

CHAPTER-II

PERFORMANCE AUDIT

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:-

- 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.

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.

- 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
- 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;

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

- 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.

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

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.

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.

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 exit conference conducted on 07 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 level 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:

- 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.

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

- 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.

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.

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:-

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

- **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 – 2.1**.

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 prerequisite 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 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.

¹⁰ G.O.(Ms) 239/2010/ID dtd.01.12.2010

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.

We noticed that

- GoK did not frame or modify rules in consonance with the GoI directions or the Honourable Supreme Court judgement making approved mining plan a prerequisite 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 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.



¹⁴ Land granted by an authority for some specific purpose.

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 Poolakkode village in Kozhikode district.

- 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 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 owners' 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.

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.

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.

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 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

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

²¹ Royalty on 9,000 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.

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 IV,²³ 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.

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

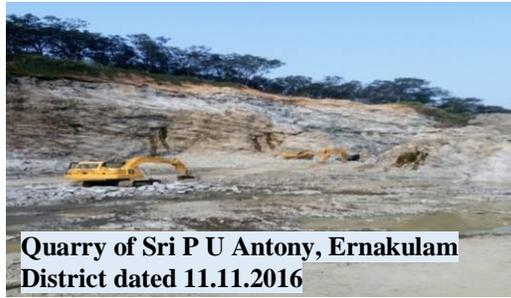
As per Rule 10 of KMMC Rules, 2015 in the case of quarries of GBS, where the depth of pit exceeds six metres, the sides of open workings shall be sloped, stepped or benched²⁵ or secured by the permit holder in such a manner so as to prevent slope failure. During joint physical verification of four sites 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.

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.

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.



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 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.

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.

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.

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.

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

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

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.

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.

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.

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.

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

²⁹ To Shri. Thomas N.A., Njattumkala House, Valamboor, Pattimattam Village, Ernakulam District.

³⁰ GO No.1222/2010/ID dt 21.08.2010.

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 – 2.2**).

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.

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 – 2.3**.

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.

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 – 2.4**.

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.

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 500m 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 – 2.5**.

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.

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.

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.

³² October 2012, January 2014 and March 2015.

2.18.1.2 Non-functioning of committees constituted to prevent illegal quarrying

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

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.

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 Panchayaths.

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.

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 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

³⁶ Check post at Kerala -Karnataka border

³⁷ Four in respect of Shri. Muhammed Firoz and two in respect of Shri. C.P. Basheer.

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.
- 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 Shri.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.

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, Eranimavu, Pannikode, Kozhikode District, Shri. Abdul Rasak, Palam P O, Kozhikode district.

³⁹ On 16.10.2016 (Purchaser Shri. Nizar, vehicle No KA-01/AB-1358), 18.10.2016 (Purchaser Shri. Lalu vehicle No. KA- 01 /AC -475) and again on 18.10.2016 (Purchaser Shri. Nizar, vehicle No.KL-33/D-6253).

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.

- **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.

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 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.

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

⁴² End user means the ultimate user of a product.

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.

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.