

**EIGHTEENTH REPORT**  
**COMMITTEE ON PUBLIC**  
**UNDERTAKINGS**  
**(1986-87)**

(EIGHTH LOK SABHA)

**MINERAL EXPLORATION CORPORATON LTD.**  
**(MINISTRY OF STEEL & MINES—DEPARTMENT OF MINES)**

[Action Taken by Government on the recommendations contained  
in the 4th Report of the Committee on Public Undertakings  
(Eighth Lok Sabha)]



*Presented to Lok Sabha on 26 March, 1987*

*Laid in Rajya Sabha on 15 April, 1987*

**LOK SABHA SECRETARIAT**  
**NEW DELHI**

*March, 1987/Chaitra, 1908 (Saka)*

*Price: Rs. 5.00*

28374A  
MC: 9

CORRIGENDA TO THE EIGHTEENTH REPORT OF COMMITTEE  
ON PUBLIC UNDERTAKINGS (1986-87) ON MINERAL  
EXPLORATION CORPORATION LIMITED.

<u>Page</u>	<u>Para</u>	<u>Line</u>	<u>For</u>	<u>Read</u>
1	2	1	respect	respect
2	4	13	besibes	besides,
	5	5	steel	coal
		8	purily	purely
3	8	6	affected	effected
6	-	20	materials	materialise
12	-	4	development	deployment
14	-	9	optium	optimum
		2 (from bottom)	concerned	concern
15	-	9	analysis	analysed
		7 (from bottom)	emphasis	emphasize
16	-	8	through	though
17	-	8 (from bottom)	from	form
18	-	1	involved	involve
19	-	25	scruplously	scrupulously
21	-	11	not	nor
22	-	5	spstem	system
23	-	11 (from bottom)	abstantially	substantially
28	-	20	maintenance	maintenance
31	-	18	compeition	competition
32	-	12	<u>Add 7 after</u> paragraph	
33	-	6	as	of
35	-	10	lying	laying
36	-	18	beanch	bench
37.	-	27-28	remunetive	remunerative
		38	remunderative	remunerative
39	-	6	* * *	(ii) Action Taken by Government on the recommendations con- tained in the 4th Report (1985-86) of CPU on Mineral Exploration Corpn. Ltd.
63	-	2	S.No.41	S.No. 14
79	-	2	<u>Add 14 after</u> Page	
88	-	1 (from bottom)	Cibaly hood	likelihood
105	-	5	OMPILATION	<b>COMPILATION</b>

## CONTENTS

PAGE

COMPOSITION OF THE COMMITTEE		(iii)
COMPOSITION OF THE ACTION TAKEN SUB-COMMITTEE		(v)
INTRODUCTION		(vii)
CHAPTER I	Report	... 1
CHAPTER II	Recommendations that have been accepted by Government.	6
CHAPTER III	Recommendations which the Committee do not desire to pursue in view of Government's replies.	24
CHAPTER IV	Recommendations in respect of which replies of Government have not been accepted by the Committee.	30
CHAPTER V	Recommendations in respect of which final replies of Government are still awaited.	31
APPENDICES		
I	Minutes of the 71st sitting of Committee on Public Undertakings (1986-87) held on 13 March, 1987.	39
II	Extracts from the minutes of the 18th Co-ordination Committee meeting held at New Delhi on 7.5.85.	41
III	Copy of O.M. No. 21/38/85-IF dated 14th May, 1985 issued by Department of Mines regarding invitation of tenders for Consultancy.	42
IV	Copy of letter No. 37/15/85-M.I. dated 12th May, 1986 issued by Department of Mines regarding constitution of 'Standing Economic Committee to Study resources established and being explored by Geological Survey of India ?	... 44
V	Copy of letter No., 37/15/85-M.I. dated 22nd July, 1985 issued by Department of Mines to All Heads of Public Sector Undertakings regarding Inter-flow of data among all organisations of Department of Mines.	... 45

(ii)

		<b>PAGE</b>
VI	Plan for development of drills for the year 1984-85.	... 46
VII	Areawise, Mineralwise, Shiftwise, and Monthwise Productivity norms per drill month for the year 1985-86 as per joint decision taken in Apex council meeting held on 4th August, 1986.	62
VIII	Projectwise Drill deployment and Monthly operation Plan 1986-87.	78
IX	Actual performance relating to workshop 1984-85.	90
X	A copy of the Report of the Committee on overall improvement of workshop.	92
XI	A copy of the new form of monthly return to be furnished by the projects directly to Central Head Quarters.	... 102
XII	A copy of the format of the revised cost-sheet for introduction from 1.4.1986.	... 105
XIII	Analysis of action taken by Government on the recommendations [contained in the Fourth Report of Committee on Public Undertakings. (Eighth Lok Sabha)]	... 107

COMMITTEE ON PUBLIC UNDERTAKINGS  
(1986-87)

CHAIRMAN

Shri K. Ramamurthy

MEMBERS

*Lok Sabha*

2. Chowdhry Akhtar Hasan
3. Shri Narayan Choubey
4. Shri Dinesh Goswami
5. Shri Harpal Singh
6. Shrimati Sheila Kaul
7. Shri Haroobhai Mehta
8. Shri Satyagopal Misra
9. Shri Braja Mohan Mohanty
10. Shri K.R. Natrajan
11. Shri Ram Bhagat Paswan
12. Dr. Sankta Prasad
13. Shri K. Ramachandra Reddy\*
14. Shri Chiranji Lal Sharma
15. Shri V.S. Vijayaraghavan

*Rajya Sabha*

- \*16. Shri Jagesh Desai
17. Shri Krishna Nand Joshi
18. Prof. C. Lakshmana

---

\* Elected w.e.f. 22.8.1986 in the vacancy caused by appointment of Miss Saroj Khaprade as Minister of State.

(iv)

19. **Shrimati Ratan Kumari**
20. **Shri Santosh Kumar Sahu**
21. **Shri G. Varadaraj**
22. **Shri Jagdambi Prasad Yadav**

**SECRETARIAT**

1. **Shri N.N. Mehra—*Joint Secretary***
2. **Shri S.S. Chawla—*Chief Financial Committee Officer***
3. **Shri Roop Chand—*Senior Financial Committee Officer***

**ACTION TAKEN SUB-COMMITTEE OF THE  
COMMITTEE ON PUBLIC UNDERTAKINGS  
(1986-87)**

1. **Shri K. Ramamurthy**—*Chairman*
2. **Shri Braja Mohan Mohanty**—*Convenor*
3. **Shri Dinesh Goswami**
4. **Shri Chiranji Lal Sharma**
5. **Prof. C. Lakshmana**
6. **Shri Jagdambi Prada Yadav**

## INTRODUCTION

I, the Chairman, Committee on Public Undertakings having been authorised by the Committee to submit the Report on their behalf, present this Eighteenth Report on Action taken by Government on the recommendations contained in the 4th Report of the Committee on Public Undertakings (Eighth Lok Sabha) on Mineral Exploration Corporation Ltd.

2. The 4th Report of the Committee on Public Undertakings (1985-86) was presented to Lok Sabha on 23 August, 1985. Replies of Government to all the recommendations contained in the Report were received by 26 December, 1986. The replies of Government were considered by the Action Taken Sub-Committee of the Committee on Public Undertakings (1986-87) on 13 March, 1987. The Committee considered and adopted this Report at their sitting held on 13 March, 1986.

3. An analysis of the action taken by Government on the recommendations contained in the 4th Report (1985-86) of the Committee is given in Appendix XIII.

NEW DELHI,

March 24, 1987  
Chaitra 3, 1908 (S)

K. RAMAMURTHY,

*Chairman,*  
*Committee on Public Undertakings.*



## CHAPTER I

### REPORT

The report of the Committee deals with the action taken by Government on the recommendations contained in the Fourth Report (Eighth Lok Sabha) of the Committee on Public Undertakings on Mineral Exploration Corporation Ltd. which was presented to Lok Sabha on 23 August, 1985.

2. Action Taken Notes have been received from Government in respect of all the 36 recommendations contained in the Report. These have been categorised as follows :

- (i) *Recommendations/observations that have been accepted by Government.*

S. No. 6—10, 13, 14, 16, 17, 21, 26—33 and 36.

- (ii) *Recommendations/Observations which the Committee do not desire to pursue in view of Government's replies.*

S. Nos. 4, 11, 12 15 and 22.

- (iii) *Recommendations/observations in respect of which replies of Government have not been accepted by the Committee.*

S. Nos. 35.

- (iv) *Recommendations/observations in respect of which final replies of Government are still awaited.*

S. Nos. 1—3, 5, 18—20, 23—25 and 34.

3. **The Committee desire that the final replies in respect of recommendations for which only interim replies have been given by Government should be furnished to the Committee expeditiously.**

The Committee will now deal with the action taken by Government on some of their recommendations :

*A. Determination of future role of Mineral Exploration Corporation Ltd.*  
**(Recommendation Sl. Nos. 1, 2 and 3 (Paras 1'23, 1'24 and 1'25))**

4. The Committee on Public Undertakings (1985-86), in para 1.23 of their Fourth Report, had pointed out that though at the time of its setting up in October, 1972, the Mineral Exploration Corporation Ltd. (MECL) was conceived as the sole agency of the Government of India to carry out detailed exploration of the minerals throughout the country, various other public undertakings like Coal India Ltd. and its subsidiaries, National Mineral Development Corporation Ltd., Hindustan Copper Ltd., Hindustan Zinc Ltd. etc. continue to carry out exploration through their own agencies. The exact line of demarcation between the functions of public sector exploiting agencies and MECL which was to be determined in consultation with the concerned interests has not so far been done in clear terms. As a result, the Company was not clear of its future role which affected its plans for modernisation and investment besides creating a situation where it had to face avoidable competition. The Committee had also recommended in para 1.24 that the Mineral Exploration Corporation Ltd. should be the main agency to undertake detailed exploration of minerals in the leasehold areas of all organisations under the Central Government.

5. In paragraph 1.25, the Committee had also pointed out that the functions of Central Mine Planning and Design Institute (CMPDI) and MECL were overlapping. In spite of the Fazal Committee recommendation requiring the CMPDI to develop as a specialised agency for design and consultancy in the steel sector, the matter had not received the attention of the Government it deserved. The Committee had, therefore, recommended that the feasibility of assigning exploration of coal solely to MECL and converting CMPDI into purely a consultancy organisation in the coal sector should be examined urgently.

6. In reply, Government have stated that demarcation of functions between MECL and other concerned agencies including CMPDI is under examination and a decision is expected to be taken shortly. The Government have also stated that the question of making the MECL the main agency to undertake detailed exploration of minerals in leasehold areas of all organisations under the Central Government is also under consideration in consultation with the concerned Departments/Ministries.

7. The Committee regret to point out that even after 16 months of presentation of their report to Parliament, the [Government have not yet taken any decision in regard to the demarcation of mineral [exploration functions between MECL and other Public Sector exploiting agencies including CMPDI. The

question of making MECL, the main agency to undertake detailed exploration of minerals in leasehold areas of all organisations under the Central Government has also not been decided as yet. The Committee urge that an early decision in the matter should be taken so that the Company could be clear in its future role for exploration of minerals which naturally affected its plans for modernisation and investment. The Committee would like to be apprised of the final decision taken in this regard within three months of the presentation of this Report to Parliament.

*B. Delay in preparation of Perspective Plan*

**Recommendation, Sl. No. 5 (Para 1'27)**

8. The Committee had expressed their unhappiness that till recently, no long term national plan in mineral exploration was prepared by Government indicating the share of various agencies. The MECL was not certain of its share in the exploration and continued to prepare from time to time different plans covering different periods. While expressing their concern about the frequent changes affected by Government in the formulation of long term plans for mineral exploration, the Committee recommended that firm estimates of the demand of various minerals and the resultant requirement of exploration inputs on a long term basis, at least upto the year 2000 A.D., should be formulated and made available to MECL so as to provide it a more definite basis for its future activities and planning.

9. The Government have stated in their reply that the perspective plan to provide MECL a more definite basis for its future planning activities for the period 1985-2000 A.D. is under preparation.

10. The Committee hope that the preparation of perspective plan for MECL on a long-term basis, covering the period 1985-2000 A.D., would be expedited so as to provide a more definite basis to MECL for its future activities.

*C. Reorganisation and employment of excess man power by MECL*

**Recommendation Sl. Nos. 19 and 20 (Paras 2'88, 2'89 and 2'90)**

11. In para 2'88 of their Fourth Report, the Committee had observed that the man power employed in MECL had increased from 2878 in 1980-81 to 3578 in 1983-84. The employment of man power per shift in MECL was on the higher side compared to norms prescribed by CMPDI. The employment of excess man power by MECL was also pointed out by BPE as back as in 1979 and inspite of that MECL did not fix norms for deployment of man power.

12. In para 2'89 of the said report the Committee had also noted that although the Board of Directors of MECL had directed the Company in 1974 carry out work study and determine the man power for each type of work etc. after inviting offers from National Productivity Council and other agencies, no agency was appointed for this purpose. It was only in 1982 that the feasibility of engaging NPC for the job was explored but it was then decided to have the job done internally. A Sub-Committee was appointed in April, 1982 for finalising the man power requirements arising out of re-organisation of management structure recommended by the Committee of Departmental Heads. Even the Sub-Committee did not study in depth this matter and after indicating some broad guidelines it authorised the Managing Director to create posts as considered necessary as a result of re-organisation. Accordingly, in para 2'90, the Committee specifically recommended that the work of re-organisation and deployment of man power should be entrusted to an expert body without any further delay.

13. In reply the Government have stated that MECL had been directed to enlist the services of NPC for reorganisation and deployment of its man power.

14. The Committee are not happy over the casual manner in which the recommendations of the Committee have been dealt with. They are also not satisfied with the routine reply that "MECL has been directed to enlist the services of NPC for re-organisation and deployment of its man-power." While reiterating their original recommendations, the Committee desire to be apprised of the conclusive action that has been taken by MECI. with regard to the employment of the excess man power and also for fixing the norms for deployment of man power on cost linked basis. The Committee would also like to be apprised of the conclusive action taken in this regard within 3 months of the presentation of this report.

#### *D. Recovery of Outstandings*

#### **Recommendation Sl. No. 35 (Para 3'56)**

15. As regards charging of interest on the outstanding the Committee were informed that contracts of MECL were generally with public undertakings who were not agreeable to the charging of interest on outstandings. The Committee strongly felt that the public undertakings and other clients should be treated alike in the matter of charging interest on delayed payment of bills. There was no justification to treat public undertakings differentially in this

matter. The Committee had, therefore, recommended that in all future contracts a clause should be specifically inserted for the payment of interest by all defaulters on delayed payments beyond a particular period of the submission of bills by MECL.

16. In their reply, the Government have stated that in accordance with the recommendation of the Committee on Public Undertakings for inclusion of interest clause for delayed payment, MECL have taken up the matter with the public sector units. However, they are not inclined to accept this clause. MECL is pursuing the matter at different levels.

17. The Committee are not satisfied with the reply of Government. While reiterating their original recommendation, the Committee urge that the matter may be taken up at the highest level and instructions may be issued by all the Ministries to exert influence over the public undertakings under them to agree to the insertion of a clause for payment of interest for delayed payments of bills in the future contracts to ensure prompt recovery of outstandings.

## CHAPTER II

### RECOMMENDATIONS THAT HAVE BEEN ACCEPTED BY GOVERNMENT

#### **Recommendation Serial No.6 (Paragraph Nos. 2.72-2.73)**

The Committee are distressed to note that the company's achievement during the Fifth Five Year Plan as compared to the targets fixed was far from satisfactory. It was only 32.87 per cent in core drilling and 30.20 per cent in exploratory mining. Similarly, during the first four years of the Sixth Five Year Plan the company could achieve 77 per cent of the Plan targets in respect of drilling and 70 per cent in respect of mining. There was also a shortfall in drilling and mining programme even with reference to targets fixed every year at the time of formulation of budget estimates. The actual achievement during 1980-84 against the targets fixed ranged from 70 per cent to 86 per cent in the case of drilling (except 1982-83 when it was 104 per cent) and 54 per cent to 94 per cent in the case of mining. The Committee have also been informed that the firm programme of exploration work was not made available in advance to MECL by GSI and Government of India in the case of promotional projects and by the clients in the case of contractual projects. As a result, things could not be planned properly and many envisaged projects did not materialise. The Committee note from the evidence of the Secretary, Department of Mines that Hindustan Zinc Ltd. hold lease for tin deposits. As referred to earlier in this Report, a decision has been taken by the Department of Mines in 1979 that MECL would be permitted to undertake work in lease-hold areas of other agencies. The Committee, therefore, recommend that the work of detailed exploration of tin deposits should be assigned to MECL and the project of MECL for this work should be sanctioned without delay. Now that a Coordination Committee consisting of representatives of all concerned Departments has been set up, the Committee expect that henceforth there would not be any delay in approval of promotional projects and work would be made available to MECL well in advance. They would also stress that the Ministry should also involve themselves actively for securing to MECL the contractual work from clients.

*Reply of the Government*

The following promotional tin projects have already been allotted by the Government to MECL :—

- (i) Detailed exploration of tin deposit at Tosham in Haryana.
- (ii) Exploration proposal submitted by the MECL for an initial stretch of 1,000 m strike length released by the GSI on western side of the Tosham hill. This will be followed in due course by release of other extension areas on the eastern side by the GSI for detailed exploration by MECL.

Government have already taken the following steps for expeditious approval of the promotional projects :—

1. Issued guidelines for inter-flow of data among all Organisations of GSI and Undertakings for drawing up detailed schemes of exploration, *vide* No. 37/15/85-MI dated 22.7.85. Appendix V.
2. Constituted a Standing Ore Economic Committee comprising Senior Officers from MECL, GSI, IBM and concerned PSEs to Study the resources established being explored by GSI and to identify projects to be taken up for detailed exploration after assessing economic viability *vide* No. 37/15/2/85-M.I. dated 12.5.1986. (Appendix IV) A decision has also been taken that the projects identified by the Committee could be taken up by MECL for detailed exploration even if PSEs indicate no immediate interest or priority. This will ensure creation of shelf of blocksdeposits explored in detail for future use.
3. Govt. have issued instructions to all Undertakings in regard to global tenders that the tenders should include a clause that the successful tenderer will utilise the resources/ agencies available in India e.g. MECL for implementation of various activities, *vide* No. 21/38/85-IF dated 14.5.85. (Appendix III).
4. Govt. have also decided that periodic meetings be held between MECL and GSI for exchange of exploration notes and techno-economic aspects of projects under exploration by GSI and to identify such projects which should be explored in detail. (Relevant extract from 18th Meeting of Coordination Committee is given in Appendix II).

[Ministry of Steel and Mines Department of Mines O.M.No. 31/4/85-M.I, Dated the 22nd October, 1986].

**Recommendation Serial No. 7 (Paragraph No. 2.74)**

As a result of the review conducted by audit of certain promotional and contractual projects undertaken by Mineral Exploration Corporation Limited (MECL) and also on examination of various aspects of functioning of the Company, the Committee have formed an unmistakable impression that there were a number of deficiencies in implementation of the projects. In the judgement of the Committee there was inadequate project planning, inadequate project management and control reflected in huge cost and time over-runs, delays in closure of camps, low productivity per worker per month, low drilling per drill month, delay in submission of geological reports and idleness of equipment and man power to say the least. Admittedly, some of these deficiencies can be attributed to inadequacies in planning and monitoring, resulting in consequential delays and cost escalations. The Committee would deal with some of these aspects in the succeeding paragraphs/chapter.

**Reply of the Government**

COPU's observations are noted for compliance. Several Acts like the Forest Conservation Act, restrictions in entering lease hold areas, applicability of the Contract labour act, problems connected with the retrenchment of temporary labourer's and other factors beyond the control of MECL act as significant factors in time and cost over-runs. However efforts at improving management systems are being made on a Continuing basis.

After the reorganisation and introduction of 3-tier management system, certain improvements have come about in the last 3 years, which it is expected would continue in future.

[Ministry of Steel and Mines. Department of Mines O.M.No.31 (4)/85-M.I. Dated the 22nd October 1986].

**Recommendation Serial No. 8 (Paragraph No. 2.75-2.76)**

Results of investigations conducted for mineral exploration and the resources established are embodied in geological reports prepared, by MECL which are required to be submitted to the Government of India in the case of promotional projects and to the concerned exploiting agency in the case of contractual projects. The Committee are constrained to observe that there were inordinate delay in the submission of such geological reports. During the period from 1973-74 to 1982-83, out of 174 projects, geological reports in respects of 28 projects were not required to be submitted. In respect of the remaining projects only in 18 cases geological reports were submitted in time



by the company. Thus there were delays in submission of reports in respect of 61.5 per cent of the projects. As a result of this, the MECL had to pay a penalty of about Rs. 20 lakhs to CMPDI alone in respect of 40 projects/blocks. Besides, the delay also resulted in blocking of 10 per cent of the value of work which was released only on submission of the final geological reports.

The Committee are informed that according to the existing contract MECL are required to submit the final geological report within four months of the completion of the project. Since the quantum of work which goes into the geological report in terms of number of maps and text including annexures etc. has tremendously increased, it is practically difficult for MECL to submit the report within the stipulated time limit of four months. The Committee feel that the contracts between MECL and the clients should be made more equitable and realistic so as to allow reasonable time for submission of geological reports by MECL. The Committee hope that priorities would be laid down in future after careful consideration so as to avoid subsequent changes therein. Change/enlargement of specifications of investigations and change in scope of work should also be avoided as far as possible as such changes upset the plan of work of MECL and result in delays in submission of geological reports. At the same time, the Committee would like to stress that MECL on its part should make all out efforts to submit the Reports well in time since the delay results not only in imposition of heavy penalties and unnecessary blocking of funds but also affects adversely the exploitation programme of the clients.

#### Reply of the Government

Noted. All-out efforts will be made in negotiations with the clients by MECL to ensure that the contracts are made more equitable and realistic so as to allow reasonable time for the preparation and submission of Geological Reports.

To eradicate delays in submission of Geological Reports, the company has already taken the following steps :—

1. In-house computer assistance for processing extremely large volumes of data.
2. Sophisticated, electronic and other machine for fast reprography.
3. Enhancement of inhouse analytical facilities.
4. Increase in the number of geologists and other specialists engaged in the report preparation work, which has now been decentralised to the Area level.

As a result of the above steps taken, the company has cleared the backlog up to 1983-84. As on December, 85 the company has been able to submit 315 reports. It is hoped that with further augmentation in the computer capability for handling inter-active graphics planned for generation of various types of maps, sections, etc. there will be further reduction in the time taken for interpretation of data and preparation of reports.

The suggestion of the Committee to avoid the change/enlargement of specifications of investigations and change in scope of work in order to avoid upsetting the plan of work of the Co. & delays in submission of reports will also be kept in view.

[Ministry of Steel and Mines, Department of Mines, O.M.No. 31 (4)/85-MI Dated the 22nd October, 1986].

#### **Recommendation Serial No. 9 (Para. No. 2.77)**

The Committee are surprised to note that until recently the company had no system of post-project coordination with the clients and association of its geologists to assess the correctness or otherwise of the assessments made by it and to take corrective measures in the light of experience gained. It was only at the suggestion of audit that the company has started such a system by selecting 5 projects every year at random. The introduction of such system for all projects is stated to be uneconomical as it would require a large number of geologists. However, the Committee are of the view that data in respect of the actual mining could be obtained by MECL from the clients for comparing it with that contained in the geological reports submitted by it without associating MECL's own geologist at the clients' site. The Committee would also suggest that this system should be tried with all the projects which are being implemented on the basis of the Reports submitted by MECL. Such comparative study would be highly useful in taking corrective measures for the future and improving the efficiency of performance of the Company in its exploratory tasks.

#### **Reply of the Government**

COPU's observations are noted for compliance. MECL have been instructed suitably to institutionalise a system of feed back from the clients and review the data so obtained on a systematic basis.

[Ministry of Steel & Mines, Department of Mines, O.M. No. 31/4/85-M.I. Dated the 26th December, 1986].

### **Recommendation Serial No. 10 (Para No. 2.78—2.79)**

The Committee have been informed that during 1983-84, an attempt was made to fix project-wise productivity for drills and also norms for major inputs and manpower. The Director (Technical) of MECL also stated in his evidence before the Committee that "for every project, we are fixing certain input and output norms. These norms are based on the individual project by taking into consideration the terrain, the depth of barrows and the strata that we are working. We are monitoring them intensively." From the information about norms of productivity various inputs and manpower furnished by the Ministry, the Committee have noted that in many projects the total cost per drill month has been higher while the productivity was lower during the last three years as compared to the norms prescribed in 1983-84.

The Committee are constrained to observe that even after more than 12 years of its formation the Company has not been able to lay down any norms for consumption of POL/bits, productivity of machines operating in a given strata/mineral, deployment of manpower, establishment of shifts, maximum and permissible down time and cost of maintenance (corrective as well as preventive), levels of inventory and standard costs of operation etc. The overall capacity of the company to take up the mineral exploration work and other ancillary jobs has also not been laid down. The Committee wonder how in the absence of such norms any effective control on the production cost, profits, optimum utilisation of man power, machinery and material could be exercised. Although it may not have been possible to fix single norms for all the projects, the Committee feel that with its long experience in exploration, the Company should not have found difficulty in evolving some norms for purposes mentioned above at least for individual projects depending upon the nature of the mineral to be explored, the strata and the terrain where it has to be explored. Therefore, in the opinion of the Committee, MECL should aim at fixing norms on consumption, productivity, manpower and cost of operation etc. in respect of each project before it is taken up for execution. This will enable evaluation of the actual performance and taking corrective action where necessary.

### **Reply of the Government**

The introduction of 3-tier system of management and progressive decentralisation of operations, have improved monitoring of performance in projects and resulted in stricter control on inputs like POL/bits, productivity of machines operating in a given strata/mineral, manpower, establishment of shifts, maximum and permissible down time and cost of maintenance (correc-

tive as well as preventive), levels of inventory and standard costs of operations etc. Further with the introduction of Management Information System, the Company have been able to lay down norms on consumption, productivity, manpower development and cost of operations for each project.

As a result of monitoring and fixing of norms, there has been a marked improvement in the output and production of the Company as is evident from the undermentioned table :

#### Drilling

Year	Target (Metres)	Achievement (Metres)	Productivity (Metres)
1982-83	1,85,700	1,83,371	102
1983-84	2,15,000	2,18,422	114
1984-85	2,50,000	2,63,390	145
1985-86	2,75,000	3,20,000	173
(Anticipated)			

The performance of each project is now being monitored in the light of these norms and corrective action taken whenever and wherever necessary.

[Ministry of Steel & Mines, Department of Mines, O.M. No. 31(4)/85-M.I. New Delhi, dated 26th December, 1986].

#### Recommendation Serial No. 13 (Para No. 2'82)

In this connection, the Committee have also observed that for considerable period the Management had neither investigated the reasons for the heavy shift losses nor had it taken any corrective measures to arrest these losses. Even in review of the utilisation of drill shifts and shifts lost during 1981-82 placed before the Board in February, 1983, reasons for excessive shift losses have not been analysed/highlighted. Representative of the Company during evidence before the Committee also admitted that there was a certain lapse on their part in the year 1982 and they had taken corrective action and their Board was looking into shift losses regularly. The Committee desire that the reasons for such heavy shift losses should be thoroughly investigated and Committee informed

of the results and also of the preventive measures taken in that regard. The Committee also desire that the figures of shift losses, result of analysis of those losses and the preventive measures taken should be suitably incorporated in the Annual Report of the Company.

#### Reply of the Government

Shift losses are now monitored regularly by the Management of the Company and are reviewed by the Board on a quarterly basis. As per the desire of the Committee, figures of shift losses, the result of analysis of those losses and the preventive measures taken would be incorporated in the Annual Report of the Company for the year 1985-86 onwards.

The following are the preventive measures that have already been taken with the help of, and in consultation with, the recognised workers' Union to reduce shift losses.

1. Timely supply of stores and spares.
2. Setting up of field workshop for quicker repairs.
3. Strengthening of the maintenance functions and drawing up of the overhaul plan of plants and equipment.
4. Advance shifting plan, provision of stand by sub-assemblies and drills and improvement in the mobility of operating crew and maintenance staff.

As a result of the above measures, there was a marked improvement in the reduction of shift losses since 1981-82 as is evident from the performance of the Company given in the following table :

Year	Target (m)	Achievement (m)	Productivity (m)
1981-82	1,51,300	1,45,141	86
1982-83	1,85,700	1,89,371	102
1983-84	2,15,000	2,18,422	114
1984-85	2,50,000	2,63,390	145
1985-86	2,75,000	3,20,000 (anticipated)	173*

[Ministry of Steel & Mines (Department of Mines) O.M. No. 31/4/85-M.I.  
Dated the 26th December, 1986].

**Recommendation Serial No. 14 (Paragraph No. 2.83)**

The Committee note that the Company did not prepare any programme at the level of corporate office for the deployment of shifts on the basis of number of drills, workload and manpower at project site. Keeping in view the need for increased production, the Committee desire that a detailed programme with regard to the deployment of shifts should immediately be worked out by the Company which, in the opinion of the Committee, would go a long way not only in exercising control on the established shifts but also on the optimum utilisation of men, material and machines. The Committee would like to be informed of the specific steps taken in this regard.

**Reply of the Government**

MECL have a detailed programme for deployment of drills with indication of number of shifts. The Company has furnished the following three statements :—

- (i) Plan for deployment of drills for the year 1984-85 ; (Appendix VI).
- (ii) Area-wise, mineral wise, shift-wise and month-wise productivity norms per drill month, as per joint decision taken in Apex Council meeting held on 4th August, 1985 ; (Appendix VII) and
- (iii) Project wise drill deployment and monthly operation plan 1986-87 (Tentative) (Appendix VIII).

Statement II generally indicates productivity on two shift basis. Third shift operations are considered whenever the work load, the time schedule, the working conditions, availability of logistic support etc. demand such operations. Three shift operations against certain projects are indicated also.

[Ministry of Steel and Mines (Department of Mines) O.M.No. 31/4/85-M.I Dated the 22nd October, 1986].

**Recommendation Serial No. 16 (Paragraph No. 2.86)**

There appears to have been no system of ensuring optimum utilisation of manpower and machinery in the workshops. Upto 1983-84, the Company did not make any analysis of the man-hours lost. The Committee view with concerned the increase in the percentage of the idle machine hours to total available hours from 15 in 1981-82 to 31 in 1983-84. The percentage of

machine hours lost on account of absence of operators alone increased from 13.25 per cent to 28.35 per cent during this period. The Committee are also distressed to note that the Company did not make any analysis of the man-hours lost during 1977-78 to 1981-82. A review of 3205 time cards of the various shops, conducted by Audit, from October, 1981 to March, 1982 has revealed that 57 per cent of the total hours lost were due to union activities ; want of raw material ; want of work ; and machine break-down. The Committee would, therefore, urge that the factors responsible for the steep increase in the idle hours should be analysed and remedial action taken to arrest the adverse trend.

#### **Reply of the Government**

COPU's observation relating to idle hours in workshops is noted for compliance.

A Committee was constituted to study in depth the existing system of working in the workshops and to suggest remedial measures. A copy of the report submitted by the Committee is enclosed (Appendix X). The recommendations of the Committee which are at various stages of implementation have led to a marked improvement in the performance relating to utilisation of men and machinery.

[Ministry of Steel & Mines (Department of Mines) O.M.No. 31/4/85-M.I. dated 22nd October, 1986].

#### **Recommendation Serial No. 17 (Paragraph No. 2.87)**

The Committee also note that the information with regard to the anticipated time and cost, actual total cost incurred, and the time taken in completing the jobs was not filled in job cards. Consequently, the actual cost of production, cost of labour and machine hours etc., and the actual cost of production of each item could not be ascertained. The Committee are also not satisfied with the reply of the Ministry that "the Company felt that since its workshop is a small service unit, detailed maintenance of job cards was perhaps not essential." The Committee cannot but emphasise the urgent need for proper maintenance of job cards, as suggested by Audit, as it would help the Company to compare the anticipated time and cost with the actuals in respect of each job.

#### **Reply of the Government**

Noted. A reputed Cost consultant, who is looking into the costing system in MECL is also looking into this area and based on his recommenda-

tions necessary follow up action will be taken.

[Ministry of Steel and Mines, (Department of Mines) O.M.No. 31/4/85-M.I. Dated the 22nd October, 1986].

#### **Recommendation Serial No. 21 (Paragraph No. 2.91)**

The Committee are distressed to note that the drilling metreage per man which was 47.94 during 1978-79 ranged from 35.34 to 41.12 during the subsequent period between 1979-84. Similarly; the mining metreage per man which was 6.51 during 1978-79 ranged from 4.87 to 6.23 during 1979-83 through during 1983-84 it reached 6.62. Thus the Company could not achieve the 1978-79 level of productivity per man during any of the subsequent years except in 1983-84 and that too only in respect of mining.

#### **Recommendation Serial No. 26 (Paragraph No. 3.47)**

Admittedly, apart from lower rate of return, there was less than anticipated productivity in a number of projects which obviously increased costs and added to losses. Thus, for 1983-84, while the rate recommended by the Cost Accounts Branch was Rs. 627, the cost of drilling by MECL was Rs. 685. The finalisation of rates for 1983-84 is stated to have again been referred to the Cost Accounts Branch. As already emphasised by the Committee elsewhere in this Report, the productivity of the corporation needs to be improved substantially. The Committee expect that the Company will make all-out efforts in this direction.

Further, it may be desirable to finalise the rate of return before a close of the financial year so that final accounts of the Company are ready in time for being laid on the Table of the House as required under the Companies Act.

#### **Reply of the Government**

Extensive efforts are being made towards improving the over-all productivity of the Corporation. Some of the steps which are already under implementation in this direction are :—

1. Modernisation of drill fleet by gradual replacement of some of the conventional drills by sophisticated equipment for obtaining a very high yield per drill.
2. Additional input in some of the conventional drills by way of wireline equipment, extra mobility, combination drilling etc. Which would increase their productivity. Maximum mechanisation of activities in exploratory mining and fixation of productivity norms.



3. Interpretation of data and preparation of reports is being expedited with increasing application of computer.
4. Sophisticated analytical equipments are being deployed for improving the speed of analytical determination.
5. Management Information System is being revamped to enable necessary information to flow up the various echelons of control and for taking corrective measures in time.
6. Shift losses in drilling and mining arising on account of various causes are being minimised.
7. The Labour Union is being involved increasingly for taking joint decisions on various aspects of labour productivity, welfare, grievance producer, etc.

As a result of the above steps, there was a marked improvement in drilling as well as in mining meterage per man year in 1984-85 and 1985-86, i.e., the drilling meterage per man which ranged between 35.34 to 41.12 during the period 1979-84 rose to 92.2 in 1984-85 and 109.4 in 1985-86. Similarly, the mining meterage per man which ranged from 4.87 to 6.62 during 1979-84 rose to 7.30 in 1985-86. The matter of remunerative rates is being actively pursued.

[Ministry of Steel and Mines (Department of Mines) O.M.No. 31/4/85-M.I. Dated the 22nd October 1986].

**Recommendation Serial No. 27 (Paragraph No. 3'48)**

The Committee find that the rates of promotional work done by MECL on behalf of Government of India were not fixed on any scientific basis. Till 1975, GSI schedule of rates were adopted for promotional work. In September, 1975. Government advised the Company to make an exercise to study the actual cost involved including the direct and indirect costs on the promotional work so that a suitable criterion could be evolved which might form the basis of payment by the Government. The cost data furnished by the Company in 1976 was found inadequate and the GSI rates prevailing in 1976 continued to form the basis for promotional rates for MECL with some escalations allowed by the Government in the cost of inputs etc. The Committee have been informed that MECL was asked by the Ministry to draw up a detailed cost data for every project so that rates for promotional works could be fixed suitably. The Company has however, stated that it was not possible to furnish such in-

formation as it would involve engagement of a large number of accountants and other personnel in projects for collecting the required data. The MECL is stated to have worked out a proposal which has been agreed to by the Ministry and on the basis of which the rates have been firmed up for two years *i.e.* for 1983-84 and 1984-85. The Committee are greatly exercised over this avoidable delay for the settlement of remunerative rates for undertaking promotional work of the Government MECL. The Committee desire that such delays should be avoided in future.

#### **Reply of the Government**

Government share the concern of the Committee on the delay in finalizing rates. After considerable effort, rates were firmed up for two years *i.e.* 1983-84 and 1984-85 for drilling, mining, geological work etc. These rates are being reviewed with reference to productivity and actual costs of inputs for the subsequent years. This exercise is continuing.

[Ministry of Steel and Mines (Department of Mines) O.M. No. 31/4/85-M.I. Dated the 22nd October, 1986].

#### **Recommendation Serial No. 28 (Paragraph No. 3'49)**

The Committee also urge upon the Government to evolve a scientific and fool proof formula for fixing rates for promotional work done by the Company. For this purpose, it may be necessary for the Company to maintain certain data contemporaneously with execution of work, rather than collecting it at a later date. The Government may impress upon the Company desirably of evolving suitable procedures.

#### **Reply of the Government**

A reputed cost consultant has been engaged to evolve a scientific and fool proof formula for fixing rates for promotional work done by MECL.

[Ministry of Steel and Mines (Department of Mines) O.M. No. 31/4/85-M.I. Dated the 22nd October 1986].

#### **Recommendation Serial Nos. 29, 30 and 31 (Paragraph Nos. 3'50, 3'51 and 3'52)**

The Committee note that though MECL has introduced annual material planning and programming as well as codification and standardisation of stores from the year 1984-85, there are still serious deficiencies in the inventory control system. Even though the store manual of MECL requires fixation of minimum and maximum limits for all items in the stores to avoid unnecessary

accumulation, the Company has not fixed maximum and minimum limits of individual store items. ABC analysis of the inventories has also not been done by the Company so far. The discrepancies between the figures of stores and spares appearing as closing stock at the end of each year as recorded in the books of accounts and the figures as reported by the projects as stock in hand at the end of the year, based on physical verification, are written off as consumption at the end of each year without any reconciliation. Such discrepancies varied between Rs. 2.62 lakhs in 1978-79 to Rs. 28.06 lakhs in 1983-84.

During evidence, the Director (Technical) or MECL, contended that requirement of material varied very considerably from year to year. The ABC system of analysis and minimum and maximum limits for stores are not strictly applicable. He also stated that keeping in view the sort of stores needed on year to year basis they have to fix up internal norms which in no case were less than 3 months' stock. The Committee feel that it should be possible for the Company to fix some broad norms for all items of store to ensure that neither the work is adversely affected for want of material nor there is excess of inventories. The Committee are surprised to note that the discrepancies in figures of stores and spares as recorded in books of accounts and the figures reported by projects after physical verification are written off as consumption at the end of each year without reconciliation. This is highly objectionable from all canons of accounting and is an open invitation for mal-practices by persons handling the stores and equipment. The Committee, therefore, recommend that MECL should introduce a workable system of reconciling the inventory at projects with the books of accounts maintained at the headquarter and internal test audit and ensure that both are worked scrupulously and effectively.

As regards desirability of introducing ABC Analysis for inventory control in public undertakings, the Committee would like to draw attention of the Company/Ministry to their 40th Report (3rd Lok Sabha) on Materials Management in Public Undertakings wherein it was emphasised that by this system of inventory control, it was possible to achieve twin objectives, namely to minimise the risk of stockouts and to reduce blocking of funds in inventories. The Committee had, therefore, recommended that ABC Analysis of inventories should be introduced by all those undertakings who had not yet introduced this system. Necessary instructions in this regard were also issued by the Bureau of Public Enterprises as far back as on 16th October, 1967. The Committee, therefore, urge that the MECL should seriously consider introducing ABC system of analysis of inventories immediately.

### Reply of the Government

COPU's observation regarding introduction of Inventory Control System has been noted for compliance.

Discrepancies in the said system in MECL are reported to have occurred due to the following reasons :

1. Uncertain work programme on long term basis.
2. Wide spread location of projects involving considerable time in communication and receipt/delivery of goods.
3. High number of stock points.
4. Unforeseen difficulties encountered in strata variation while drilling.
5. No uniformity in lead-time in supply of goods required by various vendors in view of the specialised types of items involved and erratic off take/requirement.
6. Non-fixation of Maximum/minimum levels since purchases were made for specific purposes for short duration of six months to one year.

Efforts are being made to introduce inventory control techniques *i.e.* (i) ABC system of analysis of inventories; (ii) fixation of minimum and maximum limits for all items of stores from 1986-87. Budgetary and usage inventory control is already in existence. The inventory has now been brought under a reasonable control and to a level varying from 4 to 6 months depending on the particular items of use. Annual material codification, planning and programming has been achieved and standardization of stores has already been done. Rate Contracts with the reputed manufacturers for important spares have been concluded and the purchase procedure has been streamlined accordingly.

Steps are being taken to introduce a workable system by which the accounts maintained at the Headquarters and physical balances at projects are reconciled. Towards this objective, some selected projects' reconciliation work has been entrusted to professional Chartered Accountants, in addition to the reconciliation work taken up departmentally.

A Reputed Cost Consultant who is looking into the cost system has also been requested to suggest a workable system for reconciliation of accounts. In consultation with the statutory auditors, the system would be introduced at the earliest.

[Ministry of Steel and Mines (Department of Mines) O.M. No. 31/4/85-M.I. New Delhi, dt. the 22nd October, 1986].

**Recommendation Serial No. 32 (Paragraph No. 3'53)**

The Committee have noticed many deficiencies in the costing system introduced by MECL in 1975-76. The system did not provide for classification of costs into fixed and variable costs ascertainment of idle time for labour and machinery, comparison of actual costs with the estimated costs and analysis of variations and fixation of standard costs. Further the headquarters expenses were to be apportioned on the basis of financial expenditure incurred on a project and not on the basis of physical performance of projects. A review of the costing record also revealed that the cost statements were not reconciled with financial accounts till 1978-79. The cost sheets were neither received regularly nor were received in time from Projects and Workshops. Estimated cost was adopted for compiling the annual cost in all those cases where the monthly cost sheets were not prepared. There was no system of putting up the cost statements to the Management/Board.

**Reply of the Government**

COPU's observation relating to Costing System has been noted for compliance. In view of the location of the areas and projects and lack of qualified people, there was a timelag in the flow of information resulting in delay in finalising cost sheets. The following steps have been taken to eliminate deficiencies relating to costing system in MECL.

1. Financial and cost records are reconciled every year.
2. A new form for giving the cost information every month directly from the field to Central Head Quarters has been introduced. In this way, cost will be controlled at the point of incidence.
3. A reputed cost consultant has been requested to examine the existing costing methods and suggest improvements.

[Ministry of Steel and Mines (Department of Mines) O.M. No. 31/4/85-  
M.I. Dated the 22nd October, 1986].

**Recommendation Serial No. 33 (Paragraph No. 3'54)**

The Committee have also observed that even though the workshops were manufacturing limited number of accessories and fabricating items like vehicle bodies, water tanks etc. no standard costs were prescribed therefore. No

analysis of the idle man-power and machinery hours was also made. Although the cost of manufacturing the same items differed widely, yet no analysis was made to find out reasons therefor. The overheads were charged at 130 per cent of the labour cost without any regard to actual production either in physical quantities or financial cost thereof. A comprehensive management information system comprising of internal management information as also the outgoing reports to the Ministry was also not introduced by the Company until October, 1982. Majority of the reports prescribed prior to this date were in the nature of progress reports indicating the state of work in the units and did not supply information needed by the Management for effective control on costs and functions of the Company. These reports were also not received regularly. Admittedly, the absence of an effective system of costing and also the comprehensive Management Information System were factors leading to below average performance of the Company. The Committee are concerned over the glaring deficiencies in the costing system as pointed out above. Even the representative of the Company admitted this during his evidence and stated that they were taking corrective action. The Committee are also distressed to note that even the modified costing system introduced by the Company on 1st April, 1982 could not provide for classification of costs into fixed and variable and also for the fixing of standard costs. The committee have however, been assured by the Department of Mines that it would take necessary steps to improve the Management Information System and also the system of classifying costs in the Company. The Committee would watch with keen interest the action Government would take in this regard and hope that the lacunae noticed in the costing system and also the Management Information System would soon be eliminated effectively. The Committee would like to be apprised of the specific steps taken by the Government in this regard.

#### **Reply of the Government**

The recommendations of COPU are noted.

The following steps have been taken to improve the Management Information System and Costing system of the Company :

- (i) A new form of monthly return is to be furnished by the projects directly to Central Head Quarters (Appendix XI)
- (ii) Format of the cost-sheet has been revised for introduction from 1.4 86 (Appendix XII).

- (iii) A system of regular review of items like Sundry debtors, cash flow has been introduced.
- (iv) A reputed Cost consultant has been appointed to examine the existing costing system and methods as well as the MIS form and suggest modifications and improvements. The final suggestions of the Cost consultant are awaited.
- (v) Efforts are being made to recruit suitable qualified personnel to eliminate deficiencies in costing system.

[Ministry of Steel and Mines (Department of Mines) O.M. No. 31.4.85-M.I. Dated the 22nd October, 1986].

**Recommendation Serial No. 36 (Paragraph No. 3 57)**

The Committee also find that a large amount of the Company was also blocked under work in progress i.e., the work done but not billed. The amount outstanding on this account stood at Rs. 567.19 lakhs as on 31.3.1984. This mainly represents 10 per cent of the value of work done which is billed only after submission of the Geological Reports, the preparation of which starts only after completion of drilling work and is completed within four to eight months, depending upon the volume of the work. The other main reasons for large amount of work in progress were stated to be delay in sanction for excess amount of work done than that of the originally sanctioned escalation bills raised subsequently due to rise in cost index etc. The reconstituted Coordination Committee is reported to have now decided that bills for promotional works should be paid if work exceeds upto 20 per cent of original sanction and in pursuance of this decision the Committee expect that the amount for work done but not billed should come down substantially. The Committee are also of the view that if billing system in MECL is streamlined it will go a long way not only in improving the financial position of the Company but also it would increase the internal resources generation of the Company.

**Reply of the Government**

COPU's observation relating to improvement in billing system is noted. As a result of a series of measures taken by Govt. of India, MECL and user organisations, the amount of bills outstanding have come down substantially.

[Ministry of Steel and Mines (Department of Mines) O.M. No. 31.4.85-M.I. Dated the 26 December, 1986.]

## CHAPTER III

### RECOMMENDATIONS WHICH THE COMMITTEE DO NOT DESIRE TO PURSUE IN VIEW OF GOVERNMENT'S REPLIES

#### Recommendation Serial No. 4 (Paragraph No. 1'26)

The Committee note that the main activities of the company are exploratory drilling, mining, mine construction along with the requisite geological and analytical works and finally preparation and submission of geological reports containing results of the investigations and reserves established. However, in recent years the company, without obtaining the specific approval of the Government has extended its activities to geotechnical investigations for dam foundation and ground water resources simply because a number of low capacity drills were transferred to it as assets of GSI which could not be used for exploration purposes by MECL. The Committee do not appreciate MECL undertaking extraneous work not falling strictly within its scope of functions simply because of some equipment handed over to it by GSI being in its possession. The departure on the part of MECL from its main objectives is all the more unhealthy when there is already an apex body at national level viz. Central Ground Water Board to conduct systematic hydrogeological surveys, ground water exploration, studies on special ground water problems etc. and much remains to be done in the sphere of its own activity of mineral exploration where in its performance is very significant. The Committee would suggest that the equipment with MECL which is not found suitable for mineral exploration should be disposed of or transferred to Central Ground Water Board instead of making it a base for undertaking works not connected with the company's main objectives and clearly beyond its defined functions.

#### Reply of the Government

Geotechnical investigations for dam foundation and ground water resources are being conducted by MECL on contractual basis at the behest of the State Governments. There will be sometimes need to provide speedy relief in times of distress on priority basis to provide drinking water. Moreover, Central Ground Water Board is more a scientific and research oriented Organisation than a production oriented unit like MECL.



These investigations are covered by MECL's Memorandum of Association. Para III (A) (7) of the Memorandum is reproduced below :

“to undertake contract jobs in various fields of mineral exploration techniques ; to take up drilling and mining contracts for purposes other than mineral exploration on payment of scheduled rates to be fixed by the Board of Directors ;”

These investigations represent only about 6% of the company's total work and are entirely peripheral in nature. Hence the character of work of MECL does not change. Such peripheral activities of MECL do not affect their capacity utilisation, in any significant way. Such a flexibility will be in long term interest of the Organisation].

[Ministry of Steel and Mines, Department of Mines, O.M. No. 31(4),85-M.I. Dated the 22nd October, 1986.

#### **Recommendation Serial No. 11 (Paragraph No. 2.80)**

The Committee find that the number of shifts as indicated by the Company being available during the years 1980-81 to 1983-84 were respectively 52807, 67051, 76502 and 81614 only while on the basis of two shifts operation per drill and 280 working days in a year it should have been 81760, 84000, 90720 and 101360 respectively. Even considering the Company's plea that the drills show as available on 31st March are not available throughout the year, the audit has worked out that the number of shifts available on the basis of average number of drills in operation during these years were considerably higher than the figures indicated by the company. The discrepancy in figures of audit and the Company needs to be resolved. The Committee would like to know the correct position.

#### **Recommendation Serial No. 12 (Paragraph No. 2.81)**

The Committee are unhappy to note that the number of shifts lost due to break-down, shortage of POL, shortage of accessories and other reasons rose from 7312 during 1980-81 to 12675 during 1983-84. Not only that, the number of shifts actually worked by the Company was much lower than even the shifts available after taking into account the shifts lost due to all these factors. Thus the percentage of shifts actually worked to net shifts available ranged from 60 to 76 during 1980-81 to 1983-84.

#### **Reply of the Government**

The discrepancies between the Audit Board figures and those given by Mineral Exploration Corporation Limited (MECL) on the available shifts are due to the approximation adopted by the Audit Board for all the drills opera-

ting on two-shift basis for a uniform 280 days in a year, where as MECL's figures are "actuals" based on the number of drills actually in operation month by month and the number of shifts worked on each day.

The "actuals" and the theoretical availability are tabulated below :—

	1980-81	1981-82	1982-83	1983-84
1. Drill-month in operation.	1469	1679	1849	1908
2. Available drill shifts on the basis :				
<u>Drill month × 2 × 280</u>				
12				
@2 shifts/drill for 280 days in a year	68553	78353	86287	89040
3. Shifts available as reported	52807	67051	76502	81614

Owing to local shifting of drills from bore-hole to bore-hole, releasing fishing of jammed drill strings from bore-holes etc., the drilling hours are reduced. Further in many remote & difficult areas like NHPC, NEC etc., only day-light shifts are operated on account of natural and wild-life hazards, consequently resulting in lesser available shifts.

However, efforts have been made and are being made to minimise shift losses and position has improved from year to year.

[Ministry of Steel and Mines, Department of Mines, O.M.No. 31/4/85-M.I. Dated the 22nd October, 1986].

#### Recommendation Serial No. 15 (Paragraph Nos. 2.84-2.85)

The Committee regret to note that the Company has neither laid down the installed capacity for the workshop nor has it fixed targets of various jobs to be undertaken during a particular year by its Central Workshop at Nagpur and four field workshops at Godhur (Bihar), Parasia (near Nagpur), Raniganj (West Bengal) and Kolar Gold Fields (Andhra Pradesh) though a period of 12 years has passed since the take over/establishment of these workshops. These lapses have adversely affected the production performance

of these workshops as could be seen from the declining performance of these Central Workshop, Nagpur and field workshop at Godhur after 1977-78, both in terms of manufacture as well as repairs. However, for the year 1984-85, a programme of work is reported to have been finalised for these workshops.

It is difficult to imagine how in the absence of fixed installed capacity or targets of production/repairs, the Company was assessing the requirement of facilities, quantum of equipment/spares required and in fact determining the budget/financial support for these workshops or making a systematic programme of work for them for all these years.

The Committee would like to be informed of the actual performance of these workshops as against the projected programme for 1984-85. They will also stress the immediate need for determination of installed capacity so that the extent of utilisation of the workshop capacities could be properly assessed.

#### **Reply of the Government**

The programme of work and actual performance relating to Central Workshop for the year 1984-85 is enclosed (Appendix IX).

The field workshops at Godhur (Bihar), Parasia (Near Nagpur), Raniganj (West Bengal), Kolar Gold Fields (Andhra Pradesh), are basically small preventive maintenance workshops. The Central Workshop at Nagpur, though not small as compared to field workshops, also cannot be classified as a manufacturing unit. These workshops are service oriented and their output depends upon the amount of equipment coming for repair which in turn depends on the intensity of use of machinery and standard of frontline maintenance and handling of equipment. Hence, job carried out by these workshops are not of a regular nature and it is not possible to fix their capacity in a way normally associated with workshops that actually manufacture products.

[Ministry of Steel & Mines, Department of Mines, O.M.No. 31/4/85-M.I. New Delhi, dated 22nd October 1986].

#### **Recommendation Serial No. 22 (Paragraph No. 2.92)**

In the opinion of the Committee there seems to be no system in MECL to exercise control either on the deployment efficiency or productivity of drills. Nor any system of preventive maintenance to minimise the idle time of drills is followed. As many drills as possible are deployed depending upon

the availability. As a result the productivity per drill month which was 130 metres in 1978-79 ranged only between 86 to 102 metres during 1979-80 to 1982-83 though the company was able to achieve 114 metres per drill month during 1983-84. The Committee need hardly emphasise that suitable norms in respect of deployment efficiency and productivity of drills as also schedule for their preventive maintenance should be fixed by the Company. The Committee find that the actual productivity of wirelines drills was 124 metres/drill month during 1983-84 against a parameter of 140 metres/drill month fixed for that year. The shortfall in productivity was mainly due to shortage of good quality wire line drill rods. The Committee feel that if timely action for procurement of wire line drill rods had been taken by the Company/Government, the loss in productivity of wireline drills could have been avoided or reduced to some extent. The Committee need hardly emphasise that suitable measures should be taken on priority basis to ensure adequate supply of wireline drills to meet the requirements of the Company and to enable it to achieve the parameters fixed, without depending on imports.

#### **Reply of the Government**

COPU's observations are noted for compliance. The following checks are in existence to exercise control on deployment efficiency, productivity of drills and preventive maintenance to minimise shifting time :—

1. Weekly preventive maintenance of drills and equipment.
2. Improvement in Service facilities to reduce break downs and idle time.
3. Provision of stand-by drills and spare sub-assemblies at projects.
4. Arrangement of drill deployment in advance on the basis of annual working plans in respect of each project.

Over-all productivity of drills in any given period depends also on the following factors :—

1. Area and location of operation.
2. Terrain.
3. Type of geological formation.
4. Rock hardness, and
5. Bore-hole depth range etc.

Hence, highest productivity per drill month which was 130 metres in 1978-79 was due to the fact that considerable amount of work done during

this period was in soft rock areas like Bauxite. Whereas problems of availability of tubulars, Industrial relations, and law and order situation in some parts of the country affected productivity in the subsequent years.

As regards shortfall in productivity of wireline drills per month, it is submitted that advance action has always been taken for the timely supply of drill rods and other equipment. However, shortages occasionally occur because of unforeseen delays in supplies particularly of imported materials. Availability of good quality accessories indigenously, particularly wire line drill rods, has not been regular and Indian suppliers often import steel tubes for the manufacture of drill rods and do the threadings in the country. However, Indian Suppliers are being encouraged to modernize their factories and instal computerized equipment to improve production quality and deliveries.

[Ministry of Steel and Mines, Department of Mines, O.M.No. 31/4/85-M.I. Dated the 22nd October, 1986].

## **CHAPTER IV**

### **RECOMMENDATIONS IN RESPECT OF WHICH REPLIES OF GOVERNMENT HAVE NOT BEEN ACCEPTED BY THE COMMITTEE**

#### **(Recommendation Serial No. 35 Paragraph 3.56)**

As regards charging of interest on the outstandings, the Committee are informed that contracts of MECL were generally with public undertakings who were not agreeable to the charging of interest on outstandings. The Committee strongly feel that the public undertakings and other clients should be treated alike in the matter of charging interest on delayed payment of bills. They feel that there is no reason why the public undertakings should be treated differently in this matter. The Committee, therefore, recommend that in all future contracts, a clause should be specifically inserted for the payment of interest by all defaulters on delayed payments beyond a particular period of the submission of bills by MECL.

#### **Reply of the Government**

In accordance with the recommendation of the Committee on Public Undertakings for inclusion of interest clause for delayed payment, MECL have taken up the matter with the Public Sector Units. However, they are not inclined to accept this clause, MECL is pursuing the matter at different levels.

[Ministry of Steel and Mines, Department of Mines, O.M.No. 31 (4)/85-  
M.I. Dated the 26th December, 1986].

#### **Comments of the Committee**

(Please see paragraph 17 of Chapter I of the Report).

## CHAPTER V

### RECOMMENDATIONS IN RESPECT OF WHICH FINAL REPLIES OF GOVERNMENT ARE STILL AWAITED

#### **Recommendation Serial No. 1 (Paragraph No. 1.23)**

The Committee are distressed to note that though at the time of setting up of Mineral Exploration Corporation Limited in October, 1972, the Company was conceived as a sole agency of the Government of India to carry out detailed exploration of the minerals throughout the country, various other public sector undertakings like Coal India Ltd, and its subsidiaries, National Mineral Development Corporation Ltd., Hindustan Copper Ltd., Hindustan Zinc Ltd. etc. continue to carry out exploration through their own agencies. The exact line of demarcation between the functions of public sector exploiting agencies and MECL which was to be determined in consultation with the concerned interests has not so far been done in clear terms in spite of the fact that more than 12 years have lapsed in between. Admittedly, this has created a situation where the company was not clear of its future role which naturally affected its plans for modernisation and investment besides creating a situation where it had to face avoidable competition.

#### **Reply of the Government**

Demarcation of work between MECL and other agencies is under examination. A decision will be taken in consultation with the concerned agencies shortly.

[Ministry of Steel and Mines, Department of Mines, O.M.No. 31/4/85-M.I. Dated the 22nd October, 1986].

#### **Comments of the Committee**

(Please see paragraph 7 of Chapter I of the Report)

#### **Recommendation Serial No. 2 (Paragraph No. 1.24)**

The Committee observe that the belated decision (1979) authorising MECL to undertake detailed exploration work in the leasehold areas of other agencies, was confined to organisations under the Department of Mines. In respect of undertakings under other Ministries, a separate notification has to be issued to authorise GSI or any other central organisation to undertake exploration in the leasehold areas of such undertakings. The Committee

desire that the Mineral Exploration Corporation Ltd. should be the main agency to undertake detailed exploration of minerals in the leasehold areas of all organisations under the Central Government.

#### **Reply of the Government**

The question of making the Mineral Exploration Corporation Limited the main agency to undertake detailed exploration of minerals in the leasehold areas of all Organisations under the Central Government is under consideration in consultation with the concerned Departments/Ministries.

[Ministry of Steel and Mines, Department of Mines, O.M.No. 31/4/85-  
M.I. Dated the 22nd October, 1986].

#### **Comments of the Committee**

(Please see paragraph of the Chapter I of the Report)

#### **Recommendation Serial No. 3 (Paragraph No. 1.25)**

MECL is also not very clear about its role in coal exploration. In the opinion of the Committee, the functions of Central Mine Planning and Design Institute and MECL are definitely overlapping. The Fazal Committee recommended that the CMPDI should be developed as a specialised agency for design and consultancy in the coal sector just as MECON was a consultancy agency in the steel sector. However, the Committee feel that the matter did not receive the attention of the Government it deserved. They, therefore, recommend that the feasibility of assigning exploration of coal solely to MECL and converting CMPDI into a purely consultancy organisation in the coal sector should be examined urgently.

#### **Reply of the Government**

The matter regarding demarcation of functions between MECL and CMPDIL is under active consideration of Government and a decision is expected to be taken soon.

[Ministry of Steel and Mines, Department of Mines, O.M.N. 31/4/85-  
M.I. New Delhi, the 22nd October, 1986].

#### **Comments of the Committee**

(Please see paragraph 7 of Chapter I of the Report)

#### **Recommendation Serial No. 5 (Paragraph No. 1.27)**

The Committee are unhappy to note that till recently no long term national plan in mineral exploration was prepared by Government indicating



the share of various agencies. The MECL in turn was not certain of its share in the exploration. It continued to prepare from time to time different plans covering different periods. The first exercise was the preparation of a draft 10 year plan in 1976-77. In July, 1980 however, it was recast and the company was asked to prepare basic approach papers for 20 years development programmes for certain minerals. Later, the position was again reviewed and MECL was asked to take up preparation of a 10 year perspective plan covering the period 1983-84 to 1992-93. Hardly had this plan been finalised when the working groups for preparing approach paper for development and exploration of minerals during Seventh Plan period were set up by the Planning Commission. The MECL's Plan was also incorporated in this for 1985-90. A more definite basis for long term forecasting upto 2000 A.D. is expected to be available only after finalisation of the 7th Plan document. The Committee view with concern the frequent changes effected by Government in the formulation of long term plans for mineral exploration. They desire that firm estimates of the demand of various minerals and the resultant requirement of exploration inputs of a long term basis, at least upto the year 2000 A.D. should be made soon and made available to MECL so as to provide a more definite basis for its future activities and planning therefor.

#### **Reply of the Government**

Perspective plan to provide MECL a more definite basis for its future and planning activities for the period 1985-2000 A.D is under preparation.

[Ministry of Steel and Mines (Department of Mines) O.M. No. 31/4/85-  
M.I. Dated the 22nd October, 1986]

#### **Comments of the Committee**

(Please see paragraph 10 of Chapter I of the Report)

#### **Recommendation Serial No. 18 (Paragraph No. 2.88)**

The Committee note that the manpower employed in MECL increased from 2878 in 1980-81 to 3758 in 1983-84. Besides, manpower employed per drill in operation ranged from 20 to 28 during 1977-78 to 1983-84 and per shift it was 25.13, 21.11, 26.48 and 26.03, respectively during the years 1980-81 to 1983-84. Against this, as per the norms as CMPDI, one drill on an average was provided with 29 to 30 men for two shifts operations including the jobs connected with geology, watch and ward, repairs and maintenance, accounts, store, administrative works, road building etc. in the camp. Thus, employment of man power per shift in MECL even excluding manpower employed on jobs connected with geology, repairs and maintenance etc. was on the

higher side compared to norms prescribed by CMPDI. The employment of excess-manpower by MECL was also pointed out by the BPE in 1979 and in spite of this the MECL, did not fix any norms for deployment of manpower.

#### Reply of the Government

MECL have been suitably instructed in the matter and further action is being watched.

[Ministry of Steel and Mines (Department of Mines) O.M. No. 31.4.85-M.I. Dated the 26th December, 1986].

#### Comments of the Committee

(Please see paragraph 14 of Chapter I of the Report).

#### Recommendation Serial No. 19 (Paragraph No. 2.89)

The Committee regret to note that although the Board of Directors of MECL had directed the Company as early as in 1974 to carry out work study and determine the manpower for each type of work and evolve an organisational chart by appointing consultants after inviting offers from National Productivity Council and other agencies, no agency was appointed for this purpose. Not only that, this fact was also not specifically brought to the notice of the Board. It was only in early 1982 that the feasibility of engaging NPC or some other consultant for the job was explored but it was then decided to have the job done internally. A Sub-Committee was finally appointed by the Board in April, 1982 for finalising the manpower requirements arising out of reorganisation of management structure recommended by a Committee of departmental heads. The Committee feel that even this Sub-Committee does not appear to have studied in depth this matter as, after indicating some broad guidelines, it authorised the Managing Director himself to create posts as considered necessary as a result of reorganisation. Accordingly, 144 posts were created by the Managing Director to which even the FA & CAO of the Company have expressed reservations and observed that though 60 to 70 per cent of the expenditure of the company was on manpower yet demands for men were being raised. He felt that some sort of self control should be introduced by fixing percentage of manpower cost linked to breakeven point. The Committee are not happy about casual manner in which the important issue of determining the manpower of the company has been handled by the company.

### Reply of the Government

MECL has been directed to enlist the services of NPC for reorganisation and deployment of its manpower.

[Ministry of Steel and Mines (Department of Mines) O.M. No. 31.4.85-M.I. Dated the 22nd October, 1980].

### Comments of the Committee

(Please see Paragraph 14 of Chapter I of the Report)

### Recommendation Serial No. 20 (Paragraph No. 2.90)

The Committee feel that the administrative Ministry has also not exerted any influence over the undertaking for entrusting the job of laying down norms for deployment of manpower in various projects of Mineral Exploration Corporation Limited (MECL) in a scientific manner to an expert body like the National Productivity Council rather than allowing the Managing Director to create posts as he liked. The Committee are also not sure whether the guidelines laid by the Sub-Committee of MECL covered all aspects and were on scientific lines and whether the reorganisation effected by the Managing Director was in the best interests of the Company. They, therefore, urge the Ministry that work of reorganisation and deployment of manpower may be entrusted to an expert body without any delay after consultation with labour of MECL.

### Reply of the Government

MECL have been suitably instructed in the matter.

[Ministry of Steel and Mines (Department of Mines) O.M. No. 31.4.85-M.I. Dated the 22nd October, 1986].

### Comments of the Committee

(Please see Paragraph 14 of Chapter I of the Report)

### Recommendation Serial No. 27 (Paragraph No. 2.93)

The Committee are glad to note that MECL have introduced an incentive payment scheme on an experimental basis with effect from 1st April, 1982 to increase productivity per drill. While prescribing base line output for the scheme, the company took into consideration the average productivity achieved in previous three years correlated to any substantial change in drilling condi-

tions. What the Committee are unable to appreciate is that the base line output was revised further to the lower side without any valid justification. The overall increase in production and productivity and resulting savings as a result of introduction of the scheme have not been assessed by the company. In the absence of any such assessment the efficacy of the incentive scheme cannot be judged. Attention in this connection is invited to the 97th Report of the Committee on Public Undertakings presented to Parliament on 30 April, 1984 wherein the Committee have observed that in many of the undertakings which already have productivity linked incentive schemes, the incentive appears to have degenerated into additional wage, having been linked to production even below the threshold level. In order to ensure that this does not happen in MECL, the Committee recommended that a proper assessment of the effect of the incentive scheme on productivity should be made and if found necessary, it should be made more scientific and result-oriented.

#### **Reply of the Government**

The scheme introduced in 1982 was an experimental one. A more scientific scheme linked with physical performance and cost the unit level and achievement of pre-determined benchmarks of performance at the area and headquarters level is being formulated by the Company.

[Ministry of Steel and Mines (Department of Mines) O.M. No. 31.4.85-M.I. Dated the 22nd October, 1986].

#### **Recommendation Serial No. 24 (Paragraph No. 3.44)**

The Committee regret to note that the profitability of MECL showed a sharp decline after 1978-79, the Company earned a profit of Rs. 184.79 lakhs which dropped to Rs. 5.12 lakhs the very next year. From 1980-81 to 1982-83, the Company incurred a loss of Rs. 237.79 lakhs, Rs. 245.02 lakhs and Rs. 396.73 lakhs, respectively. But in 1983-84 the MECL made a profit of Rs. 590.59 lakhs mainly on account of payments received from CMPDI as a result of revision of rates for contractual works from 1980-81 onwards.

#### **Recommendation Serial No. 25 (Paragraph No. 3.45—3.46)**

The Committee are informed that one of the reasons for losses during 1980-81 to 1982-83 was the loss on contractual drilling done on behalf of CMPDI, the main client of MECL, which varied between 1.32 per cent to 35.42 per cent during 1977-78 to 1983-84 (except during 1978-79 when there was a marginal profit of 1.22 per cent). The loss suffered was stated to be due to the unremunerative rates paid by CMPDI. Payments in 1982-83 were made at the rates fixed for 1979-80 which were unremunerative even for 1979-80.

The payment rates for coal drillings were originally settled by MECL with BCCL in 1973 and the Coal Mines Authority Ltd. in 1975 (Now Coal India Ltd. on whose behalf CMPDI looks after the coal exploration work). But in 1978-79, at the instance of CMPDI, the question of fixation of rates was referred to BPE who recommended a rate of Rs. 377 per metre drilling in respect of CIL areas and Rs. 349 per metre in respect of BCCL areas. As the rates recommended were in the nature of award they were accepted by MECL despite their being unremunerative.

In February, 1983, the Cost Accounts Branch of the Ministry of Finance, to whom the Matter was referred for fixation of rates for subsequent years recommended rates of Rs. 492, Rs. 533 and Rs. 608 for the year 1980-81, 1981-82 and 1982-83, respectively, both for CIL and BCCL areas. These rates included *inter alia*, 15 per cent return on capital employed. Even though the report of Cost Accounts Branch was accepted unanimously by the Secretary (Expenditure), Secretary (Coal), Secretary (Mines) and Director General (BPE) the rate of return on capital employed was later reduced to 10 per cent by the Department of coal as CMPDI did not agree to 15 per cent return. Thus against the rates of Rs. 492, Rs. 533 and Rs. 608 recommended by the Cost Accounts Branch for 1980-81, 1981-82 and 1982-83, respectively, both for CIL and BCCL areas, the rates actually agreed to be paid were Rs. 468, Rs. 508 and Rs. 579 respectively for these years. Obviously, the lower rates contributed to a great extent to the company's losses as the MECL is stated to have received payments on the basis of 10 per cent return on capital for the years 1980-81 to 1982-83. With a view to enabling the MECL to be run on commercial lines, the Committee recommend that the matter with regard to the increase in the rate of return on the capital should be taken up by the Department of Mines at the highest level so as to secure for MECL a remunerative rate of return. The Committee desire that a remunerative rate of return on capital employed should be fixed once for all and the Department of Coal should be in a position to prevail upon CMPDI to agree to that rate of return.

#### Reply of the Government

In pursuance of COPU's recommendations, the Department of Mines have requested the Department of Coal to prevail upon CMPDI to allow a remunerative rate of return to MECL. The matter is under discussions between CMPDI & MECL. The final outcome is awaited soon.

[Ministry of Steel and Mines (Department of Mines) O.M. No. 31.4.85-M.I. Dated the 26th December, 1986].

**Recommendation Serial No. 34 (Paragraph No. 3.55)**

The Committee are concerned over the heavy outstandings due to MECL. The major defaulters are reported to be public undertakings and Central/State Governments. The total outstanding dues to the Company, as on 31.3.1984 amounted to Rs. 601.39 lakhs\* out of which Rs. 74.06 lakhs was outstanding for more than three years of which CMPDI alone accounted for Rs. 39 lakhs. The very fact that MECL had to seek the intervention of the Ministry for getting a major portion of the outstandings cleared indicates that the debt collection machinery of the Company is not adequate and effective and needs to be streamlined and strengthened. The MECL should also consider the feasibility of inserting a bank guarantee clause in agreement with the parties for ensuring payment of whole amount of the bill within a prescribed time.

**Reply of the Government**

As a result of efforts made by the Department of Mines and the MECL, the outstanding dues have come down considerably. As regards the feasibility of insertion of bank guarantee clause in the agreements for ensuring payments within a prescribed time limit, MECL has said that as most of its clients are public sector undertakings, it cannot on its own, enforce such a clause. It has therefore requested the Department to issue a directive as from Government, in this regard. This is under consideration in consultation with the Department of Public Enterprises.

[Ministry of Steel and Mines, (Department of Mines) O.M. No. 31(4)/85-  
M.I. dated 26.12.1986].

NEW DELHI ;

March 24, 1987  
Chairman, 1908(s)

K. RAMAMURTHY

*Chairman,*  
*Committee on Public Undertakings*

---

\*At the time of factual verification, Audit have pointed out that this figure does not include Rs. 126.85 lakhs due from Government of India. Thus the total outstanding dues to MECL as on 31-3-1984 were Rs. 728.24 lakhs.

## APPENDIX I

*Minutes of the 71st sitting of the Committee on Public Undertakings held on 13 March, 1987.*

The Committee sat from 10.30 hrs. to 11.00 hrs.

### PRESENT

Shri K Ramamurthy —*Chairman*

### MEMBERS

2. Chowdhry Akhtar Hasan
3. Shrimati Sheila Kaul
4. Shri Haroobhai Mehta
5. Shri Braja Mohan Mohanty
6. Shri Ram Bhagat Paswan
7. Shri Chiranji Lal Sharma
8. Shri Jagesh Desai
9. Shri Krishha Nand Joshi
10. Shri Santosh Kumar Sahu
11. Shri Jagdambi Prasad Yadav

### SECRETARIAT

1. Shri N.N. Mehra —*Joint Secretary*
2. Shri S.S. Chawla —*Chief Financial Committee Officer.*
3. Shri G.S. Bhasin —*Senior Financial Committee Officer.*
4. Shri Rup Chand —*Senior Financial Committee Officer*

### OFFICE OF THE COMPTROLLER & AUDITOR GENERAL OF INDIA

Shri D.N. Anand —*Secretary, Audit Board*

2. The committee first considered and adopted the following action Taken Reports, as approved by the action Taken Sub-Committee :—  
\* \* \* \* \*  
\* \* \* \* \*  
\* \* \* \* \*
4. The Committee authorised the Chairman to finalise the draft Reports on the basis of factual verification by the Ministries & Undertakings concerned and Audit and present the same to Parliament.

*The Committee then adjourned.*

## APPENDIX II

(Vide Reply to Recommendation at Sl. No 6, Page 7)

*Extracts from the minutes of the 18 Co-ordination Committee meeting held at New Delhi on 7.5.85.*

The following decisions were taken :

Periodic meetings be held between MECL and GSI for exchange of exploratory notes and techno-economic aspects of the projects under exploration of GSI, and to identify such projects which should be explored in detail.

(Action : MECL & GSI)



## APPENDIX III

(Vide Reply to Recommendation at Sl. No. 6, Page 7)

Government of India  
Ministry of Steel and Mines  
Department of Pipes

No. 21/38/85-IF

New Delhi, the 14th May, 1985

### OFFICE MEMORANDUM

Subject :—*Investigation of tenders for consultancy*

The undersigned is directed to say that whenever investigation of pre-qualification bids or tenders for consultancy services, technical collaborations, etc. are issued it should be ensured by the undertaking/organisation which invites the bids that adequate provisions are made for the association/utilisation of indigenous expertise available in the country. In the bids/tenders specific mention should be made that the undertaking/organisation reserves the right to associate any agencies during the execution of the consultancy/technical collaboration.

2. Receipt of this communication may be acknowledged.

Sd/-

(R.S.V. Subramanian)  
Deputy Financial Adviser

To

1. Shri M.V.N.R. Seshagiri Rao, Chairman-cum-Managing Director, Hindustan Copper Ltd., Industry House, 10 Camac Street Calcutta.
2. Shri P.D. Gupta, Chairman-cum-Managing Director, Bharat Gold Mines, P O. Oorgaum, Karnataka State.
3. Shri Hemant Singh, Chairman-cum-Managing Director, Bharat Aluminium Company Ltd., Punj House, 18, Nehru Place, New Delhi.

4. Shri K.V.B. Pantulu, Chairman-cum-Managing Director, Hindustan National Aluminium Co. Ltd. 'IPICOL House', Janpath, Bhubaneswar-751007.
5. Shri R.P. Kapoor, Chairman-cum-Managing Director, Hindustan Zinc Ltd., 6, New Fatehpura, Udaipur (Rajasthan).
6. Shri Mahip Singh, Chairman-cum-Managing Director, Mineral Exploration Corpn. Ltd. Seminary Hills, Nagpur.
7. Shri S.K. Mukherjee, Director General, Geological Survey of India, 27, J.L. Nehru Road, Calcutta-700016.
8. Shri D.N. Bhargava, Controller General, Indian Bureau of Mines, New Sectt. Building, Nagur-440001.
9. All Officers and Sections in the Department.  
Copy forwarded for information To :  
BPF (Production Division)

## APPENDIX IV

(Vide Reply to Recommendation at Sl. No. 6, Page 7)

Copy of letter No. 37/15/85-M.I. dated New Delhi, the 12th May, 1986,  
of the Department of Mines.

### 20TH COORDINATION COMMITTEE MEETING GOVERNMENT OF INDIA MINISTRY OF STEEL & MINES DEPARTMENT OF MINES

No. 37/15 (2)/85

New Delhi, the 12th May, 1986

#### MEMORANDUM

**Subject :—***Standing Ore Economic Committee to study resources established and being explored by Geological Survey of India.*

In supersession of this Department's Memorandum of even number dated 10-12-85, it has been decided to reconstitute the Standing Ore Economic Committee with the extended terms of reference as under :

#### *Revised Composition of Standing Ore Economic Committee*

1. Shri M.L. Singhal, Indian Bureau of Mines.
2. Shri S. Sen, Hindustan Copper Limited.
3. Shri S.N. Bhatnagar, Hindustan Zinc Limited.
4. Shri B.K. Dhruvarao, Bharat Gold Mines Limited.
5. Shri N. Bhaumick, permanent representatives of Geological Survey of India.
6. Deputy Secretary, Department of Mines, dealing with Mineral Exploration Corporation Limited.
7. Shri B B. Nadgir, Chief of planning, Mineral Exploration Corporation Limited—Convenor.

#### *Revised Terms of Reference :*

1. To study the resources established and being explored by Geological Survey of India (GSI), deposit-wise and to identify projects which could be taken up for detailed exploration by Mineral Exploration Corporation Limited (MECL) on promotional basis after going into their economic viability.
2. To review the promotional projects being executed by the MECL for any mid-term modification that may be necessary.

3. To review the comments made by the public Sector Enterprises's, the GSI, IBM etc. on the reports of the MECL submitted after detailed exploration of projects.
4. This would be a standing procedure for every project. The concerned officers of the GSI working on the project will also assist the Committee.

The GSI will prepare a list of projects taken up by them after the formation of MECL and submit to the Committee for consideration.

The prospects to be considered for detailed exploration shall not be restricted only to the list prepared by the GSI, but shall include prospects identified by other exploration agencies, including PSEs, and in particular those identified in the various reports of the Sub-Groups of the Working Group on Non-Ferrous Metals in the 7th plan set up by the planning Commission.

MECL shall review data and reports on the identified prospects and prepare a draft exploration strategy/approach note for discussion with and circulation to the Members of the SOEC for their comments which should include cost benefit analysis, exploration of operational strategies and other data and suggestions to enable MECL to prepare final exploration proposals for approval of the SOEC which will then be submitted to the Coordination Committee for sanction.

The projects identified by the Committee can be taken up by MECL for exploration even when no Public Sector Enterprise shows interest in their exploitation; the purpose being to have available a shelf of projects for which detailed data is available so that an investment decision can be taken immediately, if required.

Sd/-

(J.B. Munirajulu)

Under Secretary to the Govt. of India

Copy to All Members of SOEC.

Copy to PS to Secretary.

Sd/-

(J.B. Munirajulu)

Under Secretary to the Govt. of India

APPENDIX V

(Vide Reply to Recommendation at Sl. No. 6, Page 7)

Government of India  
Ministry of Steel and Mines  
Department of Mines

No. 37/15/85-M.I.

New Delhi, the 22nd July, 1985

To

All Heads of Public Sector Undertakings.

Subject :— *Inter-flow of data among all organisations of Department of Mines.*

Sir,

I am directed to say that in the Co-ordination Committee Meeting of Mineral Exploration Corpn. Ltd., held on 7.5.85 under the Chairmanship of Shri B.K. Rao, Secretary (Mines), it has been decided that data on the mineral exploration work by the public sector undertakings under this Department of Mines may be regularly made available to MECL. Instances have come to the notice of this Department that in some cases, the companies have not furnished exploration data to Mineral Exploration Corpn. Ltd., In future, GSI, IBM and all the undertakings under this Department may kindly circulate exploration data to MECL.

MECL is also requested to organise internally a proper data base system as a follow up of receipt of data reports etc. from GSI and other organisations.

Yours faithfully,  
Sd/-  
(A.P. Tewari)  
Director

(Vide Reply to Recommendation

*DRILLS DEPLOYMENT PLAN***NAGPUR AREA**

Sl. No.	Name of Project	Nature	Mineral	Quantum of work	Depth Range	Productivity	Drill Units	4/84	5/84
1	2	3	4	5	6	7	8	9	10
1.	Malanjkhanda	P	Copper	8650	400-700	120	MEC 180, 181, 182, 59, 69, 75	740	660
2.	Baghcaves	C	Geotech	4800	15-25	145	UG-1, UG-2, MEC-140	450	400
3.	Narmadasagar	C	Geotech	2000	50-150	40	17, 98,99, 102, 110, 166, 167	315	285
4.	Katkona	C	Coal	7200	300-400	150	23, 24, 123, 154	600	540

DIX VI

at Serial No. 14, page 14)

For the Year 1984-85

6/84	7/84	8/84	9/84	10/84	11/84	12/84	1/85	2/85	3/85	REMARKS
11	12	13	14	15	16	17	18	19	20	21
600	600	600	660	740	740	740	860	850	860	WD- 4/84 : 174, 148
360	360	360	400	450	480	500	500	500	40	WD- 3/85 : 140, UG-1, UG-2
215	215	215	160	180	190	150	75	—	—	WD- 4/84 : 3, 5 11, 103 WD- 8/84 : 17 WD- 9/84 : 98, 99, WD- 1/85 : 102, 110 WD- 2/85 : 166, 167
460	460	460	540	600	660	720	720	720	720	

1	2	3	4	5	6	7	8	9	10
5.	Mohpani	C	Coal	1500	300-350	145	85, 132, 136	435	350
6.	Mandla	C	Coal	14400	250-400	141	32, 95, 142, 143, 144, 151, 159, 160	1100	1000
7.	Kanhan	C	Coal	9480	300-600	120	165, 40, 133, 145, 44, 46, 122, 48 139	1080	750
8.	Sialghogri	C	Coal	13500	250-400	125	28, 42, 45, 158, 96, 49, 156, U-147, U-150, U-151	1250	1000
9.	Wardha	C	Coal	11300	400-700	150	21, 30, 38, 174	600	675
<b>Total</b>				<b>72830</b>				<b>6570</b>	<b>5660</b>



11	12	13	14	15	16	17	18	19	20	21
310	310	95	-	-	-	-	-	-	-	WD- 5/84 : 85, 132 136 Add- 5/84 : 91, 94 WD- 8/84 : 91, 94
900	900	900	1000	1235	1350	1500	1500	1500	1515	Add- 10/84 : 94
670	670	670	750	840	925	1000	710	700	715	WD- 5/84 : 40, 44 WD- 1/85 : 46, 48
900	900	900	1000	1125	1250	1250	1250	1300	1375	WD- 5/84 : U-147, U-150 U-151 Add- 5/84 : 40, 44
720	720	720	810	1100	1200	1450	1450	900	955	Add- 10-84 : 3 VH Add- 5/84 : 171 Add : 6/84 : 146 WD- 1/85 : 3 H-21 30, 38
5135	5135	4920	5320	6270	6795	7310	7065	6470	6180	

*Drills Deployment Plan*

**RANCHI AREA**

Sl. No.	Name of Project	Nature	Mineral	Quantum of work	Depth Range	Productivity	Drill Units	4/84	5/84
1	2	3	4	5	6	7	8	9	10
<b>MEC</b>									
1.	Orissa Groundwater	C	G.W.	15000	50-150	160	14, 16, 81, 82, 83, 97, 100, 104	1400	1300
2.	Siddeshwar	P	Copper	2700	300-400	112	26, 36, 39, 27	330	300
3.	Almora	C	Tungsten	1500	50-150	63	12, 113	120	120
4.	Karanpura	C	Coal	7200	300-400	150	79, 41, 149, 66	600	540

*For the Year 1984-85*

---

6/84 7/84 8/84 9/84 10/84 11/84 12/84 1/85 2/85 3/85 REMARKS

---

11 12 13 14 15 16 17 18 19 20 21

---

**MEC**

1150 1150 1150 1450 1400 1600 1150 1150 1150 1150 WD-12:84  
MEC : 14 : 16

250 250 250 300 200 250 250 250 250 70 WD-  
4/84 : 27  
WD-  
1/85 : 29  
WD-  
2/85 : 39  
WD-  
2/85 : 36

120 100 100 100 100 140 150 150 150 150 WD-  
4/84 : 12  
Add-  
4/84 : 105

480 480 480 540 610 610 610 750 750 750 Add-  
4/84 : 27  
WD-  
1/84 : 79

1	2	3	4	5	6	7	8	9	10
5.	Talcher	C	Coal	10800	300-450	150	121, 137, 138, 173, 184, 185	900	800
6.	Sudamdih (Tasra)	C	Coal	7775	600-800 150-350	125	56, 58, 60, 67, 125, 147	750	675
7.	Angarpatra	C	Coal	8510	400-800	120	126, 72, 62, 64, 57	600	540
8.	Chanch/ Victoria	C	Coal	9345	340-900	126	73, 127, 129, 51, 80, 128	780	700
9.	Kundevkocha	P	Copper	400	50-100				
<b>TOTAL</b>				<b>63230</b>				<b>5480</b>	<b>4975</b>

---

11	12	13	14	15	16	17	18	19	20	21
----	----	----	----	----	----	----	----	----	----	----

---

720	720	720	800	900	1000	1000	1080	1080	1080
-----	-----	-----	-----	-----	------	------	------	------	------

600	600	600	675	750	825	900	900	500	—	WD-2/85
-----	-----	-----	-----	-----	-----	-----	-----	-----	---	---------

575	575	575	650	720	850	860	855	855	855	Add- 6/84 : 61
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-------------------

625	625	625	700	780	900	900	900	900	910
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

100	100	100	100	Add- 12/84 : 15, 20
-----	-----	-----	-----	------------------------

---

4520	4500	4500	5015	5460	6175	5920	6135	5555	4995
------	------	------	------	------	------	------	------	------	------

---

**CALCUTTA AREA :**

Sl. No.	Name of Project/Block	Nature	Mineral	Quantum of work	Depth Range	Productivity	Drill Units	4/84	5/84
1	2	3	4	5	6	7	8	9	10
							<b>MEC</b>		
1.	Moira Lachipur	C	Coal	10750	300-600	112	31, 35, 74, 76, 176, 119, 179, 130, 68, 43, 161, 174	900	800
2.	Madanpur/R.E.	C	Coal	11040	400-700	115	52, 54, 178	920	825
3.	Jollybirds	C	Coal	5750	300-400	125	50, 33, 168, 131	500	450
4.	Gourandih	C	Coal	6240	300-400	130	26, 120, 135, 63	520	465
5.	Namchik	C	Coal	2045	200-400	60	92, 153, 34	120	100
6.	Sijju	C	Limestone	2327	100-300	135	88, 89, 93, 101	540	490

*For the Year 1984-85*

---

6/84	7/84	8/84	9/84	10/84	11/84	12/84	1/85	2/85	3/85	REMARKS
11	12	13	14	15	16	17	18	19	20	21
										<b>MEC</b>
715	715	715	800	900	900	1075	1075	1075	1080	
735	735	735	825	920	920	1100	1100	1100	1125	
400	400	400	450	500	500	530	530	530	560	WD- 3/85 : 33
415	415	415	465	520	520	620	620	620	645	
145	145	145	160	180	180	215	215	215	225	Add- 6/84 : 34
430	430	437								

---

1	2	3	4	5	6	7	8	9	10
7.	Delhi-Jeypor	C	Coal	503+ 1350	150-400	75	176, 178	150	133
8.	Langarin	C	Coal	1350	150-400	75			
9.	Borjan	C	Coal	400	150-400	60	152, 157	120	100
10.	Dihang (BFCC)	C	G. Tech.	2610	60-150	53		—	45
11.	Gorubathan	P	Lead-Zinc	500	60-200	50	106, 118	100	90
				44865					3870 3498



---

11 12 13 14 15 16 17 18 19 20 21

---

120 120 120 140 150 160 180 190 190 200

120 140 160 160 190 190 195 195 Add-  
8/84 : 152, 157

100 80

120 120 120 135 300 330 360 360 360 360 Add-  
5/84 : 18  
Add-  
6/84 : 109, 19  
Add-  
10/84 : 108,  
105, 118

80 80 80 70

WD-  
5/84-70/EW  
Add-  
6/84 : 118

---

3260 3240 3287 3185 3630 3670 4270 4280 4285 4390

---

## HYDERABAD AREA

Sl. No.	Name of Project	Nature	Mineral	Quantum of work	Depth Range	Productivity	Drill Unit	4/84	5/84
1	2	3	4	5	6	7	8	9	10
<b>MEC</b>									
1.	K.G.F.	P	Gold	14650	300-600	112	1, 25, 172, 53, 65, 77, 169, 170, 114, 117	1000	900
2.	A.P. Diamond	P	Diamond	1500	25-60	200	188, 189, 190	200	600
3.	Ramgiri Extn.	P	Gold	2700	300-450	110	85, 132, 136	—	—
4.	Budini	P	Gold	3500	300-400	100	—	—	—
5.	Singareni	C	Gold	6685	400-700	160	22, 70, 90, 191	640	575
<b>TOTAL</b>				<b>39035</b>				<b>1840</b>	<b>2075</b>

For the Year 1984-85

6/84	7/84	8/84	9/84	10/84	11/84	12/84	1/85	2/85	3/85	REMARKS
11	12	13	14	15	16	17	18	19	20	21
										MEC
800	800	800	1210	1210	1600	1600	1600	1560	1570	Add- 5/84 : 148 WD- 4/84 : 1, 114 WD- 9/84 : 119, 117 Add- 9/84 : 2 VH
600	100	—	—	—	—	—	—	—	—	Add- 5/84 : 189, 190
—	—	175	300	300	330	400	400	400	395	Add- 8/84 : 2 H Add- 9/84 : 1 H
—	240	240	240	400	400	500	500	490	490	Add- 7/84 : 3 H Add- 10/84 : 1 H
750	750	1280	1450	1800	1880	1880	1880	1880	1920	Add- 6/84 : 55, 79 Add. 8/84 : 4 VH
2150	1890	2495	3200	3710	4210	4380	4380	4330	4375	

1	2	3	4	5	6	7	8	9	10
<b>JAIPUR AREA</b>									
1.	Kapoordin	C	Lignite	21000	150-200	500	162, 163, 1500 164	1350	
2.	Chandmari	C	Copper	6000	300-450	120	47, 134, 175, 183	500	450
3.	Degana	C	Tungesten	2600	200-400	100	87, 116	200	180
4.	Surhari	P	Copper	1800	300-400	100	86, 85	—	—
5.	Bahwas	P	Copper	2400	300-400	100	91, 155	—	—
<b>TOTAL</b>				33800				2200	1980

11	12	13	14	15	16	17	18	19	20	21
1200	1200	1200	1350	1800	2000	2350	2350	2350	2350	Add- 10/84 : 1 Drill
400	400	400	450	450	600	600	600	550	600	—
160	160	160	180	200	270	270	270	270	280	—
—	—	—	—	180	300	330	330	330	330	Add- 10/84 : 86, 85 Add- 11/84 : 1H
—	—	300	300	300	300	300	300	300	300	Add- 8/84 ; 3 H
1760	1760	2060	2280	2930	3470	3850	3850	3800	3860	

APPEN

(Vide Reply to Recommendation

Mineral Exploration

(A Government of

DRIL

Area-wise, mineral-wise, shift-wise and month-wise productivity norms per  
held on

1985-86

---

**I. NAGPUR AREA :**

- (a) Coal Projects : (3 metre per shift) 150/225 meters per  
drill per month on 2/3 shift operation.
- (b) Non-Coal 100 meters per drill per month on 2-  
shift operation.
- 150 meters per drill per month on  
3-shift operation. (2 metres per shift).

**II. RANCHI AREA :**

- (i) Talchir Coal Fields 100 metres per drill month (2 metres  
per shift).
- (ii) Other Coal Fields. 150/225 per drill per month on 2/3  
shift on (3 metres per shift).
- (iii) Ground Water 160 metres per drill per month.  
Operations.
- (iv) Dharmabad operation 525 metres per drill per month on  
(3 shift operation).
- (v) Almora 70 metres per drill per month 2-shifts.
- (vi) Kunderkocha 75 metres per drill per month 2-shifts.
-

**DIX VII .**

at S. No. 41 Page 14)

*Corporation Limited*

*India Enterprise)*

**LING**

**drill month, as per joint decision taken in Apex Council Meeting 4th August '85.**

---

**III. CALCUTTA AREA :**

**(i) North East Blocks :**

- (a) Namchik : 60 metres per drill per month on a 2-shift operation.
- (b) Lido : 70 metres per drill per month on a 2-shift operation.
- (c) Langrin : { 75 metres per
- (d) Dalli- Jaipur : { drill per month on a 2 shift operation.

- (ii) All other Blocks : 140 metres per drill per month on a 2-shift operation.

(2.85 metres per shift)

**IV. HYDRABAD AREA**

- (a) Neyveli : 450 metres per drill per month on a 3-shift (Dry drilling) operations.
- (b) Coal : (3 meters per shift) 225 metres per drill per month on a 3-shift operation or 150 metres per drill per month on a 2-shift operations.
- (c) Gold Operation : 120 metres per drill per month on a 2-shift operation.

**V. JAIPUR AREA**

- (a) Kapurdi : { 600meters
- (b) Bikaner : { per drill
- (Wet drilling) { per month on a 3 shift operation.
- (c) Tosham : 160 meters per drill per month on a 3 shift operation.
- (d) Chamdmari : 140 metres per month on 2 shift operation.

*Summary Details of areaw ise targets & monthwise production,  
Productivity*

Area	1st Quarter Actual			Actl. 2nd Quarter		
	April	May	June	July	Aug.	Sept.
1. Nagpur	6328 (127/ 50)	5175 (101/ 51)	5261 (103/ 51)	4756 (97/ 49)	6421 (128/ 50)	7545 (154/ 49)
2. Ranchi	3577 (89/ 40)	4674 (114/ 41)	6203 (151/ 41)	4426 (111/ 40)	6354 (151/ 42)	6115 (157/ 39)
3. Calcutta	982 (41/ 24)	1708 (66/ 26)	2140 (97/ 22)	2079 (80/ 26)	3340 (104/ 32)	4154 (130/ 32)
4. Hyderabad	2300 (96/ 24)	2336 (111/ 21)	1562 (98/ 16)	1666 (93/ 18)	3150 (137/ 23)	5060 (181/ 28)
5. Jaipur	2714 (209/ 13)	3456 (266/ 13)	4144 (296/ 14)	3340 (223/ 15)	4883 (271/ 18)	5591 (294/ 19)
<b>Grand Total</b>	<b>15901</b> (105/ 151)	<b>17349</b> (114/ 152)	<b>19310</b> (134/ 144)	<b>16267</b> (110/ 148)	<b>24148</b> (147/ 165)	<b>28465</b> (170/ 167)



*Drill Deployment and Productivity Plan in Persuance Of Apex Council,  
Norms-1985-86*

*Figures in Braekets are  
Productivity No. of Rig month*

*All other figures in Meters.*

3rd Quarter			4th Quarter			Grand Total
Oct.	Nov.	Dec.	Jan.	Feb.	March	
8015	8145	8126	8280	7983	7750	83790
(163/ 49)	(166/ 49)	(169/ 48)	(188/ 44)	(190/ 39)	(199/ 39)	(147/ 570)
6500	6768	7160	8010	8765	8645	77100
(167/ 39)	(174/ 39)	(188/ 38)	(205/ 39)	(225/ 39)	(240/ 36)	(163/ 473)
4305	4475	4645	4790	4870	4923	42400
(135/ 32)	(140/ 32)	(145/ 32)	(150/ 32)	(152/ 32)	154/ 32)	(120/ 354)
6400	6330	6900	7680	8090	8500	60000
(194/ 32)	(198/ 32)	(215/ 32)	(233/ 33)	(245/ 33)	(258/ 33)	(184/ 326)
6774	6744	6841	7754	6054	6194	64319
(308/ 22)	(308/ 22)	(311/ 22)	(346/ 22)	(404/ 15)	(413/ 15)	(306/ 210)
31994	32492	33672	36314	35762	36012	327609
(183/ 175)	(187/ 174)	(196/ 172)	(214/ 170)	(222/ 161)	(232/ 155)	(169/ 1934)

*Project—wise, Month—wise Drilling Targets—*

Project	Annual Targets (prod.)	Actual Ist Quarter			Actual 2nd Quarter		
		April	May	June	July	Aug.	Sept.
1.	2.	3.	4.	5.	6.	7.	8.
<b>COAL CONTRACTUAL</b>							
1. Mandla	15900 (194)	2122 (218/80)	1560 (185/8)	1278 (160/8)	1140 (143/8)	@1200 (200/6)	1200 (200/6)
2. Sialghogri	10000 (154)	1277 (160/8)	1034 (115/9)	911 (101/9)	565 (94/6)	780 (130/6)	@1020 (204/5)
3. Wardha Vellay	16200 (154)	633 (70/9)	754 (94/8)	907 (101/9)	515 (57/9)	1170 (130/9)	@1575 (175/9)
4. Katkona	7200 (150)	604 (151/4)	478 (120/4)	645 (161/4)	870 (218/4)	560 (140/4)	560 (140/4)
5. Kanhan (Damua)	14900 (140)	603 (75/8)	437 (55/8)	616 (68/9)	703 (78/9)	900 (100/9)	@1260 (140/9)
6. Nauraozabad (Sohagpur)	7500 (175)	—	—	—	151 (75/2)	560 (140/4)	700 (110/5)
<b>TOTAL COAL :</b>	71700 (159)	5239 (134/39)	4263 (115/37)	4357 (112/39)	3944 (104/38)	5170 (136/38)	6315 (166/38)
<b>COAL CONT.</b>	1870	308	188	216	—	250	250
1. Malanjkhanda (Inf.)(234)		(308/1)	(188/1)	(216/1)	—	(250/1)	(250/1)
<b>NON COAL CONT.</b>	520	83	183	176	219	41	—
2. Omkareswar	(47)	—	(28/2)	(59/3)	(55/4)	(41/1)	—
<b>PROMOTIONAL</b>							
1. Malanjkhanda (Copper) (p)	6500 (95)	300 (50/6)	316 (53/6)	261 (52/5)	423 (85/5)	600 (100/6)	600 (100/6)
2. Hirapur (p) Phosphorite	3200 (100)	481 (120/4)	325 (81/4)	251 (84/3)	170 (85/2)	360 (90/4)	380 (95/4)
<b>ND TOTAL</b>	83790 (147)	6328 (127/50)	5175 (101/51)	5261 (103/51)	4756 (97/49)	6421 (128/50)	7545 (154/49)

*Nagpur Area 1985-86*

- i. Figures in Brackets are  
(Productivity/No. of Rig months  
ii. All other figures in mts.

3rd Quarter			4th Quarter		
Oct.	Nov.	Dec.	Jan.	Feb.	March
9.	10.	11.	12.	13.	14.
1260	1260	1260	1200	1200	2220
(210/6)	(210/6)	(210/6)	(200/6)	(200/6)	(203/6)
1020	1020	1000	1050	303	—
(204/5)	(204/5)	(204/5)	(210/5)	(151/2)	—
1755	1755	1755	1800	1800	1780
(195/9)	(195/9)	(195/9)	(200/9)	(200/9)	(227/8)
560	560	560	600	600	600
(140/4)	(140/4)	(140/4)	(150/4)	(150/4)	(150/4)
1350	1440	1485	1890	2070	2146
(150/9)	(160/9)	(165/9)	(210/9)	(200/9)	(288/9)
750	775	800	@1050	1320	1394
(150/5)	(155/5)	(160/5)	(210/5)	(220/6)	(232/5)
6695	6810	6880	7590	7293	7140
(176/38)	(179/38)	(181/38)	(200/38)	(203/36)	(216/33)
250	250	158	—	—	—
(250/1)	(250/1)	(158/1)	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—
660	660	690	690	690	610
(110/6)	(110/6)	(115/6)	(115/6)	(115/6)	(102/6)
410	425	398	—	—	—
(103/4)	(106/4)	(133/3)	—	—	—
8015	8145	8126	8280	7983	7750
(164/49)	(166/49)	(169/48)	(188/44)	(190/42)	(199/39)

@ Commencement of third shift operation.

*Month—wise Quarter—wise—Project—wise Targets  
1985-86*

**RANCHI AREA**

S. L. No.	Project/Block	Annual Target (Prod.)	Actual Ist Quarter			Actual 2nd Quarter		
			April	May	June	July	Augt.	Sept.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<b>CONTRACTUAL COAL</b>								
<b>1. BCCL :</b>								
	Tasra	5700	171	450	6623	342	390	435
	North Blowned	(133)	(43/4)	(9/5)	(132/5)	(108/5)	(330/5)	(145/3)
	Victory Wear } Chanch } Victorial } Rajmahal }	8600 (140)	373 (75/5)	701 (140/5)	261 (52/5)	247 (62/4)	320 (220/5)	650 (130/5)
	Dharmabend Extn.	14000 (583)	554 (277/2)	604 (302/2)	1274 (637/2)	390 (195/2)	1200 (600/2)	1300 (650/2)
	Angarpatra	5000 (132 CWD)	603 (121/5)	954@ (191/5)	1803 (361/5)	766@ (163/5)	874 (175/5)	— —
	<b>BCCL TOTAL</b>	<b>33300 (224)</b>	<b>1701 (106/16)</b>	<b>2709 (159/17)</b>	<b>4000 (235/17)</b>	<b>1946 (122/16)</b>	<b>3064 (204/15)</b>	<b>2335 (239/10)</b>
<b>2. CCL : Talcher :</b>								
	(i) Ananta Extn. } (ii) Subhadra }	4500 (107)	406 (81/5)	304 (61/5)	284 (57/5)	336 (112/3)	300 (100/3)	300 (100/3)

*For Drilling And Mining*

Figures in Brackets are  
(Productivity, No. of Rig months)  
All other figures in Mts.

IIIrd Quarter			IVth Quarter		
Oct.	Nov.	Dec.	Jan.	Feb.	March
(9)	(10)	(11)	(12)	(13)	(14)
4650	4950	540	540	540	540
(155/ 3)	(165/ 3)	(180/ 3)	(180/ 3)	(180/ 3)	(180/ 3)
┌—* 3 shift working to commerce from Oct. 85					
800*	900	925	1000	1050	1100
(160/ 5)	(180/ 5)	(185/ 5)	(200/ 5)	(210/ 5)	(220/ 5)
1300	1400	1500	1500	1500	1500
(650/ 2)	(700/ 2)	(750/ 2)	(750/ 2)	(750/ 2)	(250/ 2)
Angarpatra work completes in August '85', deployment of drills to be considered.					
2565	2795	2965	3040	3090	3140
(257/ 10)	(280/ 10)	(297/ 10)	(304/ 10)	(309/ 10)	(314/ 10)
400	400	400	450	450	470
(133 3)	(133/ 3)	(133/ 3)	(150/ 3)	(150/ 3)	(157/ 3)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<b>South Karanpara :</b>							
(i) Bhurkunda	14000		234	244	501	596	1050 1200
(ii) Mauria + Laphan- ga Extn.	(165)		(59/ 4)	(61/ 4)	(125/ 4)	(99/ 6)	(150/ 7) (150/ 8)
<b>CCL TOTAL :</b>	18500		640	548	785	932	1350 1500
	(146)		(71/ 9)	(61/ 9)	(87/ 9)	(104/ 9)	(135/ 10) (136/ 11)
<b>NON+COAL</b>							
<b>CONTRACTUAL</b>							
3. Orissa Ground Water	21500 (160)	991 (99/10)	1221 (122/10)	1087 (109/10)	1305 (131/10)	1540 (140/11)	
4. Almora Magnecite	2000 (63)	124 (62/2)	136 (45/3)	80 (27/3)	100 (33/3)	180 (60/3)	
<b>PROMOTIONAL :</b>							
5. Kunderkocha (Gold)	1100 (69)	121 (61/2)	60 (30/2)	251 (126/2)	143 (72/2)	150 (72/2)	
6. Askot (Lead-Zinc) Underground	700 (65)	Nil	Nil	Nil	Nil	70 (70/1)	
<b>TOTAL</b>							
<b>PROMOTIONAL:</b>	1800 (67)	121 (61/2)	60 (30/2)	251 (126/2)	143 (72/2)	220 (73/3)	
<b>TOTAL DRILLING :</b>	75100 (163)	3577 (89/40)	4674 (114/41)	6203 (151/41)	4426 (114/40)	6354 (151/42)	

(8)	(9)	(10)	(11)	(12)	(13)	(14)
1240	1320	1530		1890	2025	2170
(155/ 8)	(165/ 8)	(170 9)		(210/ 9)	(225/ 9)	(241/ 9)
1040	1720	1930		2340	2475	2640
(149/ 11)	(156/ 11)	(161/ 12)		(150/ 12)	(205/ 12)	(220 12)
1800	1860	1900	1980	2300	2750	2770
(150/12)	(155/12)	(158/12)	(165/12)	(192/12)	(225/12)	(231/12)
210	210	210	210	210	330	—
(70/3)	(70/3)	(70/3)	(70/3)	(70/3)	(110/3)	—
150	150	68	—	—	—	—
(75/2)	(75/2)	(34/2)	—	—	—	—
70	75	75	75	120	120	95
(70/1)	(75/1)	(75/1)	(75/1)	(60/2)	(60/2)	(18/4)
220	225	143	75	120	120	95
(73/3)	(75/3)	(48/3)	(75/1)	(60/2)	(60/2)	(48/2)
6115	6500	6768	7160	8010	8765	8645
(157/39)	(167/39)	(174/39)	(188/38)	(205/39)	(225/39)	(240/39)

Note : 1. @ The achievement is inclusive of production of 75 m., 1437 m., and 718 m., during May, June and July'85 respectively, by two Viker Keogh rigs.

2. + The Vicker Keogh are not considered during August'85 as they will be shifted to SCCI, Area.

3. In south Koranpura three shift operation is considered by all the drill units from August'85.

4. \* 3 shifts working envisaged from October'85 in Chanch-Victoria Rajmahal project.

*Projectwise, Monthwise Drilling Targets—*

PROJECT	Annual Targets (Prod.)	Actual	1st Quarter		Actual	2nd
		April	May	June	July	Aug.
<b>E.R.C.L. (Coal) :</b>						
1. Raniganj (E)	5000 (115)	142 (28/5)	225 (45/5)	302 (76/4)	327 (82/4)	440 (110/4)
2. Ardhagram	5700 (158)	40 (13/3)	283 (88/3)	542 (181/3)	242 (81/3)	390 (180/3)
3. Raniganj (W)	7500 (159)	245 (62/4)	338 (85/4)	276 (92/3)	437 (109/4)	620 (180/4)
4. Jollybird	6800 (140)	314 (79/4)	404 (101/4)	370 (185/2)	381 (127/3)	620 (180/4)
5. Lachipur	8000 (132)	76076 (19/4)	110116 (23/5)	190490 (98/5)	447447 (75/6)	74420 (120/6)
6. Kasta (E)	3500 (125)	52 (52/1)	117 (117/1)	09 (09/1)	21 (21/1)	30 (100/3)
<b>TOTAL ECL :</b>	36500 (140)	869 (41/21)	1463 (67/22)	1989 (111/18)	1853 (88/21)	2890 (101/24)
<b>N.E.C. (COAL)</b>						
1. Namchik	1800 (50)	113 (38/3)	172 (57/3)	51 (17/3)	106 (35/3)	50 (50/3)
2. Dillijaypore	1450 (76)	— (73/1)	73 (73/1)	100 (100/1)	70 (70/1)	140 (70/2)
3. Ledo	110 (65)	— (50/1)	— (55/2)	— (50/1)	50 (50/1)	110 (55/2)
4. Langrin	1550 (74)	— (50/1)	— (50/1)	— (50/1)	— (50/1)	50 (50/1)
<b>TOTAL N.E.C.</b>	5900 (64)	113 (38/3)	245 (61/4)	151 (38/4)	226 (45/5)	450 (56/8)
<b>TOTAL</b>						
<b>CALCUTTA</b>	42400	982	1708	2140	2079	3340
<b>AREA :</b>	(120)	(41/24)	(66/26)	(97/22)	(80/26)	(104/32)

@ Commencement of third shift operation.



Calcutta Area—1985-86

(i) Figures in Brackets are  
(Productivity/No. of Rig.  
months).

(ii) All other figures in mts.

Quarter	3rd Quarter			4th Quarter		
	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.
@584	480	480	480	500	500	540
(146/4)	(160/3)	(160/3)	(160/3)	(167/3)	(167/3)	(180/3)
@510	555	600	630	640	640	650
(170/3)	(185/3)	(200/3)	(210/3)	(213/3)	(213/3)	(217/3)
@680	720	760	800	840	840	1004
(170/4)	(180/4)	(190/4)	(200/4)	(210/4)	(220/4)	(251/4)
@680	680	680	680	700	700	700
(170/4)	(170/4)	(170/4)	(170/4)	(175/4)	(175/4)	(175/4)
@750	800	850	900	925	950	975
(150/5)	(160/5)	(170/5)	(180/5)	(185/5)	(190/5)	(195/5)
@390	405	420	435	450	465	436
(130/3)	(135/3)	(140/3)	(145/3)	(150/3)	(155/3)	(145/3)
3594	3640	3790	3925	4055	4135	4305
(156/23)	(165/22)	(172/22)	(178/22)	(188/22)	(188/22)	(196/22)
150	180	180	180	195	195	128
(50/3)	(60/3)	(60/3)	(60/3)	(65/3)	(65/3)	(43/3)
140	140	150	160	160	160	160
(70/2)	(70/2)	(75/2)	(80/2)	(80/2)	(88/2)	(88/2)
120	120	130	140	140	140	150
(60/2)	(60/2)	(165/2)	(70/2)	(70/2)	(70/2)	(75/2)
150	225	225	240	240	240	180
(75/2)	(75/3)	(75/3)	(80/3)	(80/3)	(80/3)	(60/3)
560	665	685	720	735	735	618
(62/9)	(67/10)	(69/10)	(72/10)	(74/10)	(74/10)	(62/10)
4154	4305	4475	4645	4790	4870	4923
(130/32)	(135/32)	(140/32)	(145/32)	(150/32)	(152/32)	(154/3)

*Projectwise, Month—wise Target*

PROJECTS	Annual Targets (Prod.)	Ist Quarter Actual			Actual July	IInd
		April	May	June		Aug.
1. KGF (Running)	5000 (86)	614 (61/10)	673 (67/10)	441 (55/8)	234 (29/8)	880 (110/8)
2. KGF (BGML)						
Shallow Drilling	5400 (129)	—	—	—	—	—
3. Budini	4000 (125)	—	—	—	—	400 (100/4)
4. Gadag	3500 (125)	—	—	—	—	—
5. Zangamara palli	434 (244)	244 (122/2)	190 (25/2)	—	—	—
6. A.P. Diamond	129 (65)	129 (65/2)	—	—	—	—
<b>TOTAL PROMOTIONAL :</b>	18500 (110)	987 (71/14)	863 (72/12)	441 (55/8)	234 (29/8)	1280 (107/12)
or say 18500						
7. Singareni (171 with CWD)	19000	1000 (125/8)	1126 (141/8)	754 (108/7)	1053 (117/9)	1170 (130/9)
(607 Vickers)		85000	—	—	—	—
<b>TOTAL SCCL :</b>	27500 (220)	1000 (125/8)	1126 (141/8)	754 (108/7)	1053 (117/9)	1170 (130/9)
8. Neyveli	14000 (424)	313 (157/2)	347 (347/1)	367 (367/1)	379 (379/1)	700 (350/2)
<b>TOTAL CONTRACTUAL :</b>	41500 (263)	1313 (131/10)	1473 (164/9)	1121 (140/8)	1432 (143/10)	1870 (117/11)
<b>TOTAL HYDERABAD :</b>	60000 (184)	2300 (96/24)	2336 (111/21)	1562 (98/16)	1666 (93/18)	3150 (137/23)

@ Commencement of three shift operation.

\* Introduction of Vicker Keogh Accstration rigs. Brackets indicates (Productivity).

Hyderabad Area—1985-86

- (i) Figures in Brackets are (Productivity No. of Rig. months).  
(ii) All other figures in mts.

Quarter	IIIrd Quarter			IVth Quarter		
	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.
960 (120/8)	1200 (150/8)	—	—	Drills to be moved to BGML Block.		
—	150 (75/2)	800 (100/8)	960 (120/8)	1080 (135/8)	1160 (145/8)	1250 (156/8)
420 (105/4)	460 (115/4)	480 (120/4)	520 (130/4)	5553 (138/4)	5580 (145/4)	590 (148/4)
80 (80/1)	440 (110/4)	500 (115/4)	520 (130/4)	650 (130/5)	650 (130/5)	660 (132/5)
—	—	—	—	—	—	—
—	—	—	—	—	—	—
1460 (112/13)	2250 (125/18)	1780 (111/16)	2000 (125/16)	2280 (134/17)	2390 (141/17)	2500 (147/17)
1400 (140/10)	@1850 (185/10)	1850 (185/10)	1900 (190/10)	2100 (210/10)	2300 (230/10)	2500 (250/10)
*1000 (500/2)	1100 (500/2)	1100 (550/2)	1200 (600/2)	1300 (650/2)	1400 (700/2)	1400 (700/2)
2400 (200/12)	2950 (246/12)	2950 (246/12)	3100 (258/12)	3400 (303/12)	3700 (308/12)	3900 (325/12)
1200 (400/3)	1200 @ (400/3)	1600 (400/4)	1800 (450/4)	2000 (500/4)	2000 (500/4)	2100 (525/4)
3600 (243/15)	4150 (277/15)	4550 (284/16)	4900 (306/16)	5400 (338/16)	5700 (356/16)	6000 (375/16)
5060 (181/28)	6400 (194/33)	6330 (198/32)	6900 (215/32)	7680 (233/33)	8090 (245/33)	8500 (258/33)

*Projectwise, Monthwise Target*

PROJECTS	Annual Targets (Prod.)	1st Quarter Actual			Actual July	2nd
		April	May	June		Aug.
1. Kapurdih (C) (Lignite)	30000 (625)	1539 (385/4)	2384 (596/4)	3163 (795/4)	2016 (504/4)	2000 (500/4)
2. Bikaner (C) (Lignite)	15000 (625)	—	—	—	553 (553/1)	1200 (600/2)
3. Degana	400 (50)	63 (63/1)	126 (63/2)	107 (54/2)	51 (25/2)	53 (53/1)
4. Chandmari (P) (Copper)	3200 (140)	201 (150/2)	307 (153/2)	190 (95/2)	62 (31/2)	280 (140/2)
5. Banwas (P) (Copper)	8000 (140)	695 (174/4)	384 (127/3)	263 (87/3)	439 (142/3)	550 (137/4)
6. Tosham (P) Tin.	6300* +1500 (1600)	216 (108/2)	257 (124/2)	421 (140/3)	219 (73/3)	800@ (160/5)
<b>TOTAL :</b>	62500 +1500 =64319 (311)	2714 (209/13)	3456 (266/13)	4144 (296/14)	3340 (223/15)	4033 (271/18)

\* 6300 mts. would be completed by December 1985 thim IIInd phase work will start.  
 @ Third shift work will start from August '85.

*For the Year—1985-86 (Jaipur Area)*

- (i) Figures in Brackets are (Productivity/No. of rig. months.)  
 (ii) All other figures in Mts.

Quarter	3rd Quarter			4th Quarter			
	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March
	2000 (500/4)	2600 (650/4)	2600 (650/4)	2600 (650/4)	3000 (750/4)	3000 (750/4)	3010 (750/4)
	1800 (600/3)	1900 (633/3)	1900 (633/3)	1900 (633/3)	1900 (633/3)	1900 (633/3)	1950 (650/3)
	—	—	—	—	—	—	—
	280 (140/2)	314 (157/2)	314 (157/2)	314 (157/2)	314 (157/2)	314 (157/2)	314 (157/2)
	551 (137/4)	840 (140/6)	840 (140/6)	840 (140/6)	840 (140/6)	840 (140/6)	920 (153/6)
	960 (160/6)	1120 (160/7)	1120 (160/7)	1187 (170/7)	1500 (214/7)	—	—
	5591 (294/19)	6774 (308/22)	6774 (308/22)	6841 (311/22)	7554 (343/22)	6054 (404/15)	6194 (413/1)

(Vide Reply to Recommendation  
Projectwise Drill Deployment and

## NAGPUR AREA

Sl. No.	Project	Mineral	Target (m)	Depth Range	Average Productivity	Drill Units	4/86
1	2	3	4	5	6	7	8
1.	Meanjkhand	Copper	10,000	700-900	250' m 135	MEC-211, 212 MEC-198 Vol. 300- 205, 216	500 400
2.	Khobna	Tungsten	4,300	100-200	140	MEC-118, 106, 17	240
	<b>Sub Total</b> <b>Promotional</b>		14,300				1140
3.	Rajnandgaon	Atomic Mineral	3,500	150-200	70	Vol-180, 4	280
4.	Narmadasagar (Dinkareshibar)	Goo-Tech.	700	50-100	50	Vol. 90 (one)	50
	<b>Sub-Total</b> <b>Non-Coal</b>		3,700				330
1.	Sialghogri	Coal	4,000 +1,000	300-350	180	Vol. 180 [Three]	400
2.	Kanhan						
	[a] Dita/Damua	Coal	4,000	200-350	180	Vol. 180 [Two]	300
	[b] Dhanwa Ghorbani Tanbia	Coal	9,000	250-350	150	Vol. 180 [Five]	500

DIX VIII

at Sl. No. 14, Page.....]

*Monthly Creation Plan 1986-87*

5/86	6/86	7/86	8/86	9/86	10/86	11/86	12/86	1/87	2/87	3/87
9	10	11	12	13	14	15	16	17	18	19
500	500	500	500	500	500	500	500	500	500	500
400	400	360	360	360	400	400	400	600	—	—
240	240	260	260	260	400	400	400	500	500	600
1140	1140	1120	1120	1120	1300	1300	1300	1600	1000	1100
280	280	280	280	280	300	300	300	300	300	320
50	50	50								
330	330	330	280	280	300	300	300	300	300	320
400	400	450	450	500	500	550	600	750	—	—
300	300	300	300	300	350	370	380	400	400	300
600	700	700	700	700	800	900	950	950	950	550

1	2	3	4	5	6	7	8
3.	Kamptee [New]	Coal	5,000	250-300	180	Vol. 180 [Two upto Sept. 86+one from Oct. 86]	300
4.	Wardha Valley [Lohara/ Agarshari/ Colar Pumpri]	Coal	16,000	300-350	180	Vol. 180 [Six] +Vol. 300 [three] [Existing]	1500
5.	Katkona-II (Bhaskarpura)	Coal	5,000	300-350	200	4-Existing	800
6.	Nourozabad	Coal	4,500	300-350	160	Vol. 180 [three] Existing	425
7.	Piperia [East] [New]	Coal	3,000	150-250	160	Vol. 180 [three]	400
8.	Bisrampur [Bhatgaon]	Coal	5,000	150-250	180	2 upto Sept. 86+1 from Oct. 86	300
9.	Chirimini	Coal	7,500 +(2,500 U/G)	250-300	160	5-Vol. 180 & 300	500
	<b>Sub Total Coal</b>						<b>5425</b>
	<b>Grand Total</b>		<b>84,500</b>				<b>6895</b>



9	10	11	12	13	14	15	16	17	18	19
350	350	350	350	350	500	500	500	500	500	450
1500	1500	1500	1500	1500	1500	1500	1500	1500	1000	—
800	850	850	850	850	—	—	—	—	—	—
425	425	425	425	425	490	490	490	480	—	—
400	450	450	450	450	400	—	—	—	—	—
350	350	350	350	350	500	500	500	500	500	450
600	650	650	650	650	650	700	700	700	700	350
<b>5725</b>	<b>5975</b>	<b>6025</b>	<b>6025</b>	<b>6075</b>	<b>5690</b>	<b>5510</b>	<b>5620</b>	<b>5780</b>	<b>4050</b>	<b>2100</b>
7195	7445	7475	7425	7475	7290	7110	7220	7680	5350	3520

*Projectwise Drill Deployment and*

**RANCHI AREA**

Sl. No.	Project	Mineral	Target [m]	Depth Range	Average Productivity	Drill Unit	4/86
<b>Promotional</b>							
1.	Singhbhum	Atomic Mineral	9,000		130	Vol. 180 Six	750
<b>Contractual :</b>							
<b>Non-Coal</b>							
2.	Almora	Magnesite	2,000	100-250	80	Two	130
3.	Orissa	Ground Water	22,000	50-100	200	Nine	1700
<b>Coal :</b>							
<b>B.C.C.L.</b>							
4.	Dharmaband	Coal	14,000	500-700	450	One Hydro 200 + Vol. 300-4	450 720
5.	Angarpatra (Sitanala)	Coal	5,000		450	Hydro-44	450
6.	Rajmahal	Coal	10,000	300-350	200	Wireline-4	750
7.	Victoria	Coal	5,000	300-350	200	Wireline-2	375
8.	Munidih	Coal	6,000	300-350	200	Wireline-2 from April + one from Sept.	375
<b>Sub Total LCCL</b>			<b>45,000</b>				<b>3120</b>
<b>C.C.L.</b>							
9.	South Karanpura	Coal	14,000	300-350	180	Wireline-7	990
10.	Talcher	Coal	4,000	300-350	110	Wireline-3	285
<b>Sub Total CCL</b>			<b>18,000</b>				<b>1275</b>
<b>Grand Total</b>			<b>96,000</b>				<b>6975</b>

*Monthly Operation Plan 1986-87*

(Tentative)

5/86	6/86	7/86	8/86	9/86	10/86	11/86	12/86	1/87	2/87	3/87
750	750	780	780	780	810	810	810	810	810	360
140	150	160	170	170	170	170	170	180	190	200
1700	1700	1800	1800	1800	1900	1900	1900	2000	2000	2000
450	450	450	450	450	450	450	450	450	450	450
720	720	750	750	750	800	800	800	900	900	—
450	450	450	450	450	450	450	450	450	500	—
750	750	750	750	750	850	850	850	1000	1000	1000
375	375	375	375	375	425	425	425	500	500	500
375	375	375	375	375	570	570	570	680	680	680
3120	3120	3150	3150	3150	3545	3545	3545	3980	4030	2630
990	290	1225	1225	1225	1225	1225	1225	1225	1225	1225
285	285	300	300	300	330	330	330	420	420	420
1275	1275	1525	1525	1525	1555	1555	1555	1645	1645	1645
6985	6995	7415	7425	7425	7980	7980	7980	8615	8675	6835

**CALCUTTA AREA**

Sl. No.	Project	Mineral	Target (m)	Depth Range	Average Productivity	Drill Unit	4/86
<b>CONTRACTUAL :</b>							
<b>E.C.L. Coal</b>							
1.	Telaboni						
	(Rangamati 'A')	Coal	8,400	300-350	140	Five	650
2.	Sarsatali I	Coal	7,000	300-350	140	Four	540
3.	Kalidashpur	Coal	6,000	300-350	140	Four	540
4.	Kasta East	Coal	9,000	300-350	140	Six	780
5.		Coal	2,500	300-350	140	Two	260
6.	Bakulia	Coal	2,500	300-350	140	Two	260
7.	Moira-Madhujore						
	(South)	Coal	1,500	300-350	140	Two	280
	Total E.C.L.	Coal	36,900				3310
<b>N.E.C.</b>							
8.	Namchick	Coal	1,500	200-250	70	Two	120
9.	Dilli-Jaipore	Coal	1,500	200-250	100	Two	160
10.	Ledo	Coal	1,500	200-250	70	Two	120
11.	Longnin	Coal	1,500	200-250	80	Two	140
	Total N.E.C.		6,000				540
	Grand Total		42,900				3850

*Monthly Operation Plan 1986-87*

(Tentative)

5/86	6/86	7/86	8/86	9/86	10/86	11/86	12/86	1/87	2/87	3/87
650	650	675	675	675	710	710	710	750	750	750
540	540	540	540	540	560	560	560	600	600	880
540	540	540	540	540	560	560	560	560	520	—
780	780	800	800	800	850	900	900	900	710	—
260	260	300	300	300	300	300	220	—	—	—
260	260	300	300	300	300	300	220	—	—	—
280	280	330	330	—	—	—	—	—	—	—
3310	3310	3485	3485	3155	3280	3330	3170	2810	2580	1630
120	120	130	130	130	130	130	130	130	130	100
160	160	180	180	180	180	180	120	—	—	—
120	120	130	130	130	130	130	130	130	130	100
140	140	150	150	150	150	150	150	150	30	—
540	540	590	590	590	590	590	530	410	290	200
3850	3850	4075	4075	3745	3870	3920	3700	3220	2870	1830

**HYDERABAD AREA**

S. N.	Project	Mineral	Target (m)	Depth. Range	Average Productivity	Drill Unit
<b>PROMOTIONAL</b>						
1.	B.G.M.L.	Gold	5,000	150-200	120	Vol-90 (1) Vol-180 (2) Vol-300 (1)
2.	K.G.F. Boundary Block	„	600(U/G)	20-30	120	One
3.	Budhini	„	4000	150-250	160	Two
4.	Godag	„	4,000	150-250	160	Two
5.	Chingangunta Block III & IV	„	600(V/G)	20-30		* One
	Sub Total Promotional		14,200			
<b>Contractual</b>						
<b>Coal</b>						
1.	S.C.C.L.					
	(a) Singareni	Coal	11,000	400 To be confined	160	Seven (Vol. 300+ LMP 2500)
	(b) Ramagunam	„	10,000		160	Seven
	Sub Total Coal					
2.	Neyveli Lignite	Lignite	22,000		500	Four LMP-1500
3.	Sub Total Contractual		43,000			
	Grand Total		57,200+6,600 expected			
			Metrage as indicated in cocs later No. 138/CD/ 16-DO/86 Dt. 10 <sup>13</sup> /86			

\* Drills to be shifted from Boundary Block.

@ Likelihood of getting more work is bright.

*Monthly Operation Plan 1986-87*

(Tentative)

---

4/86	5/86	6/86	7/86	8/96	9/86	10/86	11/86	12/86	1/87	2/87	3/87
440	440	440	440	440	400	500	500	500	550	310	—
100	100	100	120	120	60	—	—	—	—	—	—
300	275	275	300	300	300	350	350	350	400	400	400
300	275	275	300	300	300	350	350	350	400	400	400
1140	1090	1090	1160	1260	1200	1300	1300	1300	1450	1110	800
980	980	980	1020	1020	1020	1050	1050	1050	1200	1200@	1200@
980	980	980	1020	1020	1020	1050	1050	1050	1200	1200@	1200@
2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000@

---

**JAIPUR AREA**

S.N.	Project	Mineral	Target (m)	Depth Range	Average Productivity	Drill Unit
<b>PROMOTLONAL</b>						
1.	Chandmari	Copper	5,500	400-500	150	Three
2.	Banwas	„	4,000	400-500	150	Three
3.	Basantgarh	„	8,600	250-350	145	Five
4.	Akwali	„	5,700	250-350	158	Three
	Sub Total Copper		23,800			
5.	Balda	Tungsten	1,700	100-150	150	One
6.	Tosham	Tin	5,000	300-350	150	Three
	<b>Contractual :—</b>					
1.	Kapuraih	Lignite	15,000	50-150	550	Two LMP
2.	Bikaner	„	15,000	50-150	550	Two LMP
3.	Palana	„	12,000	50-150	550	Two LMP
	Grand total		72,500			

@ Cibaly hood of getting more work bright.



*Operation Plan 1986-87*

(Tentative)

4/86	5/86	6/86	7/86	8/86	9/86	10/86	11/86	12/86	1/87	2/87	3/87
400	400	450	450	450	540	450	500	500	500	500	450
400	400	400	450	450	450	500	500	450	—	—	—
650	650	650	700	700	700	750	750	750	750	750	750
400	400	400	450	450	450	500	500	500	550	550	550
150	150	150	150	150	150	150	150	150	150	150	150
400	400	400	440	440	440	450	450	450	500	500	500
1000	1000	1000	1250	1250	1250	1400	1400	1400	1400	1400	1400
1000	1000	1000	1250	1250	1250	1400	1400	1400	1400	1400	1400
1000	1000	1000	1250	1250	1250	1400	1400	1400	1400@	1400@	1400@

## APPENDIX IX

(Vide Reply to Recommendation at Sl. No. 15, Page 27)

*Actual Percentage Relating to Workshop 1984-85*

S. No.	Description of items	Projected programme April '84 to March '85	Actual per- formance April '84 to March '85
1	2	3	4
1.	T.C. Bits	10,000	11,429
2.	Quill Bushes	136	30
3.	Rig/Spindles	36	29
4.	Gears	500	313
5.	Chuck Jaws	11,000	490
6.	Liners	1,000	181
7.	Threading of Rods & Castings	500	1,502
8.	Valve & Valve Seats	1,000	144
9.	Adaptors/Couplings	1,000	2,439
10.	Piston Rod Assembly	500	154
11.	Vehicle body	—	11
12.	Daricks	—	13
13.	Head Gears	—	2
14.	General Fabrication	200	134
15.	Other Accessories (mfd.)	200	278
16.	Heavy Vehicle (major)	24	12
17.	Light Vehicle (major)	24	13

1	2	3	4
18.	Rig with Prime mover	28	22
19.	Equipment/Pumps	60	63
20.	Generating Sets	4	6
21.	Compressors/Air winches	20	22
22.	CP/Weldon/Slush/Morrisson pump	2	2
23.	Heavy vehicle (minor)	52	48
24.	Light vehicle (minor)	72	64
25	Extraction of diamond bits salvaged from used diamond bits	5,000	5,006
<b>TOTAL</b>		<u>21,258</u>	<u>22,407</u>

## APPENDIX X

(Vide Reply to Recommendation at Sl. No. 16, Page 15)

### *Report of the Committee on Overall Improvement of Workshop*

#### **Introduction :**

In the meeting convened by C.M.D. on 29.1.85 it was decided to chalk-out a detailed plan and line of action for bringing about overall improvement in the working of the Workshop at Nagpur and other places.

In the Apex Council meeting held on 23.2.85 the matter was discussed again and a decision was taken to constitute a committee to study in depth the existing system of working in the Workshop and suggest ways and means for bringing about improvement.

#### **Formation of Team :**

A Committee with the following members was constituted on 20.3.1985.

1.	Shri M.S. Nagar	Director (Tech.)	*Chairman
2.	Shri M. Banerjee	Chief Drilling Engineer	Member
3.	Shri S.R. Roy (*)	Chief Mining Engineer	Member
4.	Shri R.M. Sharma	Manager (Materials)	Member
5.	B.G. Gadge	Dy. Works Manager	Member
6.	A.S. Shivani	Asstt. General Secretary, MECEU	Member
7.	V.G. Nimbalkar	MECEU, Member	Member

#### **Meetings :**

The Committee meetings were convened on 6.7.85, 27.7.85, 20.8.85 and 16.9.85 to discuss the various points and finalise recommendations.

\* Shri V.S. Reddy, Deputy Chief Mining Engineer was requested to participate in the meetings in place of Shri S.R. Roy who retired.

In the first meeting held on 6.7.1985, the Chairman of the committee conveyed the CMD's remarks about Workshop and Transport Division. He also enumerated the recommendations of Hanumantharao Expert Committee on capacity utilisation of Workshop and Transport Divisions.

Keeping in-view the above, members were requested to suggest ways and means to improve the performance of W and T Division.

Suggestions from members were discussed on the subsequent meetings held on 27.7.85, 20.8.85, and finalised on 16.9.1985.

#### **Acknowledgement :**

In the meetings, the committee was ably supported by the following Officers also from time to time.

- |                          |                                     |
|--------------------------|-------------------------------------|
| 1. Shri M.B. Nair,       | Additional Chief Drilling Engineer. |
| 2. Shri B.P. Sinha,      | — do —                              |
| 3. Shri. V.G. Patankar,  | Manager (F&A)                       |
| 4. Shri S.R. Shrivastva, | Manager (Coord.)                    |
| 5. Shri R.S. Kulkarni,   | Dupty Manager (F&A)                 |
| 6. Sh. S.N. Singh,       | Dy. Chief Mining Engineer           |
| 7. Shri K.R. Krishnan,   | Asstt. Chief Mining Engineer        |
| 8. Shri Ravi Rajendra,   | Senior Mechanical Engineer          |
| 9. Shri V. Longanathan,  | Senior Mechanical Engineer          |

#### **Recommendations :**

Recommendations of the Committee on the various sections of Workshop and Transport Divisions are as follows :—

#### **Transport Section :**

1. One Clerk in each project to be identified by the Project Manager for R.T.O. works and insurance claims. Project Manager shall be responsible for the R.T.O. formalities.

2. Six posts of Vehicle Supervisors be created. They will be attached to 5 field Workshops and Transport Section at CHQ. Job description for the vehicle Supervisor will be as follows :—
  1. He will inspect all the vehicles in the region.
    - (a) For improving their maintenance.
    - (b) To monitor the performance of Vehicles.
    - (c) To identify the vehicles requiring repairs and recommend the repairs.
    - (d) To Check whether R.TO./Insurance formalities for all the vehicles in his region are up to date. Performance Reports of all vehicles plying in the areas shall be routed through him by Project Managers. Vehicle Supervisor shall conduct random checks on this..
  3. Project Managers shall ensure issue of POL only after assessing the previous issue kms. covered etc. for checking and monitoring progressive averages.
  4. Field Workshop officials shall advise Project Manager to stop plying vehicles with higher POL consumption. Such vehicle shall be checked and repaired at field workshops.

## II Repair and Maintenance :

1. Three tier system in Workshop Division shall be in vogue for maintenance of equipment.
  - (a) **CHQ Workshop** :—All equipment transferred from one Area to another Area (except between Calcutta & Ranchi) shall be repaired at CHQ Workshop.
  - (b) **Area Workshops** :—They shall cater to the needs of Projects in that Area.
  - (c) **Field/Unit Workshops** :—To meet the requirements of a group of Projects/Major Projects Field/Unit Workshops shall also be established where necessary.

2. Field Workshops shall be strengthened with additional manpower and mobile workshop units to monitor the maintenance of equipment at sites. Also, they shall attend to the major repairs wherever possible. However day to day maintenance and minor repairs shall be continued to be attended by Project Managers.
3. Maintenance Schedules for all types of equipment and vehicles have been circulated. This should be strictly followed by the Project Managers. These data shall be recorded in the proforma already sent. This record shall be subjected to the inspection/verification by workshop officials as well as other officers from Area/CHQ.
4. Schedules of major repairs and overhauls for equipment shall be preplanned and communicated by user Division at least one month in advance.
5. History Sheets and Log-books shall accompany the equipment sent for repairs. Also details of defects/deficiencies noticed by the user Division shall be sent alongwith the work order. Workshop Division shall draw the attention of the General Manager (Coordination) if these stipulations are not fulfilled.
6. For CHQ Workshop issue of new spares shall be made only after receipt of old spares. This is not applicable in case deficient items. However, for the deficient items, an entry will be done in job card. Project Manager shall inturn issue new spares only on receipt of old ones from their working sites.
7. System of Log-books for workers giving details of items required for repair/manufacturing, date of receipt of spares, job done daily etc., shall be formulated in consultation with Union.
8. For the day to day maintenance of equipment at site, Drilling Technician-I or equivalent official shall be responsible. Suitable awards shall be recommended for the best maintained and utilised equipment.
9. Field Workshop officials shall also monitor the periodical maintenance of all equipment in their respective Areas.
10. Equipment sent from Projects to CHQ for repairs shall be accompanied by the detailed working condition, past usage and list of deficient items signed by Project Manager and Officer in Charge of Field Workshop. (Equipment shall always be routed through Field Workshops).

11. Loss-of-logbook/History Sheets shall be seriously viewed and the Project Manager shall be held responsible for the same.
12. Items which are found deficient in the equipment shall be separately accounted in the job card itself and reported to the concerned Division and the Stores Department.
13. History Sheet shall be maintained with each paper in Triplicate. Original Copy shall be sent to Engineering Division. Second Copy shall be sent to Area Office. This is essential for monitoring the condition of equipment and expenditure being incurred on the same. The third copy is for use by the Project Manager who shall be suitably advised, as and when required by the Area Office and the Workshop Division on the proper maintenance of equipment.
14. Indenting of Spare Parts for major repair and overhauls shall be the responsibility of Workshop Division.

#### **Manufacture :**

1. Annual demands for items like TC bits, derrick, water tanks, drilling accessories, spares etc. shall be routed through Stores Division (along with the administrative approval) who inturn will place the Work Order on Engineering Division.
2. All the high value items enclosed in annexure will be manufactured in Workshop to meet the total requirement of MECL and these items will not be purchased from out side. For enhancing the capacity for spare parts manufacturing, Engineering Division shall submit a proposal for additional men, machines, material etc.
3. Possibility of manufacturing the following item in the Workshop shall be explored with necessary cost benefit analysis.
  - (a) Water Tanker trailer.
  - (b) Mining tubs.
  - (c) Water filter tanks.
  - (d) Hydraulic Jacks.
  - (e) Rubber items like buckets, packings etc.
  - (f) Portable Magazines.



- (g) Spares for DTH Hammer.
  - (h) Foot Clamp with jaws.
  - (i) Derrick with crown pulley block system, bail and bolt etc.
4. Various methods to enhance the capacity should be explored such as use of soft jaws Chuck, hydro copying attachment etc. Material of correct size should be purchased wherever necessary as in the case of chuck jaws.
  5. Modernisation of Workshop should be undertaken in stages. (While replacing equipments, we should go for modern equipment wherever possible.)
  6. Performance Reports from Projects should be collected on all items manufactured in the Workshop for their durability, quality etc.
  7. Body building for special vehicle like loggers units, explosive vans etc. Shall be got done from other agencies who are specialised in them.
  8. Expansion of capacity shall include :—
    - (i) R & D Facilities.
    - (ii) Setting up of hydraulic repair and testing bay.
    - (iii) Facilities for salvaged diamond sorting and grading.
    - (iv) Adequate repair facilities for tubulars.
  9. Design deficiencies if any, should be looked into and corrected by the Engineering Division, wherever it is noticed that some parts have a history of persistent failures or excessive wear and tear.

#### **Inspection :**

1. User Division shall nominate one Officer for inspection of items manufactured/repared in Workshop."
2. Detailed inspection procedures for equipments repaired in Workshops shall be formulated and implemented.
3. The user Division shall nominate one representative who alongwith a representative from Workshop Division shall inspect all equipments (Sent to CHQ for repairs) for any unreported deficiencies and discrepancies. In case of any deficiencies of vital items, the joint inspection report shall indicate details thereof for further necessary action by the User Division and the Stores Division.

**Stores :**

1. Stores Division shall maintain adequate stock of materials/spares for the projected level of major repairs (overheads in the Workshops).
2. Automatic replenishment of items shall take a place after fixing the minimum/maximum stock level, reorder level etc.
3. Inventory of items manufactured in the Workshops for outside sales shall be kept separately.

**General :**

1. Technological updating and modernisation shall be done.
2. Periodical inspection of equipment at project be done by the Workshop Division.
3. All major equipment shall be provided with departmental numbers and performance reports of all the equipments shall be submitted by the user Division regularly.
4. General house keeping of Workshops shall be improved.
5. Electrical engineers shall be inducted in the Division to look after the Electrical Equipment.
6. Workshop and Transport Division shall be renamed as Engineering Division.
7. Commercial Division shall explore the possibilities of obtaining Orders from other Government Departments for the items manufactured in the Workshop. One Mechanical Engineer with Marketing aptitude shall be attached with Commercial Division and when the outside orders build up and the workshops are geared to become a profit centre for the Organisation besides being a Serve Centre.
8. The present system of disposal of unserviceable spares, parts and other equipment shall be further streamlined for speedy and efficient action. As a measure of abundant caution against useable items being scrapped and disposed of, the system shall provide for

sample checks (by a separate multi Divisional Committee) on the recommendations of the various Survey Committees.

Sd/-  
(M.S. NAGAR)  
DIRECTORS (TECHNICAL)  
CHAIRMAN

Sd/-  
(B.G. GADGE)  
DY. WORKS MANAGER  
MEMBER

Sd/-  
(M. BANERJEE)  
GENERAL MANAGER (CO. ORD.)  
MEMBER

Sd/-  
(A.S.SHIVNANI)  
ASSTT. GENERAL SECRETARY,  
MECEU  
MEMBER

Sd/-  
CHIEF MINING ENGINEER  
MEMBER

Sd/-  
(V.G. NINBALKAR)  
REPRESENTATIVE, MECEU  
MEMBER

Sd/-  
(R.M. SHARMA)  
MANAGER MATERIALS  
MEMBERS

## ANNEXURE

*List of Spares to be manufactured in M.E.C. Ltd., Workshop*

<i>Sr. No.</i>	<i>Item</i>	<i>Quantity</i>
(A)	<b>VOLTAS PUMP 4×5 QUANTITY—120 NOS.</b>	
1.	Liner	720
2.	Piston Rod	720
(B)	<b>VOLTAS PUMP 4×6—QUANTITY—50 NOS.</b>	
3.	Liner	300
4.	Piston Rod	300
(C)	<b>L.M.P. PUMP—QUANTITY—30 NOS.</b>	
5.	Liner	180
6.	Piston Rod	180
(D)	<b>VOLTAS DRILL—90 : QUANTITY—47 NOS.</b>	
7.	Idler Gear	20
8.	Bevel Gear Set	25
9.	Swivel Head Drive Gear	20
10.	Counter Shaft	40
11.	Engine Sprocket	40
12.	Spindle & Quill	20
13.	Chuck Jaw Set	200
14.	Main Shaft	30
15.	Swivel head drive shaft	30
(E)	<b>VOLTAS DRILL—180 : QUANTITY—77 NOS.</b>	
16.	Internal Gear	10

<i>Sr. No.</i>	<i>Item</i>	<i>Quantity</i>
17.	Sun Gear	10
18	Planetary Gear	80
19.	Sliding Gear	60
20.	Beveal Gear Set	25
21.	Hoisting Drum Drive Gear	10
22.	Cluster Gear	50
23.	Cluster Shaft	50
24.	Flange	50
25.	Chain Sprocket	15
26.	Spindle & Quill	20
27.	Check Jaw Set	300
28	Input Pinion	50
29.	Swivel Head Drive Shaft	30
30.	Idler Gear	40
31.	Main Shaft	30
(F)	<b>VOLTAS DRILL-300 : QUANTITY-33 NOS.</b>	
32.	Cluster Gear	10
33.	Sliding Gear	20
34.	Planetary Gear	10
35.	Spindle & Quill	10
36.	Chuck Jaw Set	150
37.	Cluster Shaft	30
38.	Pinion for Chuck	10

## APPENDIX XI

(Vide Reply to Recommendation at Sl. No. 33, page 22)

### MINERAL EXPLORATION CORPORATION LIMITED (A GOVERNMENT OF INDIA ENTERPRISE)

FORM PC-I.  
Sl. No.

Due date for receipt in CHQ : 5th of the next month.

Monthly return of the project for the month of :

- (1) Name of the project :
- (2) Name of the Project Manager :
- (3) (a) Date of starting :
- (b) Proposed date of completion :
- (4)

---

Total quantity of work as per each different specification in contract (e.g. drilling mts., shaft sinking / driving / cross-cutting/excavation etc.)	Planned Quantity of work		Work done in the month under report.	Work done upto the end of the month of report
	For the year	For the month		
-----				
Specification	Total work load for the project			

---

5.

Details of Plant and Machinery	Units approved	Units allotted	Units in working order	Units deployed
Vol drill 300				
Vol drill 180				
Vol drill 90				
Air compressors				
Generators.				

	Planned	Actual
6. Productivity per drill/ per mining unit.		
7. No. of drill shifts/mining shifts for the month.		
8. Manpower		
(i) Executives.		
(ii) Other regular staff.		
(iii) Contg. staff.		
(iv) Casual labour.		
9. Cash expenditure from imprest incurred at the project in the month under report.		RUPEES
(i) Gross wages of contg. workers.		
(ii) EPF contribution :		
(iii) Expenditure on repairs to plant and machinery/vehicles/others alongwith spares.		
(iv) Other cash expenditure other than on purchase of stores and on hutments.		
(v) POL.		

10. Consumption of stores :

- (i) Drill bits/TC bits.
- (ii) Drill steel.
- (iii) Explosives.
- (iv) Timber/Core boxes.
- (v) Other stores.
- (vi) Spares.

**SIGNATURE OF PROJECT MANAGER.**

11. Information to be added at CHQ :

- (i) Salaries, allowances and other benefit to the regular employees :
- (ii) Benefits to contg. workers.
- (iii) Depreciation.
- (iv) Interest.
- (v) Overhead.
- (vi) Repairs charge at CHQ.

12. Total expenditure.

13. Cost per unit.



## APPENDIX XII

(Vide Reply to Recommendation at Sl. No. 33, page 22)

*Mineral Exploration Corporation Limited*  
(A Government of India Enterprise)

### **COST COMPILATION IN RESPECT OF FOR THE YEAR 1986-87**

---

Sl. No.	Particulars
---------	-------------

---

1. Project Income (value of work done both billed & unbilled)

2. **Direct Variable cost :**

(i) Bits

(ii) Explosives

**Sub-Total**

3. **Direct Semi-variable & Non-variable cost :**

(i) Salary & Wages (including benefits)

(ii) POL

(iii) Other consumable

(iv) Stampling Lab.

(v) Repairs at Project.

(vi) Repairs by Outsiders at Projects.

(vii) TA & Field DA

(viii) Other (site) expenses

(ix) Report writing.

**Sub Total**

4. **Contribution :**

**5. Fixed costs :**

(i) Area (a) Workshop costs.

(b) Overhead

(ii) CHQ : (a) Workshop costs

(b) Overheads costs

**Sub-Total :**

**6. Depreciation**

**7. Interest**

**8. Total cost :**

**9. Profit/Loss**

## APPENDIX XIII

(Vide Para 3 of Introduction)

Analysis of action taken by Government on the recommendations contained in the Fourth Report of the Committee on Public Undertakings.

(Eighth Lok Sabha)

I. Total Number of recommendations made	36
II. Recommendations that have been accepted by the Government (Vide recommendations at Sl. Nos. 6-10, 13, 14, 16, 17, 21, 26-33 and 36)	19
Percentage to total	52·8%
III. Recommendations which the Committee do not desire to pursue in view of Government's replies (Vide recommendations at Sl. No. 4, 11, 12, 15 and 22)	5
Percentage to total	13·9%
IV. Recommendation in respect of which reply of Government have not been accepted by the Committee (S. No. 35)	1
Percentage to total	2·8%
V. Recommendations in respect of which final replies of Government are still awaited (Vide recommendations at Sl. Nos. 1-3, 5, 18-20, 23-25 and 34)	11
Percentage to total	30·5%

**C. P. U. No 592**

© 1987 BY LOK SABHA SECRETARIAT

PUBLISHED UNDER RULE 382 OF THE RULES OF PROCEDURE AND  
CONDUCT OF BUSINESS IN LOK SABHA (SIXTH EDITION) AND  
PRINTED BY M/S. SUNLIGHT PRINTERS, DELHI