. The violations included non-observance of safety measures, operation after expiry of permit, operating without explosive licence, non-demarcation of quarry area etc. (Appendix –III (2)).

We observed that the DMG did not conduct periodical inspection of quarry sites to monitor implementation of KMMC Rules.

GoK replied (March 2017) that strict directions have been issued to district officers to ensure compliance with Mining Plan.

[Audit paragraph 2.14 contained in the Report of the Comptroller and Auditor General of India for the year ended 31st March 2016 (Economic Sector)].

[Note received from the Government on the above audit paragraph is included as Appendix II]

Excerpts from the discussion of Committee with officials concerned.

41) When the Committee enquired whether a system was in place to monitor the compliance of conditions mentioned in the consent of KSPCB and SEIAA, The Joint Secretary, Industries Department replied that the reply regarding that was to be furnished by the KSPCB and SEIAA.

42) While considering the audit objection, the Committee enquired whether periodic inspections were conducted in quarry sites to monitor the implementation of KMMC Rules. The Deputy Director, Mining and Geology replied that in all the districts where there were quarries, a system to conduct periodical inspections at least once in a year had been introduced and it would be fully implemented within one year.

43) When the Committee enquired about the details of action taken by the department against the violation of KMMC rule, the Deputy Director, Mining and Geology informed that the Government received an amount of ₹ 200 crore as revenue last year, out of which, ₹ 80 crore had been collected as fine levied for the the violation of rules.

Conclusion/Recommendation

44) No Comments

2.15 Lack of expertise in taking measurements of uneven terrains

Engineering departments in Kerala adopts level measurement³¹ rather than tape measurement to arrive at the actual volume. Similarly, modern equipment like total station are also used for more accurate measurement. Audit scrutiny of relevant records revealed that, in the field DMG adopted tape measurement rather than level measurement, which made measurement of excess quantity mined beyond permitted area or limit in uneven terrain unascertainable.

31 Level measurement is a process whereby the difference in height between two or more points can be determined. The aim of level measurement is to determine the relative heights of different objects on or below the surface of the earth and to determine the undulation of the ground surface. This is used for, among other things, providing data on volumes.

During joint physical verification in Thrissur district we identified working of three quarries after the expiry of permit period. The quantity of minor mineral removed from the site could not be calculated by the DMG officials in two instances and in one instance the quantity was assessed tentatively as the final level was not taken immediately after the permit period.

We observed that absence of data on initial levels had led to incorrect assessment of the quantity after taking the final levels. Necessity for accurate measurements for assessing the quantity quarried is evidenced from the instances mentioned in Appendix – III (3)

GoK replied (March 2017) that as per the new KMMC Rules, 2015 mining plans were insisted upon for issue of concessions. These plans contained the topographic map of the area mined prepared using total stations, cross sections, total resources, minable resources etc. and that the lessee had to submit a scheme of mining every five years, recording the total volume excavated.

The reply is not acceptable as it does not address the audit observation. Moreover, the reply suggests that DMG would rely on information furnished by the lease holder and it was silent about permit holders.

[Audit paragraph 2.15 contained in the Report of the Comptroller and Auditor General of India for the year ended 31st March 2016 (Economic Sector)].

[Note received from the Government on the above audit paragraph is included as Appendix II]

Excerpts from the discussion of Committee with officials concerned.

45) The Committee enquired about the details of measures being adopted to assess the quarried quantity. The Deputy Director, Mining and Geology replied that all these things were clearly described in the mining plan. He added that mining should not be done in areas with a 45 degree slope and the mining plan should be prepared according to the structure of the land.

46) The Committee enquired about the details of the current status of shortage of staff in the Mining and Geology Department. To which the Deputy Director, Mining and Geology replied that staff strength is still insufficient.

Conclusions/Recommendations

47) No Comments

2.16 Failure to address issues of ground water level

Major part of the State of Kerala is covered by laterites which act as a good aquifer system. Large scale removal of laterite hillocks may result in depletion in ground water table. We noticed that while issuing EC, SEIAA of the neighbouring State of Tamil Nadu conveyed the ground water level to the lease/ permit holder along with the requirement of its monitoring.

However, we observed that DMG, which issues quarrying permits in Kerala, did not convey the ground water level of any of the quarrying sites where quarrying permits were granted. The Director, Ground Water Department stated that quarrying might lead to depletion of water table; but no specific studies have been conducted by the department with respect to quarrying affecting availability of water.

We further observed that there were complaints regarding decrease in the storage capacity of wells due to quarrying, as given in Appendix – III (4)

GoK replied (March 2017) that the impact of quarrying on ground water was studied while mining plans were prepared and possible mitigation measures were suggested. It was further stated that such study was conducted while granting EC. The reply is not acceptable because no record regarding such study was furnished to audit. Further, mining plan and EC were made mandatory to all quarry operators from December 2016 only.

[Audit paragraph 2.16 contained in the Report of the Comptroller and Auditor General of India for the year ended 31st March 2016 (Economic Sector)].

[Note received from the Government on the above audit paragraph is included as Appendix II]

Excerpts from the discussion of Committee with officials concerned.

48) When Committee wanted to know the details of steps taken to avoid the depletion of ground water level due to quarrying, the Deputy Director, Mining and Geology replied that it was mandatory that the number of pits and the quantity of water to be drained out should be mentioned in the mining plan.

49) The Senior Audit Officer brought to the notice of the Committee that the ground water level of wells near the quarries decreased and enquired any specific studies had been conducted by the department on such issues. The Deputy Director, Mining and Geology replied that such issues would come under the ambit of environmental clearances and the mining plan. The environmental clearance Committee would check whether there was depletion of the ground water and if so, the Committee would suggest remedies.

Conclusion/Recommendation

50) **The Committee strongly recommends that before issuing quarrying permits, a study should be conducted to assess whether there is depletion of ground water levels in areas in proximity to quarrying sites.**

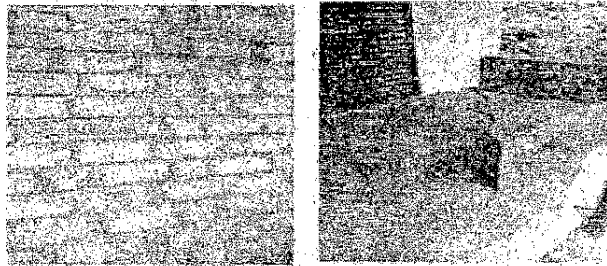
2.17 Waiver of the stipulation to maintain distance from residential buildings to GBS quarries

As per Section 164 of the Metalliferous Mines Regulations, 1961 area within 500 m from the place of blasting is danger zone. As per conditions of SEIAA, Tamilnadu, quarrying activity of GBS is not permissible within 500 m of habitation. As per para 7 of the study report of CESS (February 2008), area within 250 m is prone to vibration. Honourable High Court of Kerala had prohibited quarrying within 500 m of Ambedkar Harijan Colony which led to stoppage of quarries in nearby Pettamala located in Kunnathunad taluk in Ernakulam district.

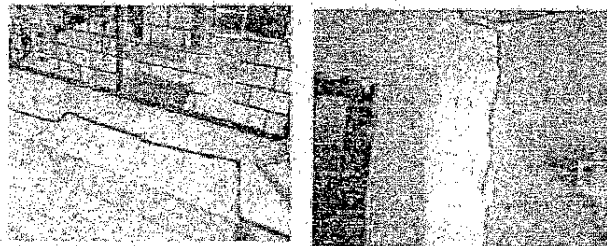
We noticed that as per Rule 29/40 of the KMMC Rules, 1967/ 2015 the minimum distance stipulated from a quarry to nearby residential building was 50/100 m.

During the joint site verification of quarries near Valakkavu in Thrissur district, the public complained of damages caused to their houses due to blasting. Local verification showed 14 houses located more than 100 m away from the quarries damaged with cracks on floors/walls, reportedly due to blasting. Other instances of public complaints regarding damages caused by blasting are illustrated in Appendix - III (5).

The Assistant Geologist who accompanied us for the joint verification stated that many geological factors affected the buildings such as waves occurring during blasting, terrain of blasting site and intensity of tremors while blasting.



Cracks to buildings noticed on 25.10.2016



DMG and KSPCB stated that they did not have the capacity to measure the impact of vibrations due to blasts. We observed that the fixation of 100 m distance may require rethinking as functioning of quarries even at a distance of beyond 100 m caused damage to properties and created fear among the public.

GoK replied (March 2017) that in the revised KMMC Rules the use of explosives and ground vibrations were dealt with in mining plans and EC.

[Audit paragraph 2.17 contained in the Report of the Comptroller and Auditor General of India for the year ended 31st March 2016 (Economic Sector)].

[Note received from the Government on the above audit paragraph is included as Appendix II]

Excerpts from the discussion of Committee with officials concerned.

51) While considering the audit para the Committee enquired why the distance was reduced to 50m even when the area within 250m was prone to vibration during quarrying. The Deputy Director, Mining and Geology replied that the said matter was being studied by a Committee as directed by the Hon'ble Supreme Court.

52) The Additional secretary, legislature secretariat brought to the attention of the Committee that as per KMMC Rule 2015, the minimum distance between GBS quarry and residential houses was 100 metres. However, the distance was reduced to 50m by an amendment made in 2017.

53) The Committee pointed out that rock blasting within a radius of 50 metres would harm the nearby houses. The Deputy Director, Mining and Geology replied that it would be advisable to devise a plan at the government level to bring construction materials from other States by ship/rail.

54) The Committee further pointed out that all means of transport including road could be used for the transportation of these type of construction materials. Being a densely populated state, operating several quarries was a daunting task. Therefore, instead of creating unnecessary issues, a lenient view should be adopted for the transportation of construction materials like granites from other states.

Conclusion/Recommendation

55) No Comments

2.18 System to curb illegal quarrying

Illegal quarrying not only leads to loss of revenue but also involves indiscriminate quarrying practices. Revenue, Mining & Geology and Police Departments are engaged in detection of illegal quarrying and transportation. There are 14 District offices and three regional mineral squads under the DMG to detect illegal quarrying, transportation and storage of minerals. The District offices are engaged both in the issue of permits and detection of illegal cases. The main function of the regional mineral squads is detection of illegal activities relating to quarrying.

2.18.1 Working of squads /committees

2.18.1.1 Performance of Regional Mineral Squads in detection of illegal cases

Regional Mineral Squads were constituted for effective implementation of the Kerala Minerals (Prevention of Illegal Mining, Storage and Transportation) Rules, 2015. There are three regional mineral squads functioning under DMG based at Thiruvananthapuram, Thrissur and Kozhikode. These squads are engaged in detection of illegal quarrying, transportation and storage of minor minerals. A test check of the Compounding Registers of the three mineral squads for three months³² revealed that;

- Though the jurisdiction of each squad was four to five districts they did not cover all the districts in a month. Pathanamthitta, Alappuzha, Ernakulam, Kottayam, Idukki, Wayanad and Kasaragod districts which constituted half the number of districts were not covered in these months.
- The squads functioned only during day time as available staff sufficed only for one shift.

Since all the 14 districts were not covered regularly, there was the risk of illegal quarrying, transportation and storage of minor mineral going undetected.

³² October 2012, January 2014 and March 2015.

GoK replied (March 2017) that the area of jurisdiction was very large. It was also stated that as there were only three squads it was not possible to reach all sites of illegal quarrying or storage and detect all cases of illegal transportation.

[Audit paragraphs 2.18 to 2.18.1.1 contained in the Report of the Comptroller and Auditor General of India for the year ended 31st March 2016 (Economic Sector)].

[Notes received from the Government on the above audit paragraphs is included as Appendix II]

Excerpts from the discussion of Committee with officials concerned

56) The Committee enquired about the details of various steps taken to strengthen the mineral squads and to curb the illegal quarrying, transportation and storage of minor minerals. The Deputy Director, Mining and Geology replied that although the department had reported the shortage of staff, no new posts were created and currently the existing employees were being redeployed.

57) To the Committee's query regarding the staff pattern, the Deputy Director, Mining and Geology replied that a proposal had been submitted to the Government for the redeployment of the existing additional staff in the Directorate so that the squad system could be made efficient in all districts.

58) The Committee further pointed out that in the present financial situation new posts might not be sanctioned and the redeployment of existing employees would be advisable.

Conclusion/Recommendation

59) No Comments

2.18.1.2 Non-functioning of committees constituted to prevent illegal quarrying

Government ordered (August 2011) formation of district level³³ and divisional

³³ The district level vigilance and monitoring committee members include District Collector (Chairman), District officer of Mining and Geology (convener), District Police Chief, District officer of State Pollution Control Board, Deputy Director of Panchayaths and Joint Director of Urban affairs.

level committees³⁴ to strengthen the surveillance and enforcement mechanism for preventing illegal quarrying. While the District level committees were to monitor the action taken to redress complaints raised by the public about illegal quarrying, the divisional level committees were to formulate an inspection schedule for visiting all working quarries and redress public complaints on illegal quarrying without delay.

In the selected five districts, though the committees were formed they were not functional, as meetings were not convened regularly. In Thrissur district no meetings were convened after the first meeting held in September 2011 while in Wayanad district no meetings were held after February 2015 and in Ernakulam district the last meeting was held in August 2013.

In Thrissur district we, during the joint physical verification with the officials of DMG and with the aid of local public and Google maps, identified five illegal quarrying sites in a single day. One was operating without quarrying permit and the other four were continuing their operations even after the expiry of permit period. DMG issued stop memos to all the five quarry operators and realised (February 2017) an amount of ₹3.71 lakh towards royalty, price and fine from one quarry operator.

GoK replied (March 2017) that shortage of staff in various departments was one of the reasons for non-functioning of the committees.

Recommendation No. 4 : Government may adequately staff the Mineral Squads and put in place suitable mechanism to monitor the working of the district and divisional committees to control illegal quarrying.

[Audit paragraph 2.18.1.2 contained in the Report of the Comptroller and Auditor General of India for the year ended 31st March 2016 (Economic Sector)].

[Note received from the Government on the above audit paragraph is included as Appendix II]

34 The divisional level vigilance and monitoring committee members include Revenue Divisional Officer (Chairman), Deputy Superintendent of Police, Representative of State Pollution Control Board, Representative of Mining and Geology Department and Deputy/Assistant Director of Panchayath .



Excerpts from discussion of Committee officials concerned.

60) The Committee enquired whether the Department of Mining and Geology (DMG) had taken strong measures in convergence with other departments to control the illegal quarrying. The Deputy Director, Mining and Geology replied that it was not possible to conduct inspections even once in a month by co-ordinating Police, Panchayat and Revenue Departments and it was expected that periodical inspections could be carried out when the squads were constituted in each district.

61) The Senior Audit Officer pointed out the significance of the co-ordination between Mining and Geology, Revenue, Forest and Ground Water Departments. The Deputy Director, Mining and Geology promised that necessary actions would be taken in that regard.

62) To the Committee's query about the laterite quarries illegally operating in Kasaragod district, the Deputy Director, Mining and Geology replied that Environmental clearance was an important issue in that regard. Leases for granite quarries were being granted for 12 years but for red quarries of one or two acres, a six-month operating permit was being given. It took at least two years to get Environmental Clearance (EC), and because of the delay illegal mining took place. Even if mining was stopped, it would be resumed after a month, he added.

63) The Deputy Director, Mining and Geology Directorate added that illegal mining could be stopped only if there was a system to obtain Environmental Clearance within three or four months from the date of application.

64) The Committee commented that due to illegal mining, the Government was not getting its due revenue and directed that Mining and Geology Department should take stringent action against illegal mining. Then the Deputy Director, Mining and Geology Directorate replied in the affirmative.

Conclusions/Recommendations

65) The Committee suggests that a joint periodical inspection of Mining & Geology, Home, Revenue and Local Self Government

Departments would be beneficial for the identification of illegal quarrying. The Committee also urges the departments concerned to put in place a suitable mechanism to monitor and control illegal quarrying and also take stringent action against illegal mining in a co-ordinated manner.

2.18.2 Non-maintenance of computerised database to identify repeat offenders

As per Rules 60A/111 of KMMC Rules 1967/2015 and Rule 32 of Kerala minerals (Prevention of Illegal Mining, Storage and Transportation) Rules, 2015 there is provision for compounding of offences. As per Rule 58/108 of KMMC Rules, 1967/2015 whoever contravenes any provision of these rules shall be punishable with imprisonment for a term which may extend to two years, or with a fine which may extend to five lakh rupees or with both and in the case of continuing contravention, with an additional fine which may extend to ₹ 50,000 for every day during which such contravention continues after conviction for the first such contravention.

We observed that DMG at the district level and in squad offices, did not maintain a database of offenders to identify the repeat offenders in illegal mining or transportation. Hence, repeat offenders went unnoticed without imposition of additional fine as shown in the Appendix – 2.6.

GoK replied (March 2017) that with the implementation of e-governance project the details of the offenders would be computerised.

[Audit paragraph 2.18.2 contained in the Report of the Comptroller and Auditor General of India for the year ended 31st March 2016 (Economic Sector)].

[Note received from the Government on the above audit paragraphs is included as Appendix II]

Excerpts from the discussion of Committee with officials concerned.

66) When the Committee asked about the current status of the maintenance of computerised database, the Deputy Director, Mining and Geology replied that KOMPAS (Kerala Online Mining Permit Awarding Services) software introduced in 2015 had some glitches, so a new version called KOMPAS 2.0 would be launched this year, so that computerized database could be maintained and problems could be solved.

Conclusion/Recommendation

67) The Committee recommends to maintain a database of offenders to identify habitual offenders in illegal mining or transportation so that such offenders shall not go unnoticed without the imposition of additional fine as stipulated in the Kerala Minor Mineral Concession Rules, 1967 & 2015.

2.18.3 Issues related to transit passes

Every person who carries a minor mineral from one place to another is required to have a valid mineral transit pass so as to ensure that royalty is collected before issuing passes. The transit passes in the prescribed form are printed in duplicate by the permit holder/dealer and got stamped at concerned district office of Mining and Geology. While transporting minor minerals, the original of the pass is to accompany the material and the carbon copy (duplicate) is to be retained by the permit holder/dealer.

In order to evolve a holistic plan using modern technology to curb illegal mining, Ministry of Mines³⁵, Government of India, requested State Governments to prepare an action plan with effect from September 2009 which would include bar coding, use of holograms, end user reporting etc. as a means of tracing unauthorised sale. But these measures were not implemented. We observed that absence of such mechanism paved the way for misuse of transit passes as detailed below:

³⁵ Annual report 2009-10 of Ministry of Mines, Government of India.

• **Defective system followed in issuance of mineral transit passes allowed misuse /forgery**

While transporting minor minerals through the Commercial Taxes check post, Muthanga³⁶, Wayanad, copies of the mineral transit passes along with sales bills are submitted at the check post. We collected copies of the mineral transit passes from the check post and cross verified them with the passes retained by the dealer, through the District office of Mining and Geology, Kozhikode and observed that:

- Six mineral transit passes³⁷ did not match the duplicate carbon copies obtained from the dealers concerned through the District office of Mining and Geology, Kozhikode. In reply to an audit query, Senior Geologist, District Office of Mining and Geology, Kozhikode stated that the passes were forged.
- Though we could collect copies of 15 mineral transit passes of book No. 2 in the name of Shri. K.T. Jafar bearing serial numbers 84,85,86,87,89,90,91, 95,96,97,98 and two copies each of 88 and 94 from the check post, it was discovered that transit passes bearing the same serial numbers remained unused with the dealer (11 January 2017). The Assistant Geologist, District office of Mining and Geology, Malappuram confirmed that the transit passes bearing serial numbers from 84 onwards issued to the dealer, Shri. K T Jafar, were unused. This indicated that the 15 mineral transit passes obtained from the check post were not bonafide. Further, in respect of another 24 mineral transit passes of the same dealer, the entries made therein did not match the entries in their duplicate copies.
- We collected (January 2017) 16 mineral transit passes issued in the name of Shri. P. Abbas for movement of extracted GBS. The Assistant Geologist, District Office of Mining and Geology, Malappuram quoted the declaration of Shri. Abbas which stated that passes bearing serial numbers 651 to 700 (50

³⁶ Check post at Kerala -Karnataka border

³⁷ Four in respect of Shri. Muhammed Froz and two in respect of Shri. C P Bashier

passes) were lost six months back. We found that 16 passes bearing serial numbers 659, 660, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 685, 686 and 688 were used during October-November, 2016 for movement of minerals through the check post. Out of these, four passes were used with sale bills of weathered sand of M/s M.P.S. Rock Products, Irivetty P.O, Malappuram district (3 nos.) and M/s Ernad Sand Manufacturing Unit, Karaparamba P.O, Malappuram district (1 no.). Weathered sand was not an item covered under these passes.

The above instances indicate large scale misuse of mineral transit passes and reveals that the prevailing system was not effective in regulating illegal extraction and transportation of minor minerals.

GoK replied (March 2017) that the department had initiated e-pass project under its e-governance programme and said that the project was ready to be launched. It was also stated that in the e-pass project a number of security features like 2D bar code, unique serial number, SMS based e-pass checking etc. were to be implemented and the issue would be resolved once e-pass project was launched. The reply was silent on the action to be taken against offences pointed out by audit.

- **Misuse of mineral transit passes**

Every movement of mineral was to be supported by mineral transit passes and in cases of sale, to be accompanied by sales bill of the seller.

Audit scrutiny of 70 mineral transit passes with corresponding sales bills in the Sales Tax check post, Muthanga for the month of October and November 2016 revealed the following:-

- Sales bills of Shri Ahammed Adangumpuravan, Kavannoor, P.O, Malappuram district (TIN 32100437215) were used by five different transit pass holders³⁸ in Kozhikode district in seven instances.

³⁸ Shri. Muhammed Firoz, (Three nos) Kallayi P O, Kozhikode district, Shri. Muhammed Basheer, Mavoor P.O, Kozhikode District, Shri. C. P. Basheer, Unnikulam P O, Kozhikode District, Shri. Sukumaran E., Managing Partner, Power stone Products, Eranhimavu, Pannikode, Kozhikode District, Shri. Abdul Rasak, Palam P O, Kozhikode district.

- Three separate sales bills showing Sl. No. 80 were used thrice³⁹ along with three different mineral transit passes.
- Three mineral transit passes in the name of Shri. C P Basheer, Unnikulam P O, Kozhikode district were used with the sales bills of M/s M.P.S Rock products, Malappuram, once and M/s Ernad Sand Manufacturing Unit, Malappuram, twice.
- Mineral transit passes in the name of Sukumaran E, Managing Partner, M/s Power Stone Products, Kozhikode district were used with the sales bills of M/s M.P.S Rock Products, Malappuram district, twice.
- Mineral transit pass in the name of Shri. Dinesh K., Wayanad was used by M/s Power Stone Products, Kozhikode district.
- Mineral transit pass nos.79, 83 and 94 in the name of Shri. K T Jafar was used twice on different dates for movement of minor minerals.

These instances indicate widespread misuse of mineral transit passes.

GoK replied (March 2017) that the problem would be mitigated on implementation of KOMPAS⁴⁰. The reply was silent on appropriate action to be taken in instances pointed out by audit.

- **Non-establishment of check posts to verify mineral transit passes at points having high traffic of minor minerals**

Check posts can ensure that a vehicle carrying minor minerals has a valid mineral transit pass, i.e. royalty has been paid, only one pass is issued to a vehicle and that the pass is not reused.

39 On 16.10.2016 (Purchaser Shri. Nizar, Vehicle No.KA-01/AB-1358), 18.10.2016 (Purchaser Shri. Lata, vehicle No. KA-01/AC-475) and again on 18.10.2016 (Purchaser Shri. Nizar, Vehicle No. KL 33/D-6753)

40 KOMPAS or Kerala Online Mining Permit Awarding Services is the e-pass project in which security features like 2D barcode, unique serial number, SMS based e-pass checking etc is envisaged.

With the aid of Commercial Taxes officials at the four⁴¹ commercial taxes check posts in three districts, we verified 55 vehicles carrying minor minerals and found that seven vehicles did not possess mineral transit passes. We also noticed irregularities such as absence of entries of date/time of transport or both, scored off / overwritten entries etc. in 16 mineral transit passes.

We observed that copies of mineral transit passes were not collected at the above check posts. Had the service of these check posts been utilised for recording and verification of minor mineral transit passes, such irregularities could have been reduced.

GoK replied (March 2017) that establishment of check posts involved creation of posts. It was also stated that the offenders were usually smart and would use alternate routes to by-pass check post. The reply indicates an attitude of helplessness of Government.

Recommendation No. 5 : Government may consider utilising the services of police aid posts or commercial taxes check posts to verify transit passes. Incorporating in the KMMC Rules, provisions similar to that of the Kerala Forest Produce Transit Rules, 1975 which specifies the route to be followed in the way permit, may reduce illegal transportation and misuse of passes.

- **Non-inclusion of directions for end user reporting**

Ministry of Mines requested State Governments to prepare an action plan which includes end user⁴² reporting as a means of tracing unauthorised sale of minor minerals. We noticed that no such provisions were included in the KMMC Rules, 2015. Following instances showed the necessity of end user reporting:

- M/s Mc Nath Bharath Engineering Co. Ltd., a sub contractor of M/s Delhi Metro Rail Corporation Limited (DMRC Ltd) for Kochi Metro Rail Project purchased

⁴¹ Vettilappara in Thrissur district, Kunhippally in Kozhikode district, Boys Town and Lakkidi in Wayanad district.

⁴² End user means the ultimate user of a product.

18,797,300 MT of minor mineral from one Shri Shahul Hameed who used 15 mineral transit passes instead of using 759 separate mineral transit passes for each vehicle load of minor mineral transported.

- M/s URC Construction (P) Ltd., a sub contractor of M/s DMRC Ltd purchased 93,321 cft of minor mineral from one Shri Abu K.K. of Kochi. Audit scrutiny at the district office of Mining and Geology, Ernakulam revealed that Shri Abu K K did not have registration with the office of Mining and Geology to trade in minor mineral.
- During February-December 2016, M/s Five Star Metals Private Limited, Pallavoor, Palakkad district supplied 12,830 MT of manufactured sand to M/s KMC Ltd., the agency engaged in the construction of six laning of Vadakkanchery - Thrissur section of NH 47 under NHDP With the assistance of officials of District office of Mining and Geology, Palakkad we verified duplicate copies of mineral transit passes retained by M/s Five Star Metals Private Limited which revealed that only 1,475 MT of GBS products were supported by mineral transit passes.

In the exit conference, the Additional Chief Secretary to Government opined that Mineral Squads would do better by detecting such cases and thus get more revenue for the State.

Recommendation No. 6 : Government may make provisions for end user reporting especially in respect of major projects to ensure realisation of royalty due.

[Audit paragraph 2.18.3 contained in the Report of the Comptroller and Auditor General of India for the year ended 31st March 2016 (Economic Sector)].

[Note received from the Government on the above audit paragraphs is included as Appendix II]

Excerpts from the discussion of Committee with officials concerned

68) When the Committee asked about the details regarding the above mentioned audit paragraphs the witness, Deputy Director, Mining and Geology replied that transit passes were issued manually before the implementation of KOMPAS software and after that online system was used for issuing passes and at present anyone could check transit passes through mobile app.

Conclusion/Recommendation

69) No Comments

2.19 Conclusion

Government did not identify areas from where GBS could be extracted with minimal impact on environment/tourism/ archaeological importance.

Absence of a streamlined procedure for granting quarrying permits resulted in allotting government land for quarrying without auction. The existing system of consolidated royalty payment paved the way for indiscriminate extraction of GBS and reduction in realisation of royalty. Department of Mining and Geology issued quarrying permits/leases violating KMMC Rules and disregarding MoEF directions. Licence issuing authorities like KSPCB, SEIAA and DMG failed to effectively monitor the compliance of licence conditions by quarry operators. The mechanism to detect illegal cases was not effective. The present system of issuance and use of mineral transit passes was not effective in preventing misuse, multiple use and use of forged mineral transit passes.

2.20 Recommendation

GoK may take punitive and legal action against all cases of illegal quarrying, forgeries and other offences in cases pointed out through this performance audit, besides taking suitable action to ensure that such instances do not exist in other than the test checked districts in the State.

[Audit paragraphs 2.19 and 2.20 contained in the Report of the Comptroller and Auditor General of India for the year ended 31st March 2016 (Economic Sector)].

[Note received from the Government on the above audit paragraphs is included as Appendix II]

Excerpts from the discussion of Committee with officials concerned.

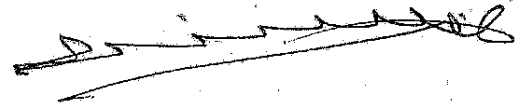
70) When the Committee enquired whether the implementation of e-pass system helped in reducing the illegal transportation of minerals, the Accountant General pointed out that some irregularities had been noticed and the reply received from the department was not satisfactory. The Deputy Director, Mining and Geology replied that a revised reply would be furnished within a week.

Conclusions/Recommendations

71) The Committee directs the department to furnish a detailed reply about the implementation of e-pass system, which helped in reducing illegal transportation of minerals.

Thiruvananthapuram

26th June 2024



SUNNY JOSEPH

Chairman,

Committee on Public Accounts.

APPENDIX I

SUMMARY OF MAIN CONCLUSIONS/RECOMMENDATIONS

Sl.No. (1)	Para No. (2)	Department Concerned (3)	Conclusion/Recommendations (4)
1	9	Industries	The Committee directs the department to furnish a report on the present status of normal, economic, construction, mining related activities allowed in the villages exempted from the purview of Ecologically Sensitive Areas.
2	20	Industries	The Committee suggests that urgent steps should be taken for the speedy implementation of the Drone Survey System being planned by the Government with the aim of monitoring post quarrying activities in the State.
3	21	Industries Motor Vehicles Home	The Committee understands that the scarcity of quarry products is a major concern of construction Industry of the State. One of the viable options to fill the gap between the increasing demand and scarce supply of quarry products is to implement an effective mechanism for transportating rubble and similar quarry products from other States. So, the Committee recommends that a lenient

			view should be taken by the Home and Motor Vehicle departments to ensure smooth inter-state transportation of rubble and quarry materials from other States which is lawfully carried out
4.	26	Industries	The Committee expresses its strong displeasure over the slothful attitude of the department officials in furnishing well informed replies before the Committee without thoroughly analysing the facts and directs the department to submit a detailed report to the Committee urgently about the action taken against the officials who had granted quarrying permits by violating KMMC Rules.
5.	31	Industries Forest	The Committee directs the Forest Department to submit a comprehensive report about the quarrying activities occurred in the forest/ assigned forest land for the period from 2010 to 2020 covering all the districts by including the actions taken to prevent such illegal acts.
6.	32	Industries Revenue	The Committee directs that in order to identify the forest land and the assigned forest land, the Forest Department should make available a map specifying the buffer zone to the Department of Mining and Geology at the earliest.

7.	37	Industries	The Committee directs the department to submit the present status of the case registered by Vigilance and Anti Corruption Bureau, Ernakulam regarding the extraction of GBS for 12 years over an area of 0.3440 ha of Government Poramboke land in Vengoor West Village, Kunnathunadu Taluk in Ernakulam District making use of a forged NOC at the earliest.
8.	38.	Industries Revenue	The Committee further directs the department to furnish the details regarding the measures taken to verify the genuineness of NOCs issued by the Revenue Department for mining and quarrying so as to check the possibilities of forgery.
9.	40	Industries Revenue	The Committee directs the department to submit the details regarding the action taken against the officers responsible for granting quarrying permits in assigned agricultural land.
10.	50	Industries Ground Water	The Committee strongly recommends that before issuing quarrying permits, a study should be conducted to assess whether there is depletion of ground water levels in areas in proximity to quarrying sites.

11.	65	Industries Mining & Geology Home Revenue Local self Government	<p>The Committee suggests that a joint periodical inspection of Mining & Geology, Home, Revenue and Local Self Government Departments would be beneficial for the identification of illegal quarrying. The Committee also urges the departments concerned to put in place a suitable mechanism to monitor and control illegal quarrying and also take stringent action against illegal mining in a co-ordinated manner.</p>
12.	67	Industries Mining & Geology Revenue	<p>The Committee recommends to maintain a database of offenders to identify habitual offenders in illegal mining or transportation so that such offenders shall not go unnoticed without the imposition of additional fine as stipulated in the Kerala Minor Mineral Concession Rules, 1967 & 2015.</p>
13.	71	Industries	<p>The Committee directs the department to furnish a detailed reply about the implementation of e-pass system, which helped in reducing illegal transportation of minerals.</p>

**Para-wise remarks/opinion on Performance Audit Report of the Comptroller and Auditor General of India
(Report No.6 of 2017) on 'Licensing and monitoring of quarrying of minor minerals in Kerala'**

Para No.	Audit Para	Action Taken by Government
2.5	Non- imposition of restrictions on quarrying ordinary earth	<p>The Office Memorandum No.L-11011/47/2011-IA.II(M) issued in the month of June 2013 by Ministry of Environment and Forest (MoEF) deals with burrowing / excavation of ordinary earth for activities like construction of roads, embankments, brick making etc. which are commercial activities. It may be noted that in civil engineering borrow pit has been defined as follows. "In construction and civil engineering, a borrow pit, also known as a sand box, is an area where material (usually soil, gravel or sand) has been dug for use at another location. Borrow pits can be found close to many major construction projects. For example, soil might be excavated to fill an embankment for a highway, clay might be excavated for use in brick- making, gravel to be used for making concrete, etc." This means that when MoEF issued directives they had considered such large scale excavation and not the excavation of ordinary earth for construction of domestic buildings. As per Kerala Minor Mineral Concession Rules, 2015 (KMMCR, 2015), for any large scale excavation, quarrying permit is required and for grant of quarrying permit Environmental Clearance (EC) issued either by State Level Environmental Impact Assessment Authority (SEIAA) or District Level Environmental Impact Assessment Authority (DEIAA) and while granting EC such authorities take care of the Office Memorandum (OM) issued by MoEF. In the OM, it is not</p>

		<p>mentioned that the two meters restriction is stipulated from the top surface of the terrain but as "<i>excavation activity shall be restricted to a maximum depth of 2m below general ground level at the site</i>". This means that more than two meter excavation is possible but the depth should be restricted to 2 meters below general ground level.</p> <p>In case of removal of ordinary earth in connection with construction of buildings upto 300 square meter plinth area, there is no need to obtain quarrying permit as the purpose of removal is not for winning of mineral. However, if any transportation of such excavated mineral is required, then the Mining & Geology Department grants permission to excavate mineral and issues passes to transport the same. During site inspection by the Geologists/Assistant Geologists, the possibility of occurrence of landslide and other safety aspects are looked into and while granting permission specific conditions are stipulated to ensure scientific excavation.</p>
2.6	Non- identification of sensitive areas to be excluded while granting quarrying permits	<p>The findings of the Audit Department as to the issuance of permits in all types of land are not correct. No new permit/lease can be granted in Ecologically Sensitive Areas (ESA). There are 123 villages notified as ESA as per the Kasthurirangan Committee Report on Western Ghats. In addition, permission for quarrying is not given in forest lands, paddy and wet lands, land assigned for specific purposes etc.</p> <p>It may be noted that the performance audit covered period from 2011-2012 to 2015-2016 and the quarries visited by them were functioning for 10 or more years prior to their visits. During the period between 2012 and 2016, many amendments were</p>

		<p>incorporated in major as well as minor mineral related laws and also in the mining related environmental laws. The landmark order of Hon'ble Supreme Court in Deepak Kumar case in February 2012 had a drastic impact on the way minor minerals are mined in the country. Following the directions by Hon'ble Supreme Court in the above mentioned case, Government of Kerala enacted new minor mineral concession rules (KMMCR, 2015) in the year 2015 incorporating new rules pertaining to requirement of EC and requirement of mining plan prepared scientifically by Recognized Qualified Persons for mining of minor minerals. The mining plan provides details of proposed scientific mining operations in mine and also takes care of environmental issues. It also contains Environmental Management Plan for proposed quarry. In January 2016, Government of India made amendments in the EIA notification, 2006 incorporating requirement of prior Environmental Clearance for mining of all types of minor minerals (including ordinary earth) irrespective of the area of mining. Prior to the order in Deepak Kumar Case, EC was not required for quarrying leases having an area less than 5 hectares.</p> <p>Before the enactment of KMMCR, 2015 or amendment of EIA notification, the mining laws were not that stringent with respect to scientific mining as well as environmental management. There were cases of unscientific mining. But now, no mining activity (for winning of minerals) can take place in the State of Kerala for any mineral without an approved mining plan and prior Environmental Clearance.</p> <p>It may be noted that the qualification of experts of District Level</p>
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		<p>Environment Impact Assessment Authority (DEIAA) and District Level Expert Appraisal Committee (DEAC) are specified in the EIA notification and the field of expertise suggested are Mining, Geology, Hydrology, Remote Sensing, Environment Quality, Environment Impact Assessment Process, Risk Assessment, Life Sciences, Marine Sciences, Forestry and Wildlife, Environmental Economics, Bio-diversity and River Ecology. This is to assess the impact of mining on various regimes. Moreover the appraisal committee has 8 technical members who are selected from different technical departments like State Pollution Control Board, State Ground Water Department, Forest Department, Health Service Department etc.</p> <p>Mineral Concessions are being issued only on receipt of clearances/licenses like Environmental Clearance, Explosives License, Dangerous and Offensive Trade License, Consent to Operate from State Pollution Control Board etc. Since granite quarries come under Mines Act, there will be inspection by mines safety officers from Directorate General of Mines Safety. In short, at present, mining cannot be done at any place but can only be done with the concurrence of many departments. Since EC has been made mandatory for all mining activities, the issues pertaining to environment as pointed by Audit will be taken care at the time of grant of EC.</p> <p>Since Kerala is a thickly populated state and the land available for mining is less and since there are no barren lands available in Kerala, finding a suitable place for mining of essential building materials is difficult. Since building materials are required for construction of houses, buildings, roads etc., banning of mining</p>
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		<p>or imposing of stringent measures in a district like Wayanad will have severe socio-economic impacts. Since mining in some parts of Wayanad has been banned for various reasons, at present building materials are coming to Wayanad from other districts and due to this reason the price of building materials like rubble, metal, manufactured sand rose up. The Mining & Geology Department feels that blanket ban of mining in an entire village on account of a landslide occurred far off in a village cannot be substantiated. Since EC has been made mandatory, the issues posed by Audit will be taken care while EC is granted.</p> <p>In the audit report, there is a mention regarding conditions in EC stipulated by SEIAA in Tamil Nadu. Since the area available for mining in Kerala is less compared to that of Tamil Nadu and since most of the quarries are less than 1 ha in area, such situation of quarrying 25 ha usually does not arise in Kerala. Moreover, it is upto SEIAA to decide whether such restriction has to be imposed or not. Since SEIAA is controlled by Ministry of Environment, Forest and Climate Change, the State cannot dictate terms with SEIAA.</p> <p>With regard to mining near sites of archaeological/tourism importance, the Mining & Geology Department can assure that permission will not be granted if the concerned departments like Department of Archeology/Department of Tourism forwards list of such sites to the Department of Mining and Geology in advance.</p>
No.2.7	Absence of Streamlined system for issuing quarrying permits	<ul style="list-style-type: none"> • Non- auctioning of Government land for quarrying <p>The Government are yet to take a decision regarding auctioning of quarrying leases in Government lands.</p>

		<ul style="list-style-type: none">• Extension of exemption to existing quarrying permit holders <p>Approved mining plan and prior Environmental Clearance are required for grant/renewal of quarrying permit as well as leases. The Kerala Minor Mineral Concession Rules, 2015 has been amended to this extent.</p> <ul style="list-style-type: none">• Non - adherence to Kerala Environmental Policy, 2009 while issuing quarrying permits <p>In the erstwhile KMMCR, 1967, there was no requirement of submission of mining plans prior to grant of quarrying permits. In mining plans, the details of reclamation/rehabilitation and also eco-restoration measures like planting of trees are stipulated. Moreover, in mining plan, details of Environmental Management Plan should also be dealt in. In the present KMMCR, 2015, mining plan as well as EC are pre-requisites for grant of quarrying permit/leases. As per KMMC Rules, mining has to be carried out as per mining plan and hence there is no need to specify the details of rehabilitation/ reclamation as special condition while granting permit. In addition to mining plan, the permit/lease holder has to submit final mine closure plan which contain details of proper closure of mine.</p> <p>Miners had earlier abandoned many quarries without proper rehabilitation. However, the scenario has changed now. As per KMMC Rules 2015, mining plans have been</p>
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made mandatory for grant of any concession. The mining plan contain progressive mine closure plans. In the last year of mining, the concession holder has to submit mine closure plan and mine has to be closed as per the closure plans. Else, the financial guarantee submitted by the lessee would be forfeited.

The technical staff of the Mining & Geology Department are post graduates in Geology and while inspection of site for grant of permit/lease, they carry out the technical evaluation of the area proposed to be mined. If there is possibility of any landslide or other safety related issues then such sites would not be recommended for grant of permit/leases. Environmental Clearance will not be granted if the slope of the hill is more than 45 degrees. There is no issue in granting of mining permission if mining does not pose any threat to safety or environment. If blanket ban is imposed on mining in hilly terrains, then people residing in hilly terrains of Idukki, Wayanad, Pathanamthitta etc. will face problems in getting building materials. Moreover, it will affect developmental activities in hilly terrains.

EIA Notification, 2006 has been amended by Ministry of Environment, Forest and Climate Change in January 2016 to include guidelines for grant of EC for mining of minor minerals. When prior EC is required based on the Central Act/Notification, it supersedes the policy taken by the State.

• Absence of provisions requiring Environmental

		<p>Management Plan for quarrying in cluster situation</p> <p>The EIA Notification 2006, based on which EC is issued for minor minerals, mandates preparation of Environmental Management Plan (EMP) when mining is done in cluster. Before granting EC, the possibility of formation of cluster situation is also studied. Mining & Geology Department also issues a certificate in this regard to the applicant for submitting the same to SEIAA/DEIAA. Since there is provision for preparation of Environmental Management Plan in cluster situation in EIA notification, there is no need to frame any rule or issue any guideline making EMP mandatory in cluster situation.</p>
2.8	Consolidated royalty payment system led to reduction in royalty and indiscriminate quarrying	Whether the quarrying permit is granted under Consolidated Royalty Payment System (CRPS) or not, the permit holder can mine only the quantity that is prescribed in the Mining Plan. With the enactment of KMMCR, 2015, mining has to be carried out as per Mining Plan and the Mining Plan is a scientific document prepared by Recognized Qualified Person. Hence it is not correct to say that CRPS system paved way for unscientific mining.
2.8.1	Lack of restriction on the number of mineral transit passes that can be issued for quarrying in areas between 40 to 50 ares	The Government, vide SRO No. 346/2017 dated 22/06/2017, amended the KMMCR, 2015 restricting the number of passes to 7000 in respect of area between 40 and 50 Ares. Since the concession holder has to mine according to mining plan, in addition to the restriction in number of passes, there is quantity restriction as prescribed in the mining plan.
2.8.2	Reduction in revenue due to collection of royalty based on Consolidated Royalty Payment	The Consolidated Royalty Payment System (CRPS) was brought in the Rules at a time when number of permits were far more than number of leases. Before the introduction of CRPS, quarry owners

	System	<p>used to take short term permits of one to two months duration and used to renew the same after such periods. During that time the royalty was collected based on the quantity of extraction. Due to the limited staff strength of the Mining & Geology Department, it was not possible to make the assessment of extraction of granite building stone on monthly/bimonthly basis. Moreover, it is very difficult to measure the quantity mined for a short period in an irregular shaped quarry. The CRPS was introduced with a good intention of reducing the workload of the staff of the Mining & Geology Department and to reduce the disputes arising regarding the quantity of mineral mined.</p> <p>At present the concept of unlimited mining is not there as mining is restricted as per approved mining plans and number of passes. Moreover, the amount paid as consolidated royalty is not refundable.</p>
2.8.3	Quarrying without bench cutting in violation of KMMC Rules	<p>It is true that it is difficult to implement bench cutting in small quarries as mining in benches reduce the volume of rock extracted. However, since mining plan has been made mandatory for small quarries under quarrying permits now, one has to adopt mining in benches. It may be noted that in old quarries where mining took place before 2015 (before the introduction of mining plan), high wall mining might have been adopted. In such quarries, benching may not be possible now.</p> <p>Since 2015, it has been made mandatory that all mining shall be carried out in benches and the volume allowed to be mined would be the total available volume available up to ultimate pit limit minus the volume of the mineral blocked in benches.</p>

2.8.4	Excessive extraction from lease areas registered as Registered Metal Crusher Units (RMCU) and resultant short collection of royalty	As per KMMC Rules 2015, quarrying should be done as per the mining plan. In mining plan, the proposed production plan in each financial year is arrived scientifically. Whether the lessee has opted RMCU or not, the quantity allowed to be mined would be the quantity mentioned in the approved mining plan. If more quantity is mined and transported then it will be considered as illegal. Moreover, mineral transit passes will be issued proportionate to the quantity of mineral prescribed in the mining plan.
2.9	Issuance of permits in violation of KMMC Rules	
2.9.1	Issuance of permits for more than the prescribed period	In the e-Governance application "Kerala Online Mining Permit Awarding Services" (KOMPAS) there is provision to generate MIS reports that give details of concessions and movement permits issued. If backlog data entry is carried out correctly in the system, then one can easily find out the number of times the permits were granted to a particular quarry. The KOMPAS software is being used in all district offices.
2.9.2	Granting of quarrying permit under CRPS violating KMMC Rules 2015	In this connection explanation was sought from the District Geologist, Wayanad by the Director of Mining and Geology. The permits were issued by the predecessors of the present Geologist. One of the geologists who issued such permit has retired and the other Senior Geologist is on leave on account of accident. However, explanation has been sought from the Geologist concerned regarding lapse and appropriate action will be taken after getting the reply.
2.10	Quarrying in forest/assigned forest land • Quarrying in forest land	The Mining & Geology Department does not issue mining permit or lease if the land is classified as forest land. All the permits and leases are granted as per the possession certificate issued by

		Revenue Department and as per the NOC issued by District Collector if the land belongs to Government.
	<ul style="list-style-type: none"> Functioning of quarry in assigned forest land 	The Mining & Geology Department is yet to receive any map from Forest Department showing the forest boundary.
2.11	Non-observance of MoEF directions	
2.11.1	Granting leases to mine areas exceeding five hectares	<p>Since the area applied for quarrying leases were of different survey numbers and they included in different documents, separate applications were received by the district officer and they were forwarded to the Directorate of Mining & Geology for the grant of quarrying lease. Mining area in respect of each application was below 5 hectares. The officers were not aware of joining the areas adjacent to each other in order to make a situation of cluster to obtain Environmental Clearance.</p> <p>There was no intention for circumventing the stipulations of Environmental Clearance. The Mining & Geology Department became aware of Environmental Clearance for minor minerals after obtaining the order dated 27.02.2012 of the Hon'ble Supreme Court in Deepak Kumar Vs. State of Haryana and others. When the department was aware of obtaining Environmental Clearance for minor minerals, the quarry operators who obtained quarrying leases for areas exceeding 5 hectares were instructed to obtain Environmental Clearance. They applied for Environmental Clearance and all functioning quarries obtained Environmental Clearance now.</p> <p>Eight quarrying leases were granted to M/s. K.J.Vasudevan Nair Granites of Thrissur in Killannur Taluk, Thrissur. In five cases, they obtained NOC from the Revenue Department for quarrying in Government lands. As they obtained separate No Objection</p>

		<p>Certificates for quarrying in different survey numbers, they were granted separate quarrying leases. There was no willful intention to circumvent the stipulations contained in the EIA notification, 2006. In the same way, as they applied for quarrying leases in different areas in different survey numbers of private lands, they were granted 3 quarrying leases in 3 private lands. One of such leases was granted prior to EIA notification, 2006. The validity of this lease expired on 07.03.2018. The area of lease was 1.1800 hectares. The other two leases were in 1.2671 hectares and 0.5040 hectares. The total area of these 3 leases was below 5 hectares. Later, they applied for Environmental Clearance and obtained the same for all working quarries. For the non working quarries, they didn't apply for Environmental Clearance.</p> <p>M/s. Poabs Rock Products Private Limited, Nellikkaparambu P.O, Kozhikode had been granted 3 quarrying leases in Kodyathoor Village of Kozhikode Taluk and District. One lease was granted prior to the date of EIA notification 2006. It was granted on 25.03.2006. Its validity was expired on 11.06.2018. One lease for 5.7584 hectare was granted on 11.03.2009. At the time of grant of this lease the Mining & Geology Department was not fully aware of obtaining Environmental Clearance for minor minerals. When the Department was aware of its failure, it directed the lessee to obtain Environmental Clearance and they obtained the same. Another lease for 4.6380 hectare was granted on 06.08.2011, ie., before the pronouncement of the order of the Hon'ble Supreme Court dated 27.02.2012 in Deepak Kumar Vs. State of Haryana and others. When the Mining & Geology Department was aware of cluster situation the lessee was directed to obtain Environmental Clearance and they obtained the same.</p>
2.12	Extraction of Granite Building Stone from Government puramboke land using forged	Director of Mining & Geology has issued appropriate direction to all the District Geologists to verify the authenticity of NOC by writing letter to the officer who issued the NOC and to process

	NOC	application only after getting confirmation letter from the official who issued the NOC.
2.13	Quarrying in land assigned for agricultural purpose	<p>This matter has to be dealt with Revenue Department as quarrying permits/leases are granted based on the possession certificate as well as survey map issued by the Revenue Department. When the Revenue Department issue possession certificate, survey plan etc. it is mentioned that same is issued for producing before the Department of Mining & Geology.</p> <p>There were similar cases in Mukkunnimala area of Thiruvananthapuram and in the latest judgment of Hon'ble High Court in this regard, Government was directed to take decision whether such assigned land could be utilized for quarrying activity. The Revenue Department has to take a final call on this matter.</p> <p>As per Rule 4(2)(c) of KMMCR, 2015 'a certificate from the Village Officer concerned to the effect that the land in respect of which quarrying is applied for, is not assigned for any special purpose by the Department of Land Revenue' is necessary for granting quarrying lease/permit in assigned land. Therefore, no fresh quarrying permit/lease can be granted in assigned lands.</p>
2.14	<p>Ineffective monitoring</p> <ul style="list-style-type: none"> Monitoring compliance of conditions mentioned in the consent of KSPCB and SEIAA 	To be answered by KSPCB and SEIAA
	<ul style="list-style-type: none"> Non-monitoring of adherence to KMMC Rules 	There is only one district office in a district to monitor all activities related to mining. Since the existing staff has to clear

	by DMG	the backlog applications for removal of ordinary earth for construction of houses, often inspection of quarries working under concession are deferred. More priority is given for attending complaints and booking cases against those engaged in illegal mining. Nevertheless, the two field staff available in the District Offices make all possible efforts to visit the quarries and take appropriate action against the defaulters.
2.15	Lack of expertise in taking measurements of uneven terrains	Both for short term permits as well as long term leases, mining plan is mandatory. Such plans are prepared by Recognized Qualified Persons and they utilize the service of professional surveyors who use total stations/DGPS for measurement of quarries. Mining Plans cannot be treated as just an information furnished by lessee but shall be treated as a scientific document prepared by a recognized qualified person who is also accountable. Mining plans have been made mandatory for permits also. In the case of unauthorized mining, the District Offices get the quantity estimated through the Taluk Surveyors in the presence of Village Officers. In order to modernize the survey techniques, the Mining & Geology Department has suggested procurement of Differential Global Positioning System and procurement of one such equipment as pilot is included in the plan proposal for the year 2018-19. The Mining & Geology Department has only one post of Draftsman-cum-Surveyor and this post is lying vacant for last many years despite many requests made to PSC. The Mining & Geology Department has one total station but the same cannot be put into use for want of surveyor.
2.16	Failure to address the issues of ground water level	The action to be taken in this regard is by SEIAA/DEIAA. The Mining & Geology Department further would like to add the

		<p>following: It may be noted that a senior officer of the Ground Water Department is a member of the DEAC which recommends issue of EC for quarrying of minor minerals. This officer can object issue of EC if ground water availability would be affected on account of mining. The Department of Mining & Geology issues quarrying permit only after getting EC. As per EIA notification, it is the duty of the proponent to carry out post Environmental Clearance monitoring and to report the same to the EC granting authority. SEIAA and DEIAA can insist that one Well could be located near to quarrying area for monitoring of ground water and can insist that while the proponent furnishes post clearance compliance report every six months, the water table level should also be reported.</p>
2.17	Waiver of the stipulation to maintain distance from residential buildings to GBS quarries	In KMMC Rules 2015, at the time of Audit, the minimum distance from GBS quarry to residential houses was 100 meter. However in June 2017, the Rules were amended and the distance was reduced to 50 meter. This was done in conformity with the distance prescribed (50 m) in Minerals (Other than Atomic and Hydro Carbons Energy Minerals) Concession Rules, 2016.
2.18	System to curb illegal quarrying	
2.18.1	Working of squads/ committees	
2.18.1.1	Performance of Regional Mineral Squads in detection of illegal cases	As of now the Mining & Geology Department has 3 mineral squads and a special squad at Cherthala for curbing illegal mining and transport of minerals. The working of the Mineral Squads has been very effective in preventing illegal mining activities in the State and to recover a sizable amount of royalty and price to the tune of Rs.30927102/- by way of compounding

		the offenses from 500 odd cases of illegal minings/ transportation and storage detected for the year 2016-17. Besides the Mineral squads, each District Geology office conducts inspection of the sites suspected to have been quarried illegally based on specific complaints from various authorities like Revenue, Vigilance, Local Self Government, Police etc as part of effectively check the menace of illegal quarrying in the State. Government will consider strengthening the staff for the Mineral Squad at appropriate time on the basis of actual evaluation of requirements and resources.
2.18.1.2	Non functioning of committee constituted to prevent illegal quarrying	Curbing illegal quarrying requires repeated field visits and follow ups. Due to shortage of staff, the District Offices are unable to carry out field visits. Since illegal quarrying and transportation can happen in any place and at any time, constant vigil is required to curb such action. The support of other agencies like Police, Local Self Government Institution and Revenue Department (whose presence is spread across the District) play an important role in curbing such activity.
2.18.2	Non - maintenance of computerized database to identify repeat offenders	It is not true that the District Offices are not maintaining record of offense and database of offenders. Compounding register as well as DCB registers are maintained in the District Offices. The details are available in old files also. However due to workload, often the officers do not get time to check these details. The Mining & Geology Department is in the process of implementation of e-Governance project and once the offense module is rolled out such issues could be resolved to a great extent.
2.18.3	Issues related to transit passes	The Mining & Geology Department has implemented the e-pass project of the e-Governance program in the state. There is facility

		<p>for online issuance of Movement Permit, e-payment of royalty, Tax and Quarry Safety Fund, generation of electronic mineral transit passes, entry of productions, filing of returns etc. Both the producer and dealer can issue e-Passes through this system. The e-Pass contain unique id and bar-code and anybody can check the genuineness of the pass through SMS, and through the website. An android application has been developed for checking of e-Passes.</p>
	<p>Defective System followed in issuance of mineral transit passes allowed misuse/forgery</p>	<p>The e-Pass project has been implemented in the state and the results are promising. The manual system followed by the Mining & Geology Department has many defects and are aware of the misuse of manual passes. The mineral squads as well as District Offices took cases of illegal transports by tampered passes (actions like not properly filing the passes; overwriting the content etc.). The Mining & Geology Department also filed police complaints when forged passes are detected. The Mining & Geology Department strongly believe that the tampering of passes and forgery of passes can be restricted to a great extent through e-Pass project.</p>
	<p>Misuse of mineral transit passes</p>	<p>The Mining & Geology Department do agree that there is misuse of passes. However, such misuse can be prevented only by frequent field inspections. The present staff strength prevents the Mining & Geology Department from carrying out frequent field inspections. The Mining & Geology Department cannot take any legal action in case of photocopy of the forged/tampered passes produced by the Audit which they collected during their audit for the reason that there will not be any merit for such cases before the court of law. There is a lengthy legal procedure to be followed in booking a case against forgery. The officer detecting the case</p>


		<p>should be competent to check the passes, a mahazar should be prepared at the time of detection of offense, there should be at least two witnesses for seizure, the vehicle carrying the mineral should be seized, the original of the tampered or forged passes shall be available, the name and other details of the people involved in the offense should be known etc. It is difficult to take any action with some photocopies of passes. The experience of the Mining & Geology Department with respect to detection of forged passes is that most of the time, the offenders gets acquitted for some or other grounds and often it is difficult to prove forgery. The Mining & Geology Department has its own limitation since such cases are being handled by police. However, the Director of Mining & Geology has given instructions to Geologists concerned to be more vigilant and to closely monitor the persons against whom Audit has made mention in their report and to warn such people of dire consequences if such action is detected in future.</p>
	<p>Non-establishment of check post to verify mineral transit passes at points having high traffic of minor minerals</p>	<p>If a permanent check post is created then the people engaged in illegal transport find other ways to bypass the system. Since quarries are scattered in the state, having a few check-posts will not serve purpose. Illegal transport of minerals can only be checked by surprise road checking. To a great extent, the shortage of staff is one of the reasons that makes the Mining & Geology Department helpless in curbing illegal transport of minerals. At present the Mining & Geology Department is unable to clear the applications for permission to remove ordinary earth for the purpose of building houses.</p> <p>It may be noted that in the mineral transit passes, the producer/dealer has to record the route also. There is no need to</p>

		<p>bring such provisions in KMMC Rules as provision is already there in the Kerala Minerals (Prevention of Illegal mining, Storage and Transportation) Rules, 2015 {KM(PIMST)R, 2015}.</p> <p>Police officers of and above the rank of Additional Sub - Inspector are authorized to check mineral transit passes. Government have already implemented e-pass system for transporting minerals. The e-pass system is introduced with an aim to effectively tackle illegal transportation of minerals and the misuse of mineral transit passes.</p>
	Non-inclusion of directions for end user reporting	<p>At present, the Rule 21 of KM(PIMST)R, 2015 reads "21, <i>Checking of unauthorized dealing in minerals:- Any Dealer, who is in possession of any mineral or its products for sale shall, if required, produce sufficient proof to the competent authority or District Geologist or to any other officer authorized in this behalf to the effect that the mineral had been purchased from any duly authorized producer</i>".</p>
2.19	Conclusion	<p>Any quarrying activity is a destructive process and it causes social as well as environmental impacts of varying nature. It is not easy to spot an area where granite building stone could be extracted with minimal impact on environment as well as with minimum disturbance in tourist areas/areas of archaeological importance. Since most of the Government owned land falls in Reserved Forests and ESA Villages, mining from such land would not be possible as mining is banned in such area. If such identified land falls in private holding then the owner of the land should permit mining from such area. In the present system, the environmental and related issues are being taken care by authorities issuing Environmental Clearance, the pollution related issues are taken care by State Pollution Control Board, Explosive</p>

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		<p>related issues are being dealt in by District Administration and Petroleum and Safety Organization etc.</p> <p>At present, the Government land is allotted for mining by adopting a "first come first served" procedure. For granite building stone, seigniorage fee of Rs.50 per ton is collected from the holder of NOC. If scientific mining is carried out as per mining plan from an area of 1 hectare, then easily around 5 lakhs tones of building stone can be extracted if the area has medium slope. This means Government gets Rs.2.5 crores as seigniorage fee from one hectare of land. Granting an NOC for quarrying does not mean that the NOC holder will get quarrying lease. He has to get all mandatory licenses to start quarry operation. Bidding means competition and higher bidding rate results in escalation of prices of the building material. Government, being a large end user of building materials, will have to bear the additional cost for purchase of building material be it for the construction of road or other developmental projects. Also, general public will have to pay more money for building material. So every option has its own merits and de-merits. It may be noted that Government is planning to setup a natural resource corporation through which building stone and sand will be made available to public at reasonable price. The same has been included in the Mining Policy declared by Government.</p> <p>It is very unfortunate that Audit has made remarks like Department of Mining and Geology issued quarrying permits/leases violating KMMC Rules and MoEF directions. It is not fair to generalize the activities of the department by citing one or two exceptional cases. It is true that there were confusion regarding EC for minor minerals from the date of pronouncement</p>
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	<p>of judgment in Deepak Kumar case by Hon'ble Supreme Court (February 2017) to the date of amendment of EIA notification (January 2016) by MoEF. When erstwhile KMMC Rules, 1967 is replaced by new KMMC Rules, 2015, for some period there were confusions. It may be noted that the Audit by CAG took place during this period of confusion.</p> <p>The lapses that occurred from the side of Mining & Geology Department regarding monitoring of quarries are not willful lapses and the same happened due to the shortage of staff and other infrastructure.</p> <p>The Mining & Geology Department has already launched the e-Pass project and hopes that new system will address the issues of misuse of passes. The Government hope that mineral administration would become proper, efficient and transparent with the implementation of e-Governance Project "Kerala Online Mining Permit Awarding Services (KOMPAS)".</p>
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APPENDIX III
Appendices From Audit Report

Audit Report (Economic Sector) for the year ended 31 March 2016

Paragraph 11(1)

Instances of NOC granted for quarrying in Government land without auction

(Reference: Paragraph 2.7 - Page : 17)

Sl. No.	Name of the Holder	Name of the Authority	Month and year of issue of NOC	Extent of land	Period (in years)
1	Shri. K.N. Madhusoodanan Managing Director, M/s Mavanal Granites Pvt. Ltd., Kalanjoor	District Collector, Pathanamthitta	August 2013	4.0469 ha	10
2	Shri. K.N. Madhusoodanan, Managing Partner, M/s Vajra Rock Mining Industries, Kalanjoor	District Collector, Pathanamthitta	February 2014	4.6785 ha	12
3	Seven NOCs- Three to Shri Reji Kuriakose, Two to Smt. Jeeva Reji and One each to Smt. Kumari Joy and Smt. Rema Rajiv.	Tahasildar, Kothamangalam	2011-13	6.7291 Acre	12
4	Shri. Sathyan, Kalathingal veedu, Kumbalangi P O	District Collector, Wayanad	July 2015	0.0808 ha	1
5	Shri George K. Vallamattom, Managing Director, Vallamattom Stone Aggregates, Arakuzha village	Additional Tahasildar, Muvattupuzha	February 2015	1.25 Acre	6

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Details of violations of KMMC Rules identified during joint site verification of quarries
(Reference : Paragraph 2.14 - Page : 26)

	Name of the quarry	Details of violations
1.	Shri. Thomas Mathai, Konuthazham Village, Pathanamthitta District	No display board containing details of quarrying permit and approach road not tarred.
2.	Shri. Baby Kutty Jacob, Konuthazham Village, Pathanamthitta District	No display board containing details of quarrying permit, no fencing around the quarry, demarcation was not properly done, access road not tarred, and no safety measures to labourers.
3.	Smt. Susamma John, M/s. Johnson Rocks Payyanamon, Konni, Pathanamthitta District.	No proper display board and no bench cutting in the quarrying area.
4.	Shri. Jobin Varghese, M/s. Pyramid Granites (P), Pathanamthitta District	No demarcation of area, no fencing and no display board. The entire quarrying area was part of a hill.
5.	Shri. Sudheer Sukumaran, MD., M/s. Aswathy Granites, Koodal Village, Pathanamthitta	No bench cutting and no proper fencing and demarcations.
6.	Abandoned quarry, Murinjaka, Pathanamthitta	No proper fencing and demarcation.
7.	Shri. Paul Varghese, M/s. Cement Bricks & Allied Industries, Choorakode, Vellangu (PO), Ernakulam District.	No bench cutting and no safety measures to the labourers. Number of trees cut and removed from the quarrying site was not available
8.	Shri. P.V. Santhosh, Ernakulam District.	Number of trees cut and removed from the quarrying site was not available. Explosive licence specifying quarrying areas at survey Nos. 410/10 and 301/2-2 was not available. But licence to keep magazine at survey No. 409/9 was produced.
9.	M/s. Cochin Granites, Pulickal Associates, North Mazhuvanoor, Ernakulam District.	Explosive licence for keeping explosive magazine at survey No. 282/3-2 was available. However explosive licence specifying quarrying areas with survey Nos. was not available. In the consent of KSPCB (No/PCB/DO-EKM/IQR-204/03 dt. 06.02.2016) survey No. 284/1-3 was not specified. Bench cutting was not done, approach road to quarry was in damaged condition and display board was not available.
10.	Shri. V.R. Parameswaran, VRP Rock Sand, Mupliyam, Varandarappilly Village, Thrissur District	Display board not filled with statutory details and validity period of D&O licence (No. A1/237/15 dt. 03.06.2015) had already been expired. No valid explosive licence, no proper fencing and there was no licensed person to supervise the blasting operations.

Sl. No.	Quarry owned by	Observations/Issues identified
11.	Shri. T.T. Michael, Mupliyam, Varandarappilly Village, Thrissur District	Details of quarrying permit not shown in the display board, validity period of the permit had already expired; details of D&O licence and consent of KSPCB were not shown in the display board. Though validity of the permit expired the blasted markings on the rocks were very clear and prominent which indicated that the quarry was illegally operated. No benching in the quarried area and there was no demarcation to identify the area of permit.
12.	Shri. Haridasan A.V, Mupliyam, Varandarappilly Village, Thrissur District	Abandoned quarry. The display board was partially damaged, bench cutting was not done in the quarry and quarry area was not demarcated and properly fenced in.
13.	M/s. Victory Granites and Metal quarry, Mupliyam, Thrissur District	Abandoned quarry, located very close to forest area, approach road to quarry was in between forest area and 'junda' and the road was not tarred. Fencing was not provided around the quarry especially the water logged portion and the quarry was part of a hillock.
14.	Shri. Augustine Jose (Kalapurakkal Jose) Varandrappilly Village, Chalakudy Taluk, Thrissur Dist.	There was no statutory display board, no demarcation to identify the area of extraction and no bench cutting in the quarrying portion.
15.	M/s. Poabs Rock Products Pvt. Ltd., Nellikaparambil, Kozhikode	Lease areas (3 Nos. of leases) were not segregated though two leases were not registered under RMCU.
16.	Shri. AbdulRahman, Director, Marva Granites, Kodiyathur Village, Kozhikode	Approach road to quarrying area was not tarred. The dealer's licence of the attached crusher unit had expired and the transit passes of the expired licence was used to move granite aggregates.
17.	Shri. C.P. Muhammed, Kodiyathur Village, Kozhikode	No separate demarcation.
18.	Quarries in revenue land granted to 17 persons, Wayand District	The quarries were not fenced.
19.	M/s.CBM Enterprises, Kolagappara, Wayanad District.	Fencing was not provided around quarrying area and no demarcation. Approach road to quarry was not tarred.
20.	Shri. M.P. Kuriakose, Krishnagiri Village, Wayanad District.	Demarcation and fencing were not done; approach road to quarry was not tarred.
21.	Quarry of Shri. Renjith K. in Wayanad district.	Fencing was not provided. No separate water tank to keep the contaminated water. No mechanism to control dust, no bench cutting and no display board.

¹ 'junda' is a permanent conical structure of stones constructed to demarcate forest boundary.

Appendix III (3)

Instances showing necessity of accurate measurement for assessing the quantity quarried

(Reference : Paragraph 2.15 - Page : 27)

Sl. No.	Name of quarry	Facts showing the necessity of accurate measurement
1	Quarry owned by Shri. N. D. Joseph, Muvattupuzha taluk in Ernakulam district	The Geologist in Ernakulam district assessed the seigniorage payable for quarrying a quantity of 4,87,500 MT of GBS, based on which the Tahasildar, Muvattupuzha taluk in Ernakulam district directed (June 2014) the NOC holder to pay seigniorage for the quantity. However, on a request (August 2014) of the lease holder the quantity was re-assessed and the quantity on which seigniorage was payable was reduced (September 2014) to 2,02,608 MT only, citing the reasons that there were differences in the fixing of boundary of NOC land and the data regarding the period of quarrying of adjacent land was not available.
2	M/s United Metals, Palakuzha in Ernakulam district	The quarrying lease holder, quarried beyond their permitted area from the government land surrounded by their lease land, which was detected (August 2015) by Revenue department. Consequent to the submission of mine plan, the Geologist, Ernakulam visited the quarry and found (August 2016) that the area was encroached upon and mined illegally beyond the permitted area, and ordered (September 2016) to remit an amount of ₹ 34.80 lakh towards royalty for 31,737 MT and fine for the violation. As per the report (November 2016) of Tahasildar, Muvattupuzha the assessed quantity would be more than what was arrived at so far and in order to arrive at the actual quantity, service of surveyors equipped with total station was sought for from the District Collector.
3	M/s Luxury Sand Kerala Private Limited, Elanji village, Ernakulam district	DMG found (June 2016) that the lease holder illegally quarried from the non lease government land surrounded by their quarrying lease land. As the Geologist could not ascertain the actual quantity extracted, the service of taluk surveyor of Muvattupuzha taluk was obtained for the purpose. As the surveyor's calculation was felt to be wrong, the Geologist, Ernakulam requested (November 2016) the District collector for revision of measurements with the observations that the surveyor excluded some portions.

111 (4)

Instances of public complaints on quarrying affecting availability of water

(Reference : Paragraph 2.16 - Page : 27)

1	Inhabitants near to a laterite quarry located in Payanithadam Hill, Thalappilly taluk, Thrissur	Quarrying affected their drinking water sources adversely
2	Shri. K. R. Remanan, an inhabitant of Kanimangalam, Nativattam PO, Ernakulam district	Working of a GBS quarry and crusher unit close to his residence reduced the water level in his well
3	Public complained Vengoor Panchayath authorities in Ernakulam District	Scarcity of water due to operation of quarry located at Munippara, Kombanad area
4	Priyadarsini Cultural Forum, Wayanad District Committee	Operating more than one GBS quarry located at Marimalkunnu in Thrikkaipatta village, caused reduction of spring water
5	Public in Kozhukkallor village in Kozhikode district	Quarrying of laterite from nearby hill caused depletion of water level in their wells and they had to depend on far away sources for drinking water.

1115)

Instances of public complaints on quarrying causing vibrations/damages to residential buildings

(Reference : Paragraph 2.17 - Page : 28)

1	Inhabitants of Ayyampuzha village in Ernakulam district.	Public complaints against a quarry which caused damages to their houses due to blasting.
2	Complaints of inhabitants residing close to a quarry owned by M/s K. J. Vasudevan Nair, Thrissur district	Complaints were made regarding cracks to walls, roof tiles sliding down and vibration to house buildings due to the blasting in the quarry KSPCB was of the view that consent was given based on the distance criteria of 100 m from residential buildings and that cracks on buildings and vibrations did not come under their purview.
3	Public complaints against quarries which used heavy explosives (Arakkuzha, Ernakulam District)	Vibrations of the blast in the quarry were felt and flying pieces of rock caused damages to buildings and property and fear to the residents. As reported by the Revenue Divisional Officer, Muvattupuzha in Ernakulam district, residential buildings, store shed and cattle sheds located even 400 m away from two quarries (M/s St. Mary's quarries and a quarry owned by Shri. Babu Varkey at Arakkuzha) were found damaged.
4	Public complained against the functioning of a quarry located at Kabanigiri in Padichra village, in Wayanad district	Complaints were that blasting in the quarry caused vibrations and damages to the roof of residential buildings.
5	Public in Kodassery Village in Thrissur district complained about the functioning of a quarry	The quarry was causing nuisances such as dust, sound and vibration and damage to houses. The Additional <i>Tahasildar</i> , Mukundapuram reported that cracks were detected on the walls of residential buildings situated more than 200 m away from the quarry owned by M/s Edathadan Granites, Kodassery.
6	Shri. Viswanathan K., Choorakkodumala, Adoor Taluk	Quarry activity caused damage to a residential building. The District Geologist, Pathanamthitta stopped the operation of a GBS quarry owned by Shri. G. Rajeevan of Erathu village based on complaints from various corners.