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## STANDING COMMITTEE ON COAL AND STEEL (2004-2005) FOURTEENTH LOK SABHA

MINISTRY OF MINES

**DEMANDS FOR GRANTS** 

(2005-2006)

## **NINTH REPORT**



## LOK SABHA SECRETARIAT NEW DELHI

April , 2005/ Chaitra, 1927 (Saka)

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## STANDING COMMITTEE ON COAL AND STEEL (2004-2005)

(FOURTEENTH LOK SABHA)

MINISTRY OF MINES

DEMANDS FOR GRANTS (2005-2006)

Presented to Lok Sabha on 26.4.2005 Laid in Rajya Sabha on 28.4. 2005



LOK SABHA SECRETARIAT NEW DELHI

April, 2005/ Chaitra, 1927 (Saka)

Price: Rs.47.00

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Published under Rule 382 of the Rules of Procedure and Conduct of Business in Lok Sabha (Eleventh Edition) and Printed by Jainco Art India, New Delhi 110 005.

## CONTENTS

## COMPOSITION OF THE STANDING COMMITTEE ON COAL AND STEEL..

## **INTRODUCTION**

## PART - I

## CHAPTER - I

## Introductory

## **CHAPTER II**

Analysis of Demands for Grants (2005-06) of the Ministry of Mines

- A. Plan Outlay
- B. Indian Bureau of Mines (IBM)
- C. National Aluminium Company (NALCO)
- D. Hindustan Copper Limited (HCL)
- E. Mineral Exploration Corporation Limited (MECL)
- F. Science and Technology (S&T)

Statement of conclusions/recommendations of the Standing Committee on Coal and Steel contained in the Report

## **PART-II**

## **ANNEXURES**

I. Budget at a Glance

- II. Statement showing provisions in BE, RE & Actuals/anticipated for years 2002-03, 2003-04 and 2004-05
- III. Statement showing major head-wise utilisation of funds earmarked for expenditure during the years 2003-04 and 2004-05
- IV. <u>State showing Central Plan Outlay including Budget Support and IEBR, BE, RE and Actuals from 2001-02 onwards</u>
- V. Statement showing scheme-wise/PSU X<sup>th</sup> Plan, BE & Actuals of 2002-03 & 2003-04, BE & Anticipated Expenditure 2004-05
- VI. Activity-wise Target Vs. Achievement during X<sup>th</sup> Plan as well as target for F.Y 2005-06
- VII. Status of Second Phase of Expansion
- VIII. Status of on-going S&T Projects
- IX. BE 2005-06 (S&T Programme)
- X. <u>Minutes of the Ninth sitting of the Standing Committee on Coal and Steel</u>
  (2004-05) held on 4 April 2005
- XI. Minutes of the Tenth sitting of the Standing Committee on Coal and Steel (2004-05) held on 20 April 2005

# COMPOSITION OF THE STANDING COMMITTEE ON COAL AND STEEL (2004-05)

## Shri Ananth Kumar - Chairman

#### **MEMBERS**

#### Lok Sabha

- 2. Shri Prasanna Acharya
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- 16. Shri Tarachand Sahu
- 17. Smt. Karuna Shukla
- 18. Shri Prabhunath Singh
- 19. Shri Rewati Raman Singh

- 20. Shri Ramsewak Singh (Babuji)
- 21. Shri M.Anjan Kumar Yadav

## Rajya Sabha

- 22. Shri Devdas Apte
- 23. Shri Ramadhar Kashyap
- 24. Capt. Jai Narayan Prasad Nishad
- 25. Shri Vidya Sagar Nishad
- 26. Shri B.J.Panda
- 27. Shri Jibon Roy
- 28. Shri G.K.Vasan

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- 1. Shri P.D.T.Achary Secretary
- 2. Shri N.K.Sapra Joint Secretary
- 3. Shri A.K.Singh Director
- 4. Shri Shiv Singh
  5. Shri R.K.Sharma
  Committee Officer

#### INTRODUCTION

I, the Chairman, Standing Committee on Coal and Steel having been authorised by the Committee to present the Report on their behalf, present this Ninth Report (Fourteenth Lok Sabha) on "Demands for Grants (2005-06) of the Ministry of Mines".

- 2. The Committee took evidence of the representatives of the Ministry of Mines on 4 April 2005.
- 3. The Committee wish to thank the representatives of the Ministry of Mines who appeared before the Committee and placed their considered views. They also wish to thank the Ministry of Mines for furnishing the replies on the points raised by the Committee.
- 4. The Standing Committee on Coal and Steel considered and adopted this Report at their sitting held on 20 April, 2005.
- 5. For facility of reference and convenience, the observations and recommendations of the Committee have been printed in bold letters in the body of the Report.

New Delhi; ANANTH KUMAR

20 April, 2005 Chairman,

30 Chaitra, 1927 (Saka) Standing Committee on Coal and Steel.

#### REPORT

#### **CHAPTER I**

#### INTRODUCTORY

Minerals are valuable natural resources being finite and non-renewable. They constitute the vital raw materials for many basic industries and are a major resource for development. Management of mineral resources has, therefore, to be closely integrated with the overall strategy of development; and exploitation of minerals is to be guided by long-term national goals and perspectives. In this context need has been felt to spell out the different elements of the policy, which has evolved over the years, relating to development of our mineral resources and in regard to areas of concern which have emerged in recent years. Mineral wealth is finite and non-renewable. It is a major resource for development. The management of this precious resource and its optimal and economical use are matters of national importance.

- India is endowed with significant mineral resources. India produces 89 minerals out of which 4 are fuel minerals, 11 metallic, 52 non-metallic and 22 minor minerals. The metallic production is accounted for by iron-ore, copper-ore, chromite and/or zinc concentrates, gold, manganese ore, bauxite, lead concentrates. Amongst the non-metallic minerals, more than 90 per cent of the aggregate value is shared by limestone, magnesite, dolomite, barytes, kaolin, gypsum, apatite & phosphorite, steatite and fluorite.
- 1.3 The Ministry of Mines is responsible for the survey and exploration of all minerals (other than natural gas and petroleum), for mining and metallurgy of non-ferrous metals like aluminium, copper, zinc, lead, gold, nickel, etc. and for the administration of the Mines and Minerals (Development and Regulation) Act, 1957 in respect of all mines and minerals, other than coal, natural gas and petroleum. As per the Annual Report (2004-05) the Ministry of Mines has been allocated the following subjects:
  - (i) Legislation for regulation of mines and development of minerals within the territory of India, including mines and minerals underlying the ocean within the territorial waters or the continental shelf, or the Exclusive Economic Zone and other Maritime Zones of India as may be specified from time to time by or under any law made by Parliament.

- (ii) Regulation of mines and development of minerals other than coal, lignite and sand for stowing and any minerals declared as prescribed substances for the purposes of the Atomic Energy Act, 1962 (33 of 1962) under the control of the Union as declared by law, including questions concerning regulation and development of minerals in various States and the matter connected therewith or incidental thereto.
- (iii) All other metals and minerals not specifically allotted to any other Ministry/Department such as aluminium, zinc, copper, gold, diamond and nickel.
- (iv) Planning, development and control of and assistance to all industries dealt with by the Ministry.
- 1.4 At the Secretariat level the Ministry of Mines is mainly engaged in direction, supervision and coordination of five divisions which *inter alia* include Survey and Exploration, Mines, Metal, General Administration and Finance and Accounts. Survey and Exploration Division has two principal agencies, *i.e.* Geological Survey of India (GSI) and Mineral Exploration Corporation Ltd. (MECL) for the implementation of the programmes of this Division while Mines Division has one subordinate office *viz.* Indian Bureau of Mines (IBM) to implement its programmes. Metal Division of the Ministry of Mines deals with the planning, exploration, development, monitoring of programmes and research in respect of non-ferrous metals both in the public and private sectors. General Administration Division is mainly concerned with the establishment and administrative matters of the Ministry and Finance and Accounts Division is concerned with the budget, financial scrutiny of projects and other proposals, rendering financial advice and maintenance and compilation of accounts.
- 1.5 The Ministry of Mines has jurisdiction over the following two subordinate offices, namely:
  - (i) Geological Survey of India (HQ Kolkata)
  - (ii) Indian Bureau of Mines (HQ Nagpur)

Public Sector Undertakings(PSUs) - Ministry of Mines has following four PSUs under its jurisdiction:

- (i) National Aluminium Company Ltd.(NALCO), Bhubaneswar
- (ii) Hindustan Copper Ltd.(HCL), Kolkata
- (iii) Minerals Exploration Corporation Ltd.(MECL), Nagpur
- (iv) Bharat Gold Mines Ltd.(BGML), Kolar Gold Fields, Karnataka (closed since 1 March 2001).
- 1.6 Joint Venture Undertakings: The two companies in which the Ministry of Mines held equity shareholding during 2004-05 are as under:
  - (i) Bharat Aluminium Company Ltd.(BALCO), New Delhi(a Company jointly owned by Sterlite Industries Ltd. and Government of India)
  - (ii) Hindustan Zinc Ltd.(HZL)(a Company jointly owned by Sterlite Opportunities and Ventures Ltd. and Government of India), Udaipur, Rajasthan.
  - 1.7 Research Institutions: There are three Research Institutions under the Ministry of Mines, namely:
    - (i) Jawaharlal Nehru Aluminium Research, Development and Design Centre, Nagpur;
    - (ii) National Institute of Rock Mechanics, Kolar Gold Fields, Karnataka; and
    - (iii) National Institute of Miners' Health, Nagpur.
  - 1.8 A statement showing the Budget Estimates, Revised Estimates for 2004-2005 and Budget Estimates for 2005-2006 are given at *Annexure-I*.
  - 1.9 The Committee have examined in depth, the detailed Demands for Grants of the Ministry of Mines for the year 2005-2006. The Committee approved the Demands presented by the Government, subject to their observations/recommendations which are contained in the succeeding chapters.

#### CHAPTER II

#### ANALYSIS OF DEMANDS FOR GRANTS (2005-06)

## A. Plan Outlay

The Budget Estimates(BE) of the Ministry of Mines for the year 2005-06 include the requirements of the Secretariat of the Ministry, National Aluminium Co. Ltd.(NALCO), Mineral Exploration Corporation Ltd.(MECL), Hindustan Copper Ltd.(HCL), Geological Survey of India (GSI), Indian Bureau of Mines (IBM), Science and Technology and lump-sum provision to North Eastern Region and Sikkim.

2.2 In BE 2004-2005, the approved Budget of this Ministry was Rs.549.00 crore comprising Rs.239.00 crore(Plan) and Rs.310.00 crore (Non-Plan). Against this, the RE 2004-2005 was Rs.497.77 crore comprising Rs.215.00 crore (Plan) and Rs.282.77 crore (Non-Plan). The BE 2005-2006 is being kept at Rs.441.86 crore comprising Rs.220.88 crore (Plan) and Rs.220.98 crore (Non-Plan). The Plan and Non-Plan provisions made in the Ministry of Mines for the year 2005-06 are as under:

(Rs. in crore)

	Plan	Non-Plan	Total
Revenue Section	179.73	220.98	400.71
Capital Section	41.15		41.15
Total Plan Outlay	220.88	220.98	441.86

2.3 The comparison of the Budget allocations at BE and RE stages for the last three years, *i.e.* 2002-2003, 2003-2004 and 2004-2005 along with actual expenditure are given below:

(Rs. in crore)

SI. No.		Plan	Non-Plan	Total	
1	2	3	4	5	
1.	BE 2002-2003	227.50	365.82	593.32	
	RE 2002-2003	207.50	910.49*	1117.99	
	Actual	196.59	906.86	1103.45	
2.	BE 2003-2004	228.50	405.24	633.74	
	RE 2003-2004	190.00	310.00	500.00	
	Actual	242.80	221.95	464.75	

1	2	3	4	5	
3.	BE 2004-2005	239.00	310.00	549.00	
	RE 2004-2005	215.00	282.77	497.77	
	Anticipated	199.33	241.25	440.58	
4.	BE 2005-2006	220.88	220.98	441.86	

<sup>\*</sup>Includes Rs. 4.70 crore for the Bhutan unit(since closed).

2.4 Replying to a query regarding the reasons for variation between BE and RE and also the reasons for less utilisation of funds, the Ministry have stated as under:

#### Reasons for variations

- 1. The BE 2002-2003 for Plan was Rs. 227.50 crore and was reduced to Rs.207.50 crore by Ministry of Finance at RE stage. The BE 2002-2003 for Non-Plan was Rs.363.32 crore and the same was increased to Rs.910.49 crore at RE stage. The RE for Non-Plan has been increased due to provision made for carrying out the accounting adjustment in respect of conversion of Non-Plan loan into Grants-in-Aid, waiver of 2002-03 guarantee fee and waiver of interest on Plan-Loan 2002-2003 for implementing capital restructuring of HCL to the tune of Rs. 472.47 crore. The reduction in outlay of NALCO is due to saving in the projects.
- 2. The BE 2003-2004 for Plan was Rs.228.50 crore and was reduced to Rs.190.00 crore by Ministry of Finance at RE stage. The BE 2003-2004 for Non-Plan was Rs.405.24 crore and the same had been reduced to Rs.310.00 crore at RE stage. The reduction of Rs.38.50 crore was made in the Plan provision for GSI on account of stoppage of BRGM aid and cut of Ministry of Finance. However, a sum of Rs.93.84 crore was provided to HCL as equity through the last batch of Supplementary Demands for Grants. The reduction in outlay of NALCO is due to approval of Government in October 2004.

- 3. The BE for the financial year 2004-2005 for Plan was Rs.239.00 crore and the RE for Plan is Rs.215.00 crore. The Non-Plan Budget Estimates for 2004-2005 were at Rs.310.00 crore which has been reduced to Rs.282.77 crore. The reason for less expenditure is saving of Rs.25.00 crore from the provision of the Rs.60.00 crore for VRS for HCL and also 10 % mandatory cut by Ministry of Finance. The reduction in outlay of NALCO is due to approval of Government in October 2004.
- 4. The BE for the financial year 2005-2006 for Plan was Rs.220.88 crore and for Non Plan is Rs 220.98 crore.
- 2.5 The statement showing Central Plan Outlay including budget support and IEBR, BE, RE and actuals from 2001-02 onwards is at *Annexure–IV*.
- Replying to the major heads of accounts which showed shortfalls in utilisation of funds earmarked for expenditure during 2003-2004 and the reasons thereof, the Ministry has informed that there was a shortfall in utilisation of funds mainly under the Major Head 2853. The main areas of savings were in GSI, BGML and HCL. There was a saving of Rs.74.88 crore by GSI firstly, due to the reduction at RE stage by Ministry of Finance (Rs.38.50) which included External Aid provision BRGM Aid. And, secondly there was less actuals against the anticipated Final Estimates because of the reasons that non-receipt of advice from BRGM, France for APMA Machine supplied and installed, non-submission of adjustment bill by the Shipping Corporation of India for servicing and maintenance of three Marine vessels of GSI and non-submission of Debit Vouchers by DGS&D for purchase under sub-head "Motor Vehicles". The provision against the head BGML(which was for final settlement of Employees dues upon the decision of the High Court), had to be kept apart till the end of the financial year as decision of the High Court of Karnataka was then pending. The saving of Rs.95.00 crore of HCL was reduced by Ministry of Finance at RE stage keeping in view trend of expenditure by HCL for separation of surplus manpower for VRS.
- 2.7 In the year 2004-05, there will be a shortfall in utilisation of funds mainly under the Major Head 2853. The main areas of Savings are in GSI and HCL where in both the cases provisions have been reduced by the Ministry of Finance at RE stage.
- 2.8 The statements showing the head-wise distribution of budgetary allocations both at BE, RE and Acutals alongwith Savings wherever there was shortfall of utilisation of funds in respect of years 2003-04 and 2004-05 is given at *Annexure–III*.
- About the corrective steps taken by the Ministry to ensure that the BE is expended fully, the Ministry has stated that since the FRBM Act has come into being, the expenditure is being monitored every quarter of the year. It has also been ensured that every organisation should spend 67% or more of the Budget in the first three quarters and only 33% of the budget during the last quarter

of the year. Before finalization of Budget provisions, detailed discussions are held by the Ministry with PSUs and other organisations. Ministry of Mines hold quarterly reviews of the performance of undertakings and subordinate organisations keeping in view the approved financial outlays. The trend of expenditure is constantly reviewed and monthly reports on expenditure and achievements with reference to targets are reported to the Ministry of Finance. With a view to streamline the system in GSI and to expedite the implementation of the Plan schemes, a Committee was constituted under the chairmanship of Additional Secretary, Ministry of Mines with Joint Secretary & Financial Advisor, Chief Controller of Accounts(Mines) and Dy. Director General(Finance), GSI which took monthly reviews of the projects which hastened the utilization of Plan funds.

- 2.10 Thus with above corrective steps, the Ministry look forward to make no major revision at any stage unless any contingency arise.
- 2.11 Regarding reasons for savings under Plan, the Additional Secretary, Ministry of Mines during the course of oral evidence stated as follows:

"On the Plan side, there was a saving of Rs.39.67 crore of which Geological Survey of India could not spend Rs.35.80 crore on their Plan expenditure; Rs.9.22 crore on Survey and Mapping; Special Investigation – Rs.3.02 crore; Mineral Exploration – Rs.6.62 crore; R&D – Rs.1.88 crore; Information Technology – Rs.9.47 crore and Modernisation – Rs.9.51 crore. These are the areas in the Ministry which we think should not have been so high but I would like to report that as compared to the previous years, there has been some improvement. We expect that in the next year, the allocations made in the Plan will be fully utilized. There are some savings in the non-Plan and Plan sides which actually is related to salary and travels. There is some shortage of manpower in Geological Survey of India. Therefore, the savings are on account of that shortage of manpower which we are trying to fill up during the current year by taking a special dispensation from the Cabinet for filling up of the posts in one go as against one-third permitted by the existing circular of the DoPT.

They are largely in two areas. One is that there has been a shortage of staff. So, there is certain saving on planned and nonplanned salary, travel expenses and all that. We are trying to fill them up. Second is the purchase of equipment. On this count also, there has been some shortage. We are closely monitoring it. The largest saving is in the GSI. In the last eight or nine months, I had about eight or nine meetings. We are having a detailed examination. We are trying to see whether there is any problem from the Ministry side. If they are getting held up in the Ministry, we are trying to expedite their clearance. Certain purchase procedures are to be followed. We are advising them as to how to do advance planning. It is because there are some specialized equipments in the GSI, delivery of which take about 18 months. They have to be manufactured after the order is placed. So, we have advised them to start the process at last 24 months in advance so that whatever they want to purchase next year, that should be finalized one year before. I am glad to inform the Committee that for the next year, we already have about Rs.24 crore, which they can spend in the next six months itself. We are closely monitoring all this. We are trying to see that full modernization of the GSI is completed during this Plan. There are two major items not included in this. A proposal has been received from the GSI for the acquisition of heli-bound survey system for finding the mineral deposits. It has been vetted by the Planning Commission. They have, in principle, given clearance to the proposal. Now, we are processing it for further approval of the Finance Ministry. We hope that action may start during this year itself. The second proposal is for the replacement of a ship. The ship they have at present is an old one. That proposal is with the Planning Commission. Once we get the clearance in principle, we well process it for further sanctions. We hope to get the heli-bound survey system this year. For the ship, if we are able to place the order this year, a lead-time of three years would be there. So, some part of it may go into the Eleventh Plan. Earlier, a lot of assistance was coming from external sources. But, a decision was taken not to take any foreign aid. So, there was some delay because the resources had to be found from the Plan. We have taken a decision to fund it from the Plan fund. Therefore, we are now processing it for purchase. The total expenditure for the Xth Plan period should be met with the purchase of these two large items. Heli-bound survey will cost us about Rs.50 crore. We have taken a decision that we will be purchasing the helicopter not from any foreign party but from the HAL. We will be purchasing the equipment from where the best are available. For the ship, we will be floating the global tenders after the approval."

Annual Plan 2005-2006(PSUs/Organisations)

2.12 The PSUs/Organisation-wise distribution of Approved Outlay for Annual Plan 2005-2006 showing Internal Resources (IR), Extra Budgetary Resources (EBR), Gross Budget Support (GBS), Net Budget Support (NBS) and External Aid is given below:-

(Rs. in crore)

SI. No.	PSUs/ Orgns.	Outlay	IR	EBR	G.B.S.	N.B.S.	Ext. Aid	NER
1.	NALCO	450.71	450.71					
2.	HCL	40.00			40.00	40.00		
3.	MECL							
	-P	11.00	0.00		11.00	11.00		
	-C	5.00	4.00		1.00	1.00		
4.	GSI	146.50			146.50	146.50		14.65
5.	IBM	18.50			18.50	18.50		1.85
6.	S&T	7.43	2.80	0.75	3.88	3.88		
7.	Const.							
	-GSI	5.00			5.00	5.00		
	-IBM	1.00			1.00	1.00		
	Total	685.14	457.51	0.75	226.88	226.88		16.50

- 1. 10% of BS of only GSI & IBM(excluding External Aid of BRGM, France) is earmarked for expenditure in NER.
- 2. GBS in respect of loss-making PSUs as well as those having no activities in North East Region and Foreign Aid component are exempted from earmarking of 10%.
- 2.13 The statement furnished to the Committee showing the Schemes/PSUs & Organisation-wise allocations made and actuals of 2003-2004 and 2004-2005 are given below:-

#### Ministry of Mines

Statement showing Scheme-wise/PSU-wise X<sup>th</sup> Plan, BE & Actuals of 2003-2004 and Anticipated Expenditure 2004-2005:

(Rs. in crore)

ſ	S1.	Name of Pu	ıblic Se	ctor	Xth	Plan	Annual Plan	Annual Plan
	No.	Undertakings/	Name	of	2002-2	2007	2003-2004	2004-2005

	Undertakings/ Name of	2002-2007	BE	Actual	BE	Actual
	Schemes/ Projects	(Approved)				
1	2	3	4	5	6	7
I.	National Aluminium Co.					
	Ltd.					
A.1	Schemes completed during 2001-02					
1.	Special Grade Alumina	6.22		4.03		1.15
2.	Zeolite	0.00		_		3.85
3.	Equity Participation in IAPL	34.00	_	3.74	11.43	10.00
	Total(A.1)	40.22	0.00	7.77	11.43	15.00
A.2	Critical ongoing Schemes					
1.	Mines & Refinery	126.02	40.00	14.47	8.88	15.00
2.	Smelter & Power Plant	697.06	300.00	101.87	63.82	51.00
3.	VIII Unit of C.P.P.	384.40	145.00	91.56	50.87	40.00
	Total(A.2)	1207.48	485.00	207.90	123.57	106.00
В.	Schemes Aimed at Maximising Benefits	402.30	65.00	14.18	75.00	40.00
C.	New Schemes					
1.	Alumina 4th Stream	1193.00	20.00		20.00	10.00
2.	Aluminium 4th Pot line	1575.00	50.00		40.00	_
3.	CPP(2x120 MW)	855.00	30.00		30.00	
4.	Equity Participation of Qatar Project	1573.00	_	_		_
5	Coal Mine(one block)	210.00		_	10.00	1.00
	Total(C):	5406.00	100.00	0.00	100.00	11.00
	Total(NALCO):	7056.00	650.00	229.85	310.00	172.00
II.	Hindustan Copper Ltd.					
A.1	Schemes Completed During 2000-01					

A.2	Critical ongoing Schemes					
В.	Schemes Aimed at					
	Maximising Benefits					
1.	Replacement & Renewals	50.00	20.00	113.84	40.00	40.00
2.	Research & Development					
	Total(B)	50.00	20.00	113.84	40.00	40.00
C.	New Schemes					
	Total(HCL):	50.00	20.00	113.84	40.00	40.00
III.	Mineral Exploration Corporation Ltd.					
	—Promotional	45.00	9.00	7.61	10.00	9.00
	—Capital	5.00	0.00	0.00	2.00	2.00
	Total(MECL):	50.00	9.00	7.61	12.00	11.00
IV.	Geological Survey of India					
1.	Survey & Mapping	281.50	37.70	31.63	41.61	32.37
2.	Mineral Exploration	139.00	19.11	15.23	24.26	17.67
3.	Specialised Investigation	103.30	9.52	7.50	8.09	5.06
4.	Other Exploration	0.40	0.09	0.08	0.15	0.12
5.	Research & Development	61.00	8.44	5.64	8.68	6.80
6.	Information & Dissemination	111.10	21.76	12.48	30.62	24.65
7.	Human Resource Development	18.70	2.94	2.52	3.20	2.55
8.	Modernisation & Replacement	285.00	76.44	26.04	45.39	35.88
	Total(GSI)):	1000.00	176.00	101.12	162.00	125.10
V.	Indian Bureau of Mines					
1.	Scheme No. 1: Inspection	11.32	3.31	3.09	4.08	3.67

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	of Mines for Scientific and					
	Systematic Mining,					
	Mineral conservation and					
	mine environment					
2.	Scheme No. 2: Mineral	20.90	5.68	5.26	6.41	5.49
	Beneficiation studies					
	Utilisation of low grade					
	and sub grade ores and					
	analysis of					
	environmental samples					
3.	Scheme No. 3: Technical	15.53	5.03	4.90	4.66	4.40
	Upgradation and					
	modernization					
4.	Scheme No. 4: Collection	4.77	1.63	1.39	1.49	1.41
	processing, dissemination					
	of data on mines and					
	minerals through various					
	publication					
5.	Capital Expenditure	0.50	0.10	_	_	
	(Works Outlay)					
	Capital Outlay (NER)					
	Lump sum provision for	_	1.60		1.80	0.00
	NER					
6(i)	BRGM-Schemes-TMIS-	0.66	_	_	_	
	Project. III					
6(ii)	BRGM-Schemes-Physico	4.43	1.50	1.50	1.50	3.26
	Chemical-Project. IV					
6(iii)	Token Provision for New	44.89				
	Schemes					
	Total(IBM):	103.00	19.00	16.17	20.00	18.23
VI.	Science & Technology	57.50	8.05	7.61	8.55	8.55
	Programmes					
VII.	Construction	28.00	6.00	5.38	6.00	3.10

Grand Total	8344.50	888.05	481.58	558.55	377.98
Ministry of Mines					

- 2.14 The Committee note that the annual Plan outlay for the year 2004-05 for the mining sector was Rs.549.00 crore which was reduced to Rs.497.77 crore at RE stage. However, the actual utilisation has been Rs.440.58 crore. The Committee are constrained to observe the declining trend in the annual Plan outlays of the Ministry of Mines both under plan and non-plan for the last five years as well as failure of the Ministry of Mines to utilize even the outlay approved at the RE stages. The Committee find that despite their earlier recommendation for the corrective steps for preparing realistic budgetary proposals, no improvement is discernible in the functioning of the Ministry. The budgetary proposals continue to reflect a casual approach and are either inflated or unrealistic. The Committee, therefore, recommend that budgetary division of the Ministry be further strengthened and sensitized to ensure realistic budgetary estimates and a monitoring mechanism put in place to closely oversee utilisation of funds.
- 2.15 The Committee further note that utilisation of funds by most of the PSUs under the Ministry of Mines has been far from satisfactory during 2004-2005 except in the case of Hindustan Copper Limited, which was allocated a small budget of Rs.40 crore for replacement and renewals. The reasons adduced by the Ministry for less utilization of funds have been of routine nature and not at all convincing. One of the major reasons being attributed for less utilization of funds has been the delayed Government approval for various schemes. The Committee fail to comprehend as to why the funds were continuously being earmarked during successive annual Plan when the Government approval was not forthcoming in time. The Committee strongly feel that major thrust areas of Xth Plan, *viz.* expansion of NALCO and modernization of GSI will suffer irreparable setback due to imprudent under-utilisation of funds.
- 2.16 As regards the Xth Plan, the Committee find even dismal scenario as the utilisation of funds during first three years of the Plan dips to merely 20.03 per cent of the approved outlay of Rs.8,344.50 crore. This is a sad reflection on the functioning of Ministry of Mines and PSUs under its administrative control. The Committee further note that with the enforcement of the Fiscal Responsibility and Budget Management(FRBM) Act, the expenditure is required to be monitored by the Ministry on quarterly basis ensuring that every organisation spends 67% or more of the Budget in the first three quarters and of 33% of the budget during the last quarter of the year. The under-utilisation of funds by the Ministry and PSUs during the first three years of the Xth Plan negates the spirit of the FRBM Act. The Committee feel deeply concerned at the failure of the Ministry to effectively play its role of facilitator and coordinator and feel that at Midterm appraisal stage of the Xth Plan, the funds which remained unutilized should have been earmarked for other approved schemes/projects.
- 2.17 The Committee are constrained to note that the modernization programme of Geological Survey of India (GSI) conceived during the early phase of the Xth Plan, has not made steady progress due to non-availability of specialized equipment and shortage of

staff. The Committee further note that the proposals for acquisition of high cost equipment for Offshore Marine Surveys Airborne Geophysical Surveys are yet to be cleared by the Planning Commission/Ministry of Finance. The Committee recommend that the Ministry should take all possible measures to procure above equipment in a time-bound manner lest the modernization process of GSI should get further delayed. The Committee also desire that shortage of staff in GSI should be met immediately to obviate any adverse affect on its functioning.

## B. Indian Bureau of Mines (IBM)

The Indian Bureau of Mines is primarily responsible for the promotion and conservation of minerals, protection of environment in mines, systematic and scientific development of mineral resources of the country other than coal, petroleum and natural gas, atomic mineral and minor minerals. Towards this end, it performs regulatory functions, namely enforcement of Mineral Conservation Development Rules, 1988, the relevant provisions of the mines and Environmental Protection Act, 1986 & Rules made thereunder. It also undertakes scientific, technoeconomic, research oriented studies in various aspects of mining, geological studies, ore beneficiation and environmental studies. It provides technical consultancy services to the mining industry for survey and geological appraisal of mineral resources and for preparation of feasibility reports of mining projects including beneficiation plants. It conducts market surveys to assist the mineral trade in the marketing of minerals. The IBM also functions as a Data Bank on Mines and Minerals and publishes periodically statistical information relating to mines and minerals. It also brings out technical publications in the form of Monographs and Bulletins. The IBM advises the Central and State Governments on all aspects of mineral industry, trade, legislation, etc.

## 3.2 Main activities of the IBM are as follows:

- (i) Inspection and study of mines for enforcement of MCDR, examination and approval of mining plans, schemes and mine closure plans under MCR 1960 and MCDR 1988.
- (ii) Providing technical consultancy services in the field of geology, mining, mine environment and mineral beneficiation.

(iii)	Research on beneficiation of low-grade ores and analysis of ores and minerals.
(iv)	Conducting research on special mining problems.
(v)	Publication of monographs and bulletins.
(vi)	Preparation of mineral maps.
(vii)	Preparation of inventory of mineral resources of the country.
(viii)	Conducting market surveys of minerals and metals.
(ix)	Collection and dissemination of statistics and information on mines and minerals.
(x)	Promoting and monitoring community development activities in mining areas.
(xi)	Advising the Central and State Governments on matters in regard to mineral industry, relating to environmental protection and pollution control, export and import policies, trade, mineral legislation, fiscal incentives and related matters.
(xii)	Training of IBM personnel and persons from the mineral industry and other agencies in India and abroad.
(xiii)	Special studies on Development Programmes and International Mineral Intelligence.

- 3.3 The activities of the Bureau are in accordance with its charter of functions notified by Government. These are in the nature of service activities and it is difficult to establish a correlation between inputs and outputs in relation to the services, which are of very diverse nature. However, in order to ensure reasonable level of productivity, norms have been fixed for various activities and the achievements are evaluated in relation to the targets set on the basis of these norms. The accounting system prevailing in the IBM, which is in line with the standard practice followed in Government Offices, does not lend itself to generation of unit cost data particularly when the activities of the various Divisions are of a diverse nature.
- 3.4 Thus in the Mines Control and Conservation of Minerals Division besides inspection of mines, Special Studies with particular reference to promote and monitor community development in mining areas, and updating of National Mineral Inventory in respect of private leaseholds are undertaken. Similarly, in the Ore Dressing Division, the inputs required for the pilot plant investigations and the laboratory scale investigation are widely different. Besides, the ore dressing activities also comprise determination of radicals through wet chemical analysis and instrumental analysis as well as mineralogical studies. Similarly, diverse activities are being carried out in the other Divisions also. The Bureau has tried to diversify its activities in accordance with the demand made on its services by the Central Government, State Governments and the mining industry.

## Inspection and Studies of Mines

3.5 The achievements during the year 2003-2004 & 2004-2005 (upto December, 2004) vis-a-vis targets, and the programme for the year 2005-2006 in respect of inspections & studies of mines for promoting systematic and scientific development of mineral deposits, conservation of mineral resources, approval of mining plans, environmental protection & pollution control and administration of MCDR, 1988 are as below:

Sl. No	Item		2003-04		2004-05		
		Target	Achievement	Target	Achievement (upto Dec., 2004)	Target	
1.	Inspection of Mines for administration of MCD R 1988, approval of mining schemes and mine closure		2,462	2,450	1,986	2,300	
2.	Special Integrated Studies Community Development in Mining Areas		13 studies	12 studies	12 studies in progress	#	

3.	Acquisition and dissemin	150 RPs/ PI	114 RPs/ PLs	200 RPs/ PLs	135 RPs/ PLs	\$
	exploration data in respec					
	Reconnaissance					
	Permits/Prospecting Licer					
	large areas					

- # In place of special studies, National Mineral Inventory will be updated as on 1.4.2005 covering about 7,500 leaseholds
- \$ As and when data received from RPs/PLs holders
- 3.6 Consequent to inspections and studies, during the year 2004-05 (upto Dec. 2004), 2,291 violations of MCDR, 1988 were pointed out in respect of 1,007 mines and 919 violations were rectified. Seventy prosecution cases were launched in various parts of the country, two cases were decided and eight cases were compounded. Besides, the suggestions and recommendations offered to the mine owners, have led to conservation of mineral resources. Promotion of scientific mining improvement in performance of mining operation, protection of environment, etc.
- 3.7 During the year 2004-05(upto Dec., 2004), 275 mining plans were approved, 52 not approved, and 221 mining schemes were approved and 45 not approved. Registration of Recognised Qualified Persons was granted in 81 cases and refused in 5 cases.

Technical Consultancy Services

- 3.8 Technical Consultancy Services were provided to the mining industry at prescribed charges and on promotional basis.
- 3.9 Targets and achievements for the year 2003-04 & 2004-05 and programme for 2005-06 are as below:-

Item		2003-04		2004-05	2005-
	Target	Achieve-me	Target	Achieve-ment(u 2004)	Target
Preparation of Mining Feasibility/ N Scheme/ EMP Study Reports and co Preliminary Geological Appraisal or deposits/survey assignments, etc. (No. of assignments)		12	9 to 11	9	7 to 8

Illegal Mining

3.10 The Ministry of Mines during briefing on illegal mining informed the Committee that there are 14000 cases of illegal mining taking place in various States. The Committee have also been informed that Indian Bureau of Mines (IBM) has taken up the matter with the State Government for taking appropriate action including determination mining leases operating without mining plan in 1522 cases of illegal mining. The representative of the Ministry has also informed the Committee as under:-

"As I have already submitted, out of these cases, we will take a break-up of the question as to which are the major mineral cases. We will come back to you saying whether the Indian Bureau of Mines (IBM) should be taking them up as they have done in the case of Karnataka. They have done a survey of illegal mining of iron-ore in Karnataka. I am told that in Bangalore, they had presented the photographs. A whole team had gone there. Subsequent to the Bangalore event, a follow up meeting has been done by the Indian Bureau of Mines (IBM) with the State Government of Karnataka on 27<sup>th</sup> December this year where the Commissioner of Mining and Geology had participated. In that meeting, the various points, which came up, were discussed. The Committee of Mining and Geology, Karnataka informed that permission granted by the DMG in the past to collect stacks and sell iron-ore in the patta land was evaluated by the Committee of Mining and Geology. It was found that all these permissions were beyond the purview of law. Of all such cases, 57 permissions were cancelled on 18.11.2004. This is one major achievement after that follow-up meeting. All the 57 permissions were illegally given. It was like giving a mining lease without the sanction of the authority concerned. The DMG, with the help of the police and the district administration, has initiated action for curbing illegal transport by seizing 60 trucks loaded with iron-ore from 6<sup>th</sup> November, 2004 onwards; fined them with a penalty ranging from Rs.10,000 to Rs.25,000".

3.11 The Committee note that the Indian Bureau of Mines(IBM) performs regulatory functions, under the Mines and Minerals(Development and Regulation) Act, 1957, Environmental Protection Act, 1986 and Rules made thereunder. IBM also undertakes scientific, techno-economic, research-oriented studies in various aspects of mining, geological studies, ore beneficiation and environmental studies besides providing technical consultancy services to the mining industry. For undertaking the above activities, an outlay of Rs.103 crore was approved for the Xth Plan. However, the actual expenditure incurred during the first three years of the Plan has been Rs.50.18 crore. The Committee are extremely surprised to note that though an amount of Rs.44.89 crore was earmarked for new schemes during the Plan, not even a single rupee has been spent thereon so far. The Committee, therefore, cannot but conclude that IBM/Ministry of Mines have made mockery of budgetary proposals by including in the Xth Plan ill-conceived and infructuous schemes/projects which remained on paper only entailing no expenditure at all even after lapse of first three years of the Plan. The

Committee, therefore, desire the Ministry to look into the matter and fix responsibility as to how such schemes/projects were included in the first instance or why no funds could be spent thereon. In case these schemes are not likely to fruitify in the coming two years, the Ministry should consider utilizing these funds on other schemes.

- 3.12 The Committee note that the IBM has been providing technical consultancy services to the mining industry at prescribed charges and on promotional basis. The Committee further note that the target for consultancy services assignments for the year 2005-2006 has been kept at quite low, *i.e.* 7 to 8 whereas the number of assignments during 2003-2004 and 2004-2005 were much more. The Committee desire that IBM should make all-out efforts to provide more technical consultancy services in order to generate more funds.
- 3.13 The Committee are dismayed to note that the alarming increase in the cases of illegal mining in different States resulting in immense loss to the National Exchequer. The Committee feel that IBM cannot absolve itself of the responsibility entrusted to it under MMDR Act and therefore strongly recommend the IBM/Ministry to pull up the concerned agencies for their failure to stop illegal mining. The Committee also desire that the Ministry should take proactive steps by exercising full vigil and responsibility in terms of location, detection and prosecution to control and prevent such illegal mining.

## C. National Aluminium Company Limited(NALCO)

National Aluminium Company Limited(NALCO) was incorporated in 1981 as a Public Sector Enterprise of the Government of India. Commissioned during 1985-87, NALCO is Asia's largest integrated aluminium complex.

- 4.2 Leveraging the technical collaboration with Aluminium Pechiney of France, ISO 9002 certification of quality management, LME registration of products, environment care conforming to ISO 14001, international customer base, at present NALCO is one of the lowest cost producer of Alumina & Aluminium in the world. After completion of the present 2<sup>nd</sup> phase expansion, the Alumina Refinery of the Company will be the 6<sup>th</sup> largest in the world.
- 4.3 Nestled in the Panchpatmali hills of Koraput district in Orissa, a fully mechanized open-cast mine is in operation since 1985, serving feedstock to Alumina Refinery located on the foothills. The present capacity is 48,00,000 TPA, which is being further expanded to 63,00,000 TPA under 2<sup>nd</sup> Phase Expansion.
- 4.4 The Aluminium Smelter is located at Angul, Orissa having a rated capacity of 3,45,000 tonnes per annum. The product profile is mainly Primary Aluminium in the form of Ingots, Sows, Wire Rods, Billets and Cast Strips. The Primary Aluminium is LME Registered and conforms to the specifications.

4.5 The physical performance of the Company during the year 2002-03, 2003-04 and 2004-05(upto December, 2004) is given in the following Table:

**Physical Performance of NALCO** 

SI. No.	Product	Unit	Actual			Target	
	Production		2002-03	2003-04	2003-04 (upto December, 2003)	2004-05 (upto December, 2004)	2004-05
1.	Bauxite	MT*	47,77,003	48,16,762	34,34,664	34,22,901	4,80,000
2.	Alumina	MT*	14,80,600	15,56,100	11,35,800	11,73,500	15,56,000
3.	Aluminium	MT*	2,44,708	2,98,208	2,23,193	2,48,498	3,48,000
4.	Net Power (Generation)	MU**	4,291	5,122	3,748	4,248.5	5,800

<sup>\*</sup>MT – Metric Tonne

4.6 The financial performance of the Company during the year 2002-03, 2003-04 and 2004-05(upto December, 2004) is given below:

<sup>\*\*</sup>MU – Million Units

## **Financial Performance of NALCO**

(Rs. in crore)

SI. No.	Details	Actual				Target
		2002-03	2003-04	2003-04 (upto December, 2003)	2004-05 (upto December, 2004)	2004-05
1.	Income	2,726.46	3,324.77	2,336.27	3,113.27	3,441.78
2.	Operating Cost	1,545.22	1,722.33	1,283.20	1,430.24	1,953.46
3.	Interest etc.	105.66	103.41	68.87	49.61	73.36
4.	Depreciation & Amortisation	360.15	446.27	314.0	344.42	483.00
5.	Net Profit before Tax & Dividend(PBT)	751.43	1,052.76	669.70	1,289.00	931.96
6.	Net Profit after Tax but before Dividend(PAT)	520.92	737.37	472.60	800.60	597.62

4.7 Projected operating results for the RE 2004-2005 and BE 2005-2006.

## **Production Programme**

SI. No.		Rated Capacity as on	RE 2004-2005	BE 2005-2006
		31.3.2005		
1.	Bauxite	48,00,000 T	48,00,000 T	48,00,000 T
2.	Alumina Hydrate	15,75,000 T	15,75,000 T	15,75,000 T
3.	Aluminium	3,45,000 T	3,25,000 T	3,45,000 T
4.	Power	120 MW x 8	5700 mln.kwh	5800 mln.kwh

- 4.8 The above production programme is based on the assumptions that:
  - 1. The coal supplies for the Power Plant and Alumina Plant from Mahanadi Coal Co. Ltd., shall be regularly available as per the projected requirements.
  - 2. Railways will ensure smooth movement of NALCO's traffic.

3. There will not be any restriction on power off take by GRIDCO.

## Damanjodi Sector(Alumina Refinery)

- 4.9 NALCO has been producing specially grade hydrate and specialty grade alumina from a pilot plant having a capacity of 600 TPY. Recently, a Main Plant for production of these items having a capacity of 26,400 TPY has been commissioned. Both these plants are located within NALCO's Alumina Refinery at Damanjodi, Orissa, India. These plants produce dry and microfined hydrates and high alpha coarse, high alpha ground, low soda high alpha coarse and high alpha low soda ground alumina of several grades. These products are sold in domestic market and exports of the same are also being developed.
- 4.10 In the same location NALCO also produces Detergent Grade Zeolite(Zeolite-A) from a plant having capacity of 10,000 TPY. Zeolite-A is mostly being sold in domestic market and feasibility of exports are also being studied.

## Expansion

- 4.11 The 1<sup>st</sup> phase expansion of production capacity at an investment of Rs.4,200 crore has been completed in February 2004 with savings of approximately Rs.610 crore.
- 4.12 The 2<sup>nd</sup> phase expansion of capacity encompassing all the production segments has been approved by the Government in October 2004 at a project outlay of Rs.4,091.51 crore to be completed in 50 months. With this capacity of Bauxite Mine, Refinery, Smelter and Captive Power Plant will increase as given below:

Capacity of Mines, Refinery, Smelter & CPP

Product	Present	After Expansion	
	Capacity		
Bauxite Mine(TPY*)	48,00,000	63,00,000	
Alumina Refinery(TPY)	15,75,000	21,00,000	
Aluminium Smelter(TPY)	3,45,000	4,60,000	
Captive Power Plant(MW)	960	1,200	

## 2<sup>nd</sup> Phase Expansion(Milestones as of December 2004)

- The procedure for pre-qualification of suppliers approved. The final recommendation is awaited.
- The soil investigation activities at site have been completed. Report is awaited.
- Notice for pre-qualification of EPCM Consultant for 2<sup>nd</sup> Phase Expansion of Bauxite Mines, Alumina Refinery
  and Smelter has been published in the newspaper and website. The bid due date is 19.1.2005.
- Consultant has been appointed for pre-qualification of contractors.
- Limited tender for EPCM consultant for CPP & SGP has been issued.
- 4.13 When asked about the basis for assessing the production capacity after expansion, the Ministry of Mines stated that the capacity for 2<sup>nd</sup> phase expansion of Alumina Refinery (2.1 Million Tonne) has been arrived considering installation of an identical 4<sup>th</sup> stream of 0.525 Million Tonne capacity. The capacity of 2<sup>nd</sup> phase expansion of Smelter(0.46 Million Tonne) is based on addition of the 4<sup>th</sup> Potline of 0.115 million tonne. The capacity of bauxite mines under 2<sup>nd</sup> phase expansion(6.3 million tonne) has been decided to match the needs of Alumina refinery after the 2<sup>nd</sup> phase expansion. Similarly, the capacity of CPP(1,200 MW) is being increased by addition of two identical units so as to take care of the expanded Smelter capacity.
- 4.14 In a query about the percentage of market share, the NALCO is likely to dominate in the aluminium industry after its expansion, the Ministry stated that the total annual consumption of Aluminium metal in the country at present is approximately 7,40,000 MT and the present market share of NALCO is about 27%.
- 4.15 NALCO's expansion is likely to be completed by 2009. Simultaneous capacity expansion by other primary producers like Sterlite/Balco, Hindalco/Indal are also in the pipeline. Keeping the above in view and expected consumption growth of approximately 10%, NALCO's market share is likely to go up and would be around 30% after it's expansion. The technology considered for 2<sup>nd</sup> phase expansion is same as the technology used in 1<sup>st</sup> phase expansion, since it is a brown field expansion.
- 4.16 A sum of Rs. 7,056.00 crore has been approved for Xth Plan outlay for NALCO. This includes an outlay of Rs.5,406 crore on further expansion and new projects including joint ventures. A sum of Rs. 838.54 crore has been spent so far in the first two years of the Plan period. In the Mid-Term Appraisal of Xth Plan, the Company has revised the outlay to Rs.2,864.25 crore in the Xth Plan.

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Scheme	Original Outlay	Revised Outlay
M& R Expansion	126.02	88.50
S&P Expansion	697.06	584.79
8 <sup>th</sup> Unit of CPP	384.40	242.75
SGA & Zeolite Plant	6.22	13.21
Rolled Product Unit	34.00	65.00
2 <sup>nd</sup> phase expansion	3,623.00	1,650.00
Qatar Project	1573.00	10.00
Coal & Mines	210.00	15.00
Additions, Modification &	402.30	195.00
Replacements		
Total:	7,056.00	2,864.25

- 4.18 Replying to a query regarding reduction of Plan outlay in the Mid-Term Appraisal, the Ministry has stated that the major reduction from Xth Plan outlay is in respect of 2<sup>nd</sup> phase expansion, Qatar Project, Coal Mines, Additions, Modifications & Replacements, etc. The reduction in M&R Expansion, S&P Expansion and 8<sup>th</sup> Unit of CPP are mostly the reflection of the savings in these projects. The outlay on 2<sup>nd</sup> phase expansion have been reduced because the approval has been accorded only in October 2004. A provision of Rs.1,573 crore was made in Xth Plan outlay for the Qatar project. Since Qatar authorities did not show much interest in our participation in the project, no money has been spent so far. Since of late the Qatar authorities are showing some positive interest, an adhoc sum of Rs.10 crore has been kept in the Xth Plan period.
- 4.19 The Company had planned for backward integration of the project by way of Captive Coal Mine to meet its critical raw material need and accordingly had projected a Plan outlay of Rs.210 crore towards a block of coal mines to cater to the needs of its Captive Power Plant and Steam Generation Plant. The provisional allotment by the Government of India for allotment of coal block Utkal E to NALCO has been received in August 2004 and pre-project activities, such as preparation of DPR, EIA/EMP study, GR preparation have been entrusted to CMPDI, lease application has been filed with Collector, Talcher etc. It is expected that the work on the project would commence shortly. A sum of Rs.15 crore is expected to be spent during the balance period of Xth Plan Outlay.

- 4.20 The Committee are happy to note that National Aluminium Company Limited(NALCO) had become a 'Zero Debt Company' after repaying all loan including entire foreign currency loan. The Committee further note that NALCO is Asia's largest integrated aluminium complex and has emerged as a star performer in production and export of alumina and aluminium and more significantly is propelling self-sustained growth. The Committee also note that the 1<sup>st</sup> phase of expansion of production capacity at an investment of Rs.4,200 crore has been completed in February 2004 with savings of Rs.610 crore. The 2<sup>nd</sup> phase expansion of capacity encompassing all the production segments has been approved by the Government in October 2004 at a project outlay of Rs.4,091.50 crore to be completed in 50 months.
- 4.21 The Committee have been informed that Xth Plan outlay of Rs.7,056.00 crore for NALCO has been revised to Rs.2865.25 crore in the Mid-Term Appraisal due to reduced allocation in respect of 2<sup>nd</sup> phase expansion, Qatar Project, coal mines and AMR, etc. The Committee expect that the Qatar Project, a prestigious one for NALCO would materialize since the Qatar authorities are showing some positive interest and desire that the Ministry of Mines should further pursue the matter with Qatar authorities.
- 4.22 The Committee are happy to note that the coal block Utkal has been allotted to NALCO in August 2004 to cater to the need of its Captive Power Plant. The Committee desire that it should be activated at the earliest and all the necessary clearances from different authorities should be obtained.
- 4.23 The Committee further desire that monitoring mechanism be set up to ensure that all the schemes under the 2<sup>nd</sup> phase expansion are completed within the time schedule without any time and cost overrun.

## D. Hindustan Copper Limited(HCL)

Hindustan Copper Limited(HCL), a Government of India Enterprise and the nation's only producer of primary copper from indigenous resources was incorporated in the Public Sector on 9 November 1967. The major activities of HCL are exploration, mining, beneficiation, smelting, refining and casting of finished copper metal into saleable products. HCL produces primary copper in the form of cathode/wire rod. Apart from copper, HCL also produces various byproducts like precious metals(Gold & Silver), Sulphuric acid, Nickel Sulphate, Selenium, Telurium, etc. The present smelting and refining capacity of HCL is supported by mining/beneficiation activity.

- 5.2 The Company has its Head Office and Registered Office at 1, Ashutosh Chowdhury Avenue, Kolkata 700 019. The main operating units of the Company are as under:-
- a. Khetri Copper Complex(KCC) at Khetri, Rajasthan

A mining and metallurgical complex alongwith the by-product recovery plant with the capacity to produce 31,000 TPA finished copper.

## b. Indian Copper Complex(ICC) at Ghatsila, Jharkhand

A metallurgical complex and the by-product recovery plant with the capacity to produce 16,500 TPA finished copper.

## c. Malanjkhand Copper Project(MCP) at Malanjkhand, MP

An open pit mine of 2 million tonne capacity per annum with a matching concentrator. The concentrate produced at Malanjkhand is sent to Khetri and Ghatsila for further processing.

## d. Taloja Copper Project(TCP) at Taloja, Maharashtra

A Continuous Cast Wire Rod Plant based on Southware Technology for conversion of cathodes into wire rod. The capacity of the plant is 60,000 TPA.

## Plan outlay for Tenth Plan(2002-2007)

5.3 HCL, while submitting 10<sup>th</sup> Plan capital expenditure, was advised to submit two years, projection only, *i.e.* 2002-03 and 2003-04 due to the fact that as per disinvestment plan, the Company was expected to be completely disinvested by the end of 2003-04. The annual plan outlay during the first two years of the 10<sup>th</sup> Five Year Plan period had been restricted to replacements and renewals only and the schemes which were considered in the 9<sup>th</sup> Plan period had been dropped from the 10<sup>th</sup> Plan period. Further, since HCL has been incurring losses for several years the Company has restricted its expenditure on replacement and renewals only with the aid of Government support. Regular development work in mines were kept in abeyance due to serious fund crunch.

## Plan outlay for RE 2004-2005 & BE 2005-06

### Replacement & Renewals

5.4 This is a continuous process for achieving maximum capacity utilisation of the existing facilities. Due to lack of sufficient funds, the Company in the past could not replace the critical plant and mining equipments in time. As a result, the desired production from the existing facility could not be achieved. The proper and timely replacement/renewals of critical equipments in Smelter, Refinery, Milling House and various material handling equipments in mines is pre-condition for achieving better capacity utilisation. Therefore, the Company proposes a plan outlay of Rs.40 crore in RE 2004-05 and Rs.40 crore in BE 2005-06.

### Physical Performance of HCL

(In tonne)

Product	Actual				
	2002-03	2003-04	2003-04	2004-05	
			(upto	(upto	
			December	December	
			2003)	2004)	
Ore Production	3,064	2,895	2,045	2,236	
(thousand)					
Metal in	30,824	28,306	20,085	20,896	
concentrates					
Refined Copper					
(Cathode)					
Own	36,575	30,598	22,902	14,366	
Tolled				3,191	
Total	36,575	30,598	22,902	17,557	
Wire rod(Taloja)	30,346	28,003	21,112	17,208	

## Financial Performance of HCL (Rs. in crore)

	T			11 01010)	
Details	Actual				
	2002-03	2003-04	2003-04	2004-05	
			(upto	(upto	
			December	December	
			2003)	2004)	
Income	501.53	514.84	348.25	431.48	
Operating Cost	531.95	452.32	333.30	318.16	
Interest and	59.57	59.62	44.50	32.58	
Transaction Cost					
Depreciation &	57.71	59.05	43.73	42.66	
Ammortisation					
Net Profit/(-Loss)	(-	(-56.16)	(-73.28)	38.08	
before Income Tax	147.70)	,	,		
and Dividend	<b>,</b>				

#### Grant to Hindustan Copper Ltd. (HCL)

5.5 The following grants have been made to Hindustan Copper Ltd. for the year 2004-2005 and 2005-2006. (Rs. in crore)

Major	BE 2004-2005		RE 2004-2005		BE 2005-2006	
Head	Plan	Non-Plan	Plan	Non-Plan	Plan	Non-Plan
2853	_	60.00	-	35.00	-	0.01

- While replying to the query regarding the reasons for huge decline in the level of BE from Rs.60.00 crore to Rs.35.00 crore during 2004-2005 in the Non-Plan expenditure and the present demand of Rs.1.00 lakh only as proposed during 2005-2006, the Ministry of Mines has stated that a Non-Plan grant of Rs.60 crore at BE stage during 2004-05 was earmarked for settlement of dues of employees separated under VRS. While arriving at this figure the assumption was to close down Khetri mine which was found to be unviable in view of very low LME that was prevalent during the period. With the subsequent steep increase in LME, operation of mines was found to be viable and the operation of the mines was restarted from January 2004. Accordingly, the requirement of fund under VRS grant was brought down to Rs.35 crore in RE 2004-05 as against BE figure of Rs.60 crore.
- 5.7 The Company does not propose to continue with the VR Scheme during the next financial year, *i.e.* 2005-06 unless it is otherwise warranted in which case the matter would be reviewed afresh and action accordingly will be taken. Hence a token provision of Rs.1 lakh has been kept in BE 2005-06 for any future requirement of fund for VRS.

#### VRS in HCL

5.8 During the financial year 2004-05 (upto February, 2005), 265 employees have been separated under VRS. Consequently, the manpower of HCL which had been 5,995 as on 1 April 2004 has come down to 5,670 as on 1 March 2005. The VR Scheme in the Company is still open and some VR optees have not been released due to exigencies of work. Only such employees are to be released on VR during the early part of the next financial year. Incidentally, HCL has reduced its manpower by 12,730 between 1 April 1998 to 1 March 2005 bringing the manpower down from 18,400 to 5,670. Therefore, at present the potential for further separation of manpower through VR is limited. Under the circumstances, HCL has not solicited further support from the Government on account of VR for the next financial year.

#### Disinvestment of HCL

- 5.9 The Committee have been informed that the Government had decided to divest its entire shareholding in HCL (98.95%) to an interested buyer. Financial bids had been initiated by the then Ministry of Disinvestment but the same was kept in abeyance in view of litigation pending in the Courts against the disinvestments of HCL. The position will be reviewed after final outcome of the court cases on reference from Department of Disinvestment.
- 5.10 Meanwhile, a financial restructuring package has been drawn and submitted by the Company to Government of India for consideration. The same is currently under active consideration of the Ministry. The proposal *inter alia* envisage that HCL may be provided plan fund of Rs.121.73 crore only during the next five financial years commencing from 2005-06. Out of this Planning Commission has already agreed in principle to grant plan fund on account of replacement and renewal to HCL for an amount of Rs.40 crore in 2005-06. HCL had also indicated that in addition, it would require a financial support of Rs.212.50 crore for repayment of bonds and debentures which the Company had issued to raise funds from the market in the past. HCL's proposal had been that the Company could be allowed to raise the required fund through IPO route and the Company has already made the presentation to the Ministry of Mines in this regard. A formal proposal in this matter would be processed by the Company after the current financial year's result of the Company are available. Incidentally, HCL is expecting to post a profit of around Rs.52 crore in the financial year 2004-05.
- As per proposal submitted by the Company, the revival strategy of HCL can be divided into two parts, namely, the operational revival and the financial revival.

#### Rationalisation of Manpower

- 5.12 Separation of manpower under VRS has been judiciously made with a view to rationalize overall manpower strength *vis-a-vis* the production requirement. Due to such separation there was no adverse effect on physical performance of the Company. Because of such separation Company was able to reduce the impact of employment cost from Rs. 139.72 crore in 2001-02 to a level of Rs. 99.31 crore in 2003-04. The same is likely to be further reduced to Rs. 87 crore (Prov.) during 2004-05. Further due to separation of manpower between 1999 to 2004-05 the Company's manpower cost as a percentage of turnover has gone down from 31.81% to 14.70%, production per employee has gone up from 2.06 tonne to 4.11 tonne, value added per rupee of wages has toned up from Rs.0.71 to Rs.3.81.
- 5.13 Details of Budgetary allocation both at BE & RE stages and actual for VRS for the last three years in respect of HCL is as under:

Year	BE	RE	Actual
2001-02			
Grant for VRS(Non-Plan)	114.00	140.00	140.00
2002-03			
Grant for VRS(Non-Plan)	90.00	220.00	220.00
2003-04			
Grant for VRS(Non-Plan)	120.00	25.00	25.00

#### Replacement and Renewals

5.14 A provision of Rs.40 crore has been made in BE 2005-06 for Replacement and Renewals of critical equipment to ensure optimum utilization of the available resources to facilitate implementation of production plan for the year 2005-06. As per BE target of 2005-06 refined copper production will be to the order of 40,000 T. The capacity utilization of HCL especially for smelting, depends largely on the availability of inputs. 60% of HCL's requirement for copper in concentrates is met through domestic production from HCL's captive mines. For full capacity utilization, the remaining 40% of copper concentrates needs to be imported. Import of concentrates depends on the fluctuation in the global price of the copper concentrates determined through treatment charge and refining charge (TC/RC) which varies from time to time. Because of adverse TC/RC, HCL did not import any copper concentrates for more than 1½ years. Now TC/RC position is better and HCL is planning to import copper concentrates in full scale till the position remains favourable.

MoU Rating

5.15 The MoU rating of Hindustan Copper Limited during the last three years is as under:

2001-2002 - Fair 2002-2003 - Good 2003-2004 - Very Good 2004-2005 - Very Good

5.16 The Committee note that the Government had decided to disinvest its entire share holdings in HCL(98.95%) to an interested buyer. Financial bids had been initiated by the then Ministry of Disinvestment but the same was kept in abeyance in view of the litigation pending in the court against the disinvestments of HCL. The Committee also note that HCL has returned on a path of recovery and has earned a net profit of Rs.38.08 crore(upto December 2004). The Committee strongly feel that disinvestment proposal of HCL should be put on hold since the Company has taken a turn around from 2004 onwards and there has been marked improvement in the MoU rating of the Company during the last three years. The Committee also reiterate their recommendation contained in Fifth Report(Fourteenth Lok Sabha) and would like that the financial restructuring package pending with the Government should be approved immediately. The

Committee hope that with the implementation of financial restructuring proposal and required allocation for replacement of critical equipments, the Company would start earning much higher profits.

- 5.17 The Committee note that a Budget provision of only Rs.40 crore was made for the Hindustan Copper Limited in RE 2004-2005. The same outlay has been proposed in BE 2005-2006 for replacement/renewals of critical equipments to ensure optimum utilization of the available resources to facilitate implementation of production plan for the year 2005-2006.
- 5.18 The Committee feel that higher allocation for HCL has become imperative in view of the operation of the Company having started from the Khetri mines and also import of 40% of copper concentrates for full capacity utilization. The Committee, therefore, recommend that the Ministry of Mines should take up the matter with the Ministry of Finance/Planning Commission for higher allocation to HCL at RE stage.

#### \*E. Mineral Exploration Corporation Limited (MECL)

Mineral Exploration Corporation Limited (MECL) was established on 21 October 1972 to undertake systematic mineral exploration and allied works in order to establish reserves of various minerals/ores in shortest possible time to curtail the large time gap entailed between discovery of a prospect and its eventual exploitation. The Corporation has been carrying out these functions by steadily enlarging its scope of activities during the last 32 years.

6.2 As on date, the authorised and paid-up capital of the Company stood at Rs.100 crore and 72.75 crore, respectively.

#### **Objectives**

- 6.3 The basic aim of MECL is to bridge that gap between preliminary exploration of mineral prospect and its commercial exploitation. To achieve this aim and accomplish its Mission, the Company has the following objectives:
  - To plan, promote, organize and implement programmes for detailed mineral exploration and to perform functions assigned by the Government from time to time within and outside the country.
  - To carry out geological, geotechnical, geophysical survey, remote sensing and environmental studies and IT enabled services for exploration of minerals.
  - To carry out exploratory drilling and developmental mining operations, to prove and estimate the reserves of various minerals/ores.
  - To take up projects for exploration, developmental mining and related activities in association with MNCs through MoU/bilateral agreement routes.

- To undertake jobs on commercial basis in various fields of mineral exploration as well as for purposes other than mineral exploration, such as geotechnical, mine constructions and commercial mining of minor minerals.
- To offer consultancy services for obtaining prospecting licence, mining lease, exploitation by mining and beneficiation for different types of minerals, rocks and ores.
- To obtain prospecting licence and mining lease for different types of minerals, in India and elsewhere for the purpose of value addition/production mining and processing.

#### **Activities**

- 6.4 MECL carries out its exploration activities under two major heads, viz.
  - 'Promotional' on behalf of Ministry of Coal & Ministry of Mines in which projects are funded by Central Government on the basis of detailed exploration schemes formulated by the Company, in the perspective of the demand vs. availability as well as national priorities, and
  - 'Contractual' on behalf of other agencies including Public Sector, Private Sector and State Governments as per contract executed by MECL with them.
- 6.5 Out of the total expenditure planned during the Xth Plan a provision for a sum of Rs.200 crore is envisaged for the promotional exploration by MECL on behalf of Ministry of Mines and an additional amount of Rs.50 crore is recommended towards replacement of machinery equipment and instruments. However, against this an outlay of Rs.45 crore for promotional exploration and Rs.5 crore only for capital investment has been approved.
- 6.6 The installed capacity for drilling and mining is 2,00,000 metres and 4,000 metres, respectively.

#### Review of Performance during Xth Plan period

- 6.7 During the year as against MoU target of 2,00,000 m. of drilling MECL has completed 1,19,994 m. of drilling representing 60% of achievement only. In mining its performance has been 3,372 m. against the target of 5,000 m. representing achievement of 67%.
- 6.8 During the year 2002-03, a total of 27 exploration reports were submitted and established 3,008 m.t. of mineral reserves comprising 2,995 m.t. of coal, two m.t. of lignite, three m.t. of copper ore and eight m.t. of gold ore.
- 6.9 The physical performance of MECL was affected due to several constraints like stoppage of coal and lignite work on behalf of Ministry of Coal for want of EFC, delay in commencement of promotional projects for want of financial

sanction and non-materialisation of CBM work on behalf of ONGC. In addition, the limited working hours for drilling in SCCL command area has also contributed for lesser outputs to some extents.

6.10 During the year a sum of Rs.8.00 crore was provided for promotional exploration on behalf of Ministry of Mines, against which Rs.7.92 crore have been utilized. In addition, Rs.3.00 crore for capital expenditure has also been fully utilized.

#### Performance during 2003-04

- 6.11 During the year as against the MoU target of 1,65,000 m. of drilling, MECL has completed 1,72,281 m. representing 104% of achievement. In mining its performance has been 3,357 m. against the target of 5,000 m. representing an achievement of 67%.
- 6.12 During the year 2003-04, 40 exploration reports were submitted which include 22 reports for environmental and remote sensing studies also. A total of 2,081 m.t. of mineral reserves comprising 884 m.t. of coal, 1,113 m.t. of lignite, 8 m.t. for copper ore, 76 m.t. bauxite reserves and 0.18 m.t. of rare metal ore with 0.443% of cesium 0.26% of lithium and 0.102% rubidium, were explored during the year.
- 6.13 The physical performance of MECL was affected due to constraints like delay in commencement of promotional projects for want of financial sanction, non-commencement of pitting and trenching work at Jamirapat bauxite deposit, Chhattisgarh due to law and order, due to extremist activities in SCCL area where two drill rigs were blasted, etc. In addition the limited working hours for drilling in SCCL command area has also contributed for lesser outputs to some extents.
- 6.14 During the year a sum of Rs.9.00 crore was provided for promotional exploration on behalf of Ministry of Mines out of which Rs.7.61 crore only could be utilised and the non-utilisation of fund is due to non receipt of financial sanction for the projects approved by Standing Committee on Promotional Project. During the year, Rs.25.00 lakh were provided for S&T grant.

#### Performance during 2004-05

6.15 The MoU targets of 1,65,000 metre and 6,000 metre have been fixed for drilling and mining respectively. So far MECL has completed 1,16,359 metre of drilling and 4,808 metre of mining which represent 70.52% and 80.13% of the annual target. Based on the performance and the work availability on date it is anticipated that the annual targets will be achieved.

#### Highlights of achievements during 2004-05

6.16 The performance of MECL during 2004-05 upto December 2004 is given below:

#### **Physical**

- MECL has completed 1,16,359 m. of drilling as against 1,13,421 m. for the same period during the year 2003-04. In developmental mining, the performance has been remarkable and the achievement has been 4,808 m. as against 2,270 m. for the same period of previous year thus registering an improvement of around 112%.
- 33 exploration reports were submitted and a total of 732 m.t. of mineral reserves have been added to National Mineral Inventory, which includes 380 m.t. of coal, 334 m.t. of lignite, 3.41 m.t. of copper ore, 9.68 m.t. of bauxite and 5.27 m.t. of ferro-silicon grade quartzite.
- So far, a total of 102 sq.km of geological mapping, a total of 77,274 metre of borehole geophysical logging and 351 sq.km. of surface geophysical survey has been carried out.
- In laboratories, the chemical laboratory determined 46,209 radicals in 19,316 samples, physical laboratory determined 3,407 radicals in 436 samples and petrology laboratory studies 480 samples.

#### **Financial**

- The sales income of the Company during 2004-2005 upto December 2004 has been Rs.51.48 crore as against the sales income of Rs.38.32 crore during 2003-04, thus registering an improvement of 34%.
- The gross margin of the Company has increased between April 2004 and December 2004 and it stood at Rs.11.21 crore as against Rs.3.03 crore during same period of the previous year.
- As a result of vigorous marketing efforts and participating in tenders on competitive rates, Company could receive a total of 36 nos. of work orders valued at Rs.34.13 crore upto December 2004 and additional are in pipe-line.
- Diversification activity continued in coal sampling and analysis, slim hole drilling for Coal Bed Methane Studies
  and ballast stone supply. The total revenue from diversification programme stood to Rs.8.50 crore.

#### Outlays for the year 2004-05

6.17 For the promotional projects an outlay of Rs.10 crore has been approved. For the capital expenditure, the approved outlay for the year is Rs.2.00 crore only in the form of equity capital. In addition to above a non-Plan loan of Rs.30.00 crore has also been approved for implementation of VRS.

**Physical Performance of MECL** 

Items			Target			
		2002-03	2003-04	2003-04 (upto December 2003)	2004-05 (upto December 2004)	2004-05
Drilling Metreage(m) Productivity drill/Months	metre/	1,19,994 277	1,72,281 289	1,13,421 266	1,16,359 254	1,65,000
Mining(Metres)		3,372	3,357	2,270	4,808	6,000
Final G Reports(Nos.)	eological	27	40	25	33	20

### Financial Performance of MECL (Rs. in crore)

Items	Items Actual			Target		
		2002-03	2003-04	2003-04 (upto December 2003)	2004-05 (upto December 2004)	2004-05
Income		44.83	60.89	38.32	51.48	66.50
Operating Cost		49.69	48.36	35.29	40.27	52.00
Interest		7.94	10.06	7.88	7.85	10.50
Depreciation Ammortisation	&	4.65	4.77	3.72	3.86	5.05
Net Profit*		-17.58	-2.49	-8.57	-0.50	-1.05

<sup>\*</sup> Before Income Tax & Dividend

6.18 When asked about the losses incurred and efforts being contemplated to make the Company viable, the Ministry of Mines stated that to arrest the declining trend in the physico-financial performance of the Company, Government of India, Ministry of Mines constituted an Expert Committee in June 1995 for suggesting measures for revival of the Company. The recommendations made by the Expert Committee were reviewed by a Review Committee chaired by the Secretary, Ministry of Mines. The main

recommendations included enhancement of drilling productivity, reduction in manpower, vigorous business development efforts to obtain more and more contractual work, increase in turnover through diversification of activities and financial restructuring.

- 6.19 Most of the recommendations of the Review Committee except financial restructuring of the Company have been implemented. As a result of various measures, the productivity of the Company has improved from a level of 160m./drill/month during 1996-97 to a level of 289m./drill/month during 2003-04. The Company has achieved a steady revenue of around Rs.60 crore between 1996-97 and 2003-2004 except during the year 2002-2003. The gross margin of the Company has been continuously positive since 1997-98 except in 2002-2003. During 2003-2004, it has achieved an all-time high gross margin of Rs.12.53 crore. Further, the Company has started earning profit before interest on Government loan from 1999-2000 onwards(except in 2002-2003).
- 6.20 To generate additional revenues, it proposes to expand its activities in the field of large diameter borehole, geo-technical investigations, geo-hydrological studies, etc. as huge market potential exists in these areas. The financial restructuring package has been received from MECL for submission to Board for Reconstruction of Public Sector Enterprises. Once it is approved and implemented, MECL shall be able to take up the programme of technological up-gradation and it shall be possible for MECL to tap the market in these areas, which in turn shall strengthen MECL. A revised proposal for financial restructuring of MECL is under consideration in the Ministry of Mines.
- 6.21 It has also identified production of bauxite as thrust area for regular source of revenue and long-term sustenance. It has applied for mining lease of Serengdag bauxite deposit in district Surguja, in Chhattisgarh State. The formalities for grant of lease are being completed.
- 6.22 Replying to a query regarding restructuring package and proposal to effect VRS scheme in the Company during 2005-06 in order to make it more viable, the Ministry of Mines informed the Committee that a comprehensive financial restructuring proposal to be put up to Board of Reconstruction of Public Sector Enterprises (BRPSE) for the following in a desired format has been received from MECL:

- (a) Waiver of interest of Rs. 43.64 crore and penal interest of Rs. 4.98 crore (a total of Rs.48.62 crore) outstanding against the Company as on 31.3.2004 on loan taken from the Government and its adjustment against the accumulated losses.
- (b) Write-off of outstanding Government loan of Rs. 30.80 crore as on 31.3.04 as Grant-in-Aid as suggested by the Ministry of Finance.
- (c) Conversion of Non-Plan loans of Rs 15.00 crore into grant, which were drawn during the year 2001-2002 and 2002-2003 for disbursement of terminal dues to the employees separated under VRS.
- (d) Provision of Rs.70 crore as grant for implementation of VRS for separation of 1,133 surplus employees to bring the manpower strength of the Company to the level of 1,200.
- 6.23 Presently a revised proposal for financial restructuring of MECL is under consideration in the Ministry of Mines.
- When asked about the promotional programmes listed by MECL during 2005-06, the Ministry of Mines in a reply stated that MECL while implementing its promotional programme has been experiencing inordinate delay in obtaining the forest clearances which in turn results in time and cost overrun. During 2004-05, though the exploration of gold at Maruda block in Kerala and for copper at Dolamala Rajasthan was approved but could not be commenced due to non-receipt of the forest clearance for over 6–8 months. Efforts are being continued to obtain the same and take up the exploration in these blocks during 2005-06.
- 6.25 In addition, the work has also been affected due to law and order problem in the sensitive areas where the work is to be continued in restricted hours thus affecting the drilling productivity.
- 6.26 Regarding perspective plan to obtain more and more job orders from PSUs and private organizations to achieve higher turnover and gross margin, the Ministry of Mines stated that for obtaining more and more job orders from PSUs and private organisations to achieve higher turnover and gross margin, MECL is participating in tenders/bids at competitive rates and also

rigorous efforts are being made to obtain work orders through bilateral negotiation. For the purpose it is committed to provide cost-effective quality mineral exploration services upto the satisfaction of the clients.

- 6.27 To address the various marketing issues, the Marketing Cell is functioning under Business Development Division with the sole aim of obtaining sufficient work orders for deployment of all the available resources. A conceptual change in its pricing policy has also been adopted for obtaining sufficient work orders for effective utilization of all the available resources which in turn would reduce its overhead cost, thereby it would be in a position to provide cost-effective mineral exploration services.
- 6.28 For the Xth Plan period an outlay of Rs.5 crore only has been provided under the head, capital. This amount has been fully utilized for replacement/renewal of essential capital equipments and accessories during the first three years of the Plan. For the year 2005-06 an outlay of Rs.5 crore has been approved out of which Rs.1 crore would be provided as equity and the balance of Rs.4 crore is to be generated from internal budgetary resources. This outlay is inadequate to meet the requirement of technological up-gradation as planned by MECL.
- 6.29 However, after approval and implementation of financial restructuring package, MECL proposes to arrange funds for technological up-gradation and modernization from the financial institutions.
- 6.30 The Committee note that an Expert Committee was constituted by the Government in June 1995 to arrest the declining trend in the physico-financial performance of the Mineral Exploration Corporation Limited(MECL). The recommendations made by the Expert Committee were considered by a Review Committee chaired by the Secretary, Ministry of Mines. Most of the recommendations of the Review Committee except financial restructuring of the Company have since been implemented. As a result of various measures, the productivity of the Company has improved. However, the financial performance of the Company has not shown the improvement. The Committee note that a revised proposal for financial restructuring of MECL is under consideration in the Ministry of Mines.
- 6.31 The Committee are extremely concerned that in spite of various policy measures taken by the Government, the physico-financial performance of MECL has not shown any improvement. The Committee feel that financial restructuring package is an essential component for the progress of a Company and are unhappy to find that the proposal is still hanging fire even after the lapse of nearly eight years thereby causing not only recurring losses worth crore of rupees but has also derailed a promising Company. The Committee, therefore, recommend that the revised financial restructuring proposal of MECL presently under consideration in the Ministry of Mines should be approved without further loss of time. The Committee would like to be apprised of the action taken in this regard.

6.32 The Committee observe that the physical performance of MECL was affected due to several constraints like the stoppage of exploration of coal and lignite on behalf of Ministry of Coal for want of environment forest clearance, the delay in commencement of promotional projects for want of financial sanction and non-materialisation of Coal Bed Methane work on behalf of ONGC. The Committee recommend that a Steering Committee may be constituted in the Ministry for holding wide ranging discussions with the concerned Ministry/State Government for getting expeditious clearance from different agencies. The Committee also desire that MECL should strive to obtain more and more job orders from PSUs and private organisations to achieve higher turnover.

#### F. Science & Technology

The Science and Technology programme of the Ministry of Mines initiated in 1978, covers the disciplines of Geology, Exploration, Mining and Environment, Bio-leaching, Beneficiation Rock Mechanics and Ground Control and Non-Ferrous Metallurgy. 124 projects have been completed so far and 35 are in progress.

7.2 The projects having the basis of national requirement, industrial requirement and PSUs requirements are approved by the Standing Scientific Advisory Group(SSAG) of the Ministry under the Chairmanship of Secretary(Mines). The projects based on the national requirement are financed through the grant-in-aid from the Government. The projects based on industrial requirement are financed through the contributions from the Government, industry and the implementing organisations. The projects based on the PSUs requirement are financed through their own resources.

#### Centres of Excellence

- 7.3 Three Centres of Excellence set up under the Science & Technology Programme of the Ministry for research in specialized areas are:
  - National Institute of Rock Mechanics(NIRM), Kolar Gold Fields Rock Mechanics and Ground Control.
  - Jawaharlal Nehru Aluminium Research Development and Design Centre(JNARDDC), Nagpur-Bauxite, Aluminium and Alumina Technology.
  - National Institute of Miners' Health(NIMH), Nagpur-Occupational Health Monitoring and Mitigation of Health Hazards.
- 7.4 During the Xth Five Year Plan emphasis will be on multi-disciplinary, multi-organisational projects catering to the national requirements and for building the capabilities and strengths of the mineral and non-ferrous metal industries.

- 7.5 The outlay of Rs.8.55 crore(Budget support of Rs.5 crore) provided in BE 2004-05 for S&T programme has been retained in RE. An outlay of Rs.7.43 crore(Budget Support Rs.3.88 crore) has been approved for the year 2005-06.
- Replying to the query regarding the reasons for decrease in the outlays for Science and Technology Programmes for the year 2005-2006 and the details of the new schemes proposed to be introduced, the Ministry of Mines has stated that during 2005-06 Budgetary Support of Rs. 388.00 lakh (Plan) and Rs. 230.00 lakh (Non-Plan) has been proposed as against Budgetary Support of Rs. 500.00 lakh (Plan) 230.00 lakh (Non-Plan) during the year 2004-05. The reason for decrease in the outlays for Science and Technology programme for the year 2005-06 was due to non signing of the MoU between the concerned organizations/ agencies in respect of the following two projects:
- (a) "Pilot Scale Smelting and pre-feasibility studies on nickel Chromium-Cobalt bearing Magnetite Ores of Nagaland for Economically Viable Plant", at a total cost of Rs. 78.00 lakh with the contribution of the Ministry of Mines at Rs. 21 lakh to be implemented by National Mineral Laboratory, Jamshedpur and Government of Nagaland.
- (b) "Die-casting Technology and appliance at Development Centre and Technology Up-gradation and Development of Non-automotive Appliance for Zinc Die-casting in India" to be implemented by Indian Lead & Zinc Development Association (ILZDA) and Indian Zinc Association, at a total cost of Rs. 610 lakh with the share of Ministry of Mines as Rs. 130 lakh.
- 7.7 The details of the new Projects proposed are:
  - 1. Mechanized sand stone quarrying in Rajasthan.
  - 2. Development of CDOS (corpus fund)
  - 3. Assistance to CDOS.
  - 4. Recycling of Aluminium metal.
  - 5. Pilot Plant study for de-ironing of east coast bauxite.

- 6. Development of a process for synthesis of non-structured Aluminium & Alumina- based products.
- 7. Development of alumina and resin/polymer matrix compositions.
- 7.8 Regarding the details of the funds actually utilized under S&T during 2003-2004 & 2004-2005, the Ministry has stated as under:

(Figures in Rs. Lakh)

<u>Plan</u>

"Funds utilised during 2003-04"

405.67

186.11

"Funds utilised during 2004-05"

368.34

140.00

The Budget Estimate for the year 2005-06 in respect of Plan is Rs.388 lakh and for Non-Plan Rs. 230 lakh.

- 7.9 The technology development in mineral and non-ferrous metals industry is being tuned to attain international competitive edge. The technology available and suitable for Indian conditions is imported, further developed and assimilated. Application of computer software to control operations of mineral processing plant has been successfully achieved at Hindustan Zinc Limited. This will be useful with some modifications to other similar plants in the country.
- 7.10 While discussing the strengths and weaknesses of mineral and non-ferrous metals sectors in various national and international conferences, R&D initiatives are highlighted. These exposures provide technical inputs for course corrections to be effected and also raise the general awareness in probable users. In the International Aluminium Conference held recently in Delhi, a stall for S&T Project, "Development of Semi-Solid Forming Technology" of Indian Institute of Science, Bangalore was set up. It generated an enthusiastic response from the participants. Auto component industry is eagerly awaiting the commissioning of the National Facility in October 2004.
- 7.11 In the Eighth International Conference on Non-Ferrous Metals-2004 held on 6-7 August 2004, results obtained in the project, "Treatment of Copper Refinery bleed solution for recovery of values"-implemented by National Metallurgical Laboratory were presented and discussed. The paper and the record of the discussions are available to the industry for reference.

7.12 The Committee note that Science & Technology(S&T) programme of the Ministry of Mines covers the disciplines of Geology, Exploration, Mining and Environment, Bi-leaching, Beneficiation, Rock Mechanics and Ground Control and Non-Ferrous Metallurgy. Since the initiation of the S&T programme in 1978, 120 projects have been completed and 36 are in progress. On a perusal of the statement of the status of on-going S&T projects, the Committee note that out of 36 ongoing S&T projects, though four projects have since been completed but their completion reports are still awaited. Some of the S&T projects which were commenced in the year 1997, 1998 and 1999 are still far from completion. The Committee are unhappy at the snail's pace progress of S&T projects and recommend that the Standing Scientific Advisory Committee which approves these projects should also ensure that these projects are completed on schedule. The Committee would like to emphasize that S&T programmes are the basis of modernization and progressiveness of any industry and, therefore, desire that the Ministry should accord utmost importance to the allocation of adequate funds and timely completion of such projects as to gainfully reap the benefits accruing from their findings.

New Delhi; 20 April, 2005\_ 30 Chaitra, 1927(Saka) ANANTH KUMAR, Chairman, Standing Committee on Coal and Steel.

### STATEMENT OF CONCLUSIONS/RECOMMENDATIONS OF THE STANDING COMMITTEE ON COAL AND STEEL CONTAINED IN THE REPORT

Sl. No.	Reference Para No. of the Report	Conclusions/Recommendations
1	2	3
1	2.14	The Committee note that the annual Plan outlay for the year 2004-05 for the mining sector was Rs.549.00 crore which was reduced to Rs.497.77 crore at RE stage. However, the actual utilisation has been Rs.440.58 crore. The Committee are constrained to observe the declining trend in the annual Plan outlays of the Ministry of Mines both under plan and non-plan for the last five years as well as failure of the Ministry of Mines to utilize even the outlay approved at the RE stages. The Committee find that despite their earlier recommendation for the corrective steps for preparing realistic budgetary proposals, no improvement is discernible in the functioning of the Ministry. The budgetary proposals continue to reflect a casual approach and are either inflated or unrealistic. The Committee, therefore, recommend that budgetary division of the Ministry be further strengthened and sensitized to ensure realistic budgetary estimates and a monitoring mechanism put in place to closely oversee utilisation of funds.
2	2.15	The Committee further note that utilisation of funds by most of the PSUs under the Ministry of Mines has been far from satisfactory during 2004-2005 except in the case of Hindustan Copper Limited, which was allocated a small budget of Rs.40 crore for replacement and renewals. The reasons adduced by the Ministry for less utilization of funds have been of routine nature and not at all convincing. One of the major reasons being attributed for less utilization of funds has been the delayed Government approval for various schemes. The Committee fail to comprehend as to why the funds were continuously being earmarked during successive annual Plan when the Government approval was not forthcoming in time.

		The Committee strongly feel that major thrust areas of Xth Plan, viz. expansion of NALCO and
		modernization of GSI will suffer irreparable setback due to imprudent under-utilisation of funds.
3	2.16	As regards the Xth Plan, the Committee find even a more dismal scenario as the utilisation of funds
		during first three years of the Plan dips to merely 20.03 per cent of the approved outlay of Rs.8,344.50
		crore. This is a sad reflection on the functioning of Ministry of Mines and PSUs under its administrative
		control. The Committee further note that with the enforcement of the Fiscal Responsibility and Budget
		Management(FRBM) Act, the expenditure is required to be monitored by the Ministry on quarterly basis
		ensuring that every organisation spends 67% or more of the budget in the first three quarters and of 33%
		of the budget during the last quarter of the year. The under-utilisation of funds by the Ministry and PSUs
		during the first three years of the Xth Plan negates the spirit of the FRBM Act. The Committee feel
		deeply concerned at the failure of the Ministry to effectively play its role of facilitator and coordinator
		and feel that at Mid-term appraisal stage of the Xth Plan, the funds which remained unutilized should
		have been earmarked for other approved schemes/projects.
4	2.17	The Committee are constrained to note that the modernization programme of Geological Survey of
		India(GSI) conceived during the early phase of the Xth Plan, has not made steady progress due to non-
		availability of specialized equipment and shortage of staff. The Committee further note that the proposals
		for acquisition of high cost equipment for Offshore Marine Surveys Airborne Geophysical Surveys are
		yet to be cleared by the Planning Commission/Ministry of Finance. The Committee recommend that the
		Ministry should take all possible measures to procure above equipment in a time-bound manner lest the
		modernization process of GSI should get further delayed. The Committee also desire that shortage of
		staff in GSI should be met immediately to obviate any adverse affect on its functioning.
5	3.11	The Committee note that the Indian Bureau of Mines (IBM) performs regulatory functions, under the
		Mines and Minerals (Development and Regulation) Act, 1957, Environmental Protection Act, 1986 and
		Rules made thereunder. IBM also undertakes scientific, techno-economic, research-oriented studies in

		various aspects of mining, geological studies, ore beneficiation and environmental studies besides
		providing technical consultancy services to the mining industry. For undertaking the above activities, an
		outlay of Rs.103 crore was approved for the Xth Plan. However, the actual expenditure incurred during
		the first three years of the Plan has been Rs.50.18 crore. The Committee are extremely surprised to note
		that though an amount of Rs.44.89 crore was earmarked for new schemes during the Plan, not even a
		single rupee has been spent thereon so far. The Committee, therefore, cannot but conclude that
		IBM/Ministry of Mines have made mockery of budgetary proposals by including in the Xth Plan ill-
		conceived and infructuous schemes/projects which remained on paper only entailing no expenditure at all
		even after lapse of first three years of the Plan. The Committee, therefore, desire the Ministry to look into
		the matter and fix responsibility as to how such schemes/projects were included in the first instance or
		why no funds could be spent thereon. In case these schemes are not likely to fruitify in the coming two
		years, the Ministry should consider utilizing these funds on other schemes.
6	3.12	The Committee note that the IBM has been providing technical consultancy services to the mining industry at prescribed charges and on promotional basis. The Committee further note that the target for consultancy services assignments for the year 2005-2006 has been kept at quite low, <i>i.e.</i> 7 to 8 whereas the number of assignments during 2003-2004 and 2004-2005 were much more. The Committee desire that IBM should make all-out efforts to provide more and more technical consultancy services in order to generate more funds.
7	3.13	The Committee are dismayed to note that the alarming increase in the cases of illegal mining in different States resulting in immense loss to the National Exchequer. The Committee feel that IBM cannot absolve itself of the responsibility entrusted to it under MMDR Act and therefore strongly recommend the IBM/Ministry to pull up the concerned agencies for their failure to stop illegal mining. The Committee also desire that the Ministry should take pro-active steps by exercising full vigil and responsibility in terms of location, detection and prosecution to control and prevent such illegal mining.
8	4.20	The Committee are happy to note that National Aluminium Company Limited(NALCO) has become a
		'Zero Debt Company' after repaying all loan including entire foreign currency loan. The Committee
		further note that NALCO is Asia's largest integrated aluminium complex and has emerged as a star

		performer in production and export of alumina and aluminium and more significantly is propelling self-
		sustained growth. The Committee also note that the 1st phase of expansion of production capacity at an
		investment of Rs.4,200 crore has been completed in February 2004 with savings of Rs.610 crore. The 2 <sup>nd</sup>
		phase expansion of capacity encompassing all the production segments has been approved by the
		Government in October 2004 at a project outlay of Rs.4,091.50 crore to be completed in 50 months.
9	4.21	The Committee have been informed that Xth Plan outlay of Rs.7,056.00 crore for NALCO has been revised to Rs.2865.25 crore in the Mid Term Appraisal due to reduced allocation in respect of 2 <sup>nd</sup> phase expansion, Qatar Project, coal mines and AMR, etc. The Committee expect that the Qatar Project, a prestigious one for NALCO would materialize since the Qatar authorities are showing some positive interest and desire that the Ministry of Mines should further pursue the matter with Qatar authorities.
10	4.22	The Committee are happy to note that the coal block Utkal has been allotted to NALCO in August 2004 to cater to the need of its Captive Power Plant. The Committee desire that it should be activated at the earliest and all the necessary clearances from different authorities should be obtained.
11	4.23	The Committee further desire that monitoring mechanism be set up to ensure that all the schemes under the 2 <sup>nd</sup> phase expansion are completed within the time schedule without any time and cost overrun.
12	5.16	The Committee note that the Government had decided to disinvest its entire share holdings in
		HCL(98.95%) to an interested buyer. Financial bids had been initiated by the then Ministry of
		Disinvestment but the same was kept in abeyance in view of the litigation pending in the court against the
		disinvestments of HCL. The Committee also note that HCL has returned on a path of recovery and has
		earned a net profit of Rs.38.08 crore(upto December 2004). The Committee strongly feel that
		disinvestment proposal of HCL should be put on hold since the Company has taken a turn around from
		2004 onwards and there has been marked improvement in the MoU rating of the Company during the last
		three years. The Committee also reiterate their recommendation contained in Fifth Report(Fourteenth
		Lok Sabha) and would like that the financial restructuring package pending with the Government should

		be approved immediately. The Committee hope that with the implementation of financial restructuring
		proposal and required allocation for replacement of critical equipments, the Company would start earning
		much higher profits.
13	5.17	The Committee note that a Budget provision of only Rs.40 crore was made for the Hindustan Copper Limited in RE 2004-2005. The same outlay has been proposed in BE 2005-2006 for replacement/renewals of critical equipments to ensure optimum utilization of the available resources to facilitate implementation of production plan for the year 2005-2006.
14	5.18	The Committee feel that higher allocation for HCL has become imperative in view of the operation of the Company having started from the Khetri mines and also import of 40% of copper concentrates for full capacity utilization. The Committee, therefore, recommend that the Ministry of Mines should take up the matter with the Ministry of Finance/Planning Commission for higher allocation to HCL at RE stage.
15	6.30	The Committee note that an Expert Committee was constituted by the Government in June 1995 to arrest
		the declining trend in the physico-financial performance of the Mineral Exploration Corporation
		Limited(MECL). The recommendations made by the Expert Committee were considered by a Review
		Committee chaired by the Secretary, Ministry of Mines. Most of the recommendations of the Review
		Committee except financial restructuring of the Company have since been implemented. As a result of
		various measures, the productivity of the Company has improved. However, the financial performance of
		the Company has not shown the improvement. The Committee note that a revised proposal for financial
		restructuring of MECL is under consideration in the Ministry of Mines.
16	6.31	The Committee are extremely concerned that in spite of various policy measures taken by the Government, the physico-financial performance of MECL has not shown any improvement. The Committee feel that financial restructuring package is an essential component for the progress of a Company and are unhappy to find that the proposal is still hanging fire even after the lapse of nearly eight years thereby causing not only recurring losses worth crore of rupees but has also derailed a promising Company. The Committee, therefore, recommend that the revised financial restructuring proposal of MECL presently under consideration in the Ministry of Mines should be approved without further loss of time. The Committee would like to be apprised of the

		action taken in this regard.
17	6.32	The Committee observe that the physical performance of MECL was affected due to several constraints like the stoppage of exploration of coal and lignite on behalf of Ministry of Coal for want of environment forest clearance, the delay in commencement of promotional projects for want of financial sanction and non-materialisation of Coal Bed Methane work on behalf of ONGC. The Committee recommend that a Steering Committee may be constituted in the Ministry for holding wide ranging discussions with the concerned Ministry/State Government for getting expeditious clearance from different agencies. The Committee also desire that MECL should strive to obtain more and more job orders from PSUs and private organisations to achieve higher turnover.
18	7.12	The Committee note that Science & Technology(S&T) programme of the Ministry of Mines covers the
		disciplines of Geology, Exploration, Mining and Environment, Bi-leaching, Beneficiation, Rock
		Mechanics and Ground Control and Non-Ferrous Metallurgy. Since the initiation of the S&T programme
		in 1978, 120 projects have been completed and 36 are in progress. On a perusal of the statement of the
		status of on-going S&T projects, the Committee note that out of 36 ongoing S&T projects, though four
		projects have since been completed but their completion reports are still awaited. Some of the S&T
		projects which were commenced in the year 1997, 1998 and 1999 are still far from completion. The
		Committee are unhappy at the snail's pace progress of S&T projects and recommend that the Standing
		Scientific Advisory Committee which approves these projects should also ensure that these projects are
		completed on schedule. The Committee would like to emphasize that S&T programmes are the basis of
		modernization and progressiveness of any industry and, therefore, desire that the Ministry should accord
		utmost importance to the allocation of adequate funds and timely completion of such projects as to
		gainfully reap the benefits accruing from their findings.

#### **BUDGET AT A GLANCE**

S1.			BE 2004-05			RE 2004-05	5		BE 2005-06	(RS. III CIO
No.		Plan	Non Plan	Total	Plan	Non Plan	Total	Plan	Non Plan	Total
	1	2	3	4	5	6	7	8	9	10
	Direction &		8.17	8.17		7.86	7.86		8.21	8.21
	Administration(Secretariat,									
	Department of Mines)									
<b>).</b>	Non-Ferrous Metals									
i)	National Aluminium									
	Company Limited									
	(a) Investment in equity									
	(b) Loan									
	Sub Total									
	Total: Alunimium									
ii)	Hindustan Zinc Limited									
	(a) Investment in equity									
	(b) Loan									
	Total: Zinc & Lead									
iii)	Hindustan Copper Limited									
	(a) Investment in equity	40.00		40.00	40.00		40.00	40.00		40.00
	(b) Loan									
	(c) Non-Plan Loan									
	Total: Copper	40.00		40.00	40.00		40.00	40.00		40.00
	Total: Non-Ferrous Metals	40.00		40.00	40.00		40.00	40.00		40.00
	Other Mining and Metallurgical Industries									
	Mineral Exploration									
	Corporation Limited									
	(a) Investment in equity	2.00		2.00	2.00		2.00	1.00		1.00
	(b) Loan									
	(c) Non-Plan Loan		30.00	30.00		30.00	30.00			
	Total: Other Mining and Metallurgical Industries	2.00	30.00	32.00	2.00	30.00	32.00	1.00		1.00
•	Survey, Exploration, Regulation & Development of Mines									
i)	Geological Survey of India	145.80	189.00	334.80	121.17	187.22	308.39	131.85	192.93	324.78
ii)	Indian Bureau of Mines									
	(a) Operational Expenditure	18.15	15.00	33.15	18.78	14.86	33.64	16.55	15.43	31.98

	(b) Capital Works							0.10		0.10
	Total(a) + (b)	18.15	15.00	33.15	18.78	14.86	33.64	16.65	15.43	32.08
(iii)	Grants to MECL	10.00		10.00	10.00		10.00	11.00		11.00
(iv)	Grants to BGML		5.00	5.00		5.00	5.00		1.54	1.54
(v)	Grants to HCL		60.00	60.00		35.00	35.00		0.01	0.01
(vi)	Science & Technology	500	2.30	7.30	5.00	2.30	7.30	3.88	2.30	6.18
(vii)	International Cooperation		0.27	0.27		0.27	0.27		0.28	0.28
(viii)	National Mineral Awards		0.26	0.26		0.26	0.26		0.28	0.28
	Total: Survey, Exploration,	178.95	271.83	450.78	154.95	244.91	399.86	163.38	212.77	376.15
	Regulation & Development									
	of Mines									
5.	Lump sum provision to									
	North-Eastern Region &									
	Sikkim									
(i)	Geological Survey of India	16.20		16.20	16.20		16.20	14.65		14.65
(ii)	Indian Bureau of Mines	1.85		1.85	1.85		1.85	1.85		1.85
, ,	Total: Lump sum provision	18.05		18.05	18.05		18.05	16.50		16.50
	to North-Eastern Region &									
	Sikkim									
	Grand Total:	239.00	310.00	549.00	215.00	282.77	497.77	220.88	220.98	441.86

MINISTRY OF MINES

STATEMENT SHOWING PROVISION IN B.E., R.E. & ACTUALS/ANTICIPATED FOR THE YEARS 2002-03, 2003-04 AND 2004-05

Organisation		2002-200	3		2003-200	4		2004-20	005
	B.E.	R.E.	Actuals	B.E.	R.E.	Actuals	B.E.	R.E.	Anticipated
1	2	3	4	5	6	7	8	9	10
Non-Plan									
Secretariat	7.35	7.03	6.46	7.67	7.67	6.95	8.17	786	7.54
(proper)									
G.S.I. 166.64	166.64	165.59	167.63	177.70	177.46	170.69	189.00	187.22	176.13
I.B.M. 13.12	13.12	13.11	13.00	14.13	14.13	13.57	15.00	14.86	14.75
Grants to	83.62	15.00	15.00	83.01	83.01	3.42	5.00	5.00	5.00
BGML									
Grants to	90.00	660.00	660.00	120.00	25.00	25.00	60.00	35.00	35.00
Hindustan									
Copper Ltd.									
Other	2.59	2.59	2.30	2.73	0.00	2.32	2.83	2.83	2.83
Programme									
Subsidy to	0.00	32.47	32.47	0.00	2.73	0.00	0.00	0.00	0.00
Hindustan									
Copper Ltd.									
Subsidy to	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hindustan									
Ltd.									
Non-Plan Loan				1	ı		ı	ı	1
B.G.M.L.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
M.E.C.L.	0.00	10.00	10.00	0.00	0.00	0.00	30.00	30.00	0.00
H.C.L.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grants for VRS							T		
Total:	363.32	905.79	906.86	405.24	310.00	221.95	310.00	282.77	241.25
Non-Plan									
Plan									
G.S.I.	158.64	80.14	71.05	160.82	122.32	88.75	145.79	121.16	112.86
I.B.M.	16.53	16.03	14.54	17.26	17.26	15.43	18.14	18.77	17.72

Lumpsum prov.	For NER								
G.S.I.	9.86	9.86	10.14	15.18	15.18	12.37	16.21	16.21	12.24
I.B.M.	1.47	1.47	1.24	1.74	1.74	0.74	1.86	1.86	0.51
Grants of	8.00	8.00	7.91	9.00	9.00	7.61	10.00	10.00	9.00
MECL									
Other	5.00	4.00	3.71	4.50	4.50	4.06	5.00	5.00	5.00
Programme									
Investment in P	SUs								
M.E.C.L.	3.00	3.00	3.00	0.00	0.00	0.00	2.00	2.00	2.00
H.C.L.	25.00	85.00	85.00	20.00	20.00	113.84	40.00	40.00	40.00
Total Plan	227.50	207.50	196.59	228.50	190.00	242.80	239.00	215.00	199.33
Grant Total	590.82	1113.29	1103.45	633.74	500.00	464.75	549.00	497.77	440.58

### STATEMENT SHOWING MAJOR HEAD-WISE UTILISATION OF FUNDS EARMARKED FOR EXPENDITURE DURING THE YEARS 2003-2004 AND 2004-2005

															(	
MAJOR HEAD																
	B.	E.	R.	E.	Act	uals	Sav	ings	В.	E.	R.	E.	Anticip	ated	Savi	ngs
	Plan	Non-	Plan	Non-	Plan	Non-	Plan	Non-	Plan	Non-	Plan	Non-	Plan	Non-	Plan	Non-
		Plan		Plan		Plan		Plan		Plan		Plan		Plan		Plan
3451	0.00	7.67	0.00	7.67	0.00	6.95	0.00	-0.72	0.00	8.17	0.00	7.86	0.00	7.54	0.00	-0.63
2853	191.46	397.57	152.96	302.33	115.85	215.00	-75.61	-182.57	178.93	217.83	154.93	244.91	144.58	233.71	-34.35	-38.12
4853	20.12	0.00	20.12	0.00	113.84	0.00	93.72	0.00	42.02	0.00	42.00	0.00	42.00	0.00	0.02	0.00
6853	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30.00	0.00	30.00	0.00	0.00	0.00	-30.00
2552	16.55	0.00	16.55	0.00		0.00		0.00	17.80	0.00	17.80	0.00		0.00		0.00
4552	0.37	0.00	0.37	0.00	*13.11	0.00	3.81	0.00	0.25	0.00	0.25	0.00	*12.75	0.00	5.30	0.00
Total	228.50	405.24	190.00	310.00	242.80	221.95	21.92	-183.29	239.00	310.00	215.00	282.77	199.33	241.25	-29.07	-68.75

<sup>\*</sup> The amount has been utilized through operative heads 2853 and 4853 as per budgetary operations.

#### MINISTRY OF MINES

### STATEMENT SHOWING CENTRAL PLAN OUTLAY INCLUDING BUDGET SUPPORT AND IEBR, BE, RE AND ACTUALS FROM 2001-2002 ONWARDS

Sl. No.	Name of Public Sector	P	Annual Pla	n				Α	annual Pla	ın		Annual	Plan	Annual Plan
	Undertakings/ Organisation		2001-2002		2	002-2003		2	2003-2004	4		2004-20	005	2005- 2006
		BE	RE	Actual	BE	RE	Actual	BE	RE	Actual	BE	RE	Anticipated	BE
1.	National Aluminium Co. Ltd.	1081.54	1100.00	1054.13	900.00	700.00	608.69	650.00	325.00	229.85	310.00	172.00	172.00	450.71
2.	Hindustan Copper Ltd.	25.00	110.00	95.00	25.00	85.00	85.00	20.00	20.00	113.84	40.00	40.00	40.00	40.00
3.	Mineral Explor	ation Corp	n. Ltd.											
	- Promotional	12.00	7.00	7.00	8.00	8.00	7.91	9.00	9.00	7.61	10.00	10.00	9.00	11.00
	- Capital				3.00	3.00	3.00	0.00	0.00	0.00	2.00	2.00	2.00	5.00
4.	Geological Survey of India	120.08	94.53	82.14	168.50	90.00	81.19	176.00	137.50	101.12	162.00	137.37	125.10	146.50
5.	Indian Bureau of Mines	19.00	19.00	17.09	18.00	17.50	15.78	19.00	19.00	16.17	20.00	20.63	18.23	18.50
6.	Science & Technology	9.00	8.00	7.62	8.50	6.60	6.60	8.05	8.05	7.61	8.55	8.55	8.55	7.43
7.	Construction	8.00	7.42	6.11	7.00	7.00	4.38	6.00	6.00	5.38	6.00	5.50	3.10	6.00
	Total	1274.62	1345.95	1269.09	1138.00	917.10	812.55	888.05	524.55	481.58	558.55	396.05	377.98	685.14

# STATEMENT SHOWING SCHEME-WISE/PSU-WISE $10^{\mathrm{TH}}$ PLAN, BE & ACTUALS OF 2002-03 & 2003-04, BE & ANTICIPATED EXP. 2004-05

Sl.No.	Name of Public	10 <sup>th</sup> Plan	ANI	NUAL PL	AN	AN	NUAL PI	LAN	Aì	NUAL F	PLAN
	Sector	2000-2007	2	2002-2003	3	2	2003-200	4		2004-20	05
	Undertakings	(Approved)	BE	RE	Actual	BE	RE	Actual	BE	RE	Anticipate
	Name of		ļ								d
	Schemes/Projects										
1	2	3	4	5	6	7	8	9	10	11	12
I.	NATIONAL ALU	MINIUM CO.	LTD.								
A.1	SCHEMES COMP	LETED DUR	ING 2001	-02							
1.	Special Grade	6.22	6.22	18.60	2.92	-	8.49	4.03	-	1.15	1.15
	Alumina										
2.	Zeolite	0.00	-	-	-	-	3.67	-	-	3.85	3.85
3.	Equity	34.00	34.00	29.40	34.35	-	20.00	3.74	11.43	10.00	10.00
	participation in		ļ								
	I.A.P.L. (Rolled		ļ								
	Product Unit)										
	TOTAL (A.1)	40.22	40.22	48.00	37.27	0.00	32.16	7.77	11.43	15.00	15.00
A.2	CRITICAL ON GO			1		1	1		1		
1.	Mines &	126.02	126.02	60	49.85	40.00	23.23	14.47	8.88	15.00	15.00
	Refinery										
2.	Smelter & Power	697.06	502.72	390	391.65	300.00	139.16	101.87	63.82	51.00	51.00
	Plant										
3.	VIII Unit of	384.40	180.04	152.00	99.38	145.00	100.45	91.56	50.87	40.00	40.00
	C.P.P.										
	Total (A.2)	1207.48	808.78	602.00	540.88	485.00	262.84	207.90	123.57	106.00	106.00
B.	SCHEMES	402.30	51.00	50.00	30.54	65.00	30.00	14.18	75.00	40.00	40.00
	AIMED AT		ļ								
	MAXIMISING		ļ								
	BENEFITS										

C.	NEW SCHEMES	-	-	-	-	-	-	-	-	-	-
1.	Alumina 4 <sup>th</sup> Stream	1193.00	-	-	-	20.00	-	-	20.00	10.00	10.00
2.	Aluminium 4 <sup>th</sup> Pot Line	1575.00	-	-	-	50.00	-	-	40.00	-	-
3.	CPP (2x120 MW)	855.00	1	-	-	30.00	-	1	30.00	-	-
4.	Equity participation of Quatar project	1573.00	1	-	-	1	1	1	1	-	-
5.	Coal Mine (one block)	210.00	-	-	-	-	-	-	10.00	1.00	1.00
Т	OTAL (C):	5406.00	-	-	-	100.00	-	0.00	100.00	11.00	11.00
	TAL (NALCO)	7056.00	900.00	700.00	608.69	325.00	229.85	310.00	172.00	172.00	172.00
II.	HINDUSTAN CO									<u>l</u>	
A.1	SCHEMES COMP	LETED DUR	ING 2000-	-01							
A.2	CRITICAL ON GO			-							
B.	SCHEMES AIME			ENEFITS							
1.	Replacement &	50.00	25.00	85.00	85.00	20.00	20.00	#113.84	40.00	40.00	40.00
	Renewals										
2.	Research &										
	Development										
	Total (B)										
C.	New Schemes										
1.	Banwas Mines	0.00	0.00	-	0.00	0.00	-	0.00	0.00	0.00	0.00
	Alternate ore	0.00	0.00	-	0.00	0.00	_	0.00	0.00	0.00	0.00
	pass system at										
	Khetri Mines										
	Total (HCL):	50.00	25.00	85.00	85.00	20.00	20.00	113.84	40.00	40.00	40.00
III	MINERAL EXPLO										
	PROMOTIONAL	EXPLORATI									
	- Promotional	45.00	8.00	8.00	7.91	9.00	9.00	7.61	10.00	10.00	9.00
	- Capital	5.00	3.00	3.00	3.00	0.00	-	0.00	2.00	2.00	2.00
TOT	ΓAL (MECL):	50.00	11.00	11.00	10.91	9.00	9.00	7.61	12.00	12.00	11.00

IV.	GEOLOGICAL SU	JRVEY OF II	NDIA								
1.	Survey &	281.50	29.61	29.73	26.47	37.70	37.70	31.63	41.61	39.06	32.37
	Mapping										
2.	Mineral	139.00	22.08	19.83	18.84	19.11	19.11	15.23	24.26	21.17	17.67
	Exploration										
3.	Specialised	103.05	9.75	7.40	7.26	9.52	9.52	7.50	8.09	6.08	5.06
	Investigation										
4.	Other	0.40	0.06	0.06	0.07	0.09	0.09	0.08	0.15	0.10	0.12
	Exploration										
5.	Research &	61.00	7.49	5.87	5.32	8.44	8.44	5.64	8.68	7.81	6.80
	Development										
6.	Information &	111.10	16.75	10.55	9.88	21.76	21.76	12.48	30.62	22.44	24.65
	Dissemination										
7.	Human Resource	18.70	2.57	2.47	2.01	2.94	2.94	2.52	3.20	2.96	2.55
	Development										
8.	Modernisation &	285.00	80.19	14.09	11.34	76.44	37.94	26.04	45.39	37.75	35.88
	Replacement										
	TOTAL (GSI):	1000.00	168.50	90.00	81.19	176.00	137.50	101.12	162.00	137.37	125.10
	` ′										
			•								

V.	INDIAN BUREAU	J OF MINES									
1.	Scheme No.1: Inspection of Mines	11.32	2.62	3.39	3.21	3.31	4.26	3.09	4.08	5.39	3.67
2	Scheme No.2: Mineral Beneficiation studies utilisation of low grade and subgrade ores and analysis of environmental samples	20.90	4.92	4.92	5.17	5.68	6.09	5.26	6.41	5.98	5.49
3.	Scheme No.3: Technical	15.53	4.30	4.74	4.13	5.03	5.59	4.90	4.66	4.51	4.40

	Upgradation and										
4	Modernisation	4.55	1.21	1.20	1.00	1.60	1.46	1.20	1.40	1 42	1 41
4.	Scheme No.4:	4.77	1.31	1.30	1.28	1.63	1.46	1.39	1.49	1.43	1.41
	Collection										
	processing,										
	dissemination of										
	data on mines										
	and mineral										
	through various										
	publication										
5.	Capital	0.50	0.50	0.50	0.50	0.10	0.08	0.00	0.00	0.00	0.00
	Expenditure										
	(Works Outlay)										
	apital Outlay(NER)	-	0.27	0.27	0.27	0.15	0.02	0.03	0.06	0.06	0.00
Lur	nsum provision for	-	1.20	-	-	1.60	-	ı	1.80	0.00	0.00
	NER										
6.(i)	BRGM-Schemes	0.66	0.66	0.67	0.66	0.00	-	-	-	-	-
	-TMIS-Project,										
	III										
(ii)	BRGM-Schemes	4.43	2.67	2.16	1.01	1.50	1.50	1.50	1.50	3.26	3.26
	-TMIS-Project,										
	IV										
(iii)	Token Provision	44.89	-	-	-	-	-	-	-	-	-
	for New										
	Schemes										
	Total (IBM):	103.00	18.00	17.50	15.78	19.00	19.00	16.17	20.00	20.63	18.23
VI.	Science &	57.50	8.50	6.60	6.60	8.05	8.05	7.61	8.55	8.55	8.55
	Technology										
VII.	Construction	28.00	7.00	7.00	4.38	6.00	6.00	5.38	6.00	5.50	3.10
Grand T	Total: Department	8344.50	1138.00	917.10	812.55	888.05	524.55	481.58	558.55	396.05	377.98
of Mine	es										

ANNEXURE -VI ACTIVITY-WISE TARGET VS. ACHIEVEMENT DURING X PLAN AS WELL AS WELL AS TARGET FOR F.Y. 2005-2006

Sl.	Name of the	Target	X Plan						
No.	Scheme/Project/Programme	during X Plan	F.Y. 2002-	-2003	F.Y. 2003-2	004	F.Y. 2004-2	005	F.Y. 2005- 2006
		(2002 - 2007)	Program me Target (April'0 2 to March'0 3)	Achiev. (April'02 to March'03)	Programm e Target (April'03 to March'04)	Achiev. (April'03 March'04)	Programm e Target (April'04 to March'05)	Achiev. (April'04 Dec'04)	Plan Target
1	2	3	4	5	6	7	8	9	10
	arvey and Mapping								
a) Gr	round Survey		1				1	1	
	Spl. Thematic Mapping (sq.km.)	35,000 **	8778	8975	7626	7735.50	6599.20	2958.50	6000
	Geochemical Mapping (sq.km.)	125280	16780.2 0	18529	20953.20	20,905	22731.60	13,876	22000
	Geophysical Mapping (sq.km. & 1 km)	110000 #	7076.30 & 3830 1 km	3948.8 & 6519.50 l km	14553 sq.km.	15285 sq.km.	16304 sq.km.	6978sq.km.	15000 sq.km.
(b) A	Aerial Survey		•		•	•		•	
	(i) Multisensor/Aeromagnetic Survey (with Twin Otter (1 km)	140200	30800	16713+	28000	31919	28000	1264*	28,000
(c) N	Marine Survey			•	•	•			
	(i) Sea bed Survey (sq. km.)	·							
	(ii Parametric Survey within EEZ and beyond	39 cruises							
	.Bathymetric Survey (1 km) -		3800	2472 (7 cruises)	2600 (7 cruises)	2023 (7 cruises)	9 cruises \$	2 <sup>1</sup> /2 cruises of GSI & 2 of ONGC	5000 (8 cruises)

	(iii	Territorial Water (sq.km.)	79	4100 +	4100 +	3470 +	3825 +	2150 +	1870 +	3000
	)		cruises	Parametri	Parametric	Parametric	Parametric	Parametric	Parametric	(14 cruises)
				c Surveys	Surveys	Surveys	Surveys	Surveys	Surveys	
				-	(14 cruises)	(14	(14	(14	(7 cruises)	
						cruises)	cruises)	cruises)		
II.	Mine	Mineral Exploration								
	(a)	Large Scale Mapping (sq.km.)	5000**	1189.54	1254.80	1021.05	1027	922.135	610.70	900
	(b)	Detailed mapping (sq.km.)	150	30.316	32.286	30.745	36.26	27.237	20.667	30
	(c)	Drilling (metre)	487500	92797.60	93388.78	88,540.70	81995.90	87129.44	59854.49	85,000
III.	Spec	calised Investigation								
	[Geotechnical, Earthquake Geology		450	92	92	90	86	94	94	91
	&								(Commence	
	Seismology, Geoenvironment,								d)	
	Glaciology									
	Geothermal etc.] (in nos.)									
IV.	Other exploration									
	[Antarctical] (sq.km.)		5000	1000	1000	1000	300***	1000	-	1000
V.	Research & Development									
	Rese	earch (No. of Investigation)	3000	64	64	61	61	71	71	65
									(commence	
									d)	
VI.		rmation Dissemination								
	(Maj		200	51	51	45	45	42	42	45
		nnology,							(commence	
		e Library, etc. (in nos.)							d)	
VII		nan Resource Devlopment								
•		ning (in GSITI) No. of Types	150	35 (42)	33 (42)	35 (42)	33 (36)	35(42)	38(43)	35(42)
	(No.	of courses)								

The target has been modified considering necessity of coverage on a larger scale with station density of 1 in 2.5 sq.km.

 <sup>\*\*</sup> Target modified based on existing manpower
 \* Flying Season: October – March, late receipt of permission from DGCA

<sup>+</sup> Delay in MOD clearance

Out of 7 cruises, 2 cruises for GSI and 5 cruises for sponsored ONGC work
 2 1/2 cruises for GSI, 6 1/2 cruises for sponsored ONGC work
 \*\*\* Thematic Mapping taken up on 1:25,00 scale instead of 1:50,000 scale

<sup>☐</sup> Expedition launched in Dec'04

#### STATUS OF SECOND PHASE OF EXPANSION

- 1.0 The 2<sup>nd</sup> Phase expansion of NALCO's Integrated Project was approved by Government of India *vide* letter dated on 26.10.2004.
- 2.0 Status of various activities for 2<sup>nd</sup> Phase expansion:
- 2.1 Pre-qualification Exercise
- 2.1.1 The exercise for Pre-qualification of vendors for major process packages and equipments for 2<sup>nd</sup> phase expansion of Alumina Refinery and Smelter is under way.
- 2.1.2 The Committee recommendation for pre-qualification for the main power house package of CPP, considering the 4 (four) offers is under preparation.
- 2.1.3 Applications have been received against the advertisement issued by NALCO for pre-qualification for Tenders for 2<sup>nd</sup> Phase expansion. The same are being evaluated.
- 2.2 Preparation of specifications for major packages / MRs.
- 2.2.1 NALCO has also taken up preparation of Tender Specifications for purchase of equipments for major packages both for Alumina Refinery & Smelter.
- 2.3 Soil Investigation and site leveling work:
- 2.3.1 The Soil Investigation work for 2<sup>nd</sup> Phase expansion both at Smelter and Damanjodi has been completed.
- 2.3.2 Leveling up of site is in progress.
- 2.4 Appointment of EPCM Consultant for Bauxite Mines, Alumina Refinery & Smelter.
- 2.4.1 Appointment of EPCM consultant for 2<sup>nd</sup> Phase expansion of Mines, Alumina Refinery & Smelter is under finalization.
- 2.5 Appointment of EPCM Consultant for CPP and SGP.
- 2.5.1 The EPCM consultancy services for 2<sup>nd</sup> Phase expansion of CPP and Steam Generation Plant (SGP) at Alumina Refinery are under finalisation.

- 2.6 The Tender documents for Site grading work for both Alumina Refinery & Smelter are under preparation.
- 2.7 The Bill of Quantities (BOQ) for the Construction Power Tenders for both Alumina Refinery & Smelter are under preparation.
- 2.8 The project schedule has been prepared and is under finalisation.

## STATUS OF ON-GOING S&T PROJECTS

SI. No.	Name of the Project	Implementing Agency, Year, Cost in Rs./ Lacs/ Period	Funds released Rs/Lacs	Objectives	Deliverable /benefit	Status
1.	Development of Electro-magnetic Tomography and buried electrode method for Geo- technical studies and base metal explorations—	MECL, 1997 119 3 Years	119 (Equipment component only)	To identify and bring-out 3-D view of fractures and map the continuity on the surface	The confidence level in deciphering the shape and size of the ore body between two bore hole points will increase and the dependence on the subjective judgment will decrease	The equipment have been commissioned. Fields trial are underway. Project will be completed in Sept. 2004. Delay has been due to the difficulty faced in procurement of equipment
2.	Extraction of magnesium from indigenous raw materials Dom-184 lacs, DST – 45 Lacs F.No.14(48)/96-Met. IV	NML, 1997 <i>DST, DOM</i> 229 2 Years	164	To develop a new process.	The process will be continuous and more energy efficient than the pidigeon process, in vogue which is a batch process and less energy efficient.	100 kg per/day magnesium sponge Pilot Plant commissioned. The project has been delayed due to the problems faced in the design of the pilot plant. The project will be completed by Dec. 04. The Progress will be reviewed by PMC in 1st week of Sept. 04.
3.	Studies on production of alloyed pig iron and low alloy steel/stainless steel using COB from Sukinda, Orissa-Mom Rs.27 lac , DST 26.25 lac, MECON Rs. 27 lac F.No.14/17/96-Met.IV	MECON, 1998 DST, DOM 132 3 Years	65	To use the chromite overburde n for iron production and recover nickel.	The dumped waste chromite overburden (COB) containing 0.6 – 0.9 % Nickel at present is a source of environmental pollution and occupy the land permanently. The waste will be used gainfully.	Blast furnace trials on the sinter produced from COB were completed in September, 2003. The feasibility report is under preparation. The project will be completed in Sept. 04.

4.	Development of underground mining techniques for limestone mining in Western Himalaya F.No.14/23/96-Met.IV	CMRI, Roorkee, 1998 16.5 2 Yars	6	To develop appropriat e technolog y for limestone mining.	The underground limestone mining if found viable will protect the sensitive ecological balance in H.P.	The project has been delayed due to resistance from local people. The project is being discontinued.
5.	Setting up of R&D Centre for dimensional stones F.No.14/4/98- Met.IV	CDOS, 1999 85 (Equipment Cost) 2 Years	50	To set-up state of the art R&D center at Jaipur.	The R&D center will help the dimensional stone industry in Northern India to enhance efficiency in mining the quality of the product and certification of the quality. This will enable exporters to improve their reliability abroad.	Equipment procurement is in progress. Building is nearing construction. The project has been delayed due to frequent changes in the management of CDOS.
6.	Design and application of Steel Fiber re-enforced shotcrete system in mines Dom-Rs. 40.54 lacs, balance NIRM F.No.18/8/99 – Met.IV	NIRM, 1999 51 2 ½ Years	40.54	To design and apply re- enforced shotcrete system and develop guidelines	The technique will help in improving safety in mines. The guidelines will enable others mines use the technique efficiently.	It has been established that system could be used in hard rock mines to control flaky type of roof and side strata and to arrest deterioration. The completion project is awaited .

7.	Extraction, Characterization and removal of organic impurities in the Bayer process F.No. 14/4/99 – Met IV	JNARDDC, 1999 35 2 Years	35	To set-up requisite facility and develop expertise	The concentration of dissolved organic matter builds up due to constant recycling of the aluminate liquor in alumina refinery. The build up causes operation problems and affects the quality and quantity of alumina produced. The center will be able to assist the primary producers in controlling the quality and productivity.	The project has been completed. The completion report is awaited.
8.	De-ironing of Eastern Ghat Bauxite, Dom- Rs. 38 lacs, DST – Rs. 15 lacs F.No.14/32/97 – Met IV	JNARDDC, 1999 53 3 Years	38	To reduce iron content in bauxite to the level of 1-3 % from 22-26% and to study technoeconomic s	Despite large resource of bauxite in the country, some alumina plants of central India are starving for proper grade ore. A long transportation of bauxite from east coast to central India makes its use cost-wise prohibitive. East coast bauxite can be used as sweetener by removing iron content	The project has been completed. The completion report is awaited.

9.	Improvement of digestion efficiency of East-Coast Bauxite and enhancement of Alumina productivity F.No. 14/34/97. Met. /V	JNARDDC, 1999 25.15 3 Years	25.15	Improvem ent in digestion efficiency	NALCO uses Panchpatmali bauxite. The digestion efficiency of 88-90% is obtained. Poor digestion efficiency leads to (a) high bauxite consumption (b) more generation of red mud and (c) higher caustic losses. The project will help increase in efficiency of the alumina refinery and to increase production at	The project has been completed. Final report is awaited.
10.	Development of a process for electrorefining of aluminium metal F.No. 14/3/00. Met. /V	CECRI, 2000 43.0 3 Years	41	To develop an improved process	minimal investment The Hoops process refines aluminium to super purity, level with high energy consumption (15- 18 KWH/kg). The method under development will consume less energy and will maintain the purity level.	Experiments in 500 A cells completed.  1000 A cells design and fabrication has been completed Experiments are underway. The PMC has reviewed the progress on 27 <sup>th</sup> July 04. The extension upto March 05 is under consideration.

11.	Treatment of Copper bleed solution for recovery values F.No. 14/8/97. Met. /V	NML, 2000 24.0 2 Years	24	The developm ent of a process for recovery of copper and nickel metal powders from the copper bleed solution of the copper electrolytic refinery of HCL	The process will help recovery of meal values from the bleed solution which are at present going in effluents	The project has been delayed due to difficulty in import of autoclave and procedural requirements.
12.	Establishment of Downstream Processing Laboratory F.No. 14/3/01. Met. /V	JNARDDC, 2001 262 3 Years	213.45	To fulfill R&D needs identified by the National Task Force on downstrea m processin g.	The facility created will enable JNARDDC to provide service to medium and small down stream aluminum processors and enhance its own revenue generation potential.	Equipment procurement is in progress. Excessive increase in cost has been examined and has been approved.

13.	National Facility for Semi-Solid Forming MoM-Rs. 359 lacs, DST – Rs. 92 lacs, DRDO – Rs. 25 lacs F.No. 14/16/00. Met. IV	IISc., Bangalore 2001 476 3 Years	150	To set-up National Facility for Developm ent of Semi Solid forming Technolog y	The auto component manufracturers will be greatly helped by the new technology in enhancing exports and developing new components	The die-casting machine is being transported from Uzwil, Switzerland to Bangalore. Building is nearing completion. The MHD system has been indigenously developed and is under fabrication.
14.	Design, Development and Production of Multi -processor based Continuous Deformation monitoring system for the Safety of Mines and Underground Openings.  F.No. 14/5/00. Met. IV	CMRI, Roorkee 2001 23.5 3 Years	15	To develop computer based continuou s deformatio n monitoring system.	The system will help in improving safety of mine working and predict rock mass behavior. Globally also such a system is in demand.	The designing of the system has been completed. The procurement of the equipment has been held up due to procedural delays at CMRI.
15.	Fly rock prediction and control in open-cast mines in India for safe deep hole blasting near habitats DoM-Rs. 44 lacs balance by industry and CMRI  F.No. 14/15/97. Met. IV	CMRI, Nagpur 2001 64 3 Years	44	To develop guidelines for fly rock control in blasting.	The safety of the habitat during deep hole blasting in open cast mines will be enhanced while reducing the safe distance required under DGMS Rule.	Experiments have been completed at MOIL mines. The recommendations have been accepted by DGMS and implemented. Trials at other mines are in progress.

16.	Laboratory Rock Mechanics investigations for Characterisation of Dimensional Stone Granite of Southern India for their global marketability –Dom- Rs. 7 lacs balance NIRM F.No. 14/14/00. Met. IV	NIRM, 2001 18 3 Years	7	To establish data bank on dimension al stones deposits of Southern India.	Exporters will be able to comply with the quality standards and certify as per International norms. Reliability of supply and the suppliers will improve.	The data on 12 property parameters of 30 varieties of dimensional stones as per ASTM standards has been generated. The completion report is awaited.
17.	Laboratory method of determining the Insitu stress of rock using Kaiser effect-Dom-Rs. 16 lacs balance NIRM  F.No. 14/13/00. Met. IV	NIRM, 2001 39.65 3 Years	16	To explore the feasibility of application of Kaiser effect in rocks, for estimation of in-situ rock stress using drilled core.	The technique has the advantages of (a) low cost (b) no special drilling is required to obtain specimen (c) large number of tests can't be carried for statistical analysis of the data generated and (d) stress measurements in different orientations. In turn safety will be improved.	The PC based Acoustic Emission Card along-with the software was procured. Kaiser stress determination on nine underground sites was carried out. The data is being analysed.

18.	Development of an Optical Fiber Based System for light transmission and illuminating selected area DoM-Rs.8.08 lacs balance NIRM F.No. 14/10/97. Met. IV	NIRM, 2001 15 (Equipment component only) 2 Years	8.08	To develop an Optical Fiber based system for light transmissi on and illuminatio n of selected area.	The conventional method of illumination has heavy transmission losses, high power consumption and requires high maintenance cost. The new technique will use sunlight and will result in large saving.	The delay is due to non-availability of low loss optical fibers. Site has been selected and equipment is being purchased.
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19.	Compilation of Bauxite Technical Data Bank for Gujarat & Jharkhand States F.No. 14/2/01. Met. IV	JNARDDC, 2001 22.52 2 Years	22.52	To generate and organize the data on bauxite reserves of Jharkhand and Gujarat States as per their physical, chemical mineralogi cal and technologi cal properties for alumina production and other industrial applications.	The compilation will be source for all information for faster investment decisions to probable user in the States of Gujarat and Jharkhand.	The project has been completed. The completion report is awaited.
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20.	High Resolution Seismic Survey in exploration mapping of anomalous zones in the mining regime with a view to analyse their stability DoM –Rs. 44 Lac, NIRM Rs. 44 lacs, DST Rs. 22 lacs F.No. 14/6/02. Met. //	NIRM, 2002 110 2 ½ Years	40 MoM 21 DST	To develop high resolution geo-physical imaging technique s for application in frontier areas.	High Resolution Seismic Survey technique indicates the high stress zones in the surrounding areas upto a distance of 10-20 meter. It will help in mining and civil engineering sectors in improving safety and speed of implementation.	Procurement of equipment is in progress. The delay is due to unique specifications of the equipment being imported and the procedural requirements.
21.	Investigations into the noise status of some selected non-coal mining complexes with a view to developing abatement and control measure.  F.No. 14/9/01. Met. IV	ISM, Dhanbad 2002 22.33 2 Years	13	To develop suitable noise abatement and control measures.	Noise pollution and its impact on hearing impairment in the miners and the surrounding population will be reduced through the abatement measures.	Assessment of prevailing noise status at 3 non-coal mines is in progress.
22.	Research and Development in enhanced gravity and magnetic separation studies for the recovery of values from plant tailing and ores slimes.  F.No. 14/19/01. Met. //	IBM, 2002 49.25 (Equipment component) 3 Years	Through IBM Plan budget	To recover iron, chromite and lead values in fine, ultra fine particles from tailings / waste materials.	Conservation of mineral and protection of environment will be the benefits.	Equipment procurement is in progress. Samples from M/s Sesa Goa, Fomento Goa, Dalli-Rajhara mine of Bhillai Steel Plant, TISCO mine in Sukinda and Rampura-Agucha mine of HZL have been collected.

23.	Attenuation of Hexavalent chromium in Sukinda Chromite Belt of Orissa State by bioremediation technology.  F.No. 14/17/. Met. IV	IBM, 2002 30 (Equipment only) 3 Years	Through IBM Plan budget	To conduct pilot plant trials for reduction of Hexavalent chromium present in mine waters to trivalent chromium by passing mine water through paddy fields.	Hexavalent chromium is a carcinogenic substance which attacks skin. By breathing it affects the respiratory system and through ingestion, it causes gastric ulcers affects lever, kidney, brain and blood circulating system of the human population in the surrounding area.	The equipment procurement is in progress. The allotment of 4 acres of land by the Directorate of Mines & Geology has been delayed. The matter has been sorted out.
24.	Development of data acquisition, processing and control system for aluminium electrolysis cell-F.No. 14/23/02. Met. /V	JNARDDC 2003 49 2 Years	7.89	To develop computer based program for enhanced problem solving capabilitie s.	The project will initiate use of mathematical models in improving efficiency of aluminum smelter by on-line control of operation. This will help the operators to avoid errors in judgment and provide quantitative and rational basis for taking on the spot corrective measures.	Equipment procurement is in progress.

25.	Development of rapid analytical procedures for bauxite and semi-quantitative analysis of scrap aluminium <i>F.No. 14/25/02. Met. IV</i>	JNARDDC 2003 25 2 Years	15	To develop analytical kit for qualitative and semi-quantitativ e checks.	The project will develop and standardize procedures for on the spot testing/categroizatio n of metals and scrap etc. This will help medium and small secondary units which may not have elaborate testing facilities.	Equipment procurement is in progress.
26.	Intervention studies in Coal, Zinc and Bauxite mines -	NIMH 2003 66 2 ½ Years	21	To plan proper health and safety programm es for miners.	The studies will generate basic data about the health of miners in India. The data will relate the exposure to noise, heat, vibration etc to the damage caused to the miners health.	Equipment procurement and recruitment of scientists is in progress.

27.	Recovery of Tungsten from Tungsten alloy swraf- Dom Rs.13.8 lacs F.No. 14/7/01. Met. IV	CECRI 2003 18.40 1 ½ Years	10	To develop electrolytic dissolution and solvent extraction methods.	There is no commercial tungsten deposits in the country. Hence recovery of tungsten from scrap etc assumes importance The electro-chemical process is less polluting, more energy efficient and has zero discharge of effluents as compared to the extraction methods in use at present.	Equipment procurement is in progress.
28.	Recovery of values from wastes of base metals industries – DoM-Rs. 24 lacs, DST Rs 6 lacs <i>F.No. 14/33/01. Met. IV</i>	RRL Bhopal 2003 30 3 Years	15	To explore the feasibility of recovery of values from tailings.	Conservation of minerals like zinc, lead and silver etc. lost which are lost in the wastes.	Equipment procurement is in progress.

29.	Integrated approach for the sustainable development geological and natural resin Bundelkhand region – Rs. 233.95 lacs balance from Bundelkhand University  F.No. 14/17/02. Met. //	Bundelkhan d University 2003 285.19 2 Years	30	development Bundelkhand	project will help sustainable development of Bundelkhand region by identifying geological resources. As a first step the infrastructure for research in geology will be created in the Bundelkhand University, Jhansi	The building is nearing completion. The research staff has been recruited. The progress will be reviewed by the PMC shortly.
30.	Characterization and upgradation of some limestone deposits of North East Region for value addition and rational utilisation – F.No. 14/18/02. Met. /V	RRL, Jorhat 2003 20 2 Years	10	To study the feasibility of value addition through beneficiati on.	The project will provide information and assistance to those desirous of setting up limestone based industry in NER. In turn industrial development will follow.	Equipment procurement is in progress.
31.	Simulation assisted development of aluminium metal foam through liquid metallurgy route RRL, Bhopal – Rs. 15 lacs, DoM- Rs.28 lac, DST Rs. 20 lac and DRDO Rs. 17 lac	RRL, Bhopal 80 January 2004 2 ½ Years	5.0	To develop new aluminum metal foam material	The new material having density of 0.5 gm/cc against 2.5 gm/cc of aluminium will find applications in defence space and auto industry due to light weight and unique structure.	The progress was reviewed PMC on 25 <sup>th</sup> June 04

32.	Pilot scale smelting and pre-feasibility studies on nickel-chromium – cobalt bearing magnetite ores of Nagaland for an economically viable plant. DoM-Rs. 21 lac, Department of Steel – Rs. 21 lacs, DST-Rs. 21 lacs, and Govt. of Nagaland Rs. 15 lac	NML Jamshedpur and the Department of Mining and Geology, Govt. of Nagaland Dec. 2003 Rs. 78 lac		To conduct pilot scale smelting trials in 500 KVA submerged are furnace using 5-6 tonnes of ore/day for a prefeasibility study	It will help in development of N.E.R.	The administration approval has been issued on 20 <sup>th</sup> April 2004. The MoU is being finalized.
33.	Development of integrated technology for processing of east coast bauxite for production of alumina.	JNARDDC Dec. 2003 Rs. 34.42 lac	Funding by NALCO	To test the package developed by the on industrial scale.	Further improvement in operating parameters will be feasible.	NALCO has released 1 <sup>st</sup> installment of Rs.3.44 Lakh in June 04
34.	Evaluation of grain refining efficiency of commercially available grain refiner alloys –	JNARDDC Dec. 2003 Rs. 5.75 lac	Funding by NALCO	To evaluate grain refining efficiency of commerciall y available grain refiners and develop new alloys.		NALCO has released 1 <sup>st</sup> installment of Rs.0.58. Lakh in June 04.

35.	Study on impurity build up during bauxite processing and its effect on Bayer liquors chemistry	JNARDDC Dec. 2003 Rs. 32.0 lac	Funding by NALCO	To estimate the concentratio n and evaluate the physical nature of different impurities like Fe, TI, Ca, Mn, Mg and their effect on the production of alumina.	The impurities control measures for application in alumina refinery will be developed.	NALCO has released 1 <sup>st</sup> installment of Rs.3.2 Lakh in June 04
36.	Ultrasonic treatment of spent pot lining	JNARDDC Dec. 2003 Rs. 12 lac		To develop an economic and effective ultrasonic process to treat spent pot lining material for recovery of by-products and destruction of toxic cyanide compounds		NALCO has released 1 <sup>st</sup> installment of Rs.1.2 Lakh in June 04

## BE-2005-06 (S&T PROGRAMME)

### THE ORGANIZATION WISE/SCHEME-WISE BREAK-UP OF BE-2005-06 FOR S&T

S.	Name of Scheme	Organization	Rs. in
No.			lacs
1	2	3	4
1.	National Facility for semi-Solid Forming	Indian Institute of Science, Bangalore	60
2.	National Institute of Rock Mechanics	<ol> <li>Laboratory Rock Mechanics investigations for Characterisation of Dimensional Stone Granite of southern India for their global marketability.</li> <li>Laboratory method of determining the in-situ stress of</li> </ol>	3
		rock using Kaiser effect.  3. Development of an Optical Fiber Based System for light	15
		transmission and illuminating selected area.  4. High Resolution Seismic Survey in exploration mapping of anom zones in the mining regime with a view to analyse their stability.	8
			4
3.	National Institute of Miner's Health Nagpur	Intervention studies in Coal, Zinc and Bauxite mines.	35
4	Jawaharlal Nehru Aluminium Research	Development of data acquistion, processing and control system for aluminium electrolysis cell.     Pilot plant study for de-ironing of east coast bauxite	21
	Development and Design Centre,	3. Development of a process for synthesis of non-structured Aluminium & alumna based products.	15
	Nagpur	4. Development of alumna and resin/polymer matrix compositions.	15
		5. Development of thermoelectric mathematical model for	

		alumium electrolysis cell	16
		6. Extensive characterization of electromaterial used in Aluminium smelting.	16
			15
5.	Regional Research Laboratory, Bhopal	Simulation assisted development of aluminium metal foam through liquid metallurgy route RRL, Bhopal	8
6.	Nantional Metallurgical Laboratory, Jamshedpur	Pilot scale smelting and pre-feasibility studies on nickel- chromium-cobalt bearing magnetite ores of Nagaland for an economically viable plant.	11
7.	Other Research Programmes	1. Setting up of R&D Centre for dimensional stones-C'DOS 2. Investigations into the noise status of some selected non- coal mining complexes with a view to developing abatement and control measure-ISM-Dhanbad.	21 8
		<ul> <li>3. Integrated approach for the sustainable development of geological and natural resources in Bundelkhand region.</li> <li>4. Characterization and up-gradation of some limestone deposits of North East Region for value addition and rational utilisation-RRL, Jorhat</li> </ul>	57
		5. Die- casting technology and appliance development centre and technology up-gradation and development of Non-automotive appliance for zinc die-casting in India-ILZDA.	10
			50

# MINUTES OF THE NINTH SITTING OF THE STANDING COMMITTEE ON COAL AND STEEL(2004-2005)HELD ON 4.4.2005 IN COMMITTEE ROOM 'E', PARLIAMENT HOUSE ANNEXE, NEW DELHI

The Committee met from 1700 hours to 1810 hours.

#### **PRESENT**

Smt. Karuna Shukla - In the Chair

#### **MEMBERS**

- 2. Shri Hansraj G. Ahir
- 3. Shri Harishchandra Chavan
- 4. Shri Bikash Chowdhury
- 5 Shri Chandra Sekhar Dubey
- 6. Shri Hemlal Murmu
- 7. Shri Dalpat Singh Paraste
- 8. Shri Tarachand Sahu
- 9. Shri Ramadhar Kashyap
- 10. Shri Vidya Sagar Nishad

#### SECRETARIAT

1. Shri N.K.Sapra - Joint Secretary

2. Shri A.K.Singh - Director

3. Shri Shiv Singh - Under Secretary

#### WITNESSES

1.	Shri R.K.Bhargava, Additional Secretary	Ministry of Mines
2.	Shri V.K.Thakral, Joint Secretary	do
3.	Shri Harbhajan Singh, JS & FA	do
4.	Shri Vinod Kumar, Director	do
5.	Shri Sunil Barthwal, Director	do
6.	Shri A.K.Mehta, Director	do
7.	Shri A.K.Singh, Director	Ministry of Mines
8.	Shri Deepak Srivastava, Director	do
9.	Shri Naval Kishore, Director	do
10.	Dr.S.K.Ray, Sr.DDG	Geological Survey of India
11.	Shri A.Mukhopadhyaya, DDG	do
12.	Dr.S.Sengupta, DDG	do
13.	Dr.Balram Chattopadhyaya, Director (Monitoring)	do
14.	Shri C.P.Ambesh, Controller of Mines	Indian Bureau of Mines
15.	Shri Meerul Hasan, Controller of Mines	do
16.	Shri C.R.Pradhan, Director(P&T) & CMD In-charge	NALCO
17.	Shri S.C.Chhatwal, Director(Finance)	do
18.	Shri M.Samajpati, Acting Chairman	Hindustan Copper Ltd.
19.	Shri P.Swarup, Director(Operations)	do
20.	Shri Rajneesh Gupta, CMD	Mineral Exploration Corporation Ltd.
21.	Shri C.P.Gupta, Director(Finance)	do

2. Since the Chairman was not available, Members of the Committee requested Smt.Karuna Shukla to preside over the Meeting

- 3. At the outset, the Chairperson welcomed the Members and representatives of the Ministry of Mines to the sitting of the Committee and apprised them of the provision of Direction 58 of the Directions by the Speaker.
- 4. The following important points were discussed by the Committee:
  - (i) Overview of the activities of the Ministry of Mines;
  - (ii) Budgetary outlay;
  - (iii) Plan allocation to GSI and HCL;
  - (iv) Physical and financial performance of GSI and utilisation of funds; and
  - (v) Privatisation of BALCO.
- 5. A copy of the verbatim proceedings of the sitting of the Committee has been kept on record.

The Committee then adjourned.

#### **ANNEXURE-XI**

MINUTES OF THE SITTING OF THE STANDING COMMITTEE ON COAL AND STEEL(2004-05) HELD ON  $20^{TH}$  APRIL, 2005 IN COMMITTEE ROOM 'B', PARLIAMENT HOUSE ANNEXE, NEW DELHI

The Committee met from 1700 hrs. to 1815 hrs. to consider and adopt the Reports on Demands for Grants(2005-06) pertaining to the Ministries of Coal, Mines and Steel.

PRESENT

Shri Ananth Kumar

- Chairman

#### **MEMBERS**

- 2. Shri Prasanna Acharya
- 3. Shri Hansraj G. Ahir
- 4. Shri Bikash Chowdhury
- 5. Shri Chandra Sekhar Dubey
- 6. Shri Chandrakant Khaire
- 7. Shri Faggan Singh Kulaste
- 8. Shri Vikrambhai Arjanbhai Maadam
- 9. Shri E. Ponnuswamy
- 10. Smt. Karuna Shukla
- 11. Shri Ramsevak Singh (Babuji)
- 12. Shri Devdas Apte
- 13. Shri Ramadhar Kashyap
- 14. Capt. Jai Narayan Prasad Nishad
- 15. Shri B.J.Panda

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1 2 3	. Shri A.K	Singh	- D	oint Secretary Director Jnder Secretary	
2.	At the outset, t	he Chairman, S	Standing Comm	nittee on Coal and S	Steel welcomed the Members to the sitting of the Committee.
3.	The Commit	ttee then consid	lered and adopt	ted the following Di	raft Reports with some additions/deletions/modifications:-
(i)	**	**	**	**	
(ii)	Report on D	emands for Gra	ants(2005-06) o	of the Ministry of M	lines.
(iii)	**	**	**	**	
4. T	The Committee	authorized the	Chairman to fir	nalise the Reports a	after making consequential changes arising out of factual verification by
the conc	erned Ministrie	s and to presen	t these Reports	to both the Houses	s of Parliament during the current Session.
			Tl	he Committee then	adjourned.
** Para	3 (i) and (iii) re	lating to consid	leration and add	option of two other	Reports of the Committee are not included.