CHAPTER VII: MINING RECEIPTS

7.1 Tax administration

Receipts from mining constitute the highest non-tax source of revenue for the State and the second highest source of revenue overall. The Principal Secretary to the Government of Meghalaya, Mining & Geology Department is in overall charge at the Department level. The Director of Mineral Resources is the administrative head at the Directorate level. At the district level, the Divisional Mining Officers have been entrusted with collection of revenue through issue of various permits. The administration of the Department is mainly governed by the Mines and Minerals (Development and Regulation) (MMDR) Act, 1957, the Mineral Concession (MC) Rules, 1960 and the Mineral Conservation and Development Rules (MCDR), 1988. In addition, the State Government has also notified the Meghalaya Minerals Cess (MMC) Act, 1988 to mobilise additional revenue.

7.2 Trend of receipts

Actual receipts from Mining & Geology Department during the years 2008-09 to 2012-13 along with the non-tax receipts during the same period is exhibited in the following table and graph.

Table 1

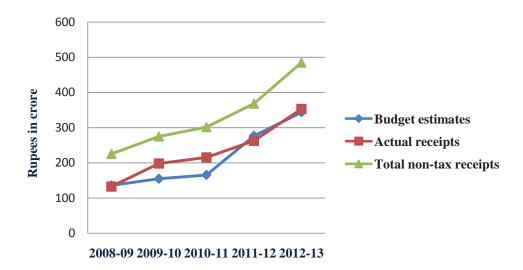
(₹in crore)

Year	Budget estimates	Actual receipts	Variation excess (+)/ shortfall (-)	Percentage of variation	Total non-tax receipts of the State	Percentage of actual receipts vis- à-vis total non-tax receipts
2008-09	135.69	132.73	(-) 2.96	2	225.31	59
2009-10	154.63	198.21	(+) 43.58	28	275.09	72
2010-11	165.44	215.58	(+) 50.14	30	301.69	71
2011-12	276.42	262.58	(-) 13.84	5	368.24	71
2012-13	343.62	353.14	(+) 9.52	3	484.94	73

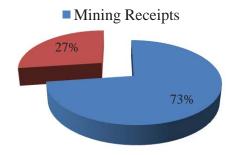
Although there was a wide variation between budget estimates and actual collection in the years 2009-10 and 2010-11, in the other three years including the current year, the percentage of variation is within acceptable limits.

Mines and minerals receipts formed about 59-73 *per cent* of the total non-tax receipts of the State during the last five years.

A line graph of budget estimates, actual receipts and total non-tax receipts may be seen below:



Also a pie chart showing the position of actual mining receipts *vis-à-vis* the other non-tax receipts of the State during the 2012-13 may be seen below:



7.3 Impact of audit reports

During the last five years (including the current year's report), we have pointed out non/short levy, non/short realisation, underassessment/loss of revenue, incorrect exemption, concealment/suppression of turnover, application of incorrect rate of tax, incorrect computation *etc.*, with revenue implication of ₹ 959.26 crore in 28 paragraphs. Of these, the Department / Government had accepted audit observations in 9 paragraphs involving ₹ 725.71 crore and had since recovered ₹ 5.57 crore. The details are shown in the following table:

Table 2 (₹in crore)

Year of Audit Report	Paragraphs included		Paragrapl	hs accepted	Amount recovered	
	No	Amount	No	No Amount		Amount
2008-09	5	41.12	-	-	-	
2009-10	10	151.42	1	0.46	-	
2010-11	8	73.91	7	52.65	1	5.57
2011-12	4	20.21	-	-	-	-
2012-13	1	672.60	1	672.60	-	-
Total	28	959.26	9	725.71	1	5.57

Thus, against the accepted cases involving ₹ 725.71 crore, the percentage of recovery by Department/ Government is 0.77 per cent.

It is recommended that the Department revamp its revenue recovery mechanism to ensure that they could recover atleast the amount involved in the accepted cases.

7.4 Results of audit

Test check of the records of three units of the Mining & Geology Department during the year 2012-13 revealed non-realisation of duties, royalties etc., amounting to $\rat{77.99}$ crore in 14 cases which can be categorised as under:

Table 3

(₹in crore)

Sl. No.	Category	Number of cases	Amount
1.	Non/Short realisation of revenue	7	15.10
2.	Loss of revenue	4	62.13
3.	Other irregularities	3	0.76
	Total	14	77.99

During the year, the Department accepted audit observations in three cases involving money value of ₹23.45 crore. No recovery was intimated.

A Performance Audit on "Controls and System for mining in Meghalaya" involving an amount of ₹ 672.60 crore is mentioned in paragraph 7.5.

7.5 PERFORMANCE AUDIT ON "CONTROLS AND SYSTEM FOR MINING IN MEGHALAYA

Highlights

The Performance Audit on "Controls and System for mining in Meghalaya" revealed the following irregularities:

➤ The Department failed to cancel the mining leases and levy penalty on 10 lease holders for carrying out mining activities without obtaining clearance from MoEF in gross violation of the FC Act as well as the MCDR.

(Para 7.5.9)

➤ Failure in setting up of a mechanism to determine the limestone extracted from non-forest areas resulted in non-collection of royalty amounting to ₹ 3.23 crore on 5.89 lakh MT of limestone.

(Para 7.5.11)

➤ The DMR failed to take action against 138 coal exporters who had exported coal to Bangladesh without payment of royalty through Baghmara, Gasuapara and Dalu resulting in non-realisation of revenue amounting to ₹3.13 crore.

(Paras 7.5.12.1 & 7.5.12.2)

➤ There was short-realisation of revenue of ₹81.40 crore by five check gates between 2008-09 and 2012-13 due to failure of the DMR to periodically assess the performance of the check gates or scrutinise the returns submitted by them.

(Para 7.5.14.1)

➤ Due to absence of check gates at Shella Bazar and Bholaganj, 103.57 lakh MT of limestone was exported to Bangladesh between 2008-09 and 2012-13 without payment of cess amounting to ₹ 17.29 crore.

(Para 7.5.14.2)

 \triangleright Failure of the DMR to promptly act upon the complaints made by the check gate officials of Dawki and Borsora and provide adequate security to them resulted in illegal export of coal without payment of royalty amounting to ₹ 130.74 crore.

(Para 7.5.14.2)

 \triangleright Three DMR check gates under-reported movement of 8.78 lakh MT of coal to Bangladesh and failed to realise royalty amounting to ₹ 30.77 crore on which penalty amounting to ₹ 7.69 crore was also realisable.

(Para 7.5.15)

 \triangleright Five lease holders produced 25.36 lakh MT of limestone (having a royalty value of ₹ 15.98 crore) between June 2010 and December 2012 against which, they deposited royalty amounting to only ₹ 0.99 crore thereby resulting in short-realisation of Government revenue amounting to ₹ 14.99 crore.

(Para 7.5.19.1)

➤ Between 2008-09 and 2012-13 an amount of ₹ 12.20 crore was shown as expended by the DMR on research, survey and mapping *etc.*, but no reports of the surveys or investigations or mappings carried out could be furnished to justify the expenditure.

(Para 7.5.21)

➤ Despite an investigation by the Meghalaya State Pollution Control Board (MSPCB) in November 2011 revealing that the entire stretch of seven sampling locations of Lukha river was severely polluted due to Acid Mine

Drainage (AMD), no efforts have been made by the Government either to implement the recommendations of MSPCB or take effective steps to control AMD.

(Para 7.5.23.1)

7.5.1 Introduction

Meghalaya is endowed with sizeable deposits of valuable minerals like coal, limestone, uranium, granite and clay. Minerals being valuable resource, the extraction needs to be maximised through scientific methods of mining with aim to ensure extraction and utilisation of minerals. Besides, most of the mineral reserves are in areas which are under forest cover and hence, mining in the State has environmental implications. In Meghalaya, individual and local communities have ownership over the land and the minerals and barring a few reserve forest areas, the State Government has no ownership over the minerals. The activities of the Mining & Geology (M&G) Department, Government of Meghalaya (GOM) are limited to collection of royalty on the minerals exported outside the State besides geological investigation /exploration of minerals. The Mines and Minerals (Development and Regulation) Act¹, 1957 lays down the legal framework for regulation of mines and development of minerals. The Mineral Concession Rules, 1960 and the Mineral Conservation and Development Rules, 1988 were accordingly framed under the MMDR Act framed for conservation and systematic development of minerals and for regulating grant of permits, licences and leases. The GOM has introduced the Meghalaya Mineral Cess Act, 1988 to mobilise additional revenue. Further with a view to facilitating systematic, scientific and planned utilization of mineral resources and to streamline mineral based development of the State, the Meghalaya Mines and Mineral Policy, 2012 has also been notified with effect from 5 November 2012.

7.5.2 Organisational setup

The Principal Secretary, M&G Department is the overall Head of the Department and monitors the mining in the State by grant of prospecting/mining licences. He is also responsible for framing of the regulatory framework relating to mining in the State. At the Directorate level, the Director of Mineral Resources (DMR) is responsible for implementation of the plans and policies formulated by the GOM. He is also responsible for revenue collection on minerals. For this he is assisted by two Divisional Mining Officers (DMO) – one each at Jowai and Williamnagar and a Mining Officer (MO) at the Directorate. In addition, the Directorate also has a Geology Wing for carrying out geological and geochemical surveys, mapping and drilling of samples for estimating and proving reserves and carrying out chemical analysis of minerals.

¹ A Central Act.

7.5.3 Audit objectives

The Performance Audit was conducted with a view to assessing:

- ➤ Whether the Department followed sound budgeting and financial practices?
- ➤ Whether there was any system deficiency involving assessment, realisation of revenue, and other activities leading to leakage of revenue?
- ➤ Whether the internal control system and enforcement measures were in place and were effective in preventing leakages of revenue?
- ➤ Whether there was compliance with the Acts and Rules and whether there was any leakage of revenue due to non-compliance with the provisions of the Acts and Rules?
- ➤ Whether there was damage to the environment due to non-conformity to the provisions of the Acts and Rules?

7.5.4 Audit Scope

The Performance Audit (PA) covered the period April 2008 to March 2013 and was conducted between January 2013 and June 2013. The office of the DMR and its two divisions at Jowai and Williamnagar including all the sixteen² checkgates were covered in the PA. In addition, records in the M&G Department were also seen during the course of the PA.

7.5.5 Audit criteria

The following Acts/Rules/Regulations were followed by audit for carrying out the PA:

- ➤ Budget manual of the Government of Assam (as adopted by Meghalaya)
- Mines and Minerals (Development and Regulation) (MMDR)Act, 1957
- Mines Act, 1952
- ➤ Mineral Concession Rules (MCR), 1960
- Mineral Conservation And Development Rules (MCDR), 1988
- Coal Mines Regulations, 1957
- ➤ Meghalaya Mineral Cess Act, 1988
- Forest Conservation (FC) Act, 1980
- Assam Forest Regulation, 1891 (as adapted by Meghalaya)
- Environment (Protection) Act, 1986
- National Mineral Policy (NMP) 1993 and 2008
- Meghalaya Mineral Policy (MMP) 2012

7.5.6 Acknowledgement

The Indian Audit and Accounts Department acknowledges the co-operation extended by the M&G Department, GOM in successful conduct and

² (i) Mookyndur (ii) Dawki (iii) Umkiang (iv) Garampani (v) Umling (vi) Athiabari (vii) Borsora (viii) Cherragoan (ix) Dainadubi (x) Ghasuapara (xi) Dalugre (xii) Masangpani (xiii) Balachanda (xiv) Boldoka (xv) Dadengre and a temporary check gate set up at Amlarem on 16 January 2013.

Out of these, seven check gates *viz.*, (i) Mookyndur (ii) Dawki (iii) Umkiang (iv) Umling (v) Athiabari (vi) Dainadubi and (vii) Amlarem were physically inspected by Audit and the records of all others were seen in the office of the DMR.

completion of the PA. An Entry Conference³ was held on 21 January 2013 in which the scope of audit and audit objectives were outlined. The draft PA report was forwarded to the Department in October 2013 following which an Exit Conference⁴ was held on 19 November 2013 in which the audit findings were discussed. The response of the Department to the audit findings and the feedback provided during various stages of the PA have been suitably incorporated in the PA.

Audit findings

The PA brought out a number of system and compliance deficiencies. The audit findings are pointed out in the ensuing paragraphs.

Audit objective: Whether the Department followed sound budgeting and financial practices?

7.5.7 Trend of Revenue and financial analysis

7.5.7.1 Budget estimates vis-à-vis actual

As per Chapter IV of the Budget Manual, in estimating the fixed revenue, the calculations should be based upon the actual demand, including any arrears due for past years and the probabilities of their realisation during the year. Any difference between the demand and expected realisations should be fully explained. In the case of fluctuating revenue, the estimate should be based upon a comparison of the last three years receipts.

The revenue earned by the M&G Department is in the form of royalty on coal and limestone and cess on limestone ⁵. Actual receipts by the M&G Department during the years 2008-09 to 2012-13 are shown below:

Table 1

(₹in crore)

				(* *** *******************************
Year	Budget est	imate	Actual	Percentage of
	Proposed by Approved		Amount	increase over the
	DMR	by Finance	realised	previous year
2008-2009	111.37	135.69	132.73	7
2009-2010	126.50	154.63	198.21	49
2010-2011	173.77	165.45	215.58	9
2011-2012	209.12	276.42	262.58	22
2012-2013	239.62	343.62	353.14	34

(Source: Finance Accounts)

From the table it is seen that:

Although the DMR was the implementing agency in so far as collection of revenue was concerned, it did a very poor job of preparing the budget estimates given the fact that estimates proposed by the DMR in each of the five years were less than the actual realisation of the previous year. In this

³ Attended by the DMR and his subordinate staff

⁴ Attended by the Deputy Secretary, M&G Department, the DMR and the Under Secretary, Finance Department.

⁵ Cess on coal was introduced in January 2009 and subsequently withdrawn in August 2009.

regard, the budget estimates proposed by the Finance Department were more realistic.

However, no criteria for fixing the revenue targets were available with the Finance Department. The reason for the Finance Department's estimates deviating from the DMR's estimates were sought (February 2013) but the same was not made available to audit (July 2013).

7.5.7.2 Position of arrears

The M&G Department has issued mining leases for extraction of limestone to 16 applicants⁶. As of July 2013, the Department has ₹ 25.50 crore in arrears from seven out of 16 lessees as shown below:

Table 2

(₹in crore)

Name of the lease holder	Period of default ⁷	Amount in arrears	Interest
M/s Adhunik Cement Ltd	December 2011 to December 2012	11.36	2.13
M/s JUD Cement Ltd.	December 2010 to December 2012	5.74	3.13
Meghalaya Cement Ltd.	June 2012 to December 2012	2.49	0.33
M/s Hills Cement Ltd.	December 2011 to December 2012	0.12	0.03
Meghalaya & Mines Pvt. Ltd.	December 2011 to December 2012	2.09	0.42
Komorrah Limestone Mining Co.	Upto June 2012	1.6	0.40
Mawmluh Cherra Cement Ltd.	Upto June 2012	2.1	0.56
Tot	al	25.5	7.0

Reasons for non realisation of arrear revenue were called for (February 2013); reply was awaited (September 2013).

7.5.7.3 Mismatch between production and revenue

The revenue earned from mining receipts has shown an increasing trend but the production of minerals vis- \dot{a} -vis the revenue has been largely disproportionate.

A table showing the production of coal and limestone during the five years covered in PA is as follows:

⁶ Mawmluh Cherra Cement Ltd., Komorrah Limestone Mining Co., Anderson Mineral Pvt. Ltd., Lafarge Umiam Mining Pvt. Ltd., M/s K.Singh wann & Son, Meghlaya Minerals & Mines Pvt. Ltd., Cement Manufacturing Co. Ltd. (with 3 lease holdings), Meghalaya Cement Ltd. (with 2 lease holdings), M/s Adhunik Cement Ltd. (with 3 lease holdings), M/s JUD Cement Ltd. and M/s Hills Cement Ltd.

⁷ For Komorrah Limestone Mining Co. and Mawmluh Cherra Cement Ltd., date since when arrears have accrued and position up to December 2012 not available.

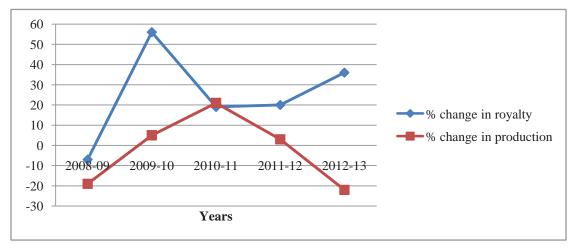
Information prior to December 2012 (in the first five cases) and after June 2012 (in the last two cases) was not furnished to audit.

Table 3

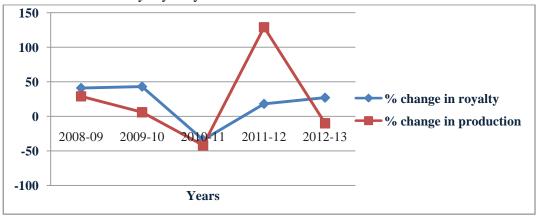
Yes	ear	Royalty on coal (in ₹)	Production of coal (in MT)	change in royalty over previous year	% change in production over previous year	Royalty on limestone (in ₹)	Production of limestone (in MT)	% change in royalty over previous year	% change in production over previous year
2008	8-09	1063723999	5488648	-7	-19	138482844	2894888	41	29
2009	9-10	1654886879	5767017	56	5	198107266	3078446	43	6
2010	0-11	1976619827	6974172	19	21	131723793	1793927	-34	-42
2011	1-12	2378754133	7205938	20	3	155277224	4109110	18	129
2012	2-13	3238763918	5648921	36	-22	197744773	3689370	27	-10

(Source: DMR)

The royalty earned from coal has increased by 204 *per cent* in 2012-13 over 2008-09 with an increasing trend throughout whereas the production of coal has increased by only three *per cent* in 2012-13 over 2008-09 showing a skewed growth chart with abnormal increase and decrease in production throughout. A line graph showing the percentage change in production of coal and royalty may be seen below:



The royalty earned from limestone has increased by 43 *per cent* in 2012-13 over 2008-09 whereas the production of limestone has increased by 27 *per cent* in 2012-13 over 2008-09 with both royalty and production showing a skewed growth chart with abnormal increase and decrease in production throughout. A line graph showing the percentage change in production of limestone and royalty may be seen below:



While the continuous growth in revenue from coal can be attributed to the increase in the rate of royalty of coal twice in the last five years as a result of which, the production of coal has shown a disproportionate growth *vis-à-vis* the revenue, the fall in revenue of limestone (or the production of limestone) can hardly be justified since all the royalty collected on limestone is from mining lease holders who have to ensure extraction/production of limestone as per approved mining plans.

No efforts were made by the M&G Department to find out why the production of limestone decreased between 2009-10 and 2010-11 as a result of which there was proportionate non-realisation of revenue on the short-produced limestone during that period;

Audit Objective: Whether there was any system deficiency involving assessment, realisation of revenue and other activities leading to leakage of revenue?

7.5.8 Non-adherence to the provisions of the MMDR Act

As per Section 4(1) of the MMDR Act, 1957 no person shall undertake mining operations in any area except in accordance with the terms of a mining lease. Chapter V⁸ of the MCR, 1960 *inter alia* stipulates that no mining lease shall be granted in respect of any mineral specified in the First Schedule to the Act *ibid* without the previous approval of the Government of India. Coal is listed in the First Schedule of the MMDR Act. The mining activities in the State of Meghalaya are primarily concentrated on coal and limestone which are the major minerals in the State. As already pointed out, the activities of the M&G Department, GOM are limited to collection of royalty on export of coal and limestone outside the State. This practice is being followed on the basis of a letter from the then Union Minister of Energy⁹ in July 1987 stating that the Government of India had no desire or intention of disturbing the customary tribal rights.

During the visit of Member¹⁰, National Commission for Protection of Child Rights to Meghalaya in May 2012, it was brought to his notice that the GOM was unable to intervene in areas which come under the Sixth Schedule appended to the Constitution of India. The Commission after examining the reply of the GOM stated (July 2012) that all Central Acts apply to all Sixth Schedule areas of the State unless there was a presidential notification to that effect.

As on July 2013, the M&G Department has granted mining leases only in respect of limestone. In respect of coal mining, not a single¹¹ mining lease

⁸ Chapter V of the MCR, 1960 stipulates the conditions for grant of mining lease in respect of land in which minerals vest in a person other than the Government.

⁹ In a demi-official letter by Shri Vasant Sathe to the Chief Minister of Meghalaya.

¹⁰ Dr. Yogesh Dube.

¹¹ One mining lease for coal was granted to the Coal India Limited (since expired and not renewed).

has ever been applied for nor granted by the M&G Department. Thus, coal mining in the State is in violation of the MMDR Act. However, no action had been taken by the M&G Department to ascertain the number of miners in the State or to force them to obtain a mining lease as required under the MMDR act and the Rules made there under.

Audit requested the DMR (February 2013) to submit a list of all the mines in the State but the DMR failed to furnish the requisite information. However, from the records made available to Audit, it was seen that the DMR has compiled a list¹² of 34 coal mines in East Jaintia Hills and 10 coal mines in South Garo Hills. Thus, there are at least 44 coal mines in the State which are operating without obtaining mining leases from the State Government and the prior permission of the GOI.

This matter was brought to the notice of the Principal Secretary, M&G Department as well as the Ministry of Coal, GOI (August 2013) and clarification was sought as to whether there existed any notification by virtue of which the coal miners in the State are exempted from the provisions of the MMDR Act and the Rules made there under. In response, the Coal Controller, Ministry of Coal, GOI stated (September 2013) that the Ministry was unaware of any order or notification granting exemption to coal mining in Meghalaya. Reply of the State Government was awaited (September 2013).

It may be mentioned here that the Meghalaya Minerals Policy, 2012 (notified on 5 November 2012) has introduced various measures to regulate mining in the State, one of which is to ensure that all the miners in the State obtain mining leases. However, even after a lapse of eleven months from the date of notification not a single coal miner has obtained mining lease till date (September 2013).

The M&G Department has granted mining leases to 16 applicants for limestone mining between November 1961 and December 2010 for periods ranging between 20 and 30 years. It was seen from information furnished by the DMR that the total production of limestone between 2008-09 and 2012-13 was 1.99 crore MT out of which, 1.56 crore MT of limestone was extracted by these 16 mining lease holders. Thus, 43 lakh MT was unauthorisedly extracted by miners without obtaining mining lease and was in violation of the MMDR Act.

Recommendation No. 1: The M&G Department should take necessary measures to regulate mining in the State in accordance with the provisions of the MMDR Act and Rules there-under.

7.5.9 Operation of mines without forest clearance

Section 2 read with Section 6 (1.6) (i) of the FC Act, 1980 restricts use of forest land or any portion of the land for any non-forestry purpose and non-

¹² The list was prepared for submission to the Director General of Mines Safety, GOI and is not exhaustive.

forest activities such as mining operation in forest area cannot be undertaken without prior approval of the Central Government even in case of renewal of mining lease. The MCDR, 1988 was accordingly framed to impose certain restrictions on mining. Rule 9 of the MCDR states that no person shall commence mining operations in any area except in accordance with a Mining Plan (MP) approved by the Controller of Mines subject to such conditions as he may impose.

The Controller of Mines, GOI while approving the MPs submitted by the lessees, approved the MPs subject to the condition that the provisions of the FC Act, 1980 were followed.

Out of 16 mining leases ¹³ granted for carrying out mining of limestone in the State, only one lease holder i.e., M/s Lafarge Umiam Mining Pvt. Ltd. has obtained clearance from the Ministry of Environment and Forests (MoEF), GOI. None of the remaining lease holders have obtained clearance from the MoEF as stipulated in the condition set by the Controller of Mines while approving the mining plan. In fact, the Forest Department, GOM has no idea as to whether the mining lease areas for which it has issued forest clearance fall within forest area. However, when a High Level Committee 14 made an assessment of the forest areas in which mining leases had been granted to eight leases (out of 16 leases) in respect of four lease holders (out of 11 lease holders), it was found that out of 42.87 hectares of leased area, 38.11 hectares fall within forest areas. Rule 58 of the MCDR further stipulates that whoever contravenes any of the provisions of the MCDR shall be punishable with imprisonment up to 2 years or with a fine up to ₹ 50,000 or with both. In case of continued offence, additional fine up to ₹ 5,000 per day for every day of such continued offence is leviable.

However, the M&G Department failed to cancel the mining leases and to levy penalty on these errant companies for carrying out mining activities without obtaining clearance from MoEF in gross violation of the FC Act as well as the MCDR.

Recommendation No. 2: The M&G Department should fix responsibility on the officers responsible for allowing the mining lease holders to carry on mining activities in forest areas in gross violation of the Acts and Rules. In addition, the Department should also cancel the mining leases of these lease holders so as to prevent them from carrying out any further mining activities in the forest area. Position of the remaining seven leases should also immediately be assessed for forest clearance.

¹³ (1) M/s MCCL (2) M/s Komorrah Limestone Mining Pvt. Ltd. (3) M/s K.S. Wann (4) M/s Anderson Mineral Pvt. Ltd. (5) M/s Lafarge Umiam Mining Pvt. Ltd. (6) M/s CMCL ((3 leases) (7) M/s Meghalaya Cements Ltd. (2 leases) (8) M/s Adhunik Cements Ltd. (3 leases) (9) M/s Meghalaya Mines & Minerals Pvt. Ltd. (10) M/s JUD Cements (11) M/s Hill Cements Company Limited

¹⁴ Comprising of one Additional Principal Chief Conservator of Forests, MoEF, GOI and one Conservator of Forests from the GOM.

7.5.10 Delay in revision/non-revision of rate of royalty of major minerals

Article 280 of the Constitution of India provides for setting up of a Finance Commission (FC) every five years. The FC *inter alia* makes recommendations for augmenting the Consolidated Fund of a State. The Eleventh Finance Commission (EFC) in its Report in June 2005 had recommended that the rates of royalty on minerals be revised every three years by the GOI. In case the process of revision was not completed by the due date, the States should be entitled to compensation.

The State of Meghalaya is endowed with rich mineral deposits, particularly coal and limestone. The royalty collected from these two minerals constitutes 95.81 *per cent* of the total revenue collected by the Department during the last five years (2008-2013). As such timely revision of royalty of minerals assumes significance for a state like Meghalaya.

The rate for royalty on coal was revised by the Ministry of Coal, GOI, through a notification dated 01 August 2007. Based on the EFC recommendation, the next revision was due on 01 August 2010. The GOI however, revised¹⁵ the royalty of coal on 10 May 2012 *i.e.*, after a delay of over 21 months from the expiry of three years since the last revision. Despite the delay, no action was taken by the GOM to request the GOI to consider a revision in the rate of royalty on coal. Between 01 August 2010 and 31 March 2012, the DMR collected royalty on 122.90 lakh MT of coal at the pre-revised rate of ₹ 290 per MT. Based on the revised rate of coal at 14 *per cent* on advalorem and calculated at the earlier fixed price of ₹ 3044 per MT, the revised royalty works out to ₹ 426 per MT. Had the revised rate been implemented on time, the GOM would have earned additional revenue of ₹ 167.14 crore¹6. But the GOM did not seek compensation from the GOI for the delay in implementation of revised rate of royalty and was thus deprived of additional revenue to the extent of ₹ 167.14 crore.

The rate for royalty on limestone was last revised by the Ministry of Mines, GOI, through a notification dated 13 August 2009. Based on the EFC recommendation, the next revision was due on 13 August 2012. The GOI however, has not revised the royalty of limestone till date (July 2013) even after a delay of over 11 months from the expiry of three years since the last revision. Despite the delay, no action was taken by the GOM to request the GOI to consider a revision in the rate of royalty on limestone. Between 01 September 2012 and 31 March 2013, the DMR collected royalty on 20.83 lakh MT of limestone at the pre-revised rate. Had the revised rate been implemented, the GOM would have earned additional revenue But the GOM did not request the GOI for revision in the rate of royalty on limestone and was thus deprived of additional revenue to that extent.

¹⁵ 14 *per cent* of the ad-valorem rate of coal.

¹⁶ Additional revenue = ₹ 426 – ₹ 290 = ₹ 136 X 122.90 lakh MT = ₹167.14 crore

Recommendation No. 3: The GOM should take up the matter with the GOI for suitable compensation for the delay in revision / non-revision of royalty on coal and limestone respectively.

7.5.11 Loss of revenue due to non-collection of royalty on limestone

Under Section 3 of the Assam Forest Regulations, 1891 (as adopted by Meghalaya), the Forest Department collects royalty on minor minerals. In Meghalaya, royalty on limestone is collected by both Forest Department as well as the M&G Department. The Forest Department collects royalty on limestone from forest areas whereas the M&G Department collects royalty on limestone from the non-forest areas. Rule 9 (2) of the MMDR further stipulates that no mineral can be removed without payment of royalty. The rate of royalty on limestone was fixed by the GOM at ₹ 45 per MT up to 27 September 2010 and ₹ 63 per MT thereafter. In addition cess at ₹ 5 per MT was also leviable on limestone up to 5 January 2009 and ₹ 20 per MT thereafter.

During the course of PA it was noticed that the M&G Department collects royalty on limestone only from the mining lease areas. In respect of all other limestone extracted, the Forest Department collects royalty and the M&G Department collects cess and issues Mineral Cess Challans (MCC) for transport of limestone outside the State. However, The M&G Department has neither made any effort to determine the quantity of limestone extracted from non-forest areas nor set up a mechanism to collect royalty on limestone from non-forest areas in gross violation of the MMDR Act and the Rules made there under. Between 2008-09 and 2012-13, 42.71 lakh MT of limestone was despatched outside the State out of which, the Forest Department collected royalty amounting to ₹ 19.48 crore on 36.82 lakh MT of limestone. Thus, by non-setting up of a mechanism to determine the limestone extracted from nonforest areas, the M&G Department failed to collect royalty amounting to ₹ 3.23 crore on 5.89 lakh MT of limestone. It may be further mentioned that limestone as listed as a Second Schedule mineral in the MMDR, a Central Act and the rates of royalty are fixed by the GOI. Further, the Forest Department itself has accepted¹⁷ that limestone is not a minor mineral and that the royalty on limestone is realised under the provisions of the MMDR. Thus, the very act of the GOM in allowing royalty on limestone to be collected by both the M&G Department as well as the Forest Department itself is erroneous and because of the involvement of two Departments, the GOM has been deprived of revenue amounting to ₹ 3.23 crore in the last five years. The matter was referred to the M&G Department, GOM; reply was awaited (December 2013).

Recommendation No. 4: The State Government should entrust collection of royalty on limestone exclusively to the M&G Department so as to prevent recurring loss of revenue.

¹⁷ In a letter by the Conservator of Forests dated 15 September 1995.

7.5.12 Irregular system of issue of NOCs and lack of controls thereon

The DMR issues Mineral Transport *Challans* (MTCs) on advance payment of royalty for transport of coal outside the State either in the course of inter-State trade or export outside the country. However, in case of export, the DMR also issues No Objection Certificates (NOC) as an alternative to MTCs. These NOCs allow coal exporters to export varied quantities ¹⁸ of coal.

It was seen that there was neither any proper laid down procedure for issue of NOCs nor could the Department explain the rationale behind issuing NOCs as an alternative to MTCs. During the course of PA, following differences were noticed between the MTCs and the NOCs.

Table 4

System	In case of MTCs	In case of NOCs	Audit observation
Printing	Printing is done by the Government press and issued to DMR as and when it issues indent.	A typed NOC is printed on a plain paper in the DMR itself as and when exporters apply for NOC.	There is no regulation of the security aspect as regards the printing and custody of the NOC is concerned.
Security	All the MTCs come in bound books of 100 MTCs each. Each book is machine serial numbered and so is the MTC sheet itself. All books come in series of 2000 numbers	There is no series number in case of NOCs.	There is ample chance of manipulation of NOCs. In the absence of unique serial numbers, the NOCs are prone to duplication and forgery.
Control in check gate	The MTCs have to be shown in the check gates. For transport of coal in excess of that shown in the MTCs or for transport of coal without MTCs, the check gates collect royalty and penalty.	The NOCs have to be shown in the check gates. For transport of coal in excess of that shown in the NOCs or for transport of coal without NOCs, the check gates are not authorised to collect royalty and penalty. The concerned DMO forwards the list of defaulters to the DMR for issue of demand notices.	The check gates have no control over the transport of coal by exporters since they are not authorised to collect royalty and penalty. The red-tapism involved in the whole process has led to non-realisation of revenue in several cases as will be pointed out below.

As can be seen from the above, the NOCs suffer from many inherent flaws and their use can hardly be justified.

The losses detected by Audit due to issue of NOCs are mentioned below.

7.5.12.1 Non-initiation of action by the DMR

It was seen that between July 2012 and February 2013 the DMO, Williamnagar forwarded to the DMR a list of 94 coal exporters (**Annexure III**) who had exported 22605.60 MT of coal without payment of royalty through the Land Customs Stations at Baghmara, Gasuapara and Dalu. The

 $^{^{18}\,\}mathrm{The}$ samples checked by audit had quantities ranging anywhere between 100 MT and 200 MT.

DMO while forwarding the names requested the DMR to issue demand notices to these defaulters. The DMR has however failed to initiate appropriate action and issue demand notices to recover the outstanding royalty and penalty till date (July 2013). Thus, non-initiation of action by the DMR resulted in non-realisation of revenue to the tune of \mathbb{Z} 1.87 crore¹⁹.

7.5.12.2 Issue of defective demand notices

In *lieu* of MTCs, the DMR issues NOCs for exporting fixed quantities of coal to Bangladesh on advance payment of royalty. As already pointed out²⁰, the check gates are not authorised to levy additional royalty and penalty on excess load of coal transported over that authorised in the NOCs. The DMO, Williamnagar merely co-ordinates with the Land Customs Stations of the Central Customs Department at Gasuapara, Dalu and Baghmara and in all such cases where excess load of coal is detected, the DMO intimates the DMR who in turn issues demand notices to the defaulters for payment of royalty and penalty.

It was seen that based on the DMO's reports, the DMR between September 2012 and January 2013 had issued 157 demand notices to 114 exporters involving royalty of ₹ 2.97 crore. The DMO, however returned 47 defective 21 demand notices to the DMR (February 2013) involving royalty of ₹ 1.26 crore in respect of 44 exporters. Till date (September 2013) no efforts have been made by the DMR to rectify the defects pointed out by the DMO and issue fresh demand notices to the defaulters as a result of which, ₹ 1.26 crore remains unrealised. In respect of those demand notices involving an amount of ₹ 1.71 crore which were correct in all respects, no recovery has also been made till date (September 2013).

In the above cases, the total loss of revenue due to the incorrect practice adopted by the DMR of not delegating authority to the checkgates to collect additional royalty and penalty for unauthorised export of coal on the strength of NOCs works out to ₹4.84 crore.

Recommendation No. 5: The M&G Department should immediately do away with the system of issue of NOCs in lieu of MTCs. It should also immediately direct the DMR to not only issue demand notices to all the defaulters at the earliest but also realise the arrear revenue in case of demand notices already issued.

7.5.13 Loss of revenue due to non-registration of mineral dealers

It was seen that the DMR issued 302 demand notices for non-payment of royalty involving revenue of ₹ 8.16 crore between 2008-09 and 2012-13. Out of which, seven demand notices involving revenue of ₹ 10.80 lakh were sent back by the Postal Department citing incomplete postal addresses.

¹⁹ Calculation shown in Annexure-III.

²⁰ Table No. 4 of Para No. 7.5.12.

²¹ Incorrect names of dealers, quantity transported *etc*.

However, till date (July 2013) the DMR has not been able to re-send the demand notices as it does not have the complete postal addresses of these defaulters. This is due to the fact that there is no system for registration of dealers in the M&G Department as is done in the case of Taxation Department.

In case of the M&G Department it was seen that every person who wishes to transport coal outside the State can apply for MTCs by simply making an application to the DMR. The application is to be accompanied by

- A challan showing the payment of advance royalty;
- ➤ Professional tax clearance certificate issued by the District Councils;
- ➤ Residential certificate issued by the traditional village head of the locality.

The existing procedure however does not provide for a proper address or identification of a dealer. Thus, the DMR is in no position to recover any dues from the defaulters due to the absence of a proper registration mechanism as a result of which there was loss of revenue to the tune of \mathbb{Z} 10.80 lakh.

Recommendation No. 6: The M&G Department should immediately put in place a system for identification and registration of all mineral dealers in the State.

Audit objective: Whether the internal control system and enforcement measures were in place and were effective in preventing leakages of revenue?

7.5.14 Internal controls

Internal controls are safeguards that are put in place by the management of an organisation to provide assurance that its operations are proceeding as planned. Internal controls help in strengthening the public accountability of an organisation and maintaining standards of probity, prudence and ethics.

Internal controls consist of five ²² interrelated components, *viz.*,

- Control environment.
- > Risk environment
- Control activities
- > Information and communication
- Monitoring

The fact that mining contributes the second highest source of revenue to the State exchequer calls for effective internal controls over the operations of the M&G Department.

²² Based on guidelines issued by the International Organisation of Supreme Audit Institutions.

7.5.14.1 Control environment

Control environment means the overall attitude, awareness and actions of the management to enforce or strengthen the internal controls in the functioning of the entity as a whole.

The lacunae noticed in the functioning of the M&G Department due to weak management controls over the field offices are discussed below.

Short-realisation of revenue by the check gates

The DMR has not prescribed any periodic reports and returns for submission by the field offices and the check gates. However, the check gates submit the following information monthly to the DMR:

- > Census of coal and limestone laden trucks passing through the check
- Monthly collection of royalty on excess load of coal and limestone;

The field offices also submit information to the DMR pertaining to monthly collection of royalty.

However, there is no system of periodic assessment of reports and returns submitted by the field offices or by the DMR or senior officers. The dealing assistants in the Directorate are in overall charge of compilation of the various kinds of data with no supervision by the senior officers.

Between 2008-09 and 2012-13, it was seen that 17.89 lakh MT of excess quantity of coal and 9.11 lakh MT of excess quantity of limestone passed through five checkgates 23 on which royalty along with penalty and cess amounting to ₹ 92.35 crore was realisable against which, the actual royalty collected by the check gates was ₹ 10.95 crore. Thus, there was short realisation of revenue of ₹ 81.40 crore due to failure of the DMR to periodically assess the performance of the check gates or scrutinise the returns submitted by them.

7.5.14.2 Risk assessment and control activities

Risk assessment is the process of identifying and analysing relevant risks to the achievement of the entity's objectives and determining the appropriate response. Risk assessment as a component of internal control plays a key role in the selection of the appropriate control activities to undertake. It is only when key risks are identified that the management can allocate resources and responsibility to those areas for minimising the risks.

Control activities are the policies and procedures established and executed to address risks and to achieve the entity's objectives.

The lacunae noticed in the functioning of the Department due to absence of risk assessment and control activities are discussed below.

²³ Mookyndur, Umling, Gasuapara, Umkiang and Dawki

Loss of revenue due to non-establishment of check gates

Under Section 23C of the MMDR, the State Government has the power to establish check gates to prevent illegal transportation of minerals. Check gates are required to be set up at strategic locations across the State to ensure that no minerals are exported without payment of royalty and cess.

The Customs Department, GOI has established check gates in the form of Land Custom Stations (LCS) at eight²⁴ locations along the Indo-Bangla border out of which, four²⁵ are major check gates in terms of export of minerals. Of these four locations, the M&G Department has not established check gates at Shella Bazar and Bholaganj.

Between 2008-09 and 2012-13, 103.57 lakh MT of limestone was exported to Bangladesh through these two LCS. Based on the records of the DMR, it was seen that no Mineral Cess *Challans* had been issued for export of limestone through these two locations during the aforesaid period. Thus, for absence of check gates at two strategic locations, cess amounting to ₹ 17.29 crore²⁶ could not be realised.

It is worth mentioning here that the loss of revenue on account of absence of check gates at these two locations has featured in the Audit Reports of the Government of Meghalaya in three the different years. In its reply (April 2013) to the House during a session of the State Legislative Assembly to a question based on an Audit observation the M&G Department while accepting the observation stated that it was taking initiative to set up check gates in all important trade routes. The same reply was furnished to Audit in August 2011. Thus, the position of the M&G Department has remained unchanged for more than 20 months between these two replies. In fact, no action has been taken so far by the M&G Department to even prepare a proposal for setting up of a check gate (July 2013) which is indicative of the fact that the Department is not serious about preventing the recurring loss of revenue to the state exchequer.

> Improper functioning of check gates

During the course of PA, Audit visited seven²⁹ check gates to ascertain the working conditions of these check gates and their efficiency in preventing leakage of revenue. The findings are discussed below:

²⁴ (i) Dawki (ii) Borsora (iii) Shella Bazar (iv) Bholaganj (v) Gasuapara (vi) Dalu (vii) Baghmara (viii) Mahendraganj

²⁵ (i) Dawki (ii) Borsora (iii) Bholaganj (iv) Shella Bazar

²⁶ Out of these, non-realisation of cess amounting to ₹ 10.26 crore for the period from 01 April 2008 to 30 September 2010 has already been featured in the Audit Reports (AR) for the years ended 31 March 2009 and 31 March 2010. Cess not realised at ₹ 5 per MT on 22.84 lakh MT and at ₹ 20 per MT on 80.73 lakh MT.

²⁷ Para 6.13 of the AR 2007-08, Para 7.6 of the AR 2008-09, Para 7.6.2 of the AR 2010-11.

 $^{^{28}\,\}text{Para}$ 7.6.2 featured in the Audit Report for the year ended 31 March 2011.

²⁹ Already pointed out in Para 7.5.4

Inconsistencies in manpower allotment in the check gates

Check gates are a control mechanism to minimise the risk of unauthorised transport of minerals without payment of royalty and resultant loss of revenue. Hence, check gates need to have optimum allotment of manpower for efficient and effective performance. The manpower position of the M&G Department check gates may be seen below:

Table 5

Sl.	Name of	No. of trucks passing	Royalty	No. of	personnel p	osted ³⁰	Total	No. of	Royalty
No.	the check gate	through the check gate (last five years)	earned (₹ in crore)	MRI/ AMRI	Check guards	Others		casual staff	earned per truck (in ₹)
1.	Dainadubi	504022	142.27	03	05	00	08	06	2823
2.	Umkiang	222208	11.60	03	03	01	07	08	522
3.	Umling	368816	9.54	04	05	01	10	09	259
4.	Athiabari	75748	8.44	02	05	00	07	0	1115
5.	Dawki	159253	4.29	02	02	01	05	07	270
6.	Borsora	128428	1.51	01	01	00	02	07	118
7.	Cherragaon	54043	0.27						49
8.	Dadengre	1146	0.17	02	01	00	03	01	1524
9.	Daluagre	20283	0.96					01	473
10.	Balachanda	305	0.05					01	1758
11.	Boldoka	290	0.05					01	1747
12.	Masangpani	96	0.01					01	1422
13.	Gasuapara	39881	0.65	02	02	00	04	02	162
14.	Mookyndur	1344081	0.41	03	06	01	10	06	3
15.	Garampani	851	0	01	01	01	03	02	0
	Total	2919451	180.22	23	31	5	59	52	

(Source: DMR)

Based on the above table it may be seen that:

- ➤ Borsora and Cherragaon which are located at a distance of 15 kms from each other are manned by the same staff although the average number of trucks passing monthly through these check gates was 2140 and 901 respectively. Similarly five check gates *viz.*, Dadengre, Daluagre, Balachanda, Boldoka and Masangpani are manned by the same staff (three) although all these check gates are located on different trade routes and are geographically separated from each other.
- For Garampani check gate having collected no revenue in the last five years had two casual staff posted. Similarly Borsora check gate had seven casual labourers but failed to collect any revenue in the last one year due to security threats. Since the presence of seven extra staff did nothing to alleviate such threats, the rationale behind posting casual workers in check gates could not be justified. A total of 52 casual employees have been posted in the 15 check gates which is 46 per cent of the total staff strength in the check gates.

A further analysis of the regular staff posted at various check gates revealed the following:

³⁰ As on June 2012 (MRI stands for Mines Royalty Inspector and AMRI stands for Assistant Mines Royalty Inspector).

Table 6

Name of the		N	umber of staff pos	sted for	
check gate	< 1 year	≥1 years < 3 years	≥3 years and < 5 years	≥ 5 years and < 10 years	≥ 10 years
Mookyndur	2	3	1	1	3
Umling	2	2	1	5	0
Umkiang	2	1	0	2	2
Dawki	0	1	2	1	1
Garampani	0	2	0	1	0
Athiabari	0	4	1	2	0
Borsora	3	0	0	0	0
Cherragoan					
Dainadubi	0	2	0	1	5
Ghasuapara	0	0	0	1	3
Dalwagre	0	0	0	2	1
Masangpani					
Balachanda					
Boldoka					
Dadengre					
Total	8	15	5	16	15

It was seen that there was no policy of staff rotation in check gates. In 10 check gates, 15 officials (out of 37 staff posted) have been working continuously for over 10 years. Overall, 31 officials (out of 56) have been serving in the same check gates for over five years. Posting of an official in the same check gate over a long period of time is fraught with the risk of such officials developing vested interests in the affairs of the check gates.

Lack of security in check gates

➤ The M&G Department has a check gate at Dawki in Jaintia Hills district on the Indo-Bangla border. The revenue realised by the Dawki check gate on excess load³¹ of coal between 2008-09 and 2012-13 is as follows:

Table 7

	Tubic /	
Year	Number of coal trucks	Revenue realised (in ₹)
2008-09	16912	9553855
2009-10	18467	11842121
2010-11	35791	6078324
2011-12	30327	211761
2012-13	8728	2462270

(Source: Check gate figures)

During 2011-12, the revenue collection on excess load fell by 96.51 per cent over the previous year. Examination of records in the check gate revealed that the downfall in royalty collection was due to the non-cooperation by the transporters carrying excess coal which made it difficult for the check gate officials to enforce payment of royalty. This was communicated to the DMR by the check gate officials through a series of letters between January 2012 and December 2012 but the DMR failed to take any action. The DMO, Jowai however visited the

³¹ On coal, both royalty and penalty (at 25 *per cent* of the royalty) on the excess load is realised. On limestone, cess on the excess load is realised.

check gate on 20 December 2012 after a gap of 11 months and in his report to the DMR corroborated the earlier complaints made by the check gate officials. Based on the DMO's report, the Department finally decided to set up a temporary check gate at Amlarem³² on 16 January 2013 with adequate police and magisterial support.

It was seen that immediately after setting up of the check gate, 1994 coal trucks passed through the check gate (between 28 January 2013 and 28 February 2013), out of which, only 17 produced MTCs at the check gate and in respect of the remaining 1977 trucks, royalty and penalty amounting to 1.73 crore was realised at the check gate. Prior to setting up of the check gate at Amlarem, 16569 trucks carrying 1.42 lakh MT of coal (involving royalty of ₹ 4.11 crore) passed through the Dawki check gate without MTCs between January 2012 and December 2012 against which, only ₹ 0.16 crore was realised. Thus, failure of the DMR to promptly act upon the complaints made by the check gate officials and delay in setting up of a check gate at Amlarem resulted in illegal export of coal without payment of royalty amounting to ₹ 3.95 crore on which penalty of ₹ 0.99 crore was realisable.

➤ The M&G Department also has a check gate at Borsora in West Khasi Hills district on the Indo-Bangla border. The total revenue collected by Borsora check gate on excess load of coal between 2008-09 and 2012-13 was ₹ 1.51 crore.

From the royalty collection registers in the DMR, it was seen that 1.83 lakh MTCs had been issued for export of 12.82 lakh MT of coal. However, during the same period, 38.92 lakh MT of coal was exported through the Borsora LCS of the Customs Department, GOI. The year wise details are shown below:

Table 8

Year	No. of MTCs	Quantity ³³ (in MT)	Quantity as reported by
	issued		the Customs Department
2008-09	109042	763294	679680
2009-10	31741	222187	659227
2010-11	29461	206227	733621
2011-12	4457	31199	912151
2012-13	8385	58695	907505
Total	183086	1281602	3892184

Thus, 26.10 lakh MT of coal passed through the Borsora check gate without obtaining MTCs and were liable to pay royalty of ₹ 102.64 crore and penalty of ₹ 25.66 crore against which, the check gate officials realised only ₹ 1.51 crore thereby resulting in leakage of revenue of ₹ 126.79 crore for the aforesaid period.

³² On the highway connecting Jaintia Hills with Bangladesh before reaching Dawki.

³³ Maximum permissible load through Borsora is 7 MT. Hence calculated at 7 MT per MTC.

It was seen that the check gate officials at Borsora had reported security problems to the DMR on atleast four occasions between October 2010 and December 2010 which resulted in non-realisation of revenue on unauthorised transport of coal without MTCs. The matter was also reported in the Comptroller and Auditor General's Audit Report for the year ended 31 March 2012 (*Para 8.6.1*). However, the DMR despite having full knowledge of the matter, failed to take deterrent measures to stop such recurring incidents which is resulting in huge loss of Government revenue.

Audit further observed that although the DMR check gate completely abdicated its duties due to security concerns, the situation was pretty much normal in case of LCS. This was due to the fact that no coal truck can pass the border unless it gets a customs clearance from the LCS. The State Government could have easily addressed this issue by taking up the matter with the GOI in order to make it mandatory that no coal trucks can pass the border check post unless they produce MTCs but it failed to do so thereby resulting in huge loss of revenue.

Recommendation No. 7: The State Government should take up the matter with the GOI in order to make it mandatory for all coal trucks to produce MTCs at all the border check posts failing which, they cannot cross the border. Adequate security should also be provided at the check gates.

Vigilance squad

The M&G Department in August 2002 directed the DMR to constitute a vigilance squad and the same was subsequently constituted in October 2002 comprising of the DMR, the Joint Director and the Financial Adviser, M&G Department. The vigilance squad was constituted to conduct surprise inspection of check gates.

Despite lapse of more than a decade since its inception, the vigilance squad has failed to conduct inspection of even a single check gate. In fact, the present FA does not even have an inkling of what is the role of a vigilance squad and he even does not know that he himself is one of the members of the squad³⁴.

Although the M&G Department created a vigilance squad, it did not lay down any guidelines as to how the vigilance squad was to function. Moreover, the logic behind creating a vigilance squad comprising of the top functionaries of the Department was in itself not justified as the members could not have performed their duties effectively over and above their regular assigned duties. Thus, the vigilance squad was merely constituted on paper and failed to serve as a proper check to minimum risks in check gates and prevent revenue losses.

³⁴ Based on a meeting held with the FA (Shri E.Ch.Momin) on 23.09.2013.

Improper maintenance and lack of control on stock keeping and issue of MTC Books

From a detailed examination of the stock register of MTC books for the period from 2008-09 to 2012-13, it was observed that 404 numbers of MTC books from different series have not been issued for use. These MTC books are unaccounted for and their balance could neither be accounted for by the DMR nor physically verified in the office of the DMR by Audit.

Each MTC book (previously called CTC 35 book) contains 100 sheets in triplicate and one sheet authorises movement of 9 MT³⁶ of coal on advance payment of royalty. There are 2000 MTC books in each series. Total quantity of coal and amount of royalty that could have been collected through the missing/unaccounted MTC books is worked out below.

Table 9

Tubic >						
Period	No. of Books	Total No. of Challans	Quantity of Coal (in MT)	Rate of Royalty (In ₹	Total Royalty (In ₹)	
1 April 2008 to 26 August 2009	203	20300	304500 (@ 15 MT per Challan)	165	50242500	
27 September 2009 to 3 April 2011	Recei		TC could not be scrutini 'Stock Register' for the			
4 April 2011 to 21 June 2012	194	19400	174600 (@ 9 MT per challan)	290	50634000	
22 June 2012 to 31 March 2013	7	700	6300 (@ 9 MT per challans)	675	4252500	
Total	404	40400	485400		105129000	

The list of unaccounted MTC books is listed in Annexure III.

It is to be mentioned here that the 'Stock Register' of MTC books for the period September 2009 to March 2011 was not made available to Audit despite several reminders. Hence irregularity in issue of MTC books, if any during the concerned period, could not be detected during the course of Performance Audit.

Thus, the possibility of misuse of the missing/unaccounted MTC books resulting in defalcation/misappropriation of government money amounting to ₹ 10.51 crore cannot be ruled out.

Recommendation No. 8: The M&G Department should overhaul the functioning of check gates. The security of the check gates, especially at Borsora and Dawki need to be strengthened and the vigilance squad should be instructed to conduct inspections on a regular basis. The control mechanism for issue of MTC books has to be strengthened and the DMR should immediately take stock of all the MTC books to prevent their misuse.

³⁵ Coal Transport *Challan*

³⁶ Up to 16 September 2010, each receipt was to be issued for transport of 15 MT of coal and 9 MT thereafter.

7.5.14.3 Information and communication

Information and communication are essential for realisation of all the internal control objectives. An efficient organisation is one which has developed an efficient and relevant information database which is appropriate, timely, current, accurate and accessible. It is only when relevant information pertaining to an organisation is available can the efficiency and effectiveness of the organisation's operations be evaluated.

During PA the following deficiencies were noticed due to absence of a proper information and communication mechanism.

Difference between information provided by the DMR and the field offices

It was seen that there was wide variation between the royalty collected by checkgates in Jaintia Hills as per DMR records and that submitted by the DMO, Jowai and the check gates³⁷ during 2008-09 to 2012-13 as per table shown below:

Table 10

Year	Royalty collected from check gates (₹ in crore)							
	As per DMR	As per DMO,	As per the check					
		Jowai	gates					
2008-09	1.58	1.62	2.13					
2009-10	3.27	2.76	3.32					
2010-11	2.62	3.15	2.62					
2011-12	2.51	2.47	2.51					
2012-13	6.31	5.79	6.31					
Total	16.29	15.79	16.89					

It was seen that in almost all the cases, there was a difference in the royalty collected as reported by the DMR, the DMO and the check gates. The variation proves the fact that there was no control of the DMR over the field offices and that no efforts were made by the DMR to reconcile the reports submitted by the field offices/check gates with those actually maintained by these offices. The difference between the DMR figures and the check gates' figures indicates a possibility of under reporting/short deposit of Government money actually collected by the check gates.

> Absence of vital information

The DMR does not maintain data which is crucial to efficiently monitor the functioning of its field offices and check gates such as monthly census of trucks carrying coal and limestone, excess load reported by the check gates, royalty realised by check gates, monthly issue of mineral transport challans *etc*. As a result, several deficiencies were noticed such as short realisation of revenue by check gates and shortage in MTCs (refer to Para 7.5.12.1).

³⁷ Check gates under DMO, Jowai viz., Mookyndur, Dawki and Amlarem.

> Likely misuse of MTCs

The DMR has no mechanism to monitor the issue of MTCs and MCCs which are proof of payment of Government moneys. There is no security mechanism to check the issue of MTCs nor has any security feature been introduced in the MTCs to prevent their duplication.

It was seen that the DMO, Williamnagar detected six fake MTCs at Dainadubi check gate in April 2010 and reported the same to the DMR (June 2010). Audit checked the original MTC with the fake one and found no distinguishing features in the original MTC whatsoever. No action was however, taken by the DMR to take up the matter with the M&G Department to revamp the procedure of issue of MTCs and conduct a detailed inquiry into the whole episode and the case was left unattended. It may be mentioned here that the DMO could detect the fake MTCs only on the basis of some prior information and not on *prima facie* basis.

In this connection, Audit reviewed the system in place in two other major revenue earning departments *viz.*, Taxation Department and State Excise Department. It was seen that in case of Taxation Department, 'P' forms are issued by the Taxation authorities akin to the MTCs issued by the DMR for transport of coal. However, the entire Taxation Department is fully computerised and they have an intra net link by means of which any 'P' form utilised at the check gate can be accessed by the Taxation authorities on real time basis.

In case of State Excise Department, a system is in place for fixing holograms having multiple security features on each liquor bottle (after payment of all duties and levies) and no liquor bottle can be sold in the State without having a hologram. Thus, the possibility of evasion of revenue has been greatly minimised.

Recommendation No. 9: The M&G Department should immediately take stock of the MTC books maintained at the DMR office. Action should be taken to put in place a stronger security mechanism for issue and use of MTCs to prevent their misuse. Computerisation of the Department and the net linking of field offices and check gates with the DMR should be taken up on priority basis.

7.5.14.4 *Monitoring*

The system of internal control has to be constantly monitored by the management so as to ensure that the controls that are in place are functioning as intended. It is only through regular monitoring that deficiencies in the functioning of the organisation can be detected. Monitoring can be done both internally by the management itself and externally by auditors.

The following deficiencies were noticed in the monitoring mechanism of the M&G Department.

> Lack of response to audit

Monitoring internal control should include policies and procedures that ensure that the findings of audit are adequately and promptly resolved through:

- > evaluation of the findings and recommendations made by audit and;
- determination of proper response or actions that correct or resolve the matters pointed put by audit in their reports.

The M&G Department has no internal check over the functioning of the DMR and it is only the external audit conducted by the Comptroller & Auditor General of India that evaluates the performance of the Department and points out deficiencies to the Department for initiating proper actions to correct such deficiencies.

It was seen that between 2008-09 and 2012-13, four Inspection Reports³⁸ were issued by the Principal Accountant General (Audit) to the DMR³⁹ containing 40 observations involving money value of ₹ 513.96 crore but the DMR has failed to furnish a single reply to any of the observations made by Audit.

Similarly, a total of 27 paragraphs involving money value of ₹ 286.66 crore and two recommendations were featured in the Audit Reports for the years ended 31 March 2009, 2010, 2011 and 2012. Against which, replies were received only in respect of six paragraphs none of which could suitably resolve the deficiencies pointed out in the ARs. No action was taken on the recommendations made in the ARs.

It is because of the lack of response on the part of the M&G Department to the audit observations that persistent irregularities highlighting losses are being pointed out year after year. This, points to serious failure on the part of the Department to monitor its functioning.

Audit objective: Whether there was compliance with the Acts and Rules and whether there was any leakage of revenue due to non-compliance with the provisions of the Acts and Rules?

7.5.15 Loss of revenue due to under reporting of excess load

During the course of PA it was seen that due to non-interlinking of records between the DMR check gates, the Taxation check gates and the LCS, GOI there was under reporting of excess load of coal by four DMR check gates leading to loss of revenue as shown below:

³⁸ Inspection Reports (IR) are findings pointed out in course of normal audit and are not to be confused with the Audit Reports (AR) which contain the most important findings of all the auditee units over the period of a year. It is only when the deficiencies pointed out in the IRs are not resolved that they are featured in the ARs.

³⁹ Only IRs issued to the DMR have been considered. IRs issued to the DMOs have been left out.

> DMR check gate and Taxation check gate

It was seen that the DMR check gate at Dainadubi reported excess load of 30.31 lakh MT of coal between April 2008 and March 2013 whereas during the same period, 37.01 lakh MT of excess load of coal was reported by the Taxation check gate at Dainadubi. Thus, the DMR check gate under reported movement of 6.70 lakh MT of coal and failed to realise royalty amounting to $\stackrel{?}{\stackrel{?}{}}$ 19.43 crore 40 on which penalty amounting to $\stackrel{?}{\stackrel{?}{\stackrel{?}{}}}$ 4.86 crore was realisable resulting in loss of revenue to that extent.

DMR check gates and Land Custom Stations, GOI

It was seen that the DMR check gate at Dawki, Gasuapara and Dalu reported despatch of 6.99 lakh MT of coal between April 2011 and March 2013 whereas during the same period, 15.76 lakh MT of coal passed through the Land Customs stations, GOI located in the same locations. Thus, the DMR check gates under reported movement of 8.78 lakh MT of coal and failed to realise royalty amounting to ₹ 30.77 crore⁴¹ resulting in loss of revenue to that extent.

7.5.16 Short-payment of Financial Assurance

Rules 23F of the MCDR, 1988 provides that Financial Assurance (FA) has to be furnished by every mining lease holder at the rate of ₹ 25,000 per hectare of the mining lease for 'A' category⁴² mines and ₹ 15,000 per hectare of the mining lease for 'B' category⁴³ mines. The FA shall be submitted in the form of bank guarantee to the Regional Controller of Mines before executing the mining lease deeds. Further rule 58 of the MCDR stipulates that whoever contravenes any of the provisions of the MCDR shall be punishable with imprisonment up to 2 years, or with a fine up to ₹ 50,000 or with both, and in the case of continuing contravention with an additional fine ₹ 5,000 per day is liable for such continued contravention.

Out of 16 mining leases granted by the M&G Department, it was seen that M/s Lafarge Umiam Mining Pvt. Ltd. - an 'A' category lease holder, with a 100 hectare mining lease submitted FA of ₹ 8.23 lakh instead of ₹ 25 lakh thereby resulting in short payment of FA of ₹ 16.77 lakh.

 $^{^{40}}$ Revenue loss of ₹ 59.1 crore was already in featured in the Audit Reports for the years ended 31 March 2010, 31 March 2011 and 31 March 2012 (vide paras 7.13, 7.11.1 & 7.11.2 and 8.7 respectively)

⁴¹ Revenue loss of ₹ 43.35 crore was already in featured in the Audit Reports for the years ended 31 March 2009, 31 March 2010 and 31 March 2011 (vide paras 7.6, 7.7 and 7.6.1.1 respectively)

⁴² Category 'A' mines are those fines which satisfy one of the following conditions:

⁽a) mines are fully mechanised and the work is being carried out by deployment of heavy mining machinery for deep hole drilling, excavation, loading and transport;

⁽b) the average employment in the mines exceeds 150.

⁴³ All other mines which do not fall into the category of 'A' mines are Category 'B' mines

7.5.17 Non-recovery of dead rent from mining lease holders due to non-operation of mines

Section 9 A (1) of the MMDR, Act, 1957 stipulates that dead rent⁴⁴ is payable to the State Government every year by the holder of a mining lease if the mining operation is not carried out in the leased area. For non-payment of dead rent, interest is payable at 24 *per cent* per annum⁴⁵ under Rule 64 A of the MCR, 1960.

Out of 16 mining leases granted by the M&G Department, two lessees ⁴⁶ failed to carry out mining operations but dead rent amounting to \mathbb{Z} 7.43 lakh in respect of these lease holders was neither demanded by the DMR nor paid by the lessees. Despite non-operation of mines, no action was taken by the DMR to cancel the leases or carry out survey of the leased area to ascertain reasons for non-operation of mines by the lessees. Thus, inaction on the part of the DMR led to non-realisation of dead rent of \mathbb{Z} 7.43 lakh on which interest amounting to \mathbb{Z} 20.61 lakh was also leviable.

7.5.18 Short-realisation of royalty by check gates

In Meghalaya, coal can be transported outside the State only on the strength of Mineral Transport *Challans* (MTC) issued by the DMR on payment of prescribed royalty.

The Ministry of Coal, GOI revised the rate of royalty on coal to 14 *per cent* ad-valorem on the price of coal as reflected in the invoice with effect from 10 May 2012. Accordingly, the M&G Department revised the rate of royalty on coal from ₹ 290 to ₹ 675 per metric tonne (MT) by considering the invoice price as ₹ 4850 per MT with effect from 22 June 2012. The DMR while notifying the revised rate further directed all coal dealers/exporters to surrender their unutilised MTCs issued at the pre-revised rate and procure new ones after payment of the balance amount. The notification further stated that non-payment of royalty at the revised rate would entail payment of penalty at the rate of 25 *per cent* of the revised rate of royalty.

It was noticed that MTCs obtained at pre-revised rate were produced by 1516 coal trucks carrying 13,223 MT of coal at Mookyndur, Umling and Borsora check gates between 23 June 2012 and 27 June 2012 and the check gate officials in gross violation of the Government directive accepted the same and allowed the trucks to ply without payment of the additional royalty. Details of transportation of coal by submitting old MTCs are as under:

44

Rates of dead rent in rupees per hectare per annum								
From second years of lease	Third year and fourth year	Fifth year onwards						
200								

⁴⁵ After the expiry of 60 days from the date when such money becomes due.

⁴⁶ M/s Anderson Mineral Pvt. Ltd and M/s K. Singh Wann & Sons.

Name of check gate and quantity of coal which can be transported per MTC	No. of MTCs	Quantity (in MT)	Old rate of royalty at ₹290 per MT (in ₹)	New rate of royalty at ₹ 675 per MT (in ₹)	Balance amount to be realised (in ₹)	Penalty @ 25 per cent of the balance amount (in ₹)	Total amount to be realised (in ₹)
Mookyndur (9 MT per MTC)	1038	9342	2709180	6305850	3596670	899168	4495838
Umling (9 MT per MTC)	202	1949 (1818+131)	565210	1315575	788355 ⁴⁷	197089	937956
Borsora (7 MT per MTC)	276	1932	560280	1304100	743820	185955	929775
Total	1516	13223	3834670	8925525	5128845	1282212	6411057

Thus, the irregular action of the check gate officials resulted in loss of revenue amounting to \mathbb{Z} 64.11 lakh.

7.5.19 Non-realisation of revenue on limestone extracted from leased areas

Rule 45 of the MCR, 1960 stipulates that if the lessee makes any default in payment of royalty then the lessor may, after giving the lessee a notice, determine the lease within 60 days from the date of receipt of such notice if the royalty is not paid. Rule 64 A of the MCR, 1960 further provides that if any amount payable by the licensees are not paid within the time specified for such payment, simple interest at the rate of 24 *per cent* per annum may be charged on the said amount from the sixtieth day of the date fixed for payment of such dues. The royalty on limestone is ₹ 63 per MT. In addition, cess at ₹ 20 per MT is also payable. For payment of royalty in respect of mining lease holders, the M&G Department, GOM fixed the due date as follows:

Half yearly ending	Due date
30 June	31 July
31 December	31 January

7.5.19.1 It was seen that five lease holders having eight active mining leases produced 27.57 lakh MT of limestone between May 2011 and December 2012 against which, they deposited royalty amounting to ₹ 0.40 crore in respect of only 0.79 lakh MT leaving a balance of 26.78 lakh MT on which royalty amounting to ₹ 16.45 crore is yet to be paid. In addition, cess amounting to ₹ 5.35 crore was not paid on the entire quantity of limestone produced. In case of two other mining lease holders the DMR does not even maintain records of the quantity of limestone extracted from the leased areas and the quantity on which royalty actually paid. However, from the records made available to audit, it was seen that these two lessees have to pay royalty

⁴⁷ 1818 MT X (₹ 675 – ₹ 290) + 131 MT X ₹ 675 = ₹ 788355

⁴⁸ (1) M/s Meghalaya Cements Ltd. (2 leases) (2) M/s Adhunik Cements Ltd. (3 leases) (3) M/s Hill Cements Ltd. (4) M/s JUD Cements (5) M/s Meghalaya Mines & Minerals Pvt. Ltd.

Details of payment in respect of two other lease holders *viz.*, M/s Komorrah Limestone Mining Co. Ltd. and M/s MCCL are not maintained by the DMR, hence not taken into account although they have also defaulted in payment of royalty.

⁴⁹ M/s Komorrah Limestone Mining Co. Ltd. and M/s MCCL

amounting to $\mathbf{7}$ 2.58 crore on which cess amounting to $\mathbf{7}$ 1.12 crore was also leviable.

It was however seen that the DMR issued demand notices once each to these defaulters on various dates between May 2011 and October 2012. Despite non-compliance with the demand notices by these companies, no action was taken by the DMR to cancel the mining leases and recover the arrear royalty by way of $bakijai^{50}$ proceedings. Thus, inaction of the DMR resulted in non-realisation of revenue amounting to ₹ 21.80 crore on which interest amounting to ₹ 6.04 crore (up to July 2013) was also realisable.

It may be mentioned here that the DMR has only nine active mining lease holders and out of these, only two lessees⁵¹ have paid their dues. This proves that the DMR and the M&G Department have completely failed to regulate the activities of 80 *per cent* of the mining lease holders.

7.5.20 Short-extraction of limestone against the mining plan

Rule 13 of the MCDR, 1988 provides that every holder of a mining lease shall carry out mining operations in accordance with the approved mining plan wherein the details for mining operations are laid out. In case of deviation the Regional Controller of Mines or any authorised officer may order suspension of all or any of the mining operations. Further, Rule 58 of the MCDR stipulates that whoever contravenes any of the provisions of the MCDR shall be punishable with imprisonment up to two years, or with fine not exceeding ₹ 50,000 or with both and in case of continued offence, with a fine not exceeding ₹ 5,000 per day during the period of which such contravention continues.

It was seen that six⁵² mining leases were granted on the basis of approved mining plans for extraction/production of 3.74 crore MT of limestone between the years 2008-09 and 2012-13. Against which, the lease holders extracted 1.30 crore MT thereby resulting in short extraction of limestone of 2.44 crore MT as shown below:

Table 12

	Sl.	Name of	Year	Quantity	(in MT)	Short extraction		
	No.	lease holder		To be extracted Actually		(in MT)	revenue ⁵³ (in ₹)	
				as per mining	•			
				plan			Royalty	Cess
Ì	1.	M/s Hills	2011-12	90000	15782	74218	4670064	1484360
		Cement	2012-13	105000	1638.96	103361.04	6511746	2067221

⁵⁰ The Deputy Commissioner of the district acts as the Certificate Officer (also termed as bakijai officer) for recovery of Government dues under the Bengal Public Demands Recovery Act, 1913.

⁵¹ M/s CMCL and M/s Lafarge Umiam Mining Pvt. Ltd.

⁵² (i) M/s Cement Manufacturing Co. Ltd. (3 leases), (ii) M/s Meghalaya Cement Ltd. (2 leases) and (iii) M/s Adhunik Cement Ltd. (3 leases).

⁵³ Royalty on limestone was ₹ 45 per MT up to 27 September 2010 and ₹ 63 per MT thereafter. Cess on limestone was ₹ 5 per MT up to 5 January 2009 and ₹ 20 thereafter. For the purpose of calculation royalty has been calculated at ₹ 45 per MT up to 2010-11. Similarly cess on limestone has been calculated at ₹ 5 per MT up to 2008-09.

2.	M/s JUD	2010-11	240000	350793.37	-110793.37	-4985702	-2215867
	Cement	2011-12	450000	191509.5	258490.5	16284902	5169810
		2012-13	450000	336828.899	113171.101	7129779	2263422
3.	M/s	2010-11	926000	179124	746876	33609420	14937520
	Adhunik	2011-12	2606000	994691.14	1611308.86	101512458	19893823
	Cement Ltd.	2012-13	1950000	352357	1597643	100651509	31952860
4.	M/s Cement	2008-09	814460.90	707897.39	106563.51	4795358	532818
	Manufacturi	2009-10	919841.35	430337.48	489503.87	22027764	9790077
	ng Co. Ltd.	2010-11	892589.30	724155.95	168433.35	7579501	3368667
		2011-12	877685.30	861299.89	16385.41	1032281	327708
		2012-13	877685.30	765785.78	111899.52	7049670	2237990
5.	M/s Lafarge	2008-09	5000000	1471324	3528676	158790420	17643380
	Umiam	2009-10	5000000	1730190	3269810	147141450	65396200
	Mining Pvt.	2010-11	5000000	0	5000000	225000000	100000000
	Ltd.	2011-12	5000000	1390337	3609663	227408769	72193260
		2012-13	5000000	1851048	3148952	198383976	62979040
6.	Komorrah	2008-09	250000	114975	135025	6076125	675125
	limestone	2009-10	250000	131909.1	118090.9	5314091	2361818
	Mining Co.	2010-11	250000	140225	109775	4939875	2195500
		2011-12	250000	139831	110169	6940647	2203380
		2012-13	250000	124631.8	125368.2	7898197	2507364
	Total		37449262.15	13006672.26	24442589.891	1295762300	419965476

No reason was given for short extraction of limestone by any of the mining lease holders. The M&G Department also failed to take any action to suspend the mining leases of the defaulters. Thus, due to non-adherence to the approved mining plans coupled with the inaction on the part of the M&G Department led to short realisation of royalty amounting to $\stackrel{?}{\underset{?}{$\sim}}$ 129.58 crore and cess amounting to $\stackrel{?}{\underset{?}{$\sim}}$ 42 crore on the short extracted quantity.

7.5.21 Lack of documentary evidence/unjustified expenditure on geological investigations

Apart from collection of royalty on minerals exported outside the State, the DMR also carries out geological investigations for detection of new reserves of existing minerals or of new minerals.

It was seen that between 2008-09 and 2012-13 the DMR expended a total of ₹ 12.20 crore on (i) research and development (ii) survey and mapping and (iii) mineral exploration under the Plan Scheme. The details may be seen below:

Table 13

Sl.	Head of	Description	Expenditure (in lakh)					
No.	Account		2008-09	2009-10	2010-11	2011-12	2012-13	Total
1.	2853-004: Research and Development	Routine analysis of rock/mineral samples to assess the quality of the various mineral deposits of the	16.81	25.38	25.70	191.76	7.00	268.51
		State for industrial use.						
2.	2853-101: Survey & Mapping	Conducting detailed survey of the minerals within the State and to supervise the mining activities.	19.09	26.19	30.49	21.63	14.05	111.45

3.	2853-102: Mineral exploration	Detailed exploration of various mineral resources, ground water resources by Geological investigation and drilling operation, study of Geo-technical aspects on constructional purposes, such as bridges, dams and plants <i>etc.</i> and landslides problem of the State for geological advice to the concerned Department.	81.67	73.21	56.79	518.59	111.17	841.43
		Total	117.57	124.78	112.98	731.98	132.22	1219.53

(Source: DMR)

The DMR does not maintain any register of surveys carried out or of mapping done. There are no records of field parties engaged in exploration and surveys or of the reports submitted by these field parties after completion of their investigations. During the five year period reviewed by Audit, no senior officers have undertaken any field trips or supervised the work of the field parties. As such, the DMR has no control over the

- Actual field trips undertaken by the field parties or;
- The research carried out in the Headquarters.

In the absence of any relevant records, the DMR has no means of information to verify the travelling allowance claims submitted by the field parties.

In response to Audit requisition, not a single report of the surveys or investigations or mappings carried out could be furnished. Thus, there is no record to establish as to how the amount of \mathbb{T} 12.20 crore was expended and whether the expenditure was justified.

Audit Objective: Whether there was damage to the environment due to non-conformity to the provisions of the Acts and Rules?

7.5.22 Violation of the Mining plans by the lease holders

Under rule 45 of MCR, if the lessee commits a breach of any of the conditions of the lease, the lessor shall give notice to the lessee requiring him to remedy the breach within sixty days from the date of receipt of the notice and if the breach is not remedied within such period, the lessor without any prejudice to any proceeding that may be taken against the lessee determine the lease. As per the conditions of the lease stipulated in Rule 27 of MCR, the lessee shall *inter alia*:

- ➤ take immediate measures for planting not less than twice the number of trees destroyed due to the mining operations in the same area or any other area; (Rule 27 (1) (s) (i))
- ➤ look after the trees during the subsistence of the lease after which these trees shall be handed over to the State Forest Department or any other authority nominated by the Government; (Rule 27 (1) (s) (ii))
- restore to the extent possible other flora destroyed by the mining operations. (Rule 27 (1) (s) (iii))

It was seen that all the mining lease holders accordingly submitted Mining Plans on various dates between October 2005 and March 2010 specifying the number of tress which each lessee⁵⁴ would plant. The details of afforestation for the lease holders are mentioned below:

Table 14

Sl.	Name of lessee	Lease			No. of trees	to be plante	ed	
No.		Area (Ha.)	1st Year	2 nd Year	3 rd Year	4 th Year	5 th Year	Total
1.	M/s Meghalaya Cements Ltd.	4.88	2275	2275	2325	1590	1200	7390
2.	M/s Meghalaya Cements Ltd. (Khliehjeri)	4.90	2925	1615	3000	3750	3000	14290
3.	M/s Adhunik Cements Ltd.	4.90	2700	2700	2800	2800	3350	14350
4.	M/s Lafarge Umiam Mining Pvt. Ltd.	100.0	6000	7000	7000	6000	NIL	26000
5.	M/s Hills Cements Ltd.	4.0	10	10	10	10	10	50
6.	M/s JUD Cements Pvt. Ltd.	4.76	100	100	50	50	50	350
7.	M/s Cement Manufacturing Company Ltd. (Khub-I)	4.96	750	750	500	400	400	2800
8.	M/s Cement Manufacturing Company Ltd. (Khub-II)	4.70	450	350	600	650	500	2250
	Total	133.10	15210	14800	16285	15250	8510	67480

No environmental impact assessment was done by either the Forest Department or by the M&G Department and the number of trees to be planted as per the mining plans was solely on the basis of the assessment made by the concerned lessees. As such there was wide difference between the afforestation proposals made by the lessees ranging from 2929 trees per hectare (in case of M/s Meghalaya Cements Ltd.) to only 13 trees per hectare (in case of M/s Hills Cements Ltd.) over the five year period from the date of execution of grant.

The M&G Department however, made no efforts to regulate the activities of the lessees as per the approved MPs which was evident from the fact that the DMR did not maintain any records pertaining to the number of trees actually planted by the lessees. As such, there was no data pertaining to the number of trees planted year-wise by the lessees. However, it was seen that the lessees submit annual returns showing details of production and other miscellaneous information to the Regional Controller of Mines (with a copy to the DMR). A test check was made of the annual returns submitted by all the lessees for the year 2011-12. Based on the annual return, it was seen that there was shortfall in plantations in case of three out of eight lessees as seen below:

⁵⁴ MCCL was granted lease in 1961, Komorrah Mining Co. Ltd. was granted lease in 1973, M/s Lafarge Umiam Mining Pvt. Ltd. was granted lease in 2001 and M/s Meghalaya Minerals and Mines Pvt. Ltd. was granted lease in 2001. Hence they have been excluded from this list since the five year period of plantation does not fall in the scope of audit.

Table 15

Lease holders	Year of	Number o	of trees	Shortfall	Percentage	
	plantation	To be planted as per MP	Actually planted		shortfall	
M/s Meghalaya Cement Ltd.	5 th year	1200	600	600	50	
M/s Meghalaya Cement Ltd. (Khliehjeri)	5 th year	3000	875	2125	71	
M/s Adhunik Cement Ltd.	1 st year	2700	1000	1700	63	

Despite violation of the mining plans by these three lessees no action was taken either by the M&G Department or by the Regional Controller of Mines to cancel the mining leases.

7.5.23 Impact of Acid Mine Drainage from coal mines

Acid Mine Drainage (AMD) is the outflow of acidic water from coal mines, coal stocks and coal handling facilities. It is caused by the oxidation of pyrite and sulphur in the presence of water leading to the formation of sulphuric acid. Coal mines are a rich source of sulphur and thus AMD worldwide is associated with large scale coal mining. AMD *inter alia* occurs in the following ways in Meghalaya:

- The tunnels sometimes progress below the water table as a result of which, the water floods the mines and it needs to be constantly pumped out of the mine to prevent flooding. This acidic water is discharged at the mine entrance which then flows to the nearby streams/rivers through surface run-offs.
- AMD also occurs when the coal mines are abandoned and the ground water (in addition to rain water) floods the mines and the acidic water comes in contact with the ground water and percolates throughout the ground water system.



Photo No. 1: An abandoned coal mine in Jaintia Hills.



Photo No. 2: Seen here is one of the umpteen places where coal is dumped in the open in a mining area in Jaintia Hills.

The effects of AMD are contamination of water, disruption of growth and reproduction of aquatic plants and organisms and corroding effects of acid on parts of infrastructure such as bridges, dams etc.

7.5.23.1 Pollution of rivers due to Acid Mine Drainage from coal mines

Based on media reports relating to pollution of Lukha river in Jaintia Hills, the Meghalaya State Pollution Control Board (MSPCB) conducted (November 2011) an investigation to ascertain the water quality of the Lukha River and its feeding streams in Jaintia Hills District *vis-à-vis* a similar investigation carried out in February 2007. For this purpose, eight⁵⁵ water and sediment samples were collected from the same sampling locations investigated during 2007. The findings are as follows:

Table 16

Station	pH BIS norms	6.5-8.5	Iron(mg/l) Sulphate(mg/l) BIS norms:0.3 BIS norms:200.0			
	2007	2011	2007	2011	2007	2011
St.1	3.0	2.7	3.6	6.2	254.0	566.5
St.2	7.5	5.0	0.13	5.4	13.4	305.0
St.3	6.8	7.3	0.17	0.4	62.0	8.69
St.4	4.5	4.3	0.46	4.8	211.8	265.0
St.5	6.3	5.0	0.32	1.2	188.8	200.0
St.6	4.3	6.2	0.372	0.26	192.1	118.2
St.7	7.9	8.2	1.35	0.18	99.0	29.04
St.8	7.8	8.1	0.3	0.28	101.5	45.6

The water quality characteristics in terms of pH, Sulphate and Iron concentrations with respect to Stations 1, 2, 4 and 5 indicated that there is

⁵⁵ St.1(Lunar River Myndihati), St.2 (Lukha River near Khaddum village), St.3 (Lukha River near Khaddum village coming out of cave like structure), St.4 (point of confluence-river Lunar and river Lukha), St.5 (Lukha river- 100m downstream of confluence), St. 6 (Lukha river sonapur bridge), St. 7 (20m downstream from point of discharge of CMCL to Umtyrngai River), St. 8 (Ummutha River downstream of Umtyrngai River)

significant deterioration of water quality in comparison to that of the year 2007 the major cause of which was the AMD from coal mining in these areas.

The investigation made by the MSPCB further revealed that the river water on the entire stretch of the sampling locations was not suitable for drinking purposes.



Photo No. 3: Impact of AMD on a stream in Jaintia Hills.

The investigation report *inter alia* made the following recommendations to minimise the impact of mining activities on water quality as:

- Filling of abandoned mines to prevent generation of AMD.
- ➤ Proper management/treatment of AMD in mining areas for mitigation of water pollution.
- ➤ Afforestation and vegetation of the mined areas.
- ➤ Prohibition from direct discharge of both solid and liquid wastes generated from the mine into the rivers/streams.

The findings of the MSPCB including the recommendations were forwarded to M&G Department and the Deputy Commissioners of all the districts in February 2012. However, no efforts have been made by the State Government either to implement the recommendations made by the MSPCB or take alternative effective steps to control AMD.

7.5.23.2 Damage to NEEPCO power plant due to AMD

The North Eastern Electric Power Corporation Ltd., (NEEPCO), a GOI enterprise, developed the Kopili Hydro Electric Project in stages since 1984. The plant situated in Assam has a total installed capacity of 275 megawatts (MW) and caters to the north eastern States of India. Both Meghalaya and Assam, however, get 6 *per cent* free power from the project being the two

'host' states of the project as the reservoir of the hydro electric project falls in both these States.

During a routine testing by NEEPCO of the reservoir water in 2006-2007 it was found that the water was acidic and accordingly the Geological Survey of India (GSI) was entrusted to study the case. The report submitted by the GSI stated that the acidity of the reservoir water was mainly due to unscientific coal mining in the catchment area. Subsequently, severe corrosion has been observed in guide vanes, top cover, runner, *etc.*, due to the acidic nature of water there been frequent power outages due to failure of cooler tubes and cooling water pipes of the power stations. It was further confirmed by a multidisciplinary team of experts from the Central Water Commission, Central Electricity Authority and Central Soil and Material Research Station that the effect of acidic water on power plant equipments had become more severe with effect from 2008-09 as a result of which, NEEPCO had to even replace the equipments.

NEEPCO had taken up the matter with DMR and the Chief Secretary, GOM on various dates between January 2009 and August 2009 for taking up necessary measures for educating coal mining agencies and adopting necessary rules and methods for extraction of coal so that the problem of acidic water could be eliminated at the root itself. The DMR in November 2009 replied that the State Government had no control over coal mining by private mine operators.

Between 2008-2009 and 2012-2013, the Kopili HE Project suffered 336 numbers of outages due to damage to machinery by acidic water. The loss of generation during the same period was 972.28 million units worth $\stackrel{?}{\underset{?}{?}}$ 103.79 crore. As the State was entitled to 6 *per cent* free power from the Kopili HE, the loss to the State exchequer during the five year period 2008-13 was $\stackrel{?}{\underset{?}{?}}$ 6.23 crore.

7.5.24 Summary of Audit Conclusions

- The M&G Department has not adhered to the provisions of the MMDR Act and the Rules made there-under resulting not only in loss of revenue but also unauthorised operation of mines.
- There was lack of co-ordination between the M&G Department and the Forest Department due to which, royalty on limestone could not be realised.
- The check gates suffered from many problems resulting in recurring loss of Government revenue.
- There was absence of suitable system and procedures for identification and registration of all mineral dealers in the State.
- There was non-existence of internal control procedures in the functioning of M&G Department.
- There was damage to the environment in the form of AMD due to unscientific mining.

7.5.25 Summary of recommendations

- The Department should fix responsibility on the officers responsible for allowing the mining lease-holders to carry on mining activities in gross violation of the Acts and Rules. The Department should also cancel the mining leases of those lease holders so as to prevent them from carrying out any further mining activities in the area.
- The GOM should take up the matter of compensation claim with the GOI for delay in revision / non-revision of royalty at the earliest.
- The GOM should entrust collection of royalty on limestone to the M&G Department so as to prevent recurring loss of revenue to the Government.
- The Department should immediately do away with the system of issue of NOCs in lieu of MTCs. It should also immediately direct the DMR to issue demand notices to all defaulters at the earliest.
- The Department should immediately put in place a system for identification and registration of all coal dealers in the State.
- > The Department should take up the matter at the highest level of Government so as to make it mandatory for all coal trucks to produce MTCs at all the LCS in the State failing which, they would not get customs clearance to cross the border.
- The security of the check gates need to be strengthened. The vigilance squad should be instructed to start inspections on a regular basis. The control mechanism for issue of MTC books has to be strengthened.
- Computerisation of the Department and the net linking of field offices and check gates with the DMR should be taken up on priority basis.

Shillong The (Rajesh Singh) Accountant General (Audit) Meghalaya

Countersigned

New Delhi The (Shashi Kant Sharma)
Comptroller and Auditor General of India