

ANNUAL REPORT & ACCOUNTS

2012-13



CENTRAL MINE PLANNING & DESIGN INSTITUTE LIMITED

(A Subsidiary of Coal India Limited)

A Mini Ratna Company

GONDWANA PLACE: KANKE ROAD

RANCHI - 834 031



Coal Minister's visit to CMPDI on 27.4.2012



Chairman's visit to CMPDI on 15.3.2013



Inauguration of medical camp on 11.10.2012

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ATLAS COPCO CT-14 HYDROSTATIC DRILL IN OPERATION

MANAGEMENT DURING 2012-2013

Functional Directors

Shri Ashok Kumar Singh	: Chairman-cum-Managing Director (Upto 31.07.2012)
Shri Nagendra Kumar	: Chairman-cum-Managing Director (Additional charge) (From 01.08.2012 upto 31.10.2012)
Shri Gopal Singh	: Chairman-cum-Managing Director (Additional charge) (From 01.11.2012 to 31.01.2013)
Shri Amal Kumar Debnath	: Chairman-cum-Managing Director (Additional charge) (From 01.02.2013 to 18.02.2013)
Shri Amal Kumar Debnath	: Chairman-cum-Managing Director (From 19.02.2013)
Shri Amal Kumar Debnath	: Director (Technical) (From 01.08.2007 to 18.02.2013)
Shri Baidya Nath Basu	: Director (Technical) (From 25.08.2011)
Shri Dilip Kumar Ghosh	: Director (Technical) (From 13.10.2011)
Shri Rajesh Kumar Chopra	: Director (Technical) (From 13.01.2012)

Part – time official Director

Shri Devulapalli Narasimha Prasad	: Adviser (Projects), Ministry of Coal, (From 27.01.2010)
Shri Nagendra Kumar	: Director (Technical), Coal India Ltd. (From 29.02.2012)

Independent Directors

Prof. Vedala Rama Sastry	: Director (From 24.12.2010)
Shri Pramod Kumar Misra	: Director (From 24.12.2010)
Dr. Mukesh Khare	: Director (From 24.12.2010)
Prof. P.K.J. Mohapatra	: Director (From 24.12.2010)

Permanent Invitee

Shri Sharad Ghodke	: Director, Ministry of Coal, New Delhi (From 18.07.2008)
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Company Secretary:

Shri P. Lazar	: Company Secretary / Dy. G.M. (Finance) (From 01.04.2011)
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BOARD OF DIRECTORS



Sri Amal Kumar Debnath
Chairman-cum-Managing Director



Sri B.N. Basu



Sri D.K. Ghosh



Sri R. K. Chopra



Sri N. Kumar



Sri D.N. Prasad



Prof. V.R. Sastry



Prof. P.K.J. Mohapatra



Dr. Mukesh Khare



Sri Pramod Kumar Misra

MEMBERS OF THE BOARD AS ON 01.05.2013**Functional Directors**

Shri Amal Kumar Debnath	:	Chairman-cum-Managing Director
Shri Baidya Nath Basu	:	Director (Technical)
Shri Dilip Kumar Ghosh	:	Director (Technical)
Shri Rajesh Kumar Chopra	:	Director (Technical)

Part-time Official Directors

Shri Devulapalli Narasimha Prasad	:	Adviser (Projects), Ministry of Coal, New Delhi
Shri Nagendra Kumar	:	Director (Technical), Coal India Ltd.

Independent Directors

Prof. Vedala Rama Sastry	:	Director
Shri Pramod Kumar Misra	:	Director
Dr. Mukesh Khare	:	Director
Prof. P.K.J. Mohapatra	:	Director

Permanent Invitee

Shri Sharad Ghodke	:	Director, Ministry of Coal, New Delhi
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Company Secretary

Shri P. Lazar	:	Company Secretary / Dy. G.M. (Finance)
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BANKERS, AUDITORS AND REGISTERED OFFICE

BANKERS

State Bank of India,
United Bank of India,
Canara Bank
Bank of Maharashtra
Union Bank of India,
Central Bank of India
UCO Bank
Syndicate Bank

AUDITORS

M/s TODI TULSYAN & Co.
(ER0043)
Chartered Accountants,
602, LUV KUSH TOWER
Exhibition Road,
Patna – 800 001 (Bihar)

REGISTERED OFFICE

Central Mine Planning & Design Institute Limited,
Gondwana Place, Kanke Road,
Ranchi - 834 031
Jharkhand, India

Website: www.cmpdi.co.in

NOTICE FOR 38TH ANNUAL GENERAL MEETING

Ref. No. CS/AGM-38/2013/

Dated: 15.05.2013

Notice is hereby given to all the shareholders of Central Mine Planning & Design Institute Limited that the 38th Annual General Meeting of the Company will be held on 22.05.2013, the Wednesday at 10.30 A.M. at the Registered Office of the Company, Gondwana Place, Kanke Road, Ranchi to transact the following business:

ORDINARY BUSINESS:

1. To receive, consider and adopt the Audited Balance Sheet as on 31st March 2013 and Profit & Loss Account for the year ended on that date along with the Notes attached thereto and the Reports of Statutory Auditor and Comptroller & Auditor General of India thereon with the replies given by the management.
2. To receive and adopt the Report of the Board of Directors for the year 2012-13.
3. (i) To appoint a Director in place of Sri N. Kumar, official part-time Director who retires in terms of Article 34 (1) (e) (iii) of the Articles of Association of the Company and is eligible for re-appointment.
(ii) To appoint a Director in place of Sri D. N. Prasad, official part-time Director who retires in terms of Article 34 (1) (e) (iii) of the Articles of Association of the Company and is eligible for re-appointment.

By Order of the Board of Directors
For Central Mine Planning & Design Institute Limited

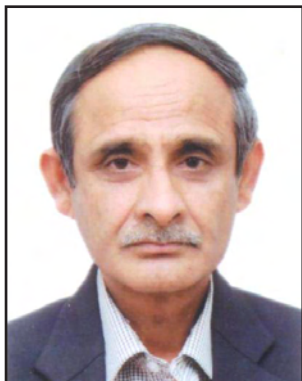
Sd/-
(P. Lazar)
Chief Manager (Finance)/ Company Secretary

Register office: Central Mine Planning & Design Institute Limited,
Gondwana Place, Kanke Road, Ranchi - 834 031, Jharkhand, India

- N.B.**
1. A member entitled to attend and vote, is entitled to appoint a proxy to attend and vote instead of himself and the proxy need not be a member of the Company.
 2. Members are also requested to accord their consent for convening the meeting at a shorter notice pursuant to the provision of Section 171(2) (i) of the Company's Act, 1956.
 3. Pursuant to Section 224(8) of the Companies act 1956, the members of the company in its 27th Annual General Meeting held on 26th September 2002 authorised the Board of Directors to fix the remuneration of Statutory Auditors appointed by Comptroller and Auditor General of India under Section 619(2) of the Companies act 1956.

To All the Shareholders, Auditors of the Company and Chairman of the Audit Committee.

CHAIRMAN'S STATEMENT



Dear Shareholders,

I have great pleasure to extend a very warm welcome to all of you to the 38th Annual General Meeting of CMPDIL and present to you the Annual Report of your Company for the financial year 2012-13. The Report of Directors and the Audited Accounts of your Company for the period ended 31st March, 2013 together with Report of the Statutory Auditors and the report and review of the Comptroller and Auditor General of India have already been provided to all the shareholders of the Company.

CMPDI was originally conceived and proposed in 1972 by a joint study group with Polish experts as a comprehensive planning set-up under one roof for entire Indian mining industry.

1. The growth Profile:

Your company has been providing in-house consultancy services to CIL and its subsidiaries in the areas of coal exploration, mine planning & design, environment engineering, coal beneficiation & utilization, allied engineering services, field services, etc. Similar services are also being provided to other than CIL clients including clients from metal mining sectors. Additionally, CMPDI also renders services to MoP&NG and Ministry of Coal pertaining to non-CIL blocks, CBM and Shale Gas etc.

Over the years after formation of CMPDI, the level of expertise of its planners and engineers was raised through bilateral agreements with foreign institutions of advanced coal mining countries like Giproshakht of erstwhile USSR, Kopex of Poland and British Mining Consultants of the UK for carrying out joint planning exercises for large opencast and underground projects. In addition to increasing the level of expertise of CMPDI personnel, significant build up of infrastructural facilities was also undertaken by establishing computer and laboratory facilities. All of these measures ensured the company a unique position in the mineral and mining sector as a total solution provider. However, with the changes in the business environment worldwide, such bilateral arrangement lost significance and momentum in 1990s. Erosion of the company's strength in terms of expert manpower also started taking place in the 90s due to superannuation of individuals, transfer to other CIL subsidiaries and non-induction of young engineers. Moreover, changing business scenario and consequent changes in opportunities in the mining sector within the country and abroad fueled exodus of experts mainly after 2000. Although, introduction of ISO Standards and computerization to some extent, including use of software related to mining industry, and addition of some equipment especially related to environmental facilities and coal characterization could be carried out, the company was falling behind in overall upgradation of its services and facilities to a level of excellence.

Capacity of drilling, one of the core activities of CMPDI, which enables projectisation of coal blocks for future production requirement, was hovering around 2 lakh meter per annum (2.02 lakh meter in 04-05 to 2.09 lakh meter in 07-08) and turn-over was also around ₹ 150 to 200 crores (₹151 crore in 2004-05 and ₹196 crore in 2007-08). This non-sustenance of advancement in respect of level of expertise, upgradation of technical facilities and support

services and reaching a plateau in respect of the services being rendered by the company to the coal industry was necessitated to be thwarted and the distinctiveness of the company was required to be kept preserved for the interest of the coal sector as a whole in foreseeable future as CMPDI had been the herald to technological innovations and strategies adopted in the coal sector.

It was conceived that CMPDI would not only need up gradation of manpower skill and infrastructural facilities but, also substantial expansion in its role as an exploration agency, consultant, technical service provider and an R&D institute. The possible way-out was in terms of enhancement in the exploration capacity, upgradation and modernisation of existing facilities and infrastructure, rationalising manpower utilization and executive manpower induction, diversification in newer areas of mineral, mining and allied engineering sectors other than coal, enhancing quantum of outside jobs (non-CIL) in value terms, establishing effective monitoring system in core areas including drilling and inventory control through computerisation and networking, establishing technology for development of alternative sources of coal based energy, etc.

2. Financial Performance:

During the financial year 2012-13, your company has achieved highest turnover of ₹ 601 crore, registering an increase of ₹ 77 crore over last year turnover of ₹ 524 crore with a profit before tax of ₹ 29.77 crore. The net worth of your company has risen to ₹ 135 crore as on 31.03.2013 from ₹111 crore as on 31.03.2012. During the financial year the earning per share has gone up to ₹1316/- from ₹1030/-. The procurement of outside consultancy services has also increased from ₹ 33.26 crores to ₹ 35.08 crores.

3. Drilling Performance:

Your company carried out 5.63 lakh meter of drilling during the first year of XII Plan i.e. 2012-13 in comparison to 4.98 lakh meter of drilling carried out during the terminal year of XI Plan i.e. 2011-12 through departmental resources and outsourcing, registering a growth of 13% over previous year. The target for 2013-14 has been substantially increased to 9.0 lakh metre which is further required to be raised to a level of 15 lakh meter per year by the 2015-16 (departmental exploration capacity to be raised to a level of 4 lakh meter), considering about 57 lakh meter of drilling target for the XII Plan period. This necessitated emphasis on outsourcing of substantial number of coal blocks for drilling. CMPDI had entered into a long term MOU with MECL on 6th January 2009 for offering up to one lakh meter of exploratory drilling per annum to MECL in different coal blocks. The annual limit has further been enhanced to 1.5 lakh meters from 2012-13. CMPDI has outsourced 26 coal blocks since 2008 to private agencies through different rounds of national and global tenders. Further 'e-tendering' was introduced for outsourcing of coal blocks for detailed exploration during 2012-13 and work has been successfully awarded for 10 blocks through E-tendering and drilling work has started in 5 blocks.

For achieving the XII Plan goals of drilling about 57 lakh metre, MoC has desired examination of need for Strengthening of CMPDIL for which a proposal stating requirement of additional Manpower (both executive & non-executive), Plant & Machinery and funds for procurement of equipment is under active consideration at CIL and modalities are being worked out.

4. ICRIS:

Coal Resource data of the country has been captured in digital form to create a data base at all the coalfields of India as part of project entitled 'Integrated Coal Resource Information System (ICRIS)', approved by the Ministry of Coal, Govt. of India. Final Report on 'Integrated Coal Resource Information System (ICRIS)' was submitted to Ministry of Coal. Updation of geological models and data continued. 40 models of zones were completed during 2012-13. ICRIS web-site, containing database & GIS applications of different coalfields, was completed and inaugurated by Secretary (Coal), Govt. of India. The site can be used by different stake holders for gathering information of different coalfields.

5. Project Reports:

A total of 126 projects were identified for XII Plan resulting in capacity addition about 438 Mt, against which, project reports for 100 projects, with capacity addition of about 333 Mt have already been formulated. During the year under review, 29 Project Reports have been prepared with capacity addition of about 75 Mt. Balance 26 Project Reports with capacity addition of about 105 Mt will be formulated in subsequent years of XII Plan.

6. Upgradation of Laboratories:

Upgradation of laboratories in your company continued this year also. Environment laboratories have been upgraded at RI-I and RI-VI. Atomic Absorption Spectrophotometer (AAS) has been procured at RI-I and RI-VI and are in the process of installation. The already existing state of the art CBM lab has been added with facilities of TOC (Total Organic Carbon) analyser for shale gas potentiality assessment. Though the capacity enhancement carried out in the labs seems to be adequate for catering to the requirement of testings in near future, further expansion effort would be necessitated considering requirement of the coal industry in the longer perspective.

7. Manpower Induction:

Manpower requirement to cater enhanced targets of Exploration, Planning and Design as well as allied engineering services has been addressed to a large extent. Out of total requirement of 134 Management Trainees (MTs) in different disciplines in 2012-13, 143 MTs have been recruited and posted in CMPDI. Similarly, non-executive manpower has been brought from other subsidiaries of CIL as well as through outside recruitment. However, this is a continuous process for maintaining the level of expertise in number terms.

8. Land Reclamation Monitoring and Land use/vegetation cover mapping:

Since 2008, Satellite surveillance for land reclamation monitoring of all the opencast coal mines of CIL having production more than 5 million m³ (composite) per annum was started annually. Further land reclamation monitoring of the opencast coal mines of CIL having production less than 5 million m³ per annum was also taken up from the year 2011 at the interval of three years. Land reclamation monitoring of 90 nos. of opencast projects of CIL (includes 50 nos. of opencast mines having production more than 5 million m³ per annum) based on high resolution satellite data was completed during 2012-13. The result of land reclamation status of all such mines have been put up on the website of CIL, CMPDI and the concerned coal companies in public domain. Additionally, land use/vegetation cover mapping of 6 (Six) coalfields viz. Karanpura, West Bokaro, East Bokaro, Bander, Singrauli and Korba based on satellite data has been completed.

9. Assistance for setting up of coal washeries:

Your company has been providing assistance to the subsidiary companies of CIL for setting up of coal washeries, particularly, in works like testing of run-of-mine (ROM) coal, planning, BID process management and assistance in construction & commissioning of washeries. It is expected that considering the large scale requirement of washing of coal in the country, there would be major spurt in services being provided by us. Foreseeing this, engineers from prestigious institutions have been inducted for strengthening the capability. Additionally, the Coal Preparation laboratory is being upgraded with procurement and installation of new equipment to cater to the future requirement for washability tests, etc. R&D project for effective utilization of low rank and low volatile high rank Indian coking coals for blast furnace has been completed.

10. Environmental Services:

Environmental services rendered by your company to CIL during 2012-13 included preparation of 30 nos. of Form-I and formulation of 29 nos. of draft EMPs (Environment Management Plans). Environmental Monitoring (air, water and noise) of 289 projects / establishments of CIL were carried out through eight environmental laboratories located at Asansol, Nagpur, Bilaspur, Kusmunda, Hasdeo, Jayant, Talcher and Ranchi. According to the guideline for Mine Closure prepared by CMPDI in June'09 and published by the Ministry of Coal in Aug.'09, a total of 132 nos. of Mine Closure Plans were prepared during 2012-13. However, considering the future requirement of environmental services and possibility of more stringent stipulations from MOEF, capacity enhancement in respect of environmental services rendered by us would be required on a continual basis.

11. Alternative source of coal based energy:

Adopting alternative source of coal based non-renewable energy generation like Coal Bed Methane / Coal Mine Methane, Underground Coal Gasification (UCG) and Coal Liquefaction, etc., has been stressed to meet energy needs to the extent possible. CMPDI is generating CBM related data under Promotional (Regional) Exploration (PRE) programme of MoC for enlarging CBM resource base. Development of Shale gas has also emerged as a promising area of operation for your company. For the first time, data dossiers on shale gas blocks and CBM Round V blocks, in pursuance to work awarded by DGH worth Rs.10 crores were submitted. Both the jobs were very challenging and were taken up for the first time.

Development of coal based alternate energy sources has been made one of the priority areas of operation for your company. To facilitate development of Coal Mine Methane, an India CMM/CBM Clearinghouse was established in CMPDI, Ranchi in November, 2008 at the instance of MoC under the aegis of MoC and USEPA. The clearinghouse is functioning as the nodal agency for collection and sharing of information on CMM/ CBM related data of the country and help in the commercial development of CMM Projects in India by public/private participation, technological collaboration and bringing financial investment opportunities. The terms of India CBM/CMM clearinghouse has been extended for a further period of 3 years which indicates the recognition of the efforts made in the field of mitigation of greenhouse gases and development of CMM at an international level.

CMPDI has been identified as the Nodal agency by Ministry of Coal, Govt. of India for the development of CMM in India and steps have been taken for commercial development of CMM within CIL areas. CMPDI has closely pursued the issue regarding operationalization of

CMM with Ministry of Coal and Ministry of Petroleum and Natural Gas and with the constant pursuit of CMPDI, the matter got resolved between the two ministries in Aug.'2012 and has paved the way for taking up commercial development of CMM. CMPDI will take further action after getting a formal order in this regard for which required collateral activities have already been taken up.

CMPDI is the only identified company from India along with IIT Kharagpur, as a collaborative partner of the Multi-country multi-organization (5 countries and 12 partners) research project 'Greenhouse Gas recovery from coal mines and unmineable coalbeds and conversion to Energy (GHG2E)'. The contribution made by CMPDI was very much appreciated in the Progress Review Meeting held at Imperial College London during July 2012.

CMPDI has already been involved with IIT Kharagpur, ISM, NGRI, CIMFR etc. for collaborative research work in the field of coal based clean energy resources. Additionally, premier organizations like OIL; GERMI, Gujarat; RSPCL, Rajasthan and Institutions of National Importance i.e. IIT Madras, IIT Bombay, Rajiv Gandhi Institute of Petroleum Technology (RGIPT), Raebareli (UP) along with various other institutions like NIT, Rourkela, University of Petroleum and Energy Studies, Dehradun have shown keen interest to work with CMPDI in the field of development of clean coal technology and unconventional energy resources (CBM, CMM, UCG and Shale gas).

12. S&T projects and R&D projects:

Your company is the nodal agency for S&T Projects sponsored by Ministry of Coal and R&D projects executed by CIL. Over the past 38 years, CMPDI has worked for the betterment of the mining industry through technology and innovation, and worked hand-in-hand with companies on a regular basis to help them convert research achievements into business success. During 2012-13, 9 nos. of R&D and S&T projects were completed. The completed projects were pertaining to Coal Mine Methane (CMM)/Abandoned Mine Methane (AMM), GPS based production reporting system in opencast mine of CIL, Generation/analysis of coalfield wise database of physico-mechanical characteristics of rock/coal and representative numerical models for solution to strata control problems, Development and optimisation of coal bed recovery process for CO₂ sequestration, Development of indigenous tool for random sampling & testing of explosives and accessories used in mines, Development of guidelines for safe dragline dump profile in the opencast mines of CIL etc. Some of the ongoing research projects related to demonstration of coal beneficiation system using radiometric technique, Indigenous development of integrated dumper collision avoidance system for OC mines, Assessment of prospect of shalgas in gondwana basin, Development of self advancing (mobile) goaf edge support for depillaring operation in underground mines, Integrated communication system to communicate and locate trapped under ground mines etc. Further to expand R&D base in coal sector, CMPDI is making all out efforts to involve more and more research and academic institutions, including private organizations with adequate infrastructure and expertise. CMPDI has invited Expression of Interest (Eoi) for undertaking R&D work on thirteen selected topics such as CBM reserve estimation for Indian Coalfields, Online washability analysis by using CT system, Early warning system for prediction of roof fall in underground mines and highwall failure in opencast mines, etc. Response has been encouraging and proposals have been received from various organizations on these topics.

13. Corporate Social Responsibility:

Your Company has built strong partnerships with the communities around its surroundings and also with the wider society through a well conceived basket of CSR interventions for the betterment of lives of the people. Under CSR, sustainable development and inclusive growth was emphasized and practiced by CMPDI. As per the guidelines on CSR, 3 to 5% of the retained profit of the preceding year had been allocated during the past years and activities were carried out which included providing study materials, school dresses, sports materials, lab materials, etc. in schools and setting up periodical medical check-up camps in schools and nearby villages and distribution of free medicine to the needy.

14. Consultancy Services in the area of Quality Assurances:

Apart from 43 management system certification during 2012-13, consultancy work was provided pertaining to Information Security Management System (ISO 27000) and integrating it with existing ISO 9001 Quality Manual of CMPDI, Company-level integrated management system (IMS) for Mahanadi Coalfields Ltd. (MCL) conforming to ISO 9001, ISO 14001, OHSAS 18001, SA 8000 and ISO 50001. Your company has started the work of ISO 9001 for Ministry of Coal, Govt. of India and NABH certification consultancy for Gandhinagar Central Hospital, CCL.

15. Consultancy-Other than CIL

Over the years, your company has been providing consultancy services to organizations other than CIL, not only in Coal & Lignite but also in other minerals. Against the MoU target to obtain ₹ 33.60 crore worth consultancy jobs outside CIL during 2012-13, CMPDI has obtained 32 work orders worth ₹ 35.08 crores. This includes a prestigious consultancy assignment worth ₹ 7.62 crores obtained from M/s Odisha Industrial Infrastructure Development Corporation (IDCO) for preparation of "Comprehensive Master Plan for Talcher and Ib-Valley Coalfields". 'Detailed Project Reports of 6 nos. explored coal blocks for captive bidding' for Ministry of Coal were prepared within two month's record time. During 2012-13, Consultancy services were provided to 20 organizations for 28 jobs. Some of the important clients/organizations are Directorate General of Hydrocarbons, Manganese Ore (India) Ltd., National Thermal Power Corporation Ltd., Central Electricity Authority, Steel Authority of India Ltd., MahaGuj Collieries Ltd., Monnet Ispat & Energy Ltd, Jindal Steel & Power Ltd., etc.

16. Recognition and Awards:

The Government of India recognized the contribution and relevance of CMPDI and conferred it with the status of a Mini Ratna (Category-II) in accordance with the provisions of the Department of Public Enterprise's (DPE's) guidelines in May, 2009. The Department of Public Enterprise's directions provide for grant of enhanced autonomy and delegation of powers to the profit making public sector enterprises (PSEs) as a policy objective, for making the public sector more efficient and competitive. Impressive performance of CMPDI got reflected in getting excellent MoU consistently rating from 2007-08 to 2009-10 and adjudging it the 'Best performing Subsidiary Company of CIL' for the year 2008-09 as per MoU rating. CMPDI achieved excellent MoU rating for 2011-12 and is also expected to get Excellent MoU rating in 2012-13.

Your Company received, "Geospatial World Excellence Award 2012" in recognition of excellent usage of Geospatial technology for Land Reclamation Monitoring of Coal Mines

on behalf of Coal India Limited in Amsterdam, the Netherlands on 24th April, 2012. A total of 149 nominations were received for the above award, out of which, CIL was selected by a panel of eminent international jury for this prestigious award.

17. Corporate Governance:

The conditions of Corporate Governance as stipulated in the guidelines on Corporate Governance for Central Public Sector Enterprises issued by Department of Public Enterprises, Govt. of India have been complied with by CMPDI. A separate section on Corporate Governance has been added to the Directors' Report and a certificate of compliance of conditions of Corporate Governance from the Statutory Auditors of the Company is annexed to Directors' Report.

Acknowledgement

All these achievements could be made because of the concerted efforts of employees of your company, wholehearted support from members from Trade Union (JCC) and Officer's Association as well as help extended by CIL and Ministry of Coal. I believe that the kind of employee involvement, commitment and level of expertise now available in the company would be a source of great comfort for the future commitments. I am confident that we shall continue to move for achieving greater heights in the future and meet the challenges and the expectations of the shareholders with its dedicated commitment and performance at all levels as in the past.

I express my sincere thanks to all shareholders, Ministry of Coal, other ministries and departments, state governments, all employees, trade unions, customers and vendors for their whole hearted support and relentless co-operation.

sd/-

Place : Ranchi

Date : 22.05.2013

(A.K. Debnath)

Chairman cum Managing Director

PERFORMANCE AT A GLANCE

	Particulars	Unit	2009-10	2010-11	2011-12	2012-13
1	Sales of Services (Net Sales)	₹ in crore	453.53	429.09	524.03	601.05
2	Profit before Tax	₹ in crore	19.61	23.69	30.79	29.77
3	Profit after Tax	₹ in crore	11.46	15.32	19.61	25.05
4	Retained Profit	₹ in crore	11.46	15.32	19.61	25.05
5	Net Block	₹ in crore	67.56	71.95	78.06	75.18
6	Net Worth	₹ in crore	73.78	87.92	110.92	134.89
7	Current Assets	₹ in crore	417.88	409.67	466.93	580.21
8	Current Liabilities	₹ in crore	317.26	319.66	347.72	455.15
9	Working Capital [(7) - (8)]	₹ in crore	100.62	90.01	119.21	125.06
10	Capital Employed	₹ in crore	168.18	161.96	197.27	200.24
11	Gross Margin	₹ in crore	27.30	26.51	36.68	42.61
12	Value Added	₹ in crore	10.48	10.31	16.95	22.59
13	Number of Employees	Numbers	3156	3102	3129	3142
14	Value Added per Employee	₹ in thousand	33.21	33.24	54.17	71.90
15	Return Capital Employed	₹ in crore	11.66	14.63	15.61	14.87
16	Face Value Per Share	Rupees	1000.00	1000.00	1000.00	1000.00
17	Earnings Per Share	Rupees	602.00	805.00	1030.00	1316.00

Note :

1. Net Worth = Paidup Capital + Reserve & Surplus - Accumulated loss & deferred revenue expenditure
2. Capital Employed = Net Block + Working Capital
3. Gross Margin = Net Profit + Depreciation + Interest + PP Adjustment + Tax Expenses
4. Value Added = Gross Margin - 10% of Capital Employed

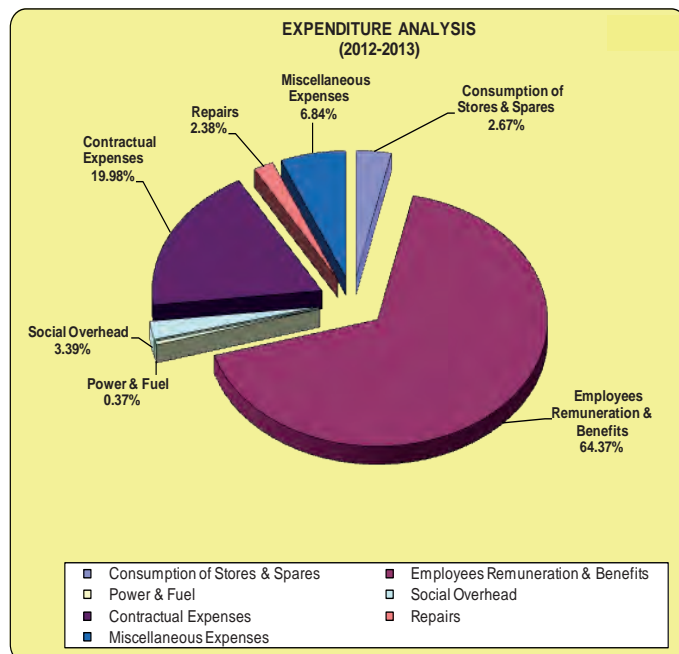
FINANCIAL STATISTICS

SOURCE OF FUNDS	As at 31.03.13		As at 31.03.12		As at 31.03.11		As at 31.03.10	
₹ in Crore								
EQUITY AND LIABILITIES								
Shareholders' Fund								
a) Share Capital	19.04		19.04		19.04		19.04	
b) Reserves & Surplus	115.85		91.88		68.88		54.74	
		134.89		110.92		87.92		73.78
Non-Current Liabilities								
a) Long Term Borrowing	-		-		-		-	
b) Deferred Tax Liability (Net)	-		-		-		-	
c) Other Long Term Liabilities	-		-		-		-	
d) Long Term Provisions	173.02		170.40		141.71		154.83	
		173.02		170.40		141.71		154.83
Current Liabilities								
a) Short Term Borrowing	-		-		-		-	
b) Trade Payables	32.43		33.45		22.95		39.87	
c) Other Current Liabilities	226.90		161.43		125.39		166.17	
d) Short Term Provisions	195.82		152.84		171.32		111.22	
		455.15		347.72		319.66		317.26
Total		763.06		629.04		549.29		545.87
APPLICATION OF FUNDS								
Non-Current Assets								
(a) Fixed Assets								
i) Tangible Assets - Gross Block	181.85		177.77		165.93		155.31	
Less : Depreciation, Impairment & Provisions	106.67		99.71		93.98		87.75	
Net Carrying Value		75.18		78.06		71.95		67.56
ii) Intangible Assets - Gross Block	5.61		5.20		4.05		2.23	
Less : Depreciation, Impairment & Provisions	5.61		5.20		4.05		2.23	
Net Carrying Value		-		-		-		-
iii) Capital Work-in-Progress		11.37		11.52		5.64		2.58
iv) Intangible Assets under Development		-		-		-		-
(b) Non-Current Investment		-		-		-		-
(c) Deferred Tax Assets (Net)		95.54		71.67		59.91		54.51
(d) Long Term Loans & Advances		0.74		0.84		2.10		3.32
(e) Other Non-Current Assets		0.02		0.02		0.02		0.02
Current Assets								
(a) Current Investments	-		-		-		-	
(b) Inventories	6.04		6.77		6.77		6.29	
(c) Trade Receivables	323.80		246.92		190.46		275.87	
(d) Cash & Cash equivalents	117.89		61.21		61.04		69.24	
(e) Short Term Loans & Advances	132.43		151.98		151.35		66.43	
(f) Other Current Assets	0.05		0.05		0.05		0.05	
		580.21		466.93		409.67		417.88
Total		763.06		629.04		549.29		545.87

FINANCIAL STATISTICS

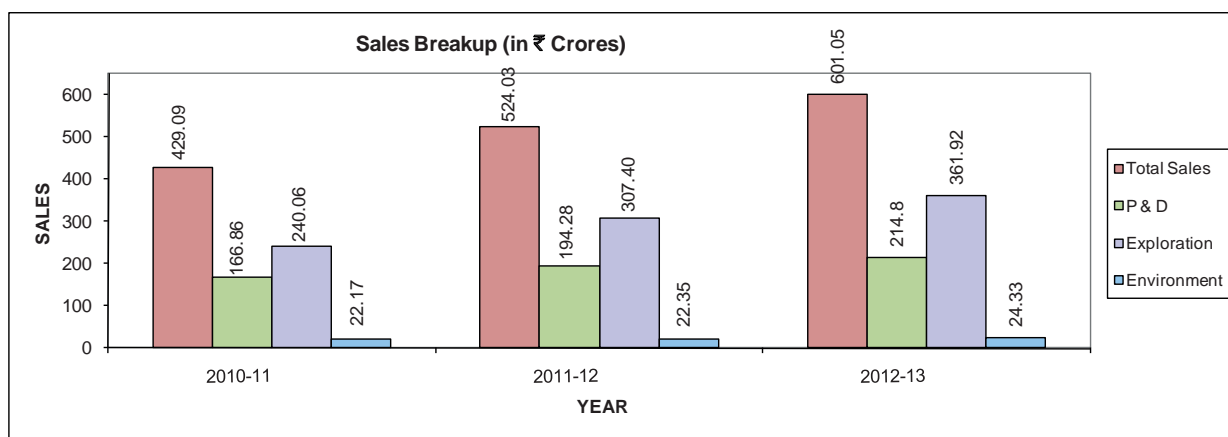
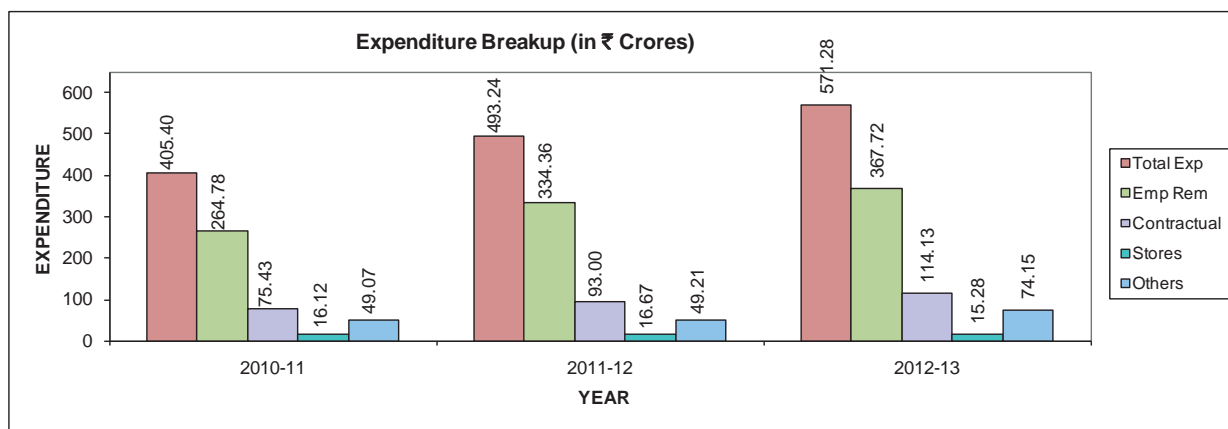
	₹ in crore			
	Figures For the Year ended 31.03.13	Figures For the Year ended 31.03.12	Figures For the Year ended 31.03.11	Figures For the Year ended 31.03.10
INCOME				
Sale of Coal				
Less : - Excise Duty				
Other Levies				
Revenue From Operations	601.05	524.03	429.09	453.53
Other Income	4.16	4.69	4.46	3.72
Total Revenue	605.21	528.72	433.55	457.25
EXPENSES				
Cost of Material Consumed	15.28	16.67	15.77	12.37
Change in inventories of finished goods work in progress and Stock in trade	-	-	-	-
Employee benefit expenses	367.72	340.08	269.75	290.92
Power & Fuel	2.10	2.24	2.07	2.30
Welfare Expenses	19.37	3.48	10.79	8.84
Repairs	13.58	9.61	11.11	13.53
Contractual Expenses	114.13	93.00	76.55	77.16
Finance Costs	0.09	0.00	0.03	0.26
Depreciation/amortization/Impairment	7.56	6.74	5.48	4.84
Provisions	0.39	(0.52)	(3.21)	0.21
Write off	-	0.08	0.43	-
Overburden Removal Adjustment	-	-	-	-
Other Expenditure	30.03	27.40	23.78	24.62
Total Expenses	570.25	498.78	412.55	435.05
Profit/Loss before exceptional & extraordinary items & tax	34.96	29.94	21.00	22.20
Prior Period Adjustment { charges/ (incomes) }	5.19	(0.85)	(2.69)	2.59
Exceptional Items				
Profit/ (Loss) before extraordinary items and tax	29.77	30.79	23.69	19.61
Extraordinary Items { charges/ (incomes) }	-	-	-	-
Profit/ (Loss) before Tax	29.77	30.79	23.69	19.61
Less : Tax Expenses				
- Current year	28.58	22.97	13.22	21.04
- Deferred Tax	(23.86)	(11.76)	(5.40)	(10.93)
- Earlier years	-	(0.03)	0.55	(1.96)
Profit/ (Loss) for the period	25.05	19.61	15.32	11.46
Earning per equity share (in)				
(Face Value of 1000/- per share)				
(1) Basic (in ₹.)	1316.00	1030.00	805.00	602.00
(2) Diluted (in ₹.)	1316.00	1030.00	805.00	602.00

FINANCIAL OVERVIEW OF CMPDIL

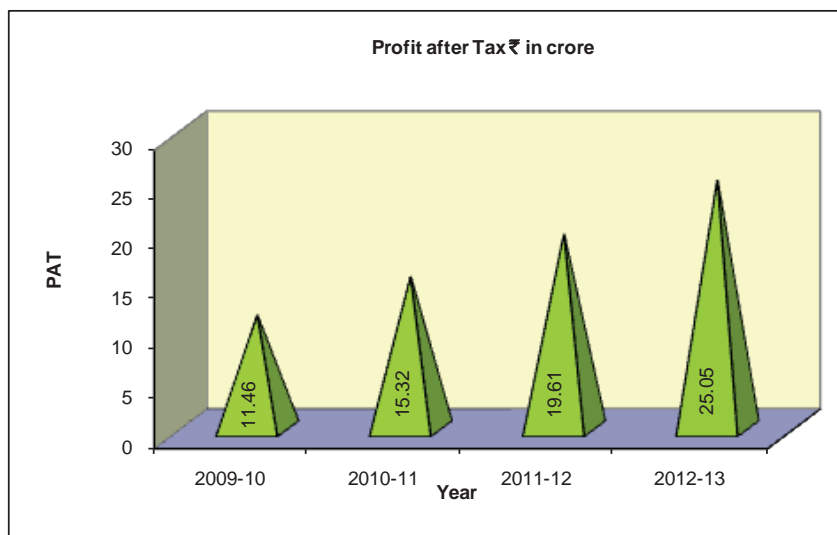
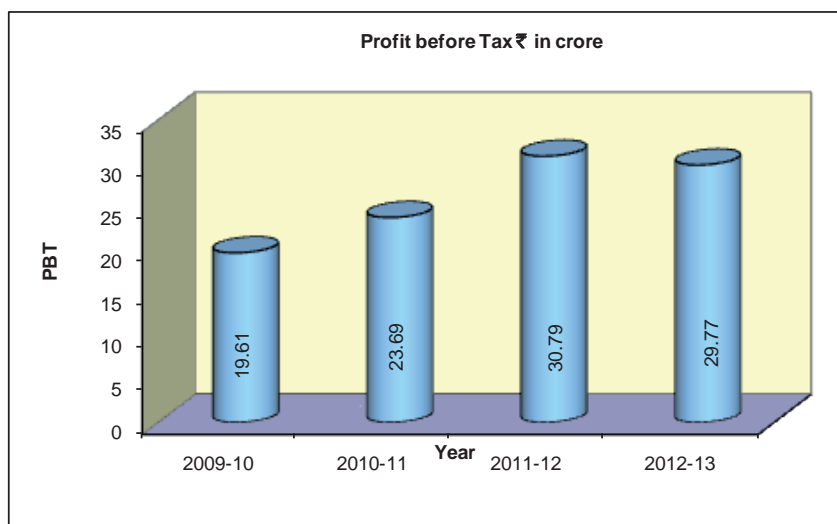
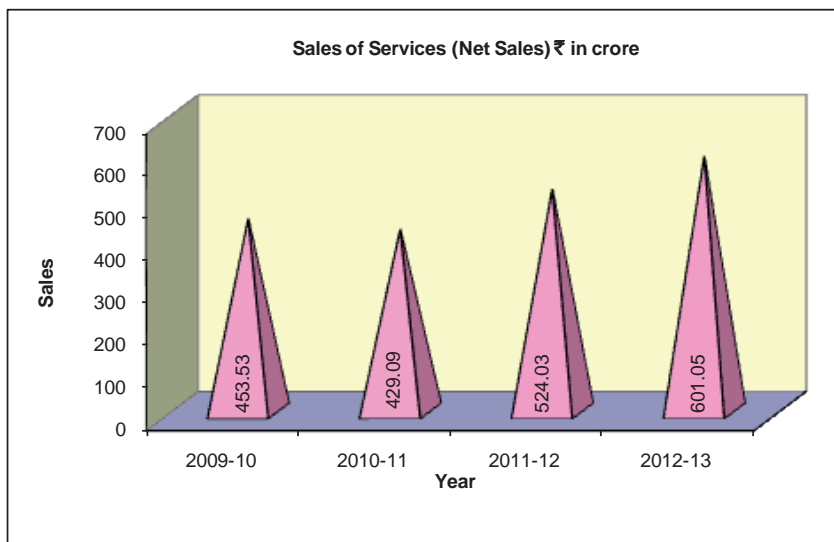


Year ending
31st March 2013

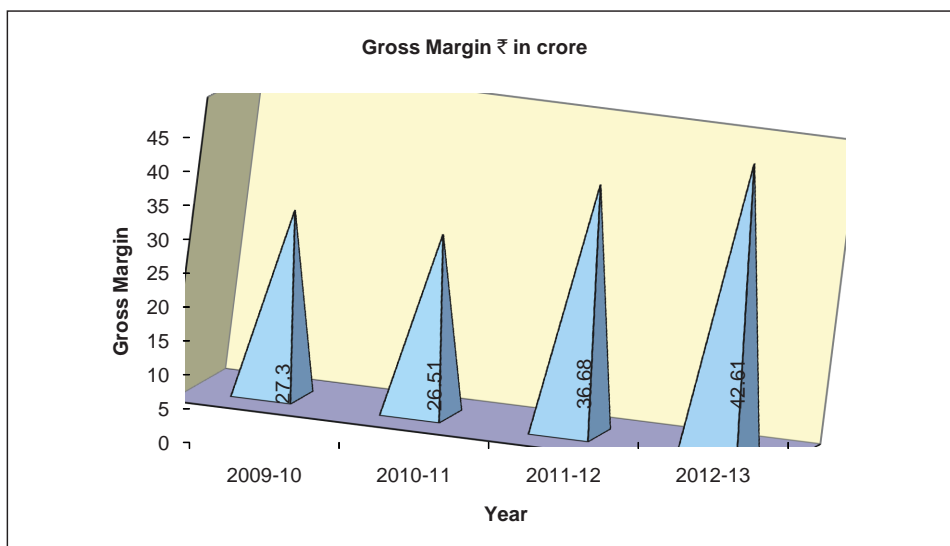
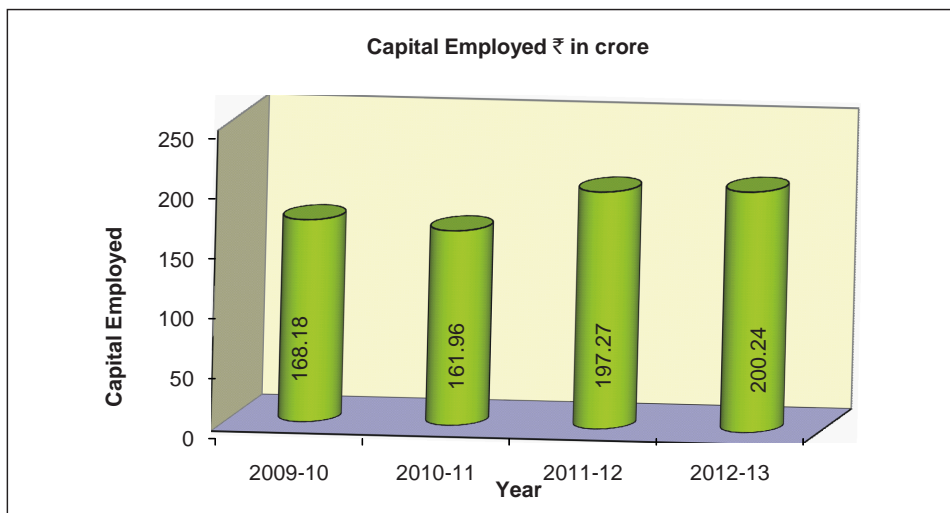
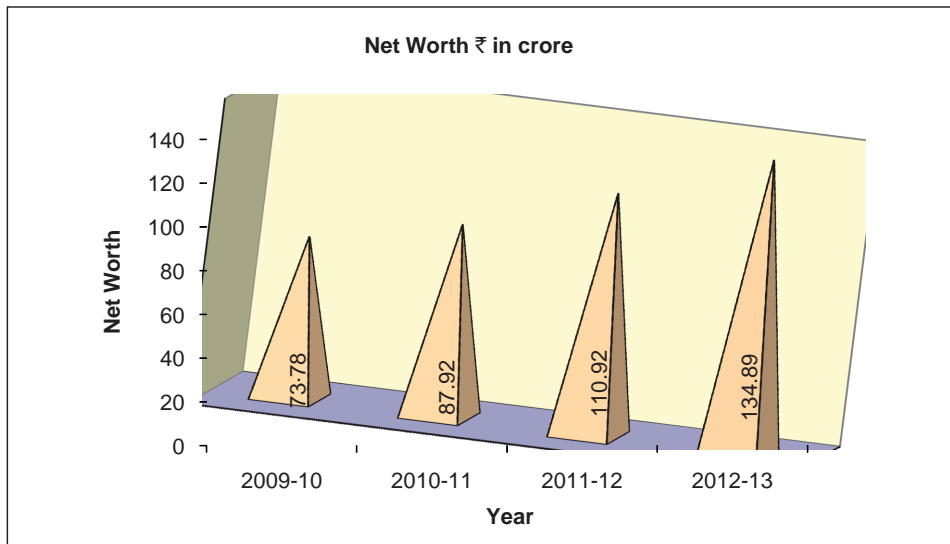
EXPENDITURE	(₹ in Crores)
Consumption of Stores & Spares	15.28
Employees Remuneration & Benefits	367.72
Power & Fuel	2.10
Social Overhead	19.37
Contractual Expenses	114.13
Repairs	13.58
Miscellaneous	39.10
Total Expenditure	571.28



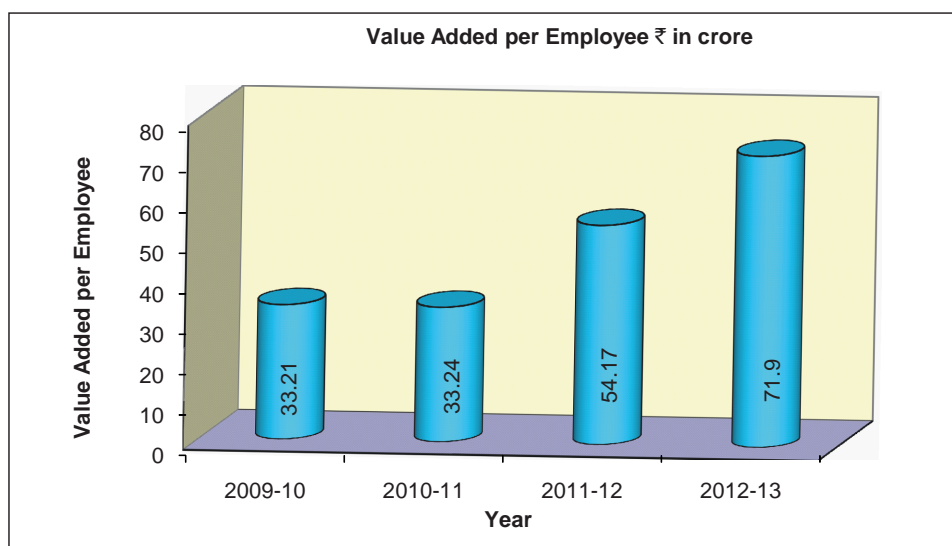
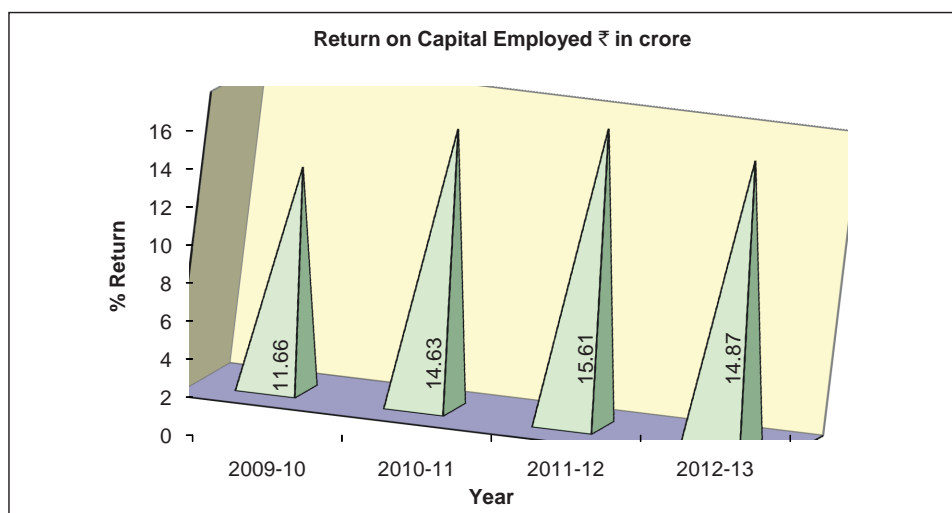
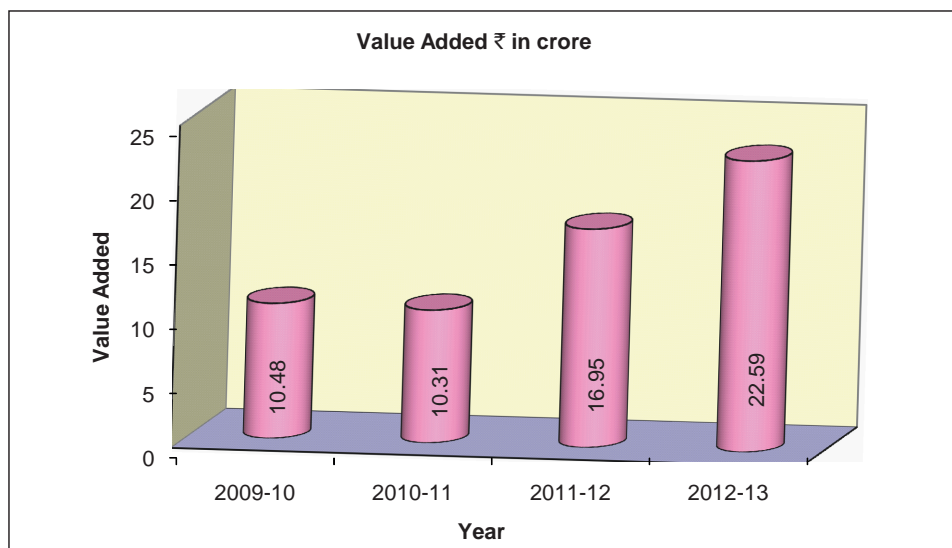
FINANCIAL OVERVIEW OF CMPDIL



FINANCIAL OVERVIEW OF CMPDIL



FINANCIAL OVERVIEW OF CMPDIL



DIRECTORS' REPORT

To
The Shareholders
Gentlemen,

On behalf of the Board of Directors, I have great pleasure in presenting the 38th Annual Report on the working of your Company along with the Accounts for the year ended 31st March, 2013 and Reports of Statutory Auditors and the Comptroller and Auditor General of India thereon.

PART: A

1.0 CORPORATE OVERVIEW

Your Company, a Mini Ratna (Cat-II) company, continued to operate with seven Regional Institutes (RI) located at Asansol, Dhanbad, Ranchi, Nagpur, Bilaspur, Singrauli & Bhubaneswar and its Headquarter at Gondwana Place, Kanke Road, Ranchi. Seven Regional Institutes designated as Regional Institute (RI)-I to RI-VII rendered consultancy services to seven corresponding subsidiaries of CIL viz. ECL (RI-I), BCCL (RI-II), CCL (RI-III), WCL (RI-IV), SECL (RI-V), NCL (RI-VI), & MCL (RI-VII). Consultancy services to CIL (HQ), NEC & non-CIL clients like Directorate General of Hydrocarbons, Manganese Ore (India) Ltd., National Thermal Power Corporation Ltd., Central Electricity Authority, Steel Authority of India Ltd., MahaGuj Collieries Ltd., Monnet Ispat & Energy Ltd., Jindal Steel & Power Ltd., Hindustan Copper Ltd., National Thermal Power Corporation Ltd., Neyveli Lignite Corporation Ltd., Orissa Mining Corporation, Baitarni West Coal Company Ltd., Odisha Power Generation Corporation, Mahan coal Ltd., etc.

1.1 Major Services Offered

- **Geological Exploration & Drilling**

Detailed geological exploration of regionally explored blocks with a view

to generate reliable geological and geo-engineering data and assess in-situ coal reserve for preparation of mining project report; geophysical survey through multi-probe geophysical logging; high resolution shallow seismic survey; hydro geological investigation and identification of coal bed methane resources.

- **Project Planning & Design**

Preparation of feasibility reports, detailed project reports and detailed engineering drawings for underground and opencast mines, master plans of coalfields, coal and mineral beneficiation and utilisation plants, coal handling plants, workshops and other ancillary units and infrastructure facilities including techno-economic evaluation of various schemes and project reports for investment decisions.

- **Engineering Services**

Detailed design of system and sub-system for mines, beneficiation and utilisation plants, coal handling plants, power supply systems, workshops and other units, architectural planning & design.

- **Research & Development**

Serving as nodal agency for all S&T schemes funded by Ministry of Coal and R&D schemes funded by R&D Board of CIL. CMPDI, on its own, also takes up applied research and development in the field of mining, beneficiation, utilisation, environment, exploration, etc.

- **Laboratory Services**

Well equipped state of the art laboratories are providing quality analysis of mine gases, coal core sample, Non-Destructive Testing (NDT), air, water, washability characteristics of coal, physico-mechanical strength of strata, petrography etc.

● Environmental Services

Preparation of Environment Management Plan, its implementation and monitoring through Regional Institutes and Headquarters and analysis of air, water, noise samples at in-house CPCB approved laboratories. Utilisation of remote sensing satellite data for land use monitoring has also started for entire CIL mines.

● Information Technology

● Human Resource Development

● Specialised Services

- ✓ Geomatics including Remote Sensing
- ✓ Ventilation & Gas survey in mines
- ✓ Controlled Blasting
- ✓ Performance evaluation of new explosives
- ✓ Mining Electronics
- ✓ Mine capacity Assessment
- ✓ Mine Support Design, Rock Mass Rating (RMR)
- ✓ Non-Destructive Testing
- ✓ Management System Consultancy
- ✓ Measurement of Coal and OBR

1.2 Financial Working Results

During the year under review your Company earned a net profit of ₹ 25.05 Crores (after deferred tax). The working results of the company are given below:

(₹ in Crore)

Sales		601.05
Less: Total Net Expenditure		566.09
Profit before P.P. Adjustment & Tax		34.96
Less: Prior Period Adjustment		5.19
[Debit (+) / Credit (-)]		
Profit before Taxation		29.77

Provision for Income Tax:		
Less: For current period	28.58	
Add: For Deferred Tax	(-) 23.86	
For earlier years	-	
		4.72
Net Profit after Tax		25.05

1.3 MANAGEMENT DISCUSSION AND ANALYSIS REPORT

The Management of Central Mine Planning & Design Institute Ltd. (CMPDIL) presents its analysis report covering the performance and outlook of the Company.

1.3.1 Vision of CMPDIL:

To be the global market leader in an expanding earth resource sector and allied professional activities.

1.3.2 Mission of CMPDIL:

To provide total consultancy in coal and mineral exploration, mining, engineering and allied fields as the premier consultant in India and also in the international arena.

1.3.3 Set Corporate Objectives to realize the above:

Major objectives of CMPDIL are as follows.

1. To provide consultancy services in coal and mineral exploration including geological, geophysical, hydrological and environmental data generation.
2. To improve quality of exploration for providing higher level of confidence of geological assessment for optimum mine planning.
3. To optimize generation of internal resources by improving productivity, preventing wastage and mobilizing adequate external resources to meet investment need.
4. Project Planning and Designing for

- coal mines, Coal beneficiation and Utilization Plants, etc.
- 5. To promote, co-ordinate and ensure effectiveness of research activities in coal sector under S&T and R&D Schemes.
- 6. To assimilate and disseminate technological information through information networks.
- 7. To undertake formulation of Environmental Management Plans (EMPs), Environment Impact Assessment (EIA) and Mine Closure Plans for coal mining and related projects.
- 9. Extending remote sensing services for land reclamation monitoring, environmental data generation, vegetation cover mapping, coal mine fire mapping, large scale topographical mapping of coalfields, infrastructure planning including selection of TPS and washery locations, etc.
- 10. To provide field and laboratory services to Subsidiary Coal Producing Companies of CIL.
- 11. To provide consultancy services to outside organizations other than CIL and its subsidiaries

1.3.4 Brief of functions of CMPDI :

A brief description of all the functions of CMPDI is given below:

- a. Geological Exploration and support Services - This core function of CMPDI since its inception offers the following services for mineral deposits:
 - Planning and execution of exploration;
 - Resource evaluation and documentation for investment and exploitation decisions; and
 - Related field tests and laboratory support.
- b. Planning, Design and Support Services – Being another core function of CMPDI since inception, this offers the following services for construction and operation of mining, beneficiation, utilization, and other infrastructure and engineering projects.
 - Formulation and/or evaluation of conceptual/pre-feasibility/feasibility studies, project reports, and basic and detailed engineering designs;
 - Engineering and other related consultancy and support; and
 - Related field tests and laboratory support.
- c. Environmental Management Services - Under offer since 1992, these cover all round support to mining and mineral industry for environmental management during their planning and operations including Mine Closure Planning, laboratory and test support. Land use monitoring of all major opencast mines in Coal India Ltd. are being carried out by satellite surveillance on yearly basis.
- d. Management System Services - Under offer since 1997, these cover complete range of consultancy and support for creation, implementation, and certification of various standardized management systems, e.g. ISO 9001 Quality Management System and its industry specific translations, ISO 14001 Environmental Management System, OHSAS18001 occupational health and safety management,

- and SA 8000 social accountability management.
- e. Human Resource Development - Under offer since 1976, these cover technical, managerial, and management-systems related training to the market clientele, particularly in mineral and mining sector.
 - f. Specialised Services – Expert consultancy services are also offered in the field of Geomatics including Remote Sensing, Ventilation & Gas survey in mines, Controlled Blasting, Performance evaluation of new explosives, Mining Electronics, Mine capacity Assessment, Mine Support Design, Rock Mass Rating (RMR), Non-Destructive Testing, Management System Consultancy, Measurement of Coal and OBR, etc.

1.3.5 Prevalent Coal Industry Environment vis-a-vis role of CMPDIL

Approximately 40% of the world's electricity needs is being provided by coal. Yes, coal is the second source of primary energy after oil. Since the start of the 21st century, coal production has been the fastest-growing global energy source. It is the second source of primary energy in the world after oil, and the first source of electricity generation. The surge in global coal consumption is driven primarily by developing economies, such as China and India.

As for India, the economic growth will continue to be robust in coming several years. Coal is the key fuel in the energy mix and since economic growth and energy use are highly correlated, coal demand prospects are bullish in near future. The XII Plan (2012-17) document of Ministry of Coal (March,

2012) indicates coal demand of 980.50 at a CAGR of 7.09 in terminal year of XII Plan i.e. 2016-17. The indigenous all India coal production projection in 2016-17 is projected to be 795 Mt (615 Mt for CIL). Hence, the demand & indigenous supply gap by 2016-17 is projected to be 185.5 Mt. Also, even with a longer perspective beyond XII Plan period, coal production is not likely to be capped in the country in foreseeable future due to demand restrictions.

Though, on the one hand, the huge demand of coal facilitates for the growth of the coal producers in the country, the role of CIL - the producer of 81 % of coal in the country often comes under scrutiny for the coal shortages for the power sector without acknowledging the role played by CIL in enhancement of the coal production of the country from 70 Mt in 80s to about 452 Mt in 2012-13 and the adverse impact of non-removal of the constraints like under-developed infrastructure including poor evacuation logistics of the railways which has been creating problems for transportation of coal to various power plants across the country in spite of considerable pit head stock, non-availability of forestry clearances in time, R&R and law & order problems. Often CIL comes into the domain of criticism even for the non-performance and inefficiencies of the captive coal producers to whom a considerable coal reserve has been allocated over the years.

Presently, India is mainly dependent on Indonesia and South Africa for import of Steam coal and on Australia, United States and South Africa for coking coal. However, the new regulatory scenarios in Australia and Indonesia are reflective on the increasing coal prices. This necessitates the requirement of intensive efforts in identifying new

avenues for supply, like Mozambique and others. While the alternate sources for coal import beyond Indonesia, South Africa and Australia are identified, the challenges in these countries (like Mozambique, Columbia) are numerous ranging from lack of infrastructure to export coal out of country, concerns over stability of political and fiscal regime, unavailability of skilled manpower, etc. Beyond acquiring coal assets, huge investment in developing surrounding infrastructure and government support to secure stable fiscal regime would be necessary to ensure long term sustainable coal imports from Mozambique and Columbia.

The target for detailed drilling for 2013-14 has been substantially enhanced and set at a level of 9.0 lakh meter from the achievement level of 5.63 lakh meter during 2012-13 which is further emphasized to be raised to a level of 15 lakh meter per year (including departmental exploration capacity of 4 lakh meter) by 2015-16, considering about 57 lakh meter of drilling target for the XII Plan period. For building up of drilling capacity, strengthening of CMPDI with additional manpower (both executive & non-executive), plant & machinery and funds for procurement of equipment is under way. However, till date about 69 lakh meter of detailed drilling in coal bearing is remaining to be carried out by CMPDI and contractual agencies working under its supervision. Nonetheless, annual rate of addition in this total requirement of detailed drilling through regional drilling being carried out by GSI, MECL, etc., is substantially lower than the desired drilling rate of 15 lakh meter per year. Hence, for sustaining the detailed drilling capacity of CMPDI at a rate of 15 lakh meter per year, commensurate capacity addition

in regional drilling capacity of various agencies is also necessitated.

CMPDI, being the consulting subsidiary of CIL - the largest coal producer company in the world, has the mandate to provide exploration, planning & design and other allied services for its rapid expansion. Additionally, CMPDI's expert services had been in demand by other coal producer in public and private sector as well. Stride of coal companies, mainly of CIL, towards meeting the coal demand from indigenous supply will have a spurt in CMPDI's services.

Also, arising out of the deficiencies in the UHV system amidst realization of the fact that there was no room for quality improvement and gains thereon, shift from coal pricing from UHV to GCV was affected by CIL which is a welcome step in improving the quality of coal being supplied to the consumers. However, this has necessitated strengthening of the required infrastructure for crushing, sizing, washing and sampling of coal. In turn, this is likely to give further boost to CMPDI's expert services.

Furthermore, adopting alternative source of coal based non-renewable energy generation like Coal Bed Methane / Coal Mine Methane, Underground Coal Gasification (UCG) and Coal Liquefaction, etc., is being stressed to meet energy needs to the extent possible. CMPDI is generating CBM related data under Promotional Regional Exploration (PRE) programme of MoC for enlarging CBM resource base. Development of Shale gas has also emerged out as a promising area of operation for CMPDI. CMPDI's services are being sought in generation of CBM related data under delineation of blocks, preparation of data dossiers, etc. Data dossiers on shale gas, blocks in pursuance to work awarded by DGH,

were submitted by CMPDI. Additionally, emerging area of Information and Communication Technology (ICT) in coal sector is also presenting additional opportunities for CMPDI and likely to inflate further in coming years.

1.3.6 Strategy adopted to realize above objectives and vision:

With the depth of knowledge and market place CMPDI has in mineral, mining and allied sectors, it is adopting the following strategies and business plan to realize its corporate objectives and vision as above:

- (i) Enhancing exploration capacity with addition of manpower, plant & machinery, etc.,
- (ii) Diversification in newer areas of mineral, mining and allied engineering sectors other than coal,
- (iii) Increasing market share for outside clients,
- (iv) Tie-up with strategic partners both within and outside the country,
- (v) Upgradation and modernisation of existing facilities and infrastructure,
- (vi) Increasing operational efficiency and work quality,
- (vii) Improving corporate culture and internal systems,
- (viii) Rationalising manpower utilization and executive manpower induction to ensure continued planning and specialized support to the coal industry,
- (ix) Better cost control measures and monitoring and
- (x) Development of Coal based alternate source of energy and Shale Gas.

1.3.7 Preparedness of CMPDI

CMPDI exploration activities had major spurt during the XI Plan period as well as in the 1st year of the XII Plan. Through departmental drills and outsourcing, CMPDI carried out 19.41 lakh meter of drilling during the XI Plan period (2007-12) in comparison to about 10 lakh meter of total drilling carried out during the X Plan period (2002-07). Also, compared to 2.09 lakh metre of drilling carried out in the beginning year of XI Plan, i.e. 2007-08, 4.98 lakh metre of drilling was carried out in 2011-12 and 5.63 lakh metre in 2012-13 through departmental resources and outsourcing. Modernization of departmental drills, procurement of new mechanical and hydrostatic drills and its deployment, effective arrangement for drilling accessories including mud pumps and trucks had been the key to augmentation in the drilling capacity of CMPDI.

The target for 2013-14 has been substantially increased to 9.0 lakh metre which is further required to be raised to a level of 15 lakh meter per year by the 2015-16 (departmental exploration capacity to be raised to a level of 4 lakh meter. This necessitated emphasis on outsourcing of substantial number of coal blocks for drilling. CMPDI had entered into a long term MOU with MECL on 6th January 2009 for offering up to one lakh meter of exploratory drilling per annum to MECL in different coal blocks. The annual limit has further been enhanced to 1.5 lakh meters from 2012-13. CMPDI has outsourced 26 coal blocks since 2008 to private agencies through different rounds of national and global tenders. Further 'e-tendering' was introduced for outsourcing of coal blocks for detailed exploration during 2012-13 and work has been successfully awarded for 10 blocks through E-tendering and drilling work has started in 5 blocks.

A total of 126 projects were identified for XII Plan resulting in capacity addition about 438 Mt, against which, project reports for 100 projects, with capacity addition of about 333 Mt have already been formulated. During the year under review, 29 Project Reports have been prepared with capacity addition of about 75 Mt. Balance 26 Project Reports with capacity addition of about 105 Mt will be formulated in subsequent years of XII Plan.

Capacities of most of the laboratories in CMPDI have been upgraded. Chemical and Petrography laboratories have been upgraded with sophisticated imported equipments and the capacities have been enhanced. Environment laboratories have been upgraded at HQ and RI-IV and established at RI-V, whereas, upgradation of RI-I and RI-VI Environmental labs are underway. Action for establishment of new environmental lab at RI-VII, Bhubneswar and RI-II, Dhanbad have been taken up. The Mining Technology laboratory has been made capable for carrying out the Resin and Cement Capsule tests. One heavy duty Universal Testing Machine (UTM) of 2000 kN capacity has also been procured and installed for determination of physico-mechanical properties.

CMPDI has created the facility for adsorption isotherm test, which is capable of testing adsorption capacity of coal seam upto 20 Mpa pressure (a pressure of about 2000 meter depth). The equipment of this capacity is probably first of this kind in India.

Manpower requirement of Exploration, Planning and Design as well as allied engineering services have been addressed. Out of total requirement of 134 Management Trainees (MTs) in different disciplines in 2012-13, 131 MTs have been recruited and posted in CMPDI.

Efforts are being made to get remaining number of MTs. Similarly, non-executive manpower have been brought from other subsidiaries and process of addition in manpower is going on.

Development of coal based alternate energy sources has become one of the priority area of operation for CMPDI. Coal Mine Methane project has been successfully demonstrated by CMPDI at Moonidih project of BCCL. CMPDI has closely pursued the issue regarding operationalization of CMM with Ministry of Coal and Ministry of Petroleum and Natural Gas and with the constant pursuit of CMPDI, the matter got resolved between the two ministries in Aug.'2012 and has paved the way for taking up commercial development of CMM. CMPDI will take further action after getting a formal order in this regard for which required collateral activities have already been taken up. In addition, steps taken for commercial development of UCG in 2 blocks within CIL areas, namely Kaitha (CCL) and Thesgora-C (WCL) and tenders were under finalization at CIL level. Foray in the area of Shale Gas development has already been affected and the data dossier on prospective Shale Gas blocks in Damodar Valley and Sohagpur Basin have been submitted to DGH. CMPDI is likely to be given the work of examining potentiality of development of Shale Gas even outside CIL areas.

Satellite surveillance for land reclamation monitoring of opencast projects of CIL is being carried out by CMPDI from the year 2008. 50 nos. of Opencast projects/mines producing 5 million cubic meter and more (composite) and 113 Opencast mines/projects producing less than 5 million cubic meter (composite) are monitored annually and at three year interval, respectively. Land reclamation monitoring of 90 nos. of opencast projects

of CIL based on high resolution satellite data has been completed during 2012-13. Additionally, land use/vegetation cover mapping of 6 (Six) coalfields viz. Karanpura, West Bokaro, East Bokaro, Bander, Singrauli and Korba based on satellite data has been completed.

Pertaining to the Planning & Design of Coal Handling Plants for various coal mines of CIL and outside agencies, CMPDI has the expertise for preparation of Basic Layout of a CHP having facilities of ROM coal receiving, crushing, storing and rapid loading in to rail wagons for incorporation in the Project Report, preparation of tender document for turn-key execution of CHPs including detailed specifications of various P&M used in the CHP and commercial terms & conditions, tendering, tender evaluation and determination of L-1 bidder for a CHP on turn key basis, design/drawing scrutiny and author's supervision, etc. Tendering for Krishnashila CHP (4 Mty) has been carried out by CMPDI in 12-13, whereas, e-tendering for Block-B CHP (3.5 Mty) and Jayant Incremental CHP (5 Mty) is in process. Work has also been started for e-tendering of Nigahi CHP (5 Mty). CMPDI has also future plan for e-tendering of Khadia Incremental CHP (6 Mty).

As per the directive of Railway Board, diesel locomotives will be phased out and replaced by Electrical Locomotives. CIL has entrusted the work to CMPDI and accordingly, the work is underway at CMPDI.

Environmental services rendered by CMPDI to CIL during 2012-13 included preparation of 59 Environment Management Plans (including 30 Form-I) and 180 Environmental Audit Statements. Environmental Monitoring (air, water and noise) of 289 projects / establishments of CIL were carried out through eight

environmental laboratories located at Asansol, Nagpur, Bilaspur, Kusmunda, Hasdeo, Jayant, Talcher and Ranchi. According to the guideline for Mine Closure prepared by CMPDI in June'09 and published by the Ministry of Coal in Aug.'09, a total of 132 nos. of Mine Closure Plans were prepared during 2012-13.

Model global bid document for opencast mine development & operation through "Mine Developer & Operator (MDO)" route has been prepared by CMPDI for selection of "Mine Developer & operator" for open pit mining who will also finance, procure, construct, operate and maintain the mine to achieve coal production and overburden removal for a specified duration as per calendar plan. The draft RFQ along with salient points of the draft RFP was also discussed with prospective bidders. Further action in this respect is underway.

Apart from 43 management system certification during 2012-13, consultancy work was provided pertaining to Information Security Management System (ISO 27000) and integrating it with existing ISO 9001 Quality Manual of CMPDI, Company-level integrated management system (IMS) for Mahanadi Coalfields Ltd. (MCL) conforming to ISO 9001, ISO 14001, OHSAS 18001, SA 8000 and ISO 50001. Your company has started the work of ISO 9001 for Ministry of Coal, Govt. of India and NABH certification consultancy for Gandhinagar Central Hospital, CCL.

CMPDI signed an MoU with GIPROSHAKHT, Russia on 15th June, 2012 for collaboration in the field of underground and opencast coal and metalliferous mine planning and related activities.

1.4.0 Financial Overview of CMPDIL

During the year the company made a net profit of Rs. 25.05 Crore (After deferred Tax). The summary of the working results for the last three years is as follows:

Eligibility Criteria		Status of CMPDIL		
		2010- 11	2011-12	2012-13
1.	Profit before Taxes (Rs. in Crore)	23.69	30.79	29.77
2.	Profit after Taxes (Rs. in Crore)	15.32	19.61	25.05
3.	Net worth (Rs. in Crore)	87.92	110.92	134.89
4.	Net profit to net worth (%)	17.42	17.68	18.57
5.	Turnover (Rs. in Crore)	429.09	524.03	601.05
6.	Profit before tax to Turnover (%)	5.52	5.88	4.95

1.5.0 Corporate Governance:

Corporate Governance is a set of relationships between a company's management, its Board, its shareholders and other stakeholders. It provides a principled process and structure through which the objectives of the company, the means of attaining the objectives and systems of monitoring performance are also set.

The objective of corporate governance is to enhance and maximize shareholder's value and protect the interest of other stakeholders like customers, employees and society at large in order to build an environment of trust and confidence among all the constituents.

1.5.1 Company's Philosophy

The philosophy of the Company in relation to Corporate Governance is to ensure transparency, integrity, accountability, confidentiality, control, social responsibility, disclosures and reporting that conforms fully to laws, regulations and guidelines.

For effective implementation of the

Corporate Governance practices, the company has a well-defined policy framework consisting of the following:

- Code of Conduct for Directors and Senior Management Personnel
- Code of Conduct for prevention of Insider Trading by Coal India Limited
- Whistle Blower policy
- Risk Management Plan

1.5.2 Board of Directors

The business of the company is managed by the Board of Directors. The president determines, from time to time, the number of Directors of the company. The Directors are not required to hold any qualification shares. The Chairman, Functional Directors, Part time official Directors and non-official part time directors are appointed by the President of India and they are paid salary allowances as determined by the President of India subject to provisions of the section 314 of the Companies Act.

(A) Size of the Board:

In terms of the Article of Association of the company, strength of our Board shall not be less than 3 Directors and not more than 15 Directors. These Directors may be Whole Time Directors / Functional Directors or Official Part-Time Directors or Non-Official Part-Time Directors.

(B) Composition of the Board of Directors category wise:

As on 31st March 2013, the Board of Directors of CMPDIL comprises of 10 (ten) Directors out of which 4 are Whole time Directors including the Chairman-cum-Managing Director, two part-time official Directors and four part-time non-official Directors.

The composition of Directors as on 31st March 2013 is as follows:

I. Whole-Time Directors**a. Chairman-cum-Managing Director**

1. Shri Amal Kumar Debnath

b. Functional Directors

2. Sri B.N.Basu

3. Sri D.K.Ghosh

4. Sri R.K.Chopra

II. Part-Time Official Directors

1. Sri Nagendra Kumar

2. Sri Devulapalli Narasimha Prasad

III. Part-Time Non-Official Directors

1. Prof. Vedala Rama Sastry

2. Sri Pramod Kumar Misra

3. Dr. Mukesh Khare

4. Prof. P.K.J. Mohapatra

(C) Number of Board Meetings held and dates on which held

The Board of Directors is the supreme body of the company which oversees the overall function of the company. Six Board meetings were held during the financial year 2012-13.

Sl.No.	Dates	Day	Place
1.	12.05.2012	Saturday	CMPDIL, Ranchi
2.	28.07.2012	Saturday	CMPDIL Ranchi
3.	20.08.2012	Monday	CMPDIL Ranchi
4.	06.11.2012	Tuesday	CMPDIL Ranchi
5.	22.12.2012	Saturday	CMPDIL Ranchi
6.	08.02.2013	Friday	CMPDIL Ranchi

(D) Attendance of each Director at the Board Meetings

Details of number of Board meetings attended by the each Director are as follows:

Sl. No.	Directors	No. of Board Meetings held during their tenure	No. of Board Meetings attended	Attended at the last AGM	No. of Directorship/ Chairmanship in other Boards on 31.03.2013	No. of Directorship/ Chairmanship in Board Committees (CMPDIL) on 31.03.2013
Functional Directors						
1.	Sri A.K. Singh	2	2	yes	-	-
2.	Shri Nagendra Kumar	1	1	No	4	-
3.	Sri Gopal Singh	2	2	No	1	-
4.	Shri Amal Kumar Debnath	6	5	No	-	1
5.	Shri B.N. Basu	6	3	No	-	-
6.	Shri D.K. Ghosh	6	6	No	-	-
7.	Shri R.K.Chopra	6	6	No	-	-
Part-time official Directors						
8.	Shri D. N. Prasad	6	3	No	2	1
9.	Shri Nagendra Kumar	6	5	No	4	-
Part-time Non-official Directors						
10.	Prof. Vedala Rama Sastry	6	3	No	1	1
11.	Shri Pramod Kumar Misra	6	6	yes	-	1
12.	Dr. Mukesh Khare	6	4	No	-	2
13.	Prof. P.K.J. Mohapatra	6	4	No	1	1

Note: Sri A.K. Singh ceased to be a member of the Board with effect from 01.08.2012.

(E). Information placed before the Board meeting

Board has complete access to any information within the Company. The information regularly supplied to Board includes:

- Capital and Revenue budgets.
- Quarterly and Annual Financial results of the Company.
- Periodic Review of the Performance of the Company.
- Periodic Review of availability & utilization of Heavy Machines.
- Periodic Report on Compliance of applicable Laws.
- Annual Report, Directors' Report etc.

- Minutes of the meeting of Audit Committee and sustainable Development Committee.
- Award of large contracts / Agreements
- Disclosure of interest by Directors about Directorship and position occupied by them in other companies.
- Any Other materially important information.

(F). Brief Resume of the Directors:

Shri A.K. Debnath is currently Chairman cum Managing Director of Central Mine Planning and Design Institute (CMPDI), a wholly owned subsidiary of the Holding company Coal India Limited (CIL), which is the largest hard coal producing company in the World.

Shri Amal Kumar Debnath,(57) graduated in Mining Engineering (in 1976) from Indian School of Mines (ISM), Dhanbad, India. He obtained First Class Mine Manager's Certificate of Competency (Coal) from DGMS, Dhanbad. He has working experience of over three & half decades in coal mining sector, wherein, he served in various capacities in production and planning and management in Central Coalfields Limited (CCL) and Central Mine Planning and Design Institute Ltd. (CMPDI). He also served as the Regional Director of Regional Institute-V, CMPDI providing full exploration and planning support to South Eastern Coalfield Ltd. (SECL). Shri Debnath, worked in the capacity of Director (Technical / P&D), CMPDI, Ranchi and looked after the various activities of Environment, Underground Mine Planning & Design, Project Appraisal Division, Quality Management System and Opencast Divisions.

He has been responsible for preparation

of Project Reports, Environmental Impact Assessment (EIA)/Environmental Management Plan (EMP), Operational Plan and other specialised reports for mines of CIL as well as outside clients. Project Report for Kusmunda OCP for a total capacity of 50 Mty was prepared under his guidance which is the largest mine planned in India till date. He has been instrumental in selection of sites & preparation of Global Bids for application of Highwall Mining, mass production technology such as Continuous Miner, Shortwall, Low Capacity Continuous Miner, etc. He has acted as Chairman of various Tender Committees for technical and commercial evaluation as well as award of work for turn-key execution of Coal Handling Plants and other projects. Major consultancy works in metal mining sector for Manganese Ore (India) Ltd., Hindustan Copper Ltd., Hutti Gold Mines Co. Ltd., etc. have also been taken up under his leadership. He is the member of Mining, Geological & Metallurgical Institute of India (MGMI). Shri A.K. Debnath has a large number of technical papers presented in National and International Conferences/Symposia/Seminars. He has traveled widely to many countries like USA, UK, China, Germany, Sweden, South Africa, Australia, Poland, Turkey, etc.

Sri Baidya Nath Basu, Director (Technical) /CRD), CMPDI, aged 59 years (30.05.1953) is a Mining Engineer and obtained degree in Mining Engineering from Indian School of Mines, Dhanbad in 1975 and Ist Class Mine Managers Certificate from DGMS, Dhanbad in 1979. He has vast working experience and expertise in the various fields and in different capacities as Under Manager in a statutory capacity in Western Coalfields Limited, as Assistant Manager in production (statutory capacity) for

about 1 $\frac{1}{2}$ years in Central Coalfields Ltd. He has for more than 30 years of rich experience in mine planning and design at CMPDI, Planned a number of opencast projects upto 25 MTY capacity along with project costing including preparation of PR for Gevra OC (25 MTY), Dipka OC (20 MTY), Magadh OC (12 MTY), Amrapali OC (12 MTY) and prepared number of Project Reports including underground, opencast, EMPs, Operational Plan, Mine Closer Plans as Project Leader. He has rendered service as Tender Committee Members for technical and commercial evaluation, worked as Regional Director, CMPDI, Regional Institute-I, Asansol and looked after overall administration, preparation of Project Reports, Environmental Monitoring and Exploration activities including GR preparation. During this period two Hydrostatic drills each having capacity of drilling 1000 m per month have been introduced in CMPDI for the first time at Raniganj coalfield within the command area of Regional Institute-I, Asansol. Presently he is working as Director (Technical), CMPDIL and looking after Coal Resource Development.

Sri Dilip Kumar Ghosh (57), a Graduate in Mining Engineering, is presently working as a Director (Technical) in CMPDIL. Prior to his joining at CMPDIL, he was in Western Coalfields Ltd., and South Eastern Coalfields Ltd., subsidiaries of Coal India Limited, working in different capacities. Shri Ghosh to his credit made many special achievements. He was awarded as “Best Manager” in the year 1993-94 in PK-II Mine of Pathakhera Area, WCL. During his tenure, in the year 2005-06 Pathakhera Area, consisting of nine UG mines, was declared as “Best UG Area of WCL” which had produced highest ever coal production i.e. 33.11 lakh tones during

the year 2006-07 and LHD productivity of the Area was also the highest in WCL i.e. 189 TPD. Thereafter, he assumed the charge of Baikunthpur Area, SECL, consisting only underground mines with similar mechanization. This Area also registered growth on all counts every year during his tenure. Churcha East & West were amalgamated in the year 2009 and converted to a Mega Underground project of 2 MTY capacities which was inaugurated by the Hon’ble minister of Coal in November 2009. Two sets of Continuous Miners are being introduced in this Project. For the year 2008-09 the Area was adjudged best Underground Area in its group. In 2009-10 on half yearly basis again this Area was adjudged best UG Area in its group. At the end of the year of 2009-10 Dipka Area, a Mega OC project of 25 Million tones per annum capacity produced 24 million tones of coal with a growth of 2 million tones. Surface miner technology was introduced with hiring of equipment for a capacity of 45000 Tonne per day. Large HEMM package of 42 Cub. Mtr. Shovel and 240T Dumper was commissioned in the month of June, 2010. Dipka Area was given award for the performance of 2009-10 for highest productivity. After joining Chirimiri Area, action was taken by Sri Ghosh for re-opening of the two mines which were sealed off earlier due to fire, for nitrogen flushing with foaming agent in the sealed off mines.

Sri Rajesh Kumar Chopra, Director (Technical/ Research, Development & Technology), CMPDI, aged 58 years (16.09.1955) is a graduate in Mining Engineering (1977) from Institute of Technology, Banaras Hindu University and has obtained 1st Class Mine Manager’s Certificate of Competency from DGMS, Dhanbad. He started his carrier with Tata Iron & Steel Co. Ltd. (1977-82) and

worked as Assistant Manager. Later he joined CIL/ CMPDIL Regional Institute- 3, Ranchi in 1982 as Assistant Colliery Manager, undertook one year (1985-86) training in Germany in Underground longwall technology and advanced coal mining methods. He served as HOD Opencast Mine Planning (1997-2001) in CMPDIL, Regional Institute- 5, Bilaspur, planned a number of opencast projects, e.g. KD Hesalong OC, Parej OC, Konar OC, Amrapali OC, Ashoka OC, Dipka OC (20 MTY), Gevra OC (25 MTY). He has also served in the Ministry of Coal, New Delhi (2001-09) as GM/ CGM (Mining), assisting in technical and policy matters and worked as Regional Director (2009-2012), CMPDIL, Regional Institute- 6, catering to exploration and planning needs of NCL and Singrauli Coalfield and has achieved record drilling performance in successive years. Presently (since 13.1.2012) he is working as Director (Technical), CMPDIL, looking after Research, Development, Blasting, Coal Technologies, CBM, UCG, Coal and Mineral Beneficiation.

Shri Nagendra Kumar (55) has graduated in Mining Engineering (B.Tech – Mining) from Indian School of Mines, Dhanbad in the year 1980. He joined CCL as junior Executive Trainee in 1980. In his first 20 years in CCL, he has worked for almost 6 years as Manager and 7 years as Project Officer. He was transferred to ECL in 2001 in the same capacity and assumed the charge of General Manager in 2004 and Chief General Manager in 2007. He has spent most of his career in reviving difficult underground and opencast mines and has the experience of working with almost all kind of mechanization in underground and opencast. He was actively associated with indigenization of Long Wall Equipment and has presented a number of papers on its successful

implementation. His latest achievement is the successful operation of Continuous Miner in Jhanjra Area matching World Standards in production and safety. Shri Kumar is a member of MGMI, IMMA and Institution of Engineers. He has travelled foreign countries like South Africa and China, France, Italy and Germany. Shri Kumar is fond of cricket, books, old melody songs and Rabindra Sangeet too. He assumed the charge of Director (Technical) of Coal India Limited on 01.02.2012 and since then his functioning as Director (Technical) of Coal India Limited. In addition, he is holding Chairmanship of Coal India Africana Limitada and he is also holding Directorship in BCCL and in CMPDI. Besides, he has also assumed the charge of CMD (Additional Charge) of SECL with effect from 01.11.2012

Shri D.N. Prasad, a Graduate Mining Engineer from the University College of Engineering, Osmania University with University First rank, holder of First Class Mine Manager's Certificate of Competency to manage coal mines and MBA from UK, has put in about 32 years of overall experience in the Coal and Energy sectors of India. His experience includes eleven years of operation and management of coal mines in the Public Sector Coal Companies, Coal India Ltd. & Singareni Collieries Co. Ltd. and about 21 years in Development Policy Planning for Energy fuels Coal & Lignite in the Energy Division of the Planning Commission and Ministry of Coal, Government of India. He is presently continuing as Director (Technical) in the Ministry of Coal, Govt. of India. His experience encompass development of coal mining projects; techno-economic appraisals of coal mining projects for investment decisions; capital budgeting; exploration for coal and lignite, CBM, CMM etc.; appraisal

of environmental impact assessment; issues related to climate change; development of perspective plans for coal & lignite; development of clean coal technologies including coal washing, coal gasification, UCG, CTL; development of infrastructure for coal evacuation etc. He represented Planning Commission & Ministry of Coal on various Committees related to coal development and visited a number of countries including Australia, Japan, Germany, UK, USA, Belgium, France, China, Turkey etc. in relation to professional work. He has contributed a number of papers on policy and issues in coal sector in various National & International Forums. He is a Member of professional bodies like Institution of Engineers (India), Mines, Metals & Geological Institute of India (MMGI) etc.

Prof. Vedala Rama Sastry (54), Ph.D in Engineering, has been working as a Professor of Mining Engineering since April, 1997 at National Institute of Technology Karnataka, Surathkal, Mangalore. He worked in different capacities as HOD-Mining Engg. (1992-1995 and 1999-2004), Dean Students' Affairs (2004-2009), HOD-Training and Placement (2008-2011). He is a Fellow of The Institution of Engineers (India), Member of European Federation of Explosive Engineers, life member of the Int. Society for Rock Mechanics and Tunneling Technology, life member of Mining Engineers Association of India and life member of Indian Society for Technical Education. His areas of specializations are Mine Planning, Rock Mechanics and Environment Management. His areas of interest span over Pipeline Projects, Dredging Projects in ports in addition to Mining. Dr. Sastry has to credit over 17 R&D Projects, more than 105 Industry Sponsored Consultancy Projects, over 130 research publications. He visited

countries like USA, Canada, Australia, Singapore etc. for research interaction. Prof. V.R. Sastry is on the Board of Central Mine Planning and Design Institute Limited, Ranchi and KIOCL Limited (Govt. of India), Bangalore.

Dr. Mukesh Khare is Professor in the Department of Civil Engineering at Indian Institute of Technology Delhi, India. **Professor Khare** received his PhD in Faculty of Engineering (Specialized in Air Quality) from the University of Newcastle_Upon_Tyne Upon Tyne, UK in 1989. He has published to date more than **140** refereed articles in refereed professional journals, conferences/seminars; **04** books: **Modelling Vehicular Exhaust Emissions**, WIT Press, UK; **Artificial Neural Networks in Vehicular Pollution Modelling**, Springer, USA; **Aluminium Smelting: Environmental, Health and Engineering Perspectives**, Ian Randle, Jamaica; **06** contributed chapters in books/handbooks, published by WIT Press, UK and Elsevier, USA. Additionally, he has published about **40** technical reports on research/consultancies conducted for government agencies and private industries. **Prof. Khare** continues to serve as peer reviewer for several government ministries grants programs and state programs and consultant/advisor to the Government of NCT Delhi and Central Pollution Control Board. **Prof. Khare** has recently contributed his expertise in formulating the methodology for estimating the Comprehensive Environmental Pollution Index (CEPI) for Industrial Clusters of India. The project was sponsored by the Central Pollution Control Board. He led the team of the experts in this project. **Prof. Khare** is also coordinating **Governance, Planning and Law Group** of experts in ongoing Ministry of Environment and Forests, Government

of India Funded project on “**Ganga River Basin Management**” along with other IITs involved in other Management and Technical aspects of River Ganga. He is also serving as reviewer to many journals and publishing houses in and outside the country. **Prof. Khare** is in the editorial board of **International Journal of Environment and Waste Management** and **International Journal of Environmental Engineering (IJEE)** and has **guest edited** one of the IJEE special issues on Urban Air Pollution, Control and Management. **Prof. Khare’s** research has focused on local scale urban air quality modeling targeting the predictions of episodes at urban roads/intersections, mainly arising out from undefined low-level/line sources. Current research areas include formulation of air quality models and their validation; indoor air quality modeling in air-conditioned and naturally ventilated buildings and exposure assessment of related pollutants on indoor occupants. He has been actively involved in research areas related to particulate pollution to ambient environment due to coal mining activities and sustainable cities analyzing the *Urban Genome* affecting the sustainable growth of the cities. He has also worked extensively in the area of industrial wastewater treatment particularly application of Rotating Biological Contactor Systems to treat industrial and sewage wastes. **Prof. Khare** and his research group have carried out a number of on site assessments of air pollutants and designed a number of effluent treatment plants to treat the corresponding wastes from various types of industries in and around Delhi. **Prof. Khare** has rendered his expert services as Atlantic LNG Chair Professor in Environmental Engineering at University of West Indies, St. Augustine

Campus, Trinidad and Tobago for one academic year till July 2007. **Prof Khare** also recently served as DAAD Fellow to Karlsruhe Institute of Technology (KIT), Germany. **Prof. Khare is a Principal Member**, International Sustainable Technological Association (ISTA), Arizona State University, USA, **Member**, Technical Advisory Board, Blacksmith Institute, USA, **Principal Reviewer**, Research Management Group, USA, **Former Advisor (Air Pollution)**, Delhi Pollution Control Committee, **Member (Expert)**, State Level Environmental Impact Assessment Authority (SEIAA), Government of NCR, Delhi; **Fellow**, Wessex Institute of Great Britain and **Fellow**, Institution of Engineers (India), **Honorary Patron**, Planet Earth Institute, London, **Founder Member**, Global Scientific Committee, Planet Earth Institute, London, **Member Expert**, Male Declaration, The Central pollution Control Board, New Delhi, **Founder Member**, Council for Sustainable Development, New Delhi. **Prof. Khare** has served as **Non Official Director** in one of the leading public sector undertakings, Hindustan Copper Limited, Kolkata, India from 2007 to 2010; and presently, he is serving as Non Official Director in the Central Mine Planning and Design Institute Limited (CMPDIL), Ranchi since December, 2010 and also as the chairman of the Sustainable Development Committee.

Sri Pramod Kumar Misra (55), born in Cuttack, Odisha on 25th September, 1957, is a Practicing Chartered Accountant with Certificate of Practice holding for more than 26 years. He is a Fellow member of the Institute of Chartered Accountants of India (No. 052699), a Bachelor Graduate of Law, India (May 1980) and a Post Graduate in Commerce, India (July 1985). Beside his vast experience in Auditing

both Public Sector and Private Sector organizations., he is also an expert in formulating Commercial Agreements and Memorandum of Understandings, Project Planning & Commissioning & Operation Planning & Execution, Land Acquisition, Project Financing, Compliance to Company Laws, preparing, auditing and analysing Financial Statements, Policies & Procedures, Compliance to Income Tax, VAT, Central Excise, Service Tax, Professional Tax, Budgeting and Costing. Presently, he is serving as Non Official Part Time Director in the Central Mine Planning and Design Institute Limited (CMPDIL), Ranchi since December, 2010 and also as the chairman of the Audit Committee.

Dr. Pratap K. J. Mohapatra, a post graduate in engineering, is working at present as Dean of Post-Graduate Studies & Research, IIT Kharagpur. He has been for 40 years teaching and carrying out research and consultancy. Prof. Mohapatra was working for two years at Regional Engineering College (REC), Rourkela and thereafter he has been at IIT Kharagpur, working in different capacities. He has specialized in Industrial Engineering & Management and his Areas of interest are Production and Operations Management, Systems Engineering, E-Business, and uantitative Modelling. Prof. Mohapatra has published in more than 75 reputed international journals and authored 2 books. He has guided 24 PhD students and has provided more than 20 consultancy services to organizations like Tata Steel, Tata Chemicals Ltd, Tata Bearings, National Jute Board, Rural Development Department (Govt. of Orissa), and Orissa Pollution Control Board. He was a Member of the Board of Governors of IIT Kharagpur and, is at present, is on the Board of Braitwaite

& Co. Ltd, and CMPDIL.

1.5.3 Audit Committee:

The primary function of the Audit Committee is to assist the Board of Directors in fulfilling its oversight responsibilities by reviewing the financial report: the Company's system of internal control regarding finance, Accounting and the Company's auditing, accounting and financial reporting process generally.

The Audit Committee reviews reports of the Internal Auditors, meets Statutory Auditors and discusses their findings, suggestions and other related matters and reviews major accounting policies followed by the Company.

Terms of reference:

The terms of reference of the Audit Committee are in accordance with Section 292A of the Companies Act, 1956 and in accordance with the guidelines on Corporate Governance of CPSEs issued by the Ministry of Heavy Industries and Public Enterprises, Department of Public Enterprises.

The Terms of reference of Audit Committee will cover all commercial aspects of the organization inter-alia:

- (i) Review of financial statement before submission to the Board.
- (ii) Periodical review of internal control system.
- (iii) Review of Government audit and Statutory Auditor's report.
- (iv) Review of operational performance vis-à-vis standard parameters.
- (v) Review of projects and other capital scheme.
- (vi) Review of internal audit findings/ observations.
- (vii) Development of a commensurate and effective Internal Audit function.

- (viii) Special studies/investigation of any matter including issues referred by the Board.

Scope of Audit Committee:

The Scope of Audit Committee is as follows:

1. Over seeing of the company's financial reporting process and the disclosure of its financial information to ensure that the financial statement is correct, sufficient and credible.
2. Recommending to the Board the fixation of audit fees.
3. Recommendation to the Board for payment to statutory auditors for any other services rendered by the statutory auditors.
4. Reviewing, with the management, the annual financial statements before submission to the Board for approval, with particular reference to :
 - a. Changes, if any, in accounting policies and practices and reasons for the same;
 - b. Major accounting entries involving estimates based on the exercise of judgment by management;
 - c. Significant adjustments made in the financial statement arising out of audit findings;
 - d. Compliance with legal requirements relating to financial statements;
 - e. Disclosure of any related party transactions; and
 - f. Qualifications in the draft audit report.
5. Reviewing with the management, the quarterly financial statements before submission to the Board for approval.
6. Reviewing with the management, performance of internal auditors and adequacy of the internal control systems.
7. Reviewing the adequacy of internal audit function, if any including the structure of the internal audit department, staffing and seniority of the official heading the department, reporting structure coverage and frequency of internal audit.
8. Discussion with internal auditor and / or auditors any significant findings and follow up thereon.
9. Reviewing the findings of any internal investigations by the internal auditors / auditors / agencies into matters where there is suspected fraud or irregularity or a failure of internal control system of a material nature and reporting the matter to the Board.
10. Discussion with statutory auditors before the audit commences, about the nature and scope of audit as well as post-audit discussion to ascertain any area of concern.
11. Reviewing the functioning of the Whistle Blower Mechanism.
12. Reviewing the follow up action on the audit observations of the C & A G audit.
13. Providing an open avenue of communication between the independent auditor, internal auditor and the Board of Directors.
14. Reviewing and approving all related party transactions in the company.
15. Reviewing with the independent auditor the co-ordination of audit efforts to assure completeness of coverage, reduction of redundant efforts, and the effective use of all audit resources.
16. Reviewing the adequacy of internal controls including computerized Information System Controls and security, and related findings and recommendations of the independent auditor and internal Auditor, Significant findings, difficulties

encountered during audit work including any restrictions on the scope of activities or access to required information together with the management responses.

Powers of the Audit Committee:

The Audit Committee shall have powers commensurate with its role including the following:

1. To investigate any activity within its terms of reference.
2. To seek information from any employee.
3. To obtain outside legal or other professional advice.
4. To secure attendance of outsiders with relevant expertise, if considered necessary.
5. To protect whistle blowers.

Composition:

The Audit Committee consists of following members and is headed by a non-official part-time Director (Independent Director):

1.	Chairman	Sri Pramod Kumar Misra	Non-official part-time Director
2.	Member	Dr. V. R. Sastry	Non-official part-time Director
3.	Member	Prof. PKJ Mohapatra	Non-official part-time Director
4.	Member	Prof. Mukesh Khare	Non-official part-time Director
5.	Member	Sri D. N. Prasad	Govt. nominee Director
6.	Member	Sri A. K. Debnath	Director (Technical)

Meeting and Attendance:

Five meetings were held during the financial year 2012-13 on 11.05.2012, 28.7.2012, 20.08.2012, 06.11.2012 and 18.02.2013 respectively. The details of the audit committee meetings attended by members are as under:

Members of Audit committee	status	Meetings held	Meetings attended
Shri Pramod Kumar Misra	Chairman	5	5
Dr. V. R. Sastry	Member	5	3
Prof. PKJ Mohapatra	Member	5	3
Prof. Mukesh Khare	Member	5	4
Shri D. N. Prasad	Member	5	3
Shri A. K. Debnath	Member	5	5

1.5.4 Remuneration Committee:

CMPDI, being a Central Public Sector Enterprise, the appointment, tenure and remuneration of Directors are fixed by the President of India.

The decisions relating to remunerations in respect of annual bonus/variable pay pool and the policy for its distributions across the executives and non unionized supervisors in line with the prescribed limits are made by Coal India Limited, the holding company, which has constituted the remuneration committee.

The company being the subsidiary of Coal India Limited, the remuneration of the executives and non unionized supervisors are regulated as per the directions of the holding company, Coal India Limited and Government of India.

Hence, the Board does not decide the remuneration and no remuneration committee is constituted. However, if any requirement arises, the Board shall discharge such functions of the remuneration committee or constitute remuneration committee.

1.5.5 Sustainable Development Committee

Each CPSEs is required to put in place specific organizational structure to steer the sustainable development projects and activities and to form a Board level designated committee headed by an Independent Director as Chairman to approve the sustainable development plan and to oversee the performance. In terms of the guidelines on sustainable development issued by the Ministry of Heavy Industries and Public Enterprises, Government of India, sustainable development has been included as a compulsory element under; non-financial parameters having 5% weightage in MoU.

In line with the guidelines, the Board constituted the Sustainable Development Committee in its 164th meeting held on 13.01.2012.

(A) Functional Directors

The details of the remuneration of the Functional Directors of the Company are as under:

(Figure in Rs)

Name	Designation	Gross Salary and Allowances Including Leave encashment	Perks	HRA	CMPF Employer's Contribution	PRP Advance	TOTAL	LTC & Medical expenses
Sri A. K.Singh	CMD	667437	192040	-	79851	-	939328	150479

Composition:

The Sustainable Development Committee consists of following members and is headed by a non-official part-time Director (Independent Director):

1.	Chairman	Dr. Mukesh Khare	Non-official part-time Director
2.	Member	Shri A. K. Debnath	Director (Technical/ P&D)
3.	Member	Shri D. K. Ghosh	Director (Technical/ ES)

Meeting and Attendance:

Two meetings were held during the financial year 2012-13 on 12.05.2012 and 06.11.2012. The details of the Sustainable Development Committee meetings attended by members are as under:

Members of Audit committee	Status	Meetings held	Meetings attended
Dr. Mukesh Khare	Chairman	2	2
Shri A. K. Debnath	Member	2	1
Shri D. K. Ghosh	Member	2	2

1.5.6 Remuneration of Directors:

All the Directors of the company are appointed by the President of India. The terms and conditions and the remuneration of all full time functional directors are decided by the President of India in terms of Articles of Association of the company / Coal India Limited.

Name	Designation	Gross Salary and Allowances Including Leave encashment	Perks	HRA	CMPF Employer's Contribution	PRP Advance	TOTAL	LTC & Medical expenses
Sri A. K. Debnath	Director (T)	1710738	406011	-	204733	-	2321482	19021
Sri B.N.Basu	Director (T)	1444808	401805	-	172824	344328	2363765	281166
Sri D.K.Ghosh	Director (T)	1800725	421776	-	215532	-	2438033	27330
Sri R.K.Chopra	Director(T)	1390000	385260	-	166247	329431	2270938	23447

(B) Part-Time Official Directors

No remuneration is being paid to the Part-Time Official Directors by CMPDIL. Shri D.N. Prasad, Adviser (Projects) is the nominee Director from the Ministry of Coal, Govt. of India, New Delhi and Shri N. Kumar, Director (Technical) is the nominee Director from Coal India Limited, Kolkata and their remuneration is being paid by the Govt. deptt. and Coal India Limited respectively.

(C) Part-Time Non-Official Directors

No remuneration is being paid to the Part-Time Non-Official Directors of the Company except the sitting fees for attending the Board and Committee meetings at the rate fixed by the Coal India Board within the ceiling fixed under the Companies Act, 1956. The details of the sitting fees paid to the Part-Time Non-Official Directors are given as under:

Sl. No.	Name	Sitting Fees paid for attending		Total (Rs.)
		Board Meeting (Rs.)	Committee Meeting (Rs.)	
1	Sri Pramod Kumar Misra	90,000.00	75,000.00	1,65,000.00
2	Dr. V. R. Sastry	30,000.00	30,000.00	60,000.00
3	Prof. PKJ Mohapatra	60,000.00	45,000.00	1,05,000.00
4	Prof. Mukesh Khare	60,000.00	90,000.00	1,50,000.00

1.5.7 Annual General Meetings:-

The details of the Annual General Meeting held during the last three years are as follows:

Details	2009-2010	2010-2011	2011-2012
Date	14.05.2010	26.05.2011	21.05.2012
Time	4.00 P.M.	10.30 A. M.	10.30 A. M.
Venue	At the Registered office of the company, Gondwana Place, Kanke Road, Ranchi, Jharkhand-834031	At the Registered office of the company, Gondwana Place, Kanke Road, Ranchi, Jharkhand-834031	At the Registered office of the company Gondwana Place, Kanke Road, Ranchi, Jharkhand-834031
Special Resolution	Nil	Nil	Nil

1.5.8 Disclosures:

- **Materially Significant related party transactions:**

The Company has not entered into any materially significant related party transactions with the Directors or the Senior Management Personnel or their relatives for the year ended 31st March 2013 that may have potential interest of the company at the large.

- **Details of compliance of laws by the Company**

The Company is monitoring the compliance of various laws applicable to the Company and there is no adverse report for non compliance by the Company, penalty, strictures imposed on the Company by any authority on any matter related to any guidelines issued by Government during the financial year 2012-13 is brought to the notice of the Company.

- **Access to the Audit Committee as per the Whistle Blower Policy:**

This policy is formulated to provide an opportunity to employees to report to the management instances of unethical behavior, actual or suspected, fraud or violation of the company's code of conduct and to the audit committee.

No personnel has been denied access to the audit committee as per the whistle blower policy and no cases was reported under whistle blower policy during the year.

- **Compliance of the guidelines on Corporate Governance:**

The requirements of these guidelines with respect of Board of Directors, Audit Committee, Disclosures, Reports, Code of Conduct etc. are complied with. However, the Guidelines like Remuneration Committee, Subsidiary Companies, Training Policy etc. are not

considered for compliance as they are not applicable to CMPDIL. A certificate from the Company Auditor in whole-time practice regarding compliance of conditions of Corporate Governance is annexed.

- **Integrity Pact**

The Company has a Memorandum of Understanding (MOU) with Transparency International India (TII) for implementing an integrity Pact Programme focused on enhancing transparency in its business transactions, contracts and procurement process. Under the MoU, the Company is committed to implement the integrity Pact in all its major procurement and work contract activities. Two Independent External Monitors, being persons of eminence nominated by TII in consultation with the Central Vigilance Commission (CVC), monitor the activities. The Integrity Pact has strengthened the established systems and procedures by creating trust and has the full support of the CVC.

- **CEO/CFO Certification:**

The Chairman and the Chief of Finance of the Company have given the "CEO/CFO Certification" to the Board of Directors of the Company which is placed as addendum to Directors' Report.

- **Code of Conduct for Directors and Senior Executives:**

The Code of Conduct for the Directors and Senior Management Personnel of the company has been laid down by the Board, which has been circulated to all the concerned and the same is also hosted in the website of the Company i.e www.cmpdi.co.in. The Directors and Senior Management personnel of the Company have affirmed compliance with the provisions of the Company's Code of Conduct for the financial year ended 31st March 2013.

- **Details of Expenses incurred:**

No items of expenditure debited in the books of accounts, which are not for the purpose of the Business and no expenses debited which are personal in nature and incurred for the Board of Directors and top management.

- **Presidential Directives :**

No Presidential Directives was issued by the Central Government to CMPDI during the financial year 2012-13.

1.5.9 Means of Communication

The Company communicates with its shareholder through its Annual Report, General Meetings and disclosures through its website, Official journal "Sampatha", MineTech and publications in the Leading English Newspaper and also in local dailies.

In addition to above, the Annual Report and the quarterly results of the company and other important events were uploaded in the website of the company i.e www.cmpdi.co.in. Information and latest updates and announcements regarding the company can be accessed to the company website. In order to make the general public aware of the achievements of the company, press conference is also being held.

1.5.10 Audit Qualification

It is always the Company's endeavour to present unqualified financial statement.

Management reply to the Statutory Auditors' observations on the Accounts of the Company for the year ended 31st March 2013 are furnished as Annexure to the Directors' Report. Comments of the Comptroller & Auditor General of India under Section 619(4) of the Companies Act, 1956, on the Accounts of the Company, for the Financial Year ended 31st March 2013 is also enclosed.

1.5.11 Training of Board Members

The Board of Directors are fully briefed on all business related matters, associated risks future strategies etc. of the company.

The Functional Directors are the head of the respective functional areas by virtue of their possessing the requisite expertise and experience. They are aware of the business model of the company as well as the risk profile of the company's business. The part-time directors are also fully aware of the company's business model.

The independent Directors are sponsored for training on Corporate Governance from time to time. All the official directors are sponsored for training both in India and abroad as per the policy of the company. All the newly appointed Directors of the company are familiarized with the various aspects of the company like the constitution, Vision & Mission statement, core activities, Board procedures, Strategic directions etc. by way of detailed presentation, discussion etc.

1.5.12 Whistle Blower Policy

In order to strengthen the ethical behaviours of the employees of the company and promote the interest of different stake holders, the whistle blower policy of CMPDIL was introduced during the year 2011-12 and Board was informed in its 163rd meeting held on 08.11.2011.

This policy is formulated to provide an opportunity to employees to report to the management instances of unethical behavior, actual or suspected, fraud or violation of the company's code of conduct. Clause 49 of the Listing Agreement between listed Companies and the Stock Exchanges has been emended and is effective from November 4th, 2010. Clause 49 Inter alia, provides for a non-mandatory requirement for all listed companies to establish a mechanism

called “Whistle Blower Policy”. It is to provide necessary safeguards for protection of employees from reprisals or victimization. However, a disciplinary action against the Whistle Blower which occurs on account of poor job performance or misconduct by the Whistle Blower and which is independent of any disclosure made by the Whistle Blower shall not be protected under this policy.

1.5.13 Risk Management Plan

As a part of strategic business policy, due importance is given to the process of risk identification, assessment and mitigation control in different functional areas of the organization. Inherent risk due to external and internal factors is assessed and necessary mitigation control measures are taken through policies and system to manage risk effectively. The risk management scheme of CMPDIL 2011 was approved by the Board in its 164th meeting held on 13.01.2012 and this Scheme is in operation in CMPDIL.

1.5.14 Code of Internal procedures and conduct for prevention of Insider Trading

Coal India Ltd., the holding company, has adopted code of Internal procedures and conduct for prevention of Insider Trading and dealing with securities of Coal India Ltd. with the objective of preventing purchase and / or sale of the shares of CIL by an insider on the basis of unpublished price sensitive information. This code has been adopted by CMPDIL. Under this code insiders are named as designated employees who are prevented to deal in the CIL's shares during the closure of trading window. To deal in securities beyond limit specified, permission of compliance officer is required. All designated employees are also required to disclose related information periodically as defined in the code. Company Secretary has been designated as Compliance officer for this code.

1.5.15 Accountability of Directors

Memorandum of Understanding (MOU) between the management of CMPDI and CIL / MoC, Govt. of India is signed before commencement of the ensuing financial year as laid down in the DPE Guidelines. Under this agreement, the company undertakes to achieve the target set in at the beginning of the year and it is intended to evaluate the performance of CMPDI at the end of the year against the target fixed. It is done by adopting a system of “Five point scale” and “criteria weight” which result in calculation of “composite score”. The composite score is forwarded to DPE through CIL and the Administrative Ministry (MoC) for their ratification.

The MoU system enables to perform efficiently as there are a variety of parameters both financial and non-financial (Dynamic, Sectors specific and Enterprise specific parameters). This process helps immensely in fulfillment of the long ranging objectives and overall growth. The entire process also ensures transparency and accountability towards stakeholders.

1.6.0 Sustainable Development initiative at CMPDI

Sustainable Development as defined universally is “development that meets the needs of present without compromising the ability of future generation to meet their own needs” & is an approach towards corporate driven development and growth of economy as a whole. Sustainable Development is also a convergence of economic development, social development & environment protection.

Sustainable Development as such has been incorporated in MOU of CPSEs including that of CMPDI with significant weightage of 5% as non-financial parameter for the financial year 2012-13.

PART : B**ANNUAL PERFORMANCE OVERVIEW****1.0 GEOLOGICAL EXPLORATION & DRILLING**

1.0.1 CMPDI continued to carry out coal exploration activities in 2012-13 also, mainly in CIL and Non-CIL/Captive Mining blocks. Exploration in CIL blocks was taken up to cater the needs of project planning/production support of subsidiaries of CIL whereas exploration in Non-CIL/Captive Mining blocks was undertaken to facilitate allotment of coal blocks to prospective entrepreneurs.

1.0.2 CMPDI has substantially improved the capacity of drilling during XI & XII plan period. As against the achievement of 2.09 lakh metre in 2007-08, CMPDI has achieved 4.98 lakh metre in 2011-12 and 5.63 lakh meter in 2012-13(Growth -13%) through departmental resources and outsourcing. For capacity expansion through modernization of departmental drills, 31 new Mechanical drills & 4 Hi-Tech Hydrostatic drills have been procured, out of which 6 are deployed as additional drills and 29 as replacement drills. Supply Order for 5 more Mechanical drills has been placed. CMPDI has also replaced 38 mud pumps and 46 trucks in last four years. To meet the increasing work load, recruitment of Geologists/ Mechanical Engineers was continued and 147 Geologist, 14 Geophysicist and 27 Mechanical Engineers were inducted through campus interview/open examination since 2008-09. Shortage of non-executive staff is being met through transfers of 246 employees from other subsidiaries of CIL.

1.0.3 Under outsourcing, the work of 36 blocks involving 13.66 lakh metre of drilling was awarded through tendering since 2008-09, out of which drilling has been concluded in 15 blocks. In 2012-13 a

total of 2.87 lakh m.(**Growth- 28%**) has been drilled through outsourcing, out of which 1.41 lakh m. has been drilled in 6 Non-CIL and 9 CIL blocks during 2012-13 under tendering. A long term MoU (5 Years), involving 1 lakh metre/ annum of drilling, was also signed with MECL. In 2012-13 a total of 1.39 lakh m. has been drilled in 11 Non-CIL and 6 CIL blocks during 2012-13 under MoU. Due to local (law & order) problems work could not be started in 1 block and stopped in 3 blocks. Due to pending forest clearance work is stopped in 4 blocks.

1.0.4 To fulfill the enhanced requirement of coal core analysis due to increase in drilling, the capacity expansion of CMPDI & CIMFR labs has been taken up. A MoU between CMPDI (on behalf of Coal India Ltd.) and CSIR has been signed for capacity enhancement. The work is under progress.

1.1 Drilling Performance in 2012-13:

1.1.1 CMPDI deployed its departmental resources for exploration of CIL/Non-CIL blocks whereas State Govts. of MP and Odisha deployed resources in CIL blocks only. Besides, five other contractual agencies have also deployed resources for detailed drilling/exploration in CIL/Non-CIL blocks. A total of 115 to 140 drills were deployed in 2012-13 out of which 53 were departmental drills. Apart from it, CMPDI continued the technical supervision of Promotional Exploration work undertaken by MECL in Coal Sector (CIL & SCCL areas) in 11 blocks and monitored work of GSI in 10 blocks for Promotional Exploration in Coal Sector (CIL area) on behalf of MoC.

1.1.2 In 2012-13, CMPDI and its contractual agencies took up exploratory drilling in 102 blocks/mines of 22 coalfields situated

in 6 States. These coalfields are Raniganj (10 blocks/mines), Brahmani(1), Jharia (4 blocks/mines), W.Bokaro (2), E.Bokaro(1), Ramgarh (2), South Karanpura(6), North Karanpura (4), Kamptee (7), Nand-Bander (3), Wardha Valley(5), Katol Basin(1), Sohagpur (7), Johilla (1), Mand Raigarh (12), Korba (3), Bistrampur (4), Sonhat (1), Tatapani-Ramkola- (3), Singrauli (7), Talcher (12) and Ib Valley (6) . Out of 102 blocks/mines, 35 were Non-CIL/ Captive blocks and 67 CIL blocks/mines. Departmental drills of CMPDI took up exploratory drilling in 63 blocks/mines

whereas contractual agencies drilled in 39 blocks/mines.

1.1.3 Under Promotional (regional) Exploration Programme, MECL has undertaken Promotional drilling in 11 coal blocks (Mand Raigarh = 3, Wardha Valley = 1, Bander=1, Singrauli=1, Bistrampur=1 & Godavari Valley = 4), GSI has undertaken 10 blocks for Promotional drilling (Raniganj CF=1, Talcher CF= 2, Ib Valley = 3, Sohagpur = 3 & Tatapani Ramakola=1) and DGM(Nagaland) has undertaken 1 block for Promotion drilling(Northern Khar = 1) in Coal Sector.

1.1.4 The overall performance of exploratory drilling in 2012-13 is given below:

Agency	Target 2012-13 (metre)	Performance of Exploratory Drilling in 2012-13			Achieved Prev. Year: 2011-12 (m)	Growth %
		Achieved (metre)	Achieved (%)	+/- (m)		
A. Detailed Drilling by CMPDI :						
I.Departmental	2,57,000	276199	107%	19199	273018	1%
II. Outsourcing:						
State Govts.	8000	7397	92%	-603	6815	9%
MECL (MOU)	89000	1387601	156%	49759	96207	44%
Tendering (CIL blocks)	147000	90779	62%	-56221	17605	416%
Tendering (non-CILblocks)	81000	49772	61%	-31228	104779	-52%
Total Outsourcing	325000	286709	88%	-38291	225406	27%
Total A:	582000	562908*	97%	-19092	498424	13%
B. Promotional Drilling by MECL, GSI & DGM(Nagaland) in Coal Sector:						
MECL	40250	30594	76%	-9656	25998	18%
GSI	13750	14702	107%	952	17872	-18%
DGM, Nagaland	500	328	66%	-172	289	14%
DGM, Assam	500	0	0%	-500	0	
CMPDI	3000	0	0%	-3000	0	
Total B:	58000	45624	79%	-12376	44158	3%
Total A+B:	640000	608664	95%	-31336	542636	12%

* In 2012-13, 3,35,200m in CIL blocks and 2,27,708m in Non-CIL Blocks has been drilled.

1.1.5 In 2012-13, CMPDI achieved its departmental and overall drilling targets by 107% and 97%, respectively. The performance of departmental drilling was better than previous year with 1% growth and recording average operational drills productivity of **434 m/drill/month**. Non-availability of permission to explore in forest areas & local problems(law& order) has affected the performance of outsourced drilling. MECL could not achieve the targets of Promotional drilling in coal sector due to forest problems and CMPDI could not take promotional drilling due to priority in detailed drilling.

1.1.6 Drilling in Non-CIL/Captive Mining Blocks:

A programme comprising 20.13 lakh meters(Including NER) of detailed drilling in coal has been drawn up by working group on "Coal & Lignite" for formulation of the Twelve five year plan with fund requirement of Rs. 974.69 crores through department resources and outsourcing. In 2012-13, a total of 1,74,900m of drilling was targeted in Non-CIL blocks (departmental=52,900m, outsourcing=1,22,000m). As against this, a total of **2.28 lakh m.** has been achieved, out of which the departmental drills of CMPDI have carried out **77,458m** of exploratory drilling in 17 blocks whereas **1,50,249m** of drilling in 17 blocks has been achieved through outsourcing.

Apart from above exploration work, CMPDI has provided preliminary geological information of existing Captive Mining Blocks to MoC for allotment purpose. CMPDI has also provided copies of existing GRs to prospective entrepreneurs of Captive Mining to enable them in selection of suitable blocks for their end use. After the process of allotment is over, original Geological Report is provided to allottee on payment of total cost of exploration. CMPDI has

also prepared a document for allotment of blocks through competitive bidding by MoC.

1.2 Hydrogeology

1.2.1 Hydro geological studies of a number of mining projects/mines were taken up for preparation of 'Groundwater Clearance Application' for CGWA approval and EMP clearance. Hydro geological studies for 31 mining projects/mines/cluster of mines in ECL, BCCL, CCL, MCL, WCL and SECL were completed during 2012-13.

1.2.2 CMPDI is also carrying out groundwater monitoring of 70 MOEF cleared projects in WCL area. Water level monitoring in other areas of ECL, BCCL, CCL, SECL, NCL and MCL are in progress.

1.2.3 Hydrogeological notes on ground water condition of 6 WCL, 4 MCL and 3 SECL projects as part of PR and GR have also been completed during this period. Hydrogeological studies for mine water inflow estimation in 3 projects of ECL and SECL were completed.

1.2.4 Hydrogeological studies in 8 projects of WCL, MCL and SECL have been carried out for water supply arrangement to mines, colony and villages.

1.2.5 Hydrogeological study for Devangudi Lignite Block has been completed for advance mine dewatering as a part of Project Report for NLC. Scheme for hydrogeological studies for Gomia UG Coal Block, EBCF for MMTC submitted. Hydrogeological investigations for disposal of ash in Jagannath OC mine void and South Balanda OC mine void are in progress.

1.3 Geological Reports:

1.3.1 In 2012-13, a total of 15 Geological Reports (excluding GR for PR) were prepared on the basis of detailed exploration conducted in previous years.

The prepared Geological Reports have brought about **3.3 Billion Tonnes** of coal resources under 'Proved' category.

- 1.3.2** Under Promotional Exploration Programme, GSI and MECL have submitted 9 Geological Reports on coal blocks, estimating about **3.7 Billion Tonnes** of coal resources, in 'Indicated' category, above specified thickness.

1.4 Geophysical Surveys:

- 1.4.1 Geophysical Logging:** Boreholes drilled for exploratory drilling were geophysically logged to get the in-situ information of different strata encountered in the boreholes. During the year 2012-13, a total of **2,17,409 depth meter** of geophysical logging has been carried out for this purpose in CIL and Non-CIL project with multi-parametric geophysical logging equipments. Out of this, **78100** depth meter of logging was done by 5 no. of departmental geophysical logging units and 1,39,309 m of logging was done by contractual agencies.

- 1.4.2 Surface Geophysical Surveys:** CMPDIL has also undertaken Electrical Resistivity & Magnetic Survey in CIL and Non-CIL blocks for delineation of In-crop of coal seams, delineation of dykes and ground water investigation. A total of **245 line km** of Resistivity profiling, **50 no.** of Vertical Electrical Sounding (VES) and **3571 no.** of stations of Magnetic survey have been carried out in 2012-13 for such purpose. With 48-Channel signal enhancement Seismograph a total of 30.31 line kms of reflection survey and 30.15 line kms of refraction survey has been carried out in Prajapara block of Ib Valley Coalfield (MCL) and South of Hardi block(Promotional Area) of Korba Coalfield (SECL) .

- 1.4.3 Reports:** A total of 31 Geophysical reports have been submitted during the

year 2012-13. It includes 20 reports on geophysical logging, 7 on resistivity survey, 1 on magnetic survey and 3 on HRSS survey.

1.5 Geosystem:

- 1.5.1** In the Government funded project "Integrated Coal Resources Information System (ICRIS), Geological Modelling of zones has been taken up during XII plan and during 2012-13, more than 50 such zones models has been completed by different data centers. They are being checked and uploaded in the database. Procurement action has been initiated for new hardware and software in 2012-13 to replace earlier hardware and software.

1.5.2 CEMPGEODOC & SASLINT :

- A window based version of existing in-house developed CEMPGEODOC software for the analysis, interpretation & graphical representation of Geological data has been developed.
- In-house SASLINT software is developed for Geophysical log interpretation for output of lithology, seam structure & quality of coal seams.

- 1.5.3 CIL R & D Project:** The Laboratory Service Division has successfully completed one CIL R&D project entitled : "Effective utilization of low rank and low volatile high rank Indian coking coal for BF coke making " in February 2013. It is a CMPDI- RDCIS SAIL joint project. The total outlay of the project was Rs. 265 lakh.

- 1.5.4** One technical paper entitled "Coal Petrography and beneficiation studies of low volatile high rank coals of Damodar Valley Basin: Implication for augmentation of coking coal resources in India " was presented in the 34th International Geological Congress at Brisbane, Australia from 5th to 10th August 2012.

1.6 COALBED METHANE (CBM) / COAL MINE METHANE (CMM) AND UNDERGROUND COAL GASIFICATION (UCG)

1.6.1. COLLABORATIVE DEVELOPMENT OF CBM PROSPECTS IN JHARIA & RANIGANJ COALFIELDS BY THE CONSORTIUM OF CIL & ONGC.

In terms of Govt. of India CBM Policy, consortium of CIL and ONGC has been allotted 2 blocks, one each in Jharia and Raniganj coalfields for commercial development of coalbed methane. These projects are being implemented by CMPDI on behalf of CIL.

1.6.1.1 Jharia CBM Block:

The Govt. of Jharkhand granted Petroleum Exploration License (PEL) to the consortium of CIL-ONGC in August 2003 for the block after which the work as detailed in the Minimum Work Programme was taken up.

CMPDI has carried out deep slimhole drilling (depth range 1000 to 1400m) wherein CBM related parametric data were generated. A report based on this drilling and other available drilling and gas related data has been prepared by CMPDI and submitted to ONGC which facilitated ONGC to drill exploratory and pilot wells.

Consequent to the completion of envisaged work in the Exploratory and Pilot phases, consortium of CIL & ONGC has submitted a Development Plan of the block having a budgetary outlay of 1137 crore for approval of the Government in August 2013. The development plan has been examined by a committee of CMPDI officials which found the project to be economically viable and the same was forwarded to CIL in March 2013 for taking a considered view regarding increasing stakes of CIL from 10 to 26%

in terms of provisions of the Operating Agreement.

The consortium will take necessary developmental work after approval of the development plan by the Government.

1.6.1.2 Raniganj CBM Block:

The Govt. of West Bengal granted Petroleum Exploration License (PEL) for Raniganj CBM block in April 2004 for the block after which the work as detailed in the Minimum Work Programme was taken up.

CMPDI has carried out deep slimhole drilling (depth range 800 to 1100m) wherein CBM related parametric data were generated. A report based on this drilling and other available drilling and gas related data has been prepared by CMPDI and submitted to ONGC which facilitated ONGC to drill exploratory and pilot wells.

Consequent to the completion of envisaged work in the Exploratory and Pilot phases, consortium of CIL & ONGC has submitted a Development Plan of the block having a budgetary outlay of 957 crores for approval of the Government. The development plan has been examined by a committee of CMPDI officials which found the project to be economically viable and the same was forwarded to CIL in March 2013 for taking a considered view regarding retaining stakes of CIL up to 26% in terms of provisions of the Operating Agreement.

The consortium will take necessary developmental work after approval of the Development Plan by the Government

1.6.2 CBM AND SHALE GAS RELATED STUDIES UNDER PROMOTIONAL EXPLORATION DURING XII PLAN:

1.6.2.1 CBM Related Studies:

CMPDI is carrying out studies related to

“Assessment of Coalbed Methane Gas-in-Place Resource of Indian Coalfields/Lignite fields” through boreholes being drilled under promotional exploration (XII Plan period) under PRE funding. This study will enlarge the CBM resource base of the country and facilitate delineation of more blocks for CBM development. A total of 60 boreholes (40 by CMPDI and 20 by GSI) are to be taken up for studies during the XII Plan Period with a total plan expenditure of Rs 13.46 crore.

During 2012-13, a total of 8 boreholes located in different coal/lignite fields were taken up for studies by CMPDI and samples collected for desorption and other tests.

Three reports based on CBM related studies carried out during XI Plan “Assessment of CBM Gas-in-Place Resource in Sukli, Kapri block of Katol Coalfield and Mahanadi block of Talcher Coalfield submitted during 2012-13. These reports are MoU reports for the year 2012-13 between CIL & CMPDI and the schedule date of submission is March 2013. Total number of reports submitted since April 2007 is eleven.

1.6.2.2 Shale Gas Related Studies:

CMPDI is carrying out studies related to “Assessment of Shale Gas-in-Place Resource of Indian Coalfields/Lignite fields” through boreholes being drilled under promotional exploration (XII Plan period) under PRE funding. This study will create the data for assessment of shale gas potentiality and facilitate delineation of more blocks for Shale Gas development. A total of 25 boreholes were to be taken up for studies during the XII Plan Period with a total plan expenditure of Rs.7.75 crore.

During the year 2012-13 a total of 4

boreholes were taken up for shale gas related studies.

1.6.3 COMMERCIAL DEVELOPMENT OF CMM

Commercial development of CMM is a priority area both at the Govt and coal Industry level. Successful implementation of the Demonstration Project at Moonidih Mine of BCCL has already proved the efficacy of the process and five suitable areas within CIL mining leasehold areas were identified. Further, MoC has made CMPDI Nodal Agency for development of CMM in India.

Under the aforesaid background actions for commercial development was initiated and CMPDI, on behalf of CIL had floated Global Tender for selection of suitable developer for commercial development of CMM in 5 identified blocks (3 in BCCL 2 in CCL) in April 2011. However, the tender was deferred and subsequently cancelled in view of observations of MoP&NG on certain issues. The matter was resolved in a meeting held between Adviser, MoC and Secretary, MoP&NG in August 2012 and a formal approval from Govt is awaited regarding operationalization of CMM development.

The matter was taken up with CCL and BCCL and a Director Level meeting was held (CCL: Sept 2012 and BCCL: Oct 2012) and consent of both companies received.

1.6.4 ASSESSMENT OF CMM POTENTIAL RELATED TO LARGE OPENCAST MINES:

CMPDI carried out Assessment of CMM Potentiality in Dip-side Area of Moher Sub-basin, NCL, Singrauli and CMM Potentiality in Dip-side Area of Korba Coalfield, SECL and further action for commercial development will be taken after the issue related to

operationalization between MoC and Mop&NG is resolved.

1.6.5 COMMERCIAL DEVELOPMENT OF UCG WITHIN CIL COMMAND AREA:

CMPDI had floated tenders for commercial development of UCG in Kaitha Block (under CCL command area) and Thesgora 'C' Block (under WCL command area). The tenders received very good response and the offers were evaluated by a duly constituted TC of CMPDI having members from coal producing company and recommendation sent to CIL. The matter was deliberated in the CIL FDs meetings held in July/August 2011 wherein it was suggested that criteria for technical evaluation should be re-visited and should be consider for re-tendering.

Draft TSD prepared accordingly and sent to CIL for competent approval. The draft TSD was deliberated in the meeting of FDs of CIL in January 2013 wherein it was desired that the representative of CMPDI will be invited in the meeting of FDs of CIL for discussion in the matter.

1.6.6 OUTSIDE CONSULTANCY WORK (DGH JOB):

1.6.6.1. Preparation of data Dossiers for CBM Round V:

DGH has awarded paid consultancy work to CMPDI in May 2011 for delineation and preparation of Data Dossiers on prospective CBM blocks in Cambay basin, Singrauli and Johilla Coalfields for CBM Round V. Draft Data Dossiers on the identified 8 blocks were submitted to DGH in March, 2012.

The reports were initially deliberated between CMPDI and DGH officials and were finalized after visit of a high level team of DGH to CMPDI in mid February 2013. The final reports on the blocks

have been prepared and submitted by CMPDI in March 2013.

1.6.6.2. Delineation and preparation of Data Dossiers for six prospective Shale Gas blocks within Gondwana Basin:

DGH has assigned paid consultancy job to CMPDI for delineation and preparation of Data Dossiers for six prospective Shale Gas blocks within Gondwana Basin in May, 2011. Draft Data Dossiers on Raniganj, Jharia, Bokaro, South Karanpura, North Karanpura and Sohagpur basins were submitted in March 2012.

The reports were deliberated between CMPDI and DGH officials and the reports were finalized after visit of a high level team of DGH in mid February 2013. The final reports have been submitted by CMPDI in March 2013.

1.6.7 EU FUNDED RESEARCH PROJECT:

CMPDI is one of the participating organizations along with IIT Kharagpur from India in the multi-national/ multi-organization collaborative project titled "GREENHOUSE GAS RECOVERY FROM COAL MINES AND UNMINEABLE COALBEDS AND CONVERSION TO ENERGY" which has been approved under the partial funding scheme of European Union Research Commission. The balance fund has been provided under a CIL R&D scheme.

The CMPDI Project team attended the review meeting on progress of work at Imperial College, London (UK) on 5th & 6th July, 2012 wherein UNECE observer was also present. The work carried out by CMPDI was appreciated in the meeting.

The work has been taken up and the assigned CMPDI work packages were submitted to Imperial College of Mining in January 2013 as per schedule.

1.6.8 CIL R&D PROJECT “ASSESSMENT OF PROSPECTS OF SHALE GAS IN GONDWANA BASIN.

Work on CIL R&D project “Assessment of prospects of shale gas in Gondwana basin with special reference to CIL areas is in progress and collection of shale samples for qualitative analysis has been taken up and few shale samples have been sent to lab for Shale Gas specific tests. In the mean time facility for taking up Total Organic Carbon (TOC) has been created in the CMPDI lab under this project.

In addition areas have been demarcated for assessing the prospectivity of shale gas within BCCL and CCL areas.

1.6.9 S&T PROJECT ON SHALE GAS POTENTIALITY OF DAMODAR BASIN OF INDIA.

A new S&T project regarding Shale gas potentiality of Damodar basin of India at an investment of Rs. 1686.84 lacs under S&T plan of Ministry of Coal (MoC) vide letter no. 34012/3/2012-CRC-1, dated 30.10.2012 and 12.12.2012 has been approved.

The basic objective of the project is to evaluate Damodar basin for their shale gas potentiality through integrated geophysical, geological, geo-chemical and petro-physical investigations.

NGRI team visited CMPDI for discussion and collected shale samples from Kapuria, Singra and Mahuda blocks of JCF for studies of TOC, Rock Eval Pyrolysis, Carbon isotopic signatures and Biomarker. A team of NGRI team visited CMPDI during March 2013 and explored the possibility of taking up 3D seismic survey in identified areas.

1.6.10 ESTABLISHMENT OF CMM/CBM CLEARINGHOUSE IN INDIA:

A CMM/CBM clearinghouse has been

established at CMPDI, Ranchi under the aegis of Ministry of Coal and US EPA on 17th Nov’08. The clearinghouse is functioning as the nodal agency for collection and sharing of information on CMM/CBM related data of the country and help in the commercial development of CMM Projects in India by public/private participation, technological collaboration and bringing financial investment opportunities.

The clearinghouse has been established with financial support from Coal India Ltd on behalf of Ministry of Coal and US EPA. A website of the India Clearinghouse, <http://www.cmmclearinghouse.cmpdi.co.in> encompasses all the important information viz EOI notifications, newsletters etc have been posted on the web-site of the Clearinghouse in addition to information regarding opportunities existing for development of CMM, VAM etc.

The initial 3 year term for US EPA grant of clearinghouse has been completed in Nov 2011. MoC has approved the proposal for extension of term for further periods of 3 years on 31st August 2012 and US EPA has also given its consent for extension of terms of the clearinghouse for a further period of 3 years.

1.6.10.1 Participation of CMPDI officials in GMI EXPO-13:

A high level CMPDI team comprising of CMD, CMPDI, Director (T/RD&T) and GM (CBM) along with Adviser (Projects), Ministry of Coal participated in the Expo,13 and other meetings of the GMI as Government of India delegates wef 12th to 15th March 2013. Government of India booth was also managed by CMPDI officials wherein posters highlighting the Government initiative in methane mitigation were showcased in addition to highlighting the opportunities

of commercial development existing within CIL command areas. CMPDI team also presented the opportunities and challenges existing in the field of development of CMM.



Shri Ak Debnath, CMD, CMPDI Addressing Coal-Sub Committee Meeting



Ministry of Coal and CMPDI Official In the Methane Expo 2013



Indian delegates with European Union Officials in Govt. of India Booth in The Methane Expo 2013

2.0 PROJECT PLANNING & DESIGN

As prioritized by subsidiary companies of Coal India Limited, preparation of Project Reports (PR) for new/expansion/re-organisation mines was carried out during the year 2012-2013 for building additional coal production capacity to the tune of 75 Mty. Revision of Project Reports/Cost Estimates for projects was also taken up along with new PRs. Thrust was laid on preparation of reports of identified projects of XII Plan.

In addition to above, the following jobs were also undertaken:

- Master Plan of Coalfields
- Preparation & evaluation of RFQ (Request for Qualification) and RFP (Request for Proposal) documents and customisation of bid document for coal washeries
- Operational plans for large OC mines
- Environment Management Plan (EMP)
- Mining Plans and Mine Closure Plans of OC and UG mines
- Mine capacity assessment of underground & opencast mines of CIL.
- Various technical studies relating to operation of opencast & underground mines.
- Performance analysis of HEMM operating in OC mines of CIL.
- Preparation of Standard Bid Documents for procurement of Continuous Miner in underground mines of CIL.

- Preparation of Model Bid Document & Conceptual Report for setting up of FBC based thermal power plants using washery rejects.
- Detailed design and drawings, NIT, tender scrutiny, etc.

During the year 2012-2013, expert consultancy services were also provided to subsidiary companies of Coal India Limited in the field of Environmental Management and Monitoring, Remote Sensing, Energy Audit (Diesel & Electrical), Benchmarking of Diesel & Electrical Consumption and Fixation of Diesel & Electrical Consumption Norms of Opencast and Underground mines, Physico-mechanical tests on Rock and Coal Samples, Subsidence Studies, Strata Control, Non-Destructive Testing (NDT), Controlled Blasting & Vibration Studies and Explosive Utilisation, Ventilation/Gas Survey of UG mines, Mining Electronics, Petrography and Cleat Study on coal samples, Coal Core Processing & Analysis, Washability tests, OBR Survey, Man Riding System, Soil

Erosion Study, Slope Stability Study, Effluent/Sewerage Treatment Plants, Assessment of Normative Cost of sand stowing for stowing mines, etc.

During the year 2012-2013, a total of 271 reports have been prepared for CIL and its subsidiary companies.

The break-up of reports prepared has been given below:

REPORTS	Nos.
Geological Reports	15
Project Reports	29
Other Studies	168*
Draft EMPs (including 30 Form-I)	59
TOTAL	271

* This includes 17 Operational Plans of large opencast mines.

Detail of reports prepared during the period 2012-2013 is furnished in Annexure-I.



ANNEXURE-I

LIST OF COMPLETED REPORTS DURING 2012-13

Regional Institute/HQ	Name of the Reports
Geological Reports	
RI-I	1. Kumardihi
	2. Nakrakonda
RI-III	1. Argada
	2. Kuju
RI-IV	1. Shaktigarh
RI-V	1. Karkati North
	2. Tulsi Block-A
RI-VI	1. Baghela
RI-VII	1. Lajkura OCP and Dip Extn.
	2. Samaleswari & Kudopalli (Combined)
	3. Mahanadi
HQ	1. Chandrapura (Contractual)
	2. Sayang NW (Non-CIL) (Contractual)
	3. Kayda-Chaudhar-Gariapani (Contractual)
	4. Sayang East B (Non-CIL) (Contractual)
Project Reports	
RI-I	1. Chitra Expn. OC
	2. Ghusik UG
	3. North Searsol OC
	4. New/West Kenda OC
	5. Rangamati 'B' Block (Tumni & Kanchanpur Sector)
RI-II	1. Block-VI OCP
RI-III	1. Govindpur UG
	2. Kathara Expn. OC
	3. Sanghamitra OCP
	4. Topa Expn. OCP
	5. Mahendra (Rajbar) OC
RI-IV	1. Expn. of Nandgaon Inclines Mine
	2. Bhatadi Expn. OC RPR
	3. Pimpalgaon Deep OC
	4. Hindustan Lalpeth Extn. OC
	5. Kolgaon Deep OC
	6. Pauni Combined OC

Regional Institute/HQ	Name of the Reports
RI-V	1. RPR for Mahan-II OC
	2. RPR of Katkona UG
	3. RPR for Amadand OC
	4. RPR of Chhal OC
	5. Malachua OC
RI-VI	1. EPR of Block-B OCP
	2. Kakri North OCP
RI-VII	1. Integrated PR for Belpahar & Lakhanpur OC (30 Mty)
	2. Lajkura OCP Expn.
	3. Garjanbahal OCP (Recast PR)
	4. Siarmal OCP (Recast PR)
HQ	1. Hura 'C' OC
Operational Plans	
RI-I	1. Jambad OC
	2. Rajmahal OC
	3. Sonapur Bazari-A OC
	4. Chitra OC
	5. Kottadih OC
	6. Mohanpur OC
RI-III	1. Amrapali OC
RI-IV	1. Padmapur OC (Deptt. Patch)
	2. Sasti OC
	3. Ghugus OC
	4. Pimpalgaon OC
RI-V	1. Dipka OC
	2. Kusmunda OC
	3. Gevra OC
RI-VI	1. Jayant OCP
	2. Nigahi OCP
	3. Dudhichua OCP
Other Reports	
RI-I	1. Conceptual report for Madhabpur OC Patch
	2. Updated Cost Estimate of Tilaboni UG and Shankarpur Mine
	3. Vibration study of onjemehari OC

Regional Institute/HQ	Name of the Reports
RI-II	4. Updated Cost Estimate of PR of low height CM of Jhanjra UG
	5. GR for PR for Ghushick Block
	6. GR for PR for Rangamati 'B' Block (Kanchanpur Sector)
	7. GR for PR for Kenda Block
	8. Vibration study of Jambad OC
	9. Updated Cost Estimate of PR of Kumardih UG
	10. GR for PR for North Searsol Block
	11. Scheme for rain water harvesting
	12. Controlled blasting and vibration study at coal face of Jambad OCP
	13. Energy audit report for Pandaveswar Colliery
	14. Energy audit report for Kottadih UG
	1. Mining Plan of Bhutgoria UG
	2. Geological Notes on Bhowrah North and Sudamdih Shaft Mine
	3. Preparation of Global Bid Documents of Bhowrah North Mine
RI-III	4. UCE of PR for Dhansar UG mine
	5. Geological Note on Phularitand UG
	6. GR for PR of Kalyaneshwari OC
	1. Subsidence prediction of Sayal D UG
RI-IV	2. Revised Cost Estimate (RCE of Kathara OCP)
	3. Pre-Feasibility Report of Religara OCP
	4. Global Bid Document for Churi-Benti UG (Hiring Basis)
	1. Scheme for extension of workings of Ghugus OC beyond approved scheme boundary
	2. Scheme for Takia Nala Phase-VIII & IX
	3. Controlled blasting studies at Gondegaon OC, Nagpur Area
	4. GR for PR of Hindustan Lalpeth OC
	5. Assessment of blast induced ground vibration study at Saoner UG Mine No.1
	6. Scheme of Damua OC
	7. Gas survey of Seam-V of Pipla UG Mine
	8. Energy Audit Report (Electrical) with benchmarking for Saoner-III UG

Regional Institute/HQ	Name of the Reports
RI-V	9. Study on proposed power demand for next 25 years from the year 2017-18 of WCL
	10. Schemes for Telwasa and Dhorwasa Ocs
	11. Scheme of Ghorawari OC Extn.
	12. GR for PR of Bhatadi Extn. OC
	13. GR for PR of Kolgaon Deep OC
	14. Mine Closure Plan of Gouri Deep OCP
	15. Mining Plan of Ghugus OC & Nakoda OC
	16. Mining Plan of Bellora Naigaon OC
	17. Mine Closure Plan of Juna Kunada OC Expn
	18. Mine Closure Plan of Waghoda UG
	19. Feasibility Report of Penganga OC
	1. Updated Cost Estimate of Rai OC (15 Mty)
	2. Updated Cost Estimate of Bijari OC (15 Mty)
	3. Updated Cost Estimate of Batura OC (4 Mty)
	4. Controlled blasting study at Amlai OCM, Sector-B
	5. Subsidence study of katkona UG mine
	6. Controlled blasting study at Amlai OCM, Sector-A
	7. Madan Nagar North & South (Model for PR)
	8. Pre-feasibility report for conversion of Mahamaya UG to OC
	9. Pre-feasibility report for conversion of Vijay West & Rani Atari UG to OC
	10. RCE of Mahan (0.36 Mty)
	11. Updated Cost Estimate of Pelma OC (15 Mty)
	12. Blast design and vibration study at Sharda highwall mining project
	13. Pre-feasibility report for conversion of Badauli UG to OC
	14. Controlled blasting study at Amlai OCP beyond 50m but within 100m
	15. Techno-Economics for Vijay West UG (0.5 Mty) (CM application)

Regional Institute/HQ	Name of the Reports
RI-VI	16. Pre-feasibility report for conversion of Pathakpur, Khairaha, Damini, and Rajendra UGs to OC
	17. Pre-feasibility report for conversion of Amba UG to OC
	18. Scheme for installing of Mine Fan at Gayatri UG
	19. Energy Audit of 8 nos. UG mines of SECL
	20. RCE for Bijari OCP
RI-VII	1. Scheme for installation of 2.5 Mtpa feeder breaker at Jayant OCP
	2. Scheme for extraction of barrier between Bina & Kakri mine
	3. Diesel auditing and benchmarking and fixation of equipment-wise diesel consumption norm for Nigahi OCP
	1. PR on deployment of CISF in MCL
HQ	2. Mine Closure Plan of Balram OCP
	3. Geological Model on Extension of Basundhara West & Chaturdhara OCP
	4. Mining Plan of Balram OCP
	5. Mining Plan of Lakhanpur OCP
	1. Subsidence prediction report of Govindpur Colliery, BCCL
	2. Subsidence prediction report of Jogidih Colliery, BCCL
	3. Subsidence prediction report of Maheshpur Colliery, BCCL
	4. Subsidence prediction report of New Akashkinari Colliery, BCCL
	5. Feasibility Report for Man Riding System at Nandira UG Mine, MCL
	6. Report on RMR and Rock Load of Kumardihi 'A' Colliery (R-VII B Seam), Jhanjra Colliery (R-VII A Seam, SDL/ LHD District), Mandarboni Colliery (R-VI Seam), Dalurband Colliery (R-VII A+B Dobrana Seam), ECL
	7. Scheme for Kaniha 220/33 kV Sub-station, MCL
	8. Report on RMR and support layout of Hariajam Colliery (G.P. Seam), ECL
	9. Subsidence prediction report of panel 'H' of Tandsi amalgamated UG mine, ECL
	10. Electrical energy audit of 2 OCPs of NCL

Regional Institute/HQ	Name of the Reports
	11. Land use/cover mapping of core & buffer zone of Inder UG to OC and Tawa-II UG, WCL
	12. Land use/cover mapping of core & buffer zone of Simlong OC, ECL
	13. Report on RMR and Rock Load of Jhanjra Colliery, 3 & 4 Incline Unit (R-VII A Seam & R-VII (Bonbahal Seam) and Mandarboni Colliery (R-IV Seam), ECL
	14. Report on RMR and support layout of Hariajam Colliery (BP Top Seam) and Shankarpur Colliery (R-VII A Seam), ECL
	15. Subsidence prediction report of Kankanee Colliery, BCCL
	16. Subsidence prediction report of Basdeopur Colliery, BCCL
	17. Subsidence prediction report of tetulmari Colliery, BCCL
	18. Subsidence prediction report of Sendra Bansjora Colliery, BCCL
	19. Controlled blasting and vibration study at Bharatpur OCP, MCL
	20. Report for fire detection and fire fighting in Jurabaga sub-station, MCL
	21. Land use/cover mapping of core & buffer zone of Chincholi OCP, WCL
	22. Land use/cover mapping of core & buffer zone of Chitra OCP, ECL
	23. Report on RMR and support layout of Orient Colliery Mine No.1&2 (HR Seam-III & IV), MCL
	24. Standard price list of mining equipment for 2012-13
	25. Slope stability study of Sonepur Bazari OCP, ECL
	26. Report on top soil management of Magadh and Amrapali OCP, CCL
	27. Mining Plan for Bilenda/Biksar sand mine of Talcher coalfields, MCL
	28. Controlled blasting and vibration study at Balrampur OCP
	29. Report on RMR and Rock Load of Madhaipur Colliery, 5 & 6 Pit and 9 & 10 Pit (Samla/R-II/R-III Seam) and Jhanjra Project Colliery, MIC Unit (R-VI Seam), ECL
	30. Land use/vegetation cover mapping of Singrauli Coalfield

Regional Institute/HQ	Name of the Reports
31.	Slope stability study of Belpahar OCP, MCL
32.	Soil erosion study for Sirka OCP, CCL
33.	Scheme for Effluent Treatment Plant (ETP) of Balram OCP, MCL
34.	Land use/vegetation cover mapping of Bander Coalfield
35.	Soil erosion study for Giddi-C OCP, CCL
36.	Assessment of capacity and capacity utilisation of opencast mines of CIL during 2011-12
37.	Scheme for installation of man riding system at Moonidih Mine, BCCL
38.	Capacity assessment as on 1st April, 2012 and capacity utilisation for 2011-12 of CIL underground mines
39.	Gas survey of M N Incline, Topa Mine, CCL
40.	Subsidence prediction report of Tawa-II UG Mine, WCL
41.	Recast of Tirap OCP Ph.II
42.	Report on RMR studies of Siduli Colliery (Jambad/R-VIII Seam), Chora Block Incline (Bonbahal/R-VII Seam), Dalurband Colliery (R-VII Seam) and Chapapur-II Colliery (Metadih Seam), ECL
43.	Subsidence prediction report of Chinakuri UG Mine, ECL
44.	Land use/cover mapping of Tawa-III UG, WCL
45.	Land use/vegetation cover mapping of Core & buffer zone of five cluster of Raniganj Coalfield
46.	Report on scientific study regarding the effect on overlying seam while depillaring with caving in R-IV seam at Chinakuri UG Mine, ECL
47.	Subsidence prediction report of Tawa-III UG Mine, WCL
48.	Slope stability study of Niljai OCP, WCL
49.	Soil erosion study for Pundi OCP, CCL
50.	Annual benchmarking of 14 OCPs identified by CCL
51.	Annual benchmarking of 3 OCPs identified by SECL
52.	Annual benchmarking of 5 OCPs identified by MCL
53.	Annual benchmarking of 8 OCPs identified by NCL
54.	Annual benchmarking of 14 OCPs identified by BCCL

Regional Institute/HQ	Name of the Reports
55.	Annual benchmarking of 9 OCPs identified by ECL
56.	Annual benchmarking of 17 OCPs identified by WCL
57.	Performance of HEMM of opencast mines of CIL during 2011-12
58.	Report on analysis of specific consumption of explosives, diesel and electric power of opencast mines of CIL during 2011-12
59.	Controlled blasting and vibration study at Lohapatti Colliery, BCCL
60.	Scheme for selection of suitable man riding system for Kottadih colliery, Haripur colliery, Shyamsunderpur colliery (Sarpi Unit) and Parshapit of ECL
61.	Report on RMR studies of Kargali UG Mine (Bermo Seam) & Topa UG Mine (VIII Seam), CCL and Pure Searsole Colliery (R-VII Seam), Nimcha (R) Colliery (R-VII and R-VIII Seam) and J.K. Nagar Colliery (R-VI Seam), ECL
62.	Gas survey to determine the degree of gassiness at BSI (Kargali UG), CCL
63.	Vegetation cover mapping of West Bokaro Coalfield
64.	Soil erosion study for Khasmahal OCP, CCL
65.	Capacity assessment of four coking coal washery of CCL viz. Kathara, Sawang, Kedla & Rajrappa
66.	Reports on 'Assessment of CBM Gas-in-Place Resource in Sukli, Kapri block of Katol Coalfield and Mahanadi block of Talcher Coalfield
67.	Report on RMR studies of Satgram Incline (R-IV Seam), Satgram Project (R-IV Seam), Chapuikhas Colliery (R-VI Seam) and Kuardi Colliery (R-IXA Seam), ECL
68.	Report on suggestion for method of extraction of Panel 'H' of Tandsi Mine, WCL
69.	Vegetation cover mapping of East Bokaro Coalfield
70.	Vegetation cover mapping of Karanpura Coalfield
71.	Vegetation cover mapping of Korba Coalfield
72.	Energy Audit Report (Electrical) for Bagdeva, Korba Area, SECL

Regional Institute/HQ	Name of the Reports
	73. Energy Audit Report (Electrical) for Damini, Sohagpur Area, SECL
	74. Energy Audit Report (Electrical) for Kakri and Khadia mines of NCL
	75. Energy Audit Report (Electrical) of OC 4 Mine, MCL
	76. Detailed diesel benchmarking and fixation of equipment wise diesel consumption norms for Tapin North OCP, CCL
	77. Assessment of capacity of opencast mines of CIL (Projections as on 1.4.2013)
	78. Slope stability study of Tirap OCP, NEC
	79. Slope stability study of Pimpalgaon OCP, WCL
	80. Slope stability study of Lingraj OCP, MCL
Environment Management Plan (Draft EMP)	
Form-I	
RI-I	1. Cluster-IV Mines (Revised)
	2. Rangamati 'B' Block (Kanchanpur Sector)
	3. Ghusick UG
	4. Sand mining at Damodar River Bed
	5. Sand mining at Ajoy River Bed
RI-II	1. Lohapatty Sand Ghat
RI-III	1. Argada OC
	2. Kuju OC
	3. Chano-Rikba OC
	4. DRD OC
	5. Jarangdih Sand Mine Project
	6. Swang Sand Mine Project
	7. Govindpur Sand Mine Project
	8. Piparwar Expn. OC
	9. Tarmi OCP
RI-IV	1. Padmapur Extn. Deep OC
	2. Ghugus Expn. (Sector-C) OC/Nakoda UG to OC
	3. New Sethia OC
	4. Parsoda OC
	5. Chinchala-Chikalgaon (A) OC
	6. Ballarpur OC Expn.
	7. Ghugus OC Expn.

Regional Institute/HQ	Name of the Reports
	8. Pauni OC Expn.
RI-VI	1. Block-B OCP
RI-VII	1. Jagannath OC
	2. Belpahar OC Expn.
	3. Lakhanpur OC Expn.
	4. Samleswari OCP, Phase-IV
	5. Integrated Lakhanpur, Belpahar & Lilari OC
HQ	1. Nigahi OCP, NCL
Draft EMP	
RI-I	1. Mohanpur OC Expn.
	2. North Searsole OC Patch
	3. Cluster-I Mines
	4. Cluster-XII Mines
RI-II	1. Dugda Washery
	2. Cluster-VI Mines of BCCL
	3. Cluster-XV Mines of BCCL
	4. Cluster-XI Mines of BCCL
RI-III	1. Barka-Sayal Group of Mines
	2. Pichri OC
	3. Piparwar Expn. OC (Summary EIA/EMP)
	4. Tarmi OCP (Addendum EMP)
RI-IV	1. Juna Kunada Expn. OC
	2. Shivani OC
	3. Niljai Deep OC
	4. Ghonsa OC Expn.
RI-V	1. Dipka Expn. OC
	2. Gevra Expn. OC
	3. Kusmunda OCP (62.50 Mty) (Revised)
	4. Chhal OC
	5. Amadand OC
	6. Rampur-Batura OC
	7. Katkona UG
	8. Malachua OC
HQ	1. Krishnashila OC, NCL
	2. Cluster-VI Mines, ECL
	3. Cluster-II Mines, ECL
	4. Cluster-V Mines, ECL
	5. Cluster-VII Mines, ECL

2.1 COAL & MINERAL PREPARATION

Coal & Mineral Preparation Division offers technology services for Coal washeries, Mineral beneficiation Plant and Modification/Modernization of existing plants. These services encompass exhaustive Laboratory studies, Techno Economics Feasibility Report, Conceptual Report, Project Planning, Construction management and wide range of R&D activities. The division is equipped with ISO certified modern laboratory with latest and sophisticated equipments for carrying out laboratory scale studies.

Coal & Mineral Preparation Division has already handled many prestigious assignments in the field of Beneficiation of coal and other minerals against stiff competition in open market which includes

- i. World Bank aided project “Report on Techno-economic study of coal washeries for Cement Industry” and
- ii. ADB funded project “Implementation of clean coal technology through coal beneficiation in India.”

Some of the esteemed customers on CMP division’s roster are MPEB, MECL, Neyveli Lignite, PSEB, BHEL, NTPC, TISCO, ICMPL, UNDP, MOIL, SCCL and many more.

The following major works have been completed during the year 2012-13.

A. REPORTS/STUDIES.

1. Preparation of Report on washery for Mine PR of
 - a) Block-VI OCP, BCCL
 - b) Sangmitra OCP (15 Mty), CCL.
 - c) Expansion Project, Samleshwari OCP, MCL.
 - d) Topa Expansion OCP, MCL.
 - e) Rajbar OCP, CCL.
2. Preparation of study report of

- a) Moonidih washery, BCCL
- b) Dugda-II washery, BCCL
- c) Sudamdih washery, BCCL
- d) Bhojudih washery, BCCL
3. Capacity assessment of
 - a) Kedla washery (coking coal), CCL
 - b) Kathara washery (coking coal), CCL
 - c) Sawang washery (coking coal), CCL
 - d) Rajrappa washery (coking coal), CCL
4. Modification of chapter and cost updating of washery for inclusion in Mine PR of Siarmal OCP, MCL.

5. Preparation of Techno-Economic Feasibility Report (TEFR) for Dhori washery, CCL.
6. Preparation of Conceptual Report for Bhojudih washery, BCCL.

B. Preparation of Tender Document

1. Preparation of RFP part of Bid Document for
 - a) Hingula washery, MCL.
 - b) Dugda washery, BCCL (Revised)
 - c) Basundhara washery, MCL (Draft)
 - d) Patherdih-II washery, BCCL (Draft)
2. Preparation of Revised Tender Document for Additional Loading Bunkers at Sawang washery, CCL.

C. Tender Scrutiny

1. Evaluation of RFP part of Bid Document for.
 - a) Dahibari washery, BCCL
 - b) Kusmunda washery, SECL
 - c) Hingula washery, MCL
2. Evaluation of RFQ part of Bid document

for Basundhara and Jagannath washery, MCL.

3. Evaluation of offers for

- a) Fine Coal beneficiation plant at Sawang washery, CCL.
- b) Additional Loading Bunkers at Sawang washery, CCL.
- c) Primary Crushing with Twin-shaft sizer at Kedla washery, CCL.
- d) Dry-deshaling with Allmineral Allair Jig at Bharatpur, MCL
- e) Dry-deshaling with Ardeesort Technique (Radiometric) at Madhuband washery, BCCL.

D. Agreements

1. Preparation of agreement for

- a) Madhuband washery, BCCL.
- b) Patherdih washery, BCCL.
- c) Ashok washery, CCL. (Draft)

E. R&D and S&T Projects

1. Preparation of Revised Tender document for

- a) Dry-deshaling with Allmineral Allair Jig at Bharatpur, MCL.
- b) Dry-deshaling with Ardeesort Technique (Radiometric) at Madhuband washery, BCCL.

2. Development of Coal Preparation Plant Simulator.

F. Outside Consultancy

1. Vetting of Detailed Project Report (DPR) of Bhelatand coking coal washery of M/s S&T Mining Company Pvt. Ltd.

2.2 PROJECT APPRAISAL

1. Scrutiny and appraisal of 23 nos of draft PRs/RPRs//EPRs prepared by Regional Institutes and HQ Departments of CMPDI during the year 2012-13, and coordination for their presentation at CMPDI (HQ)

for guidance to the concerned Regional Institute and HQ Department before finalization of the reports.

2. Scrutiny and appraisal of 9 nos of conceptual notes prepared by Regional Institutes, and coordination for their assessment by Director (T) (P&D) / Director (T) (RD&T) along with OC/ UMD Department and PAD for finalizing the main technical parameters before preparation of the draft PR/RPR/EPR.

3. Updation of status of implementation of ongoing projects costing more than Rs. 500 crores, especially with respect to actions under CMPDI's responsibility, for the Secretary (Coal)'s Quarterly Review Meetings.

4. Updation of status of formulation of PRs for XII Plan coal mining projects of CIL at the time of Secretary (Coal)'s Quarterly Review Meetings, VIP visits, and RDs' Coordination Meetings.

3.0 UNDERGROUND MINING AND OPENCAST MINING

The following jobs were completed and are in progress during the year 2012-13

3.1 UNDERGROUND MINING

A.1 OUTSIDE CONSULTANCY JOBS (COMPLETED):

1. Consultancy services for vetting DPR, scope of work and participation in pre-bid meeting for Malajkhand Copper Project, HCL
2. Preparation of EOI, Bid document & vetting of designs for construction equipping & furnishing of new shaft at Hutti Gold mines.
3. Preparation of Mining Plan & Project Report for Macherkunda coal block, Latehar, Bihar Sponge Iron Ltd.

A.2 OUTSIDE CONSULTANCY JOBS (IN PROGRESS):

1. Comprehensive Consultancy Services including design & preparation of Tender document for sinking of 7.5 meters diameter vertical high speed shaft about 630 mtrs. deep at Balaghat mine of MOIL
2. Detailed design of vertical shaft, winding installation & vetting of TEFR for vertical shaft at Ukwa mine , MOIL
3. Detailed design of vertical shaft, winding installation & vetting of TEFR for vertical shaft at Munsar mine, MOIL.
4. Preparation of Mining plan & expansion PR for enhancement of production from Balaghat mine

B.1 CIL JOBS (COMPLETED):

1. Stability test of headgear structure of 1 pit winder, PB project, BCCL.
2. Feasibility study of man riding system for Nandira u/g mine, MCL.
3. Detailed design drawing of Fan drift & Fan house suitable for higher capacity MMV at Bangwar u/g mine, Sohagpur area, SECL.
4. Detailed design drawing of air shaft of Vijay West u/g mine, Sindurgarh sub area, Chirimiri area, SECL.
5. Standard Price list of mining equipments for 2012-13.
6. Preparation of mining plan for Bilenda / Biksar snad mine of Talcher coalfields, MCL.
7. Proposal for procurement, installation & commissioning of Manriding system at Moonidih mine, BCCL.
8. Gas survey of M N incline for Topa mine, CCL.
9. Capacity assessment as on 1/4/12 & capacity utilization for 11-12 of CIL u/g mines.

10. Preparation of detailed design, BOQ and NIT for construction of Incline and Air shaft for Hirakhand Bundia mine of Orient area, MCL .
11. Preparation of NIT documents for Global Tendering for procurement of man riding vehicle for Jhanjhara Project - Technical Part.
12. Scientific study regarding the effect on over lying seam while depillaring, caving in RIV seam at Chinakuri u/g mine, ECL.
13. Scheme for selection of suitable man riding system for (1) Kottadih colliery (2) Haripur colliery (3) Shyamsundarpur colliery (Sarpi unit) & (4) Parshapit of ECL.
14. Design drawing & estimate for one pair of incline at Tilaboni Colliery, Bankola area, ECL.
15. Stability analysis of Headgear structure of no.3 pit winder of Bhagaband colliery, P.B.area, BCCL.
16. Gas survey to determine the degree of gassiness at BSI (Kargali u/g) of B&K area of CCL.

B.2 CIL JOBS (IN PROGRESS):

1. Preparation of draft NIT for operation of Chinakuri-I, U/G mine, ECL, through joint venture route.
2. Scheme for introduction of man riding system of 10 mines of SECL.
3. Preparation of NIT/TD, BOQ, Detailed design of supports for Incline drivage at Piparwar UG, CCL.
4. Suggestion for method of extraction of Panel 'H' of Tandsi mine, Kanhan Area, WCL.
5. Preparation of detailed Project Report (DPR) for 6 (2 nos. allotted to UMD) Explored Captive coal blocks for valuation by CRISIL for bidding.

6. Quick comments on various “Mining Plan & Mine Closure Plan” for other than CIL Client.
7. Comments on draft DPR of Kapuria Projects submitted by M/s AMR-BBB.
8. Technical vetting of Draft Project Report of Muraidih U/G mine, BCCL submitted by M/s MINOP.

3.2 OPENCAST MINING

i. JOBS COMPLETED

Outside Consultancy Jobs

1. Expansion PR for Dongri Buzurg Manganese Mine – Client MOIL Ltd
2. (Draft) Mining Plan for Devangudi Lignite Mine – Client Neyveli Lignite Corp
3. FR for Devangudi Lignite Mine – Client Neyveli Lignite Corp
4. Reviewing Mining Plan of Utkal-B2 Block with specific reference to required of External OB dump. Client Monnet Ispat Limited.

Major Internal Consultancy Jobs

1. FR for Samleshwari Extension OCP (considering all seams) – Client : MCL
2. PR for Hura ‘C’ OCP (3.0 MTY) – Client ECL
3. Recast of Tirap OCP Ph – II - Client NEC

Other Major Jobs

1. Assessment of Capacity of all the Opencast Mines of CIL
2. Performance Analysis of HEMM deployed in Opencast Mines of CIL
3. Analysis of specific consumption of explosives, diesel & electric power in Opencast Mines of CIL
4. Allocation of CIL plant number for newly commissioned HEMM

Review of Mining Plans - Client Ministry of Coal

1. Revised Mining Plan (1st Revision) and Mine Closure Plan (July 2012) for Surkha (North) Lignite Deposit, Dist. Bhavnagar, Gujarat
2. Mining Plan (Nov'2011) of Kistaram OCP, Dist. Khammam, AP.
3. Revised Mining Plan including Mine Closure Plan (Nov'2011) for part of Manuguru Mining Lease, Revision-2 (Manuguru OC-IV Extension), Dist. Khammam, AP.
4. Mining Plan (Aug'2012) for Suliyari Belwar Coal Block, Singrauli Coalfield.
5. Revised Mining Plan (1st Rev.) including Mine Closure Plan (March 2012) for Pakri Barwadih coal block (M/s NTPC).
6. Mining plan (Revision-1) including Mine Closure (May 2012) for Manoharpur coal block, Dist. Sundargarh (M/s OPGC).
7. Revised MP for Kapurdi Lignite block of Barmer Lignite Mining Co Ltd
8. Mining Plan for Parsa East Kanta Basan Coal block of Rajasthan Rajya Vidut Utpadan Nigam Ltd
9. Revised MP for Radhikapur East (including Utkal F) of Tata Sponge Iron Ltd

Technical Study

1. Machhakata OC, Mahandi Coal Block.
2. Review of mine plan & RFP document for Manoharpur coal Block, M/s OPGC
3. OBR rate estimation of Amlohri OCP, NCL
4. Assessment of production potentiality of Coal Blocks

Technical Scrutiny of Project Reports

1. Lajkura OC Expn Ph.II (5.0 MTY), MCL
2. Supplement of DPR for Block B Expn OCP (6.0 MTY), BCCL

3. Chhal OCP (3.0 to 6.0 MTY incremental), SECL
4. Kathara OCP, CCL
5. Block – V, BCCL
6. Sanghamitra OCP (15.0 MTY), CCL
7. Vijay Central OC, SECL
8. Pauni Deep OC, WCL
9. Kolgaon OC, WCL
10. Bhatadi Expn OC, WCL
11. Hindustan Lalpeth Expn OC, WCL.
12. Jayant Expansion OCP, 16 MTY, NCL
13. North Searsol OCP, 2 MTY, ECL.
14. Conceptual note of Kalyaneswari OCP, 4 MTY, BCCL.
15. Topa Expn OCP (7 Mty), CCL
16. New Kenda (1.1 Mty) ECL
17. Pindra OCP (1 Mty), CCL
18. Religara (0.6 Mty), CCL
19. Mahan II (1.0 Mty), SECL
20. Kuju OCP (1.3 Mty), CCL

II. JOBS IN PROGRESS :

Outside Consultancy Jobs

1. Mining Plan for Devangudi Lignite Mine Project – Client NLC
2. Mining Plan for Dongribuzurg Manganese Mine – Client MOIL Ltd
3. Mining Plan for Palana Lignite Mine Project (Draft submitted) – Client NLC
4. Mining Plan for Nuagaon-Telisahi block – Client OMC
5. FR for Nuagaon-Telisahi block – Client OMC
6. Review & vetting of RFP documents for selection of MDO for Manoharpur coal Block.
Client: OPGC.
7. UCE for Mahan OCP (8.5 MTY), Mahan Coal Ltd

Major Internal Consultancy Jobs

1. FR for Jagannath Re-Organisation with Revised Boundary – Client : MCL
2. Reorganisation of Bharatpur OCP - Client : MCL
3. Preparation of R&D Project of High Angle Conveying (HAC) in OC mines
4. Mining Plan for Samaleswari ocp.
5. Mining Plan for Jagannath re-organisation.
6. Mining Plan for re-organisation of Bharatpur ocp.

Other Major Jobs

1. Allocation of CIL Plant numbers for newly commissioned HEMM
2. Technical Scrutiny of Project Reports as per requirement of subsidiary companies of CIL

4.0 ENGINEERING SERVICES

4.1 CIVIL ENGINEERING

Following major services were carried out during the year 2012-13:

PROJECT PLANNING JOBS

1. PR/FR preparation of
 - i) Expansion of Dongri Buzurg Manganese Mine, MOIL
 - ii) Devanguri O/C , NLC,
 - iii) Recast of Tirap O/C NEC
 - iv) Hura C, ECL
 - v) Samleswari Extension, O/C Mine MCL
2. Technical vetting of PR for
 1. Chhal Expn OC (3 to 6 mty), SECL.
 2. Nandgaon Expn UG (0.36 mty), WCL.
 3. Lajkura Expn OC (5 mty), MCL

4. Kathara Expn OC (2 mty), CCL.
5. Hura C OC (3 mty), ECL.
6. Kakri North OC (3.5 mty), NCL.
7. Block-VI OC (3 mty), BCCL.
8. Sanghamitra OC (15 mty), CCL.
9. Samaleshwari Expn OC (17 mty), MCL.
10. Topa Expn OC (5.25 mty), CCL.
11. New Kenda OC (1.1 mty), ECL.
12. Bhatadi Expn OC (1.5 mty), WCL.
13. Hindustan Lalpeth Expn OC (1 mty), WCL.
14. Pimpalgaon Deep OC (1 mty), WCL.
15. Kolgaon Deep OC (0.8 mty), WCL.
16. Pauni Deep OC (2.5 mty), WCL.
17. Vijay Central OC (1.5 mty), SECL.
18. Mahendra (Rajbar) OC (4 mty), CCL.
19. Ghusick UG (1.46 mty), ECL.
20. Rangamati-B (Tumni and Kanchanpur Sector) UG (0.72 mty), ECL.
21. Jayant Expn OC (16 mty), NCL.
22. North Searsole OC (2 mty), ECL.
23. Karo Expn OC (11 mty), CCL.
6. Structural adequacy study for Madhabpur head frame structure
7. Design/Drawing of MTs' Hostel – 48 Unit model

TENDER EVALUATION :

1. Block B CHP (3.5 MTY) NCL.
2. Jayant Extension CHP

PREPARATION OF SCHEME

1. Preparation of conceptual report for CTPS based on FBC technology using washery rejects as fuel at MCL

ARCHITECTURAL JOBS

1. Layout and Design for different quarters and office building for West Jharia Area BCCL
2. Design and estimation for CMPDI, RI-V Building at Bialspur
3. Design of office complex at Margheritta for NEC
4. Preparation of Scheme and turn-key tender documents for
 - Officers' Club and Community hall complex at Jagriti Vihar for MCL
 - Staff Club and Community hall complex at Jagriti Vihar for MCL
 - MT Hostel Building for MCL at Sambalpur
 - Executive Hostel
5. CSR related planning design and estimation for Hathia Gonda village and Patra Gonda village.

DETAILED DESIGN JOBS

1. Design/Drawing of Urdhan CHP of WCL
2. Design/Drawing of A and B type quarters of G+3 configuration for MCL
3. Design/Drawing of Annexe building, MCL (HQ),
4. Design/Drawing of A and B type quarters(G+8 configuration), MCL
5. Design/Drawing of Kalyan Mandap at Anand Vihar colony for MCL

DESIGN/ DRAWING SCRUTINY

- a. Scrutiny of design and drawing for Ananta CHP of capacity 15 MTY with two numbers of Rapid loading Silo of capacity 4000 tonne, Ground Bunker, Two locations of Truck Receiving Hoppers, associated conveyor Structures and associated civil

/structural and infra-structure facility - total 120 Nos. of drawings were approved/ commented based on the scrutiny of the design documents/ drawings submitted by the contractor.

- b. Scrutiny of design and drawing for Kirshnashila CHP of capacity 3.5 MTY with Rapid loading Silo of capacity 3000 tonne, Ground Bunker of capacity 15000 tonne, Receiving pit with Gyratory Crusher, associated conveyor Structures and associated civil /structural and infra-structure facility - total 100 Nos. of drawings were approved/ commented based on the scrutiny of the design documents/ drawings submitted by the contractor.
- c. Scrutiny of design and drawing for Mahespur CHP, BCCL with Rapid loading Silo of capacity 3000 tonne, Ground Bunker, Receiving pit with Gyratory Crusher ,associated conveyor Structures and associated civil /structural and infra-structure facility - total 100 Nos. of drawings were approved/ commented based on the scrutiny of the design documents/ drawings submitted by the contractor.

4.2 ELECTRICAL AND MECHANICAL ENGINEERING SERVICES

4.2.1 Mine Planning (Infrastructure)

- (i) Outside Consultancy
 - Mine Planning for Dongri Buzurg, MOIL
- (ii) CIL Projects
 - Samleshwari OCP Expn, MCL
 - Hura 'C', ECL

4.2.2 Coal Handling Plant

- Amlohri Phase-II CHP (6.0 Mtpa): Scrutiny/ approval of Design & Drawings submitted by Turnkey contractor M/S L&T and Project

monitoring for construction of Amlohri Phase-II CHP is going on.

- Krishnashila CHP (4.0 Mtpa): Scrutiny/ approval of Design & Drawings submitted by Turnkey contractor M/S HEC and Project monitoring for construction of Krishnashila CHP is going on.
- Block-B CHP (3.5 Mtpa): CMPDI intends to implement e tendering system in the contracts related to Turnkey execution. Accordingly modalities are under finalization.
- Jayant Interim CHP (5.0) Mtpa CMPDI intends to implement e procurement system in the contracts related to Turnkey execution. Accordingly modalities are under finalization.
- Nigahi Phase II CHP (5 Mtpa): Draft Tender document submitted to NCL. NCL proposed to shift receiving pit location. After receipt of detailed survey for changed location from Nigahi project NCL final Tender document will be submitted.

4.2.3 FBC Based Power Plant

Planning of FBC based power plants utilizing washery rejects for the following Project Reports:-

- i) Sanghmitra OCP (15 MTY), CCL
- ii) Topa Expansion OCP (5.25 MTY), CCL
- iii) Mahendra OCP (4.0 MTY), CCL

Conceptual Report for FBC based power plant at:-

- i) Basundhara Washery (Recast), MCL (2 X 125 MW TPP for 10 MTY washery).
- ii) Jagannath Washery, MCL (2 X 40 MW TPP for 10 MTY washery)

4.2.4. Energy Audit and Benchmarking

- Reports on annual benchmarking of diesel consumption of 70 identified OCPs of CIL
- Report on Electrical Energy Audit and Benchmarking of
 - i) Khadia OCP, NCL
 - ii) Kakri OCP, NCL
 - iii) Damini UG Mine, SECL
 - iv) Bagdewa UG Mine, SECL
 - v) OC - 4 UG Mine, MCL.
- Report on Power Factor Improvement of Ib Valley Coalfield, MCL.

4.2.5 Power supply and distribution & control system

- i) Scheme and NIT for construction of 220/33kV Kaniha Substation, MCL.
- ii) Scheme for Augmentation of Belpahar Substation, MCL.
- iii) Scheme for Augmentation of Samleshwari Substation, MCL
- iv) Scheme for power supply augmentation for corporate office of MCL and associated township.

4.2.6 Inspection Services

CMPDI continued Third Party Inspection services for pre-dispatch of equipment and materials purchased by various subsidiaries of CIL. Total revenue earned from these services was 2.23 crores during 2012-13.

4.2.7 Other Studies

- Detail diesel benchmarking for Tapin North Project of CCL
- Study on improvement of specific diesel consumption of MCL mines
- NDT of 5 Winder Components, 4 Draglines, 9 Shovels, 13 Structural Columns, CHP & Feeder Breakers, 15 Dumper and 4 CSG.
- Scheme and NIT for Fire Detection & Fire Fighting in UTLS, Lakhanpur, MCL
- Scheme and NIT for Fire Detection & Fire Fighting in Jurabaga 132kV Substation, MCL.
- Study of eco-friendly transport system for different subsidiaries of CIL

4.3 TOWN ENGINEERING SERVICES

Following are the list of competed and running works under Special repair, Capital works and CSR works in 2012-13 in Town Engg Department of CMPDI,HQ.

COMPLETED WORKS

SL. No.	Name of works	Work value (Rs. In Lakh)
1.	Repair and maintenance of boundary wall of CMPDI colony and misc dev works	65.42
2.	Misc repair and maintenance work at CWS CDS and its premises at NTS Barkakana	76.52
3.	Roof top rain water harvesting of balance Qtrs and balance service building at CMPDI	44.76
4.	Creation of Lecture hall at STC building and development of its surrounding areas at CMPDI	170.76

SL. No.	Name of works	Work value (Rs. In Lakh)
5.	Providing and fixing curtains at old office, R&D and CPEI building at CMPDI, HQ	3.13
6.	Supply installation of Electromagnetic flow metre at CMPDI HQ	2.32
7.	Replacement of feeder panel for JSEB power supply and DG power supply at CMPDI,HQ	32.66
8.	Spl electrical repair and maintenance of residential area at CMPDI,HQ	47.12

ONGOING WORKS

1.	Spl electrical repair and maintenance for Non resid area at CMPDI,HQ Ranchi.	49.16
2.	Spl electrical repair and maintenance (LED Light) at CMPDI,HQ Complex	48.49
3.	Construction of boundary wall , repair of damage drains drains, construction of dust bin and repair of nallah at NTS Barkakana	65.48
4.	Extension of Store shed and renovation of existing shed at at CMPDI,HQ HQ Ranchi.	36.41
5.	Renovation of park near STP and old office and extension and renovation of Hill park at CMPDI HQ Ranchi.	74.56
6.	Refurbishing of Library and publication department at CMPDI, HQ Ranchi	63.45
7.	Development and logistic support in cmp division and renovation of opencast division.	58.30
8.	Repair of roof of residential and service buildings at CMPDI, HQ Complex	91.75
9.	Construction of three rooms at Birsa high school and and other works at Hathia Gonda and Patra Gonda Village under CSR Scheme.	47.22
10.	Installation of two No bore well with hand pump at nearby villages under CSR Scheme	1.04

5.0 RESEARCH & DEVELOPMENT PROJECTS

5.1 R&D PROJECTS UNDER S&T GRANT OF MINISTRY OF COAL

The R&D activity in Coal sector is administered through an Apex body namely, Standing Scientific Research Committee (SSRC) with Secretary (Coal) as its Chairman. The other members of this Apex body include Chairman of Coal India Limited (CIL), CMDs of CMPDI, Singareni Collieries Company Limited (SCCL) and Neyveli Lignite Corporation (NLC), Directors of concerned Council of Scientific & Industrial Research

(CSIR) laboratories, representatives of Department of S&T, Planning Commission and educational institutions, amongst others. The main functions of SSRC are to plan, programme, budget and oversee the implementations of research projects and seek application of the findings of the R&D work done.

The SSRC is assisted by a Technical sub-committee headed by CMD, CMPDI. The committee deals with research proposals related to coal exploration, mining, mine safety, coal beneficiation & utilization and also the project proposals on mine environment and reclamation.

CMPDIL acts as the Nodal Agency for co-ordination of research activities in the coal sector, which involves identification of Thrust Areas for research activities, identification of agencies which can take up the research work in the identified fields, processing the proposals for Government approval, preparation of budget estimates, disbursement of fund, monitoring the progress of implementation of the projects, etc.

Total no. of S&T projects taken up (till 31.03.2013) - 378

Total no. of S&T projects completed (till 31.03.2013) - 305

Physical and financial performance during 2012 -13

A. Physical performance

The status of Coal S&T projects during 2012 -13 is as follows:

Projects on-going as on 01.04.2012	-	14
Projects sanctioned by Gol during 2012 -13 (Annexure-A)	-	04
Projects completed during 2012 -13 (Annexure-A)	-	03
Projects on-going as on 01.04.2013	-	15

B. Financial status –

Budget provisions and actual expenditure are shown below:

(₹ in Crores)

2011 -12		2012 -13	
RE	Actual	RE	Actual
10.62	9.64	11.40	11.53

5.2 CIL R&D Projects

For in-house R&D work of CIL, R&D Board headed by Chairman, CIL is also

functioning. CMPDI acts as the Nodal Agency for processing the proposals for CIL approval, preparation of budget estimates, disbursement of fund, monitoring the progress of implementation of the projects, etc.

In order to enhance R&D base in command areas of CIL, the CIL Board in its meeting held on 24 March 2008 has delegated substantial powers to CIL R&D Board and also to the Apex Committee of the R&D Board. The Apex Committee is empowered to sanction individual R&D project up to ₹ 5.0 Cr value with a limit of ₹ 25.0 Cr per annum considering all the projects together and CIL R&D Board is empowered to sanction individual R&D project up to ₹ 50.0 Cr.

So far, 69 projects have been taken up under the fund of CIL R&D Board out of which 41 projects have been completed till March 2013. The status of CIL R&D Projects during 2012-13 is as follows:

i)	Projects on-going as on 1.4.2012	:	24
ii)	Projects sanctioned during 2012-13	:	05
(Annexure- B)			
iii)	Projects completed during 2012-13	:	06
(Annexure-B)			
iv)	Projects on-going as on 1.4.2013	:	23

Total disbursement of fund to CIL R&D projects during 2012 -13 is Rs. 11.22 Cr and Rs. 5.94 Crore was disbursed against the projects being implemented by CMPDIL.

Annexure-A**S&T Projects funded by Ministry of Coal sanctioned during 2012-13**

(₹ in Lakh)

Sl.No.	Name of the Project.	Total Approved Cost
1	Development of Tele robotics and remote operation technology for underground coal mines Project Code-MT(Eol)/162 Imple. agencies: - CMERI, Durgapur, CIMFR, Dhanbad & CMPDI, Ranchi	440.12
2	Enhancing life of de-watering pipes in coal/lignite mines by prevention of erosion-corrosion with nano-crystalline surface engineering treatments Project Code : MT/163 Implementing Agency: NLC, Neyveli & NITT, Trichirappalli	293.99
3	Blast design and fragmentation control – key to productivity Project Code : MT/164 Impl Agencies : CIMFR, Dhanbad	303.86
4	Modeling of airborne dust in opencast mines Project Code:EE/43 Impl. agencies: NIT, Surathkal	77.04

S&T Projects funded by Ministry of Coal completed during 2012-13

(₹ in Lakh)

Sl.No.	Name of the Project	Total Approved Cost
1	Development and optimization of coal bed recofery process for CO ₂ sequestration Project Code-CE/29 Imple. agencies: - ISM, Dhanbad	26.98
2	Treatment of acid mine water generated in Indian coal mines using low cost material Project Code : EE/41 Implementing Agency: CIMFR, Dhanbad	44.17
3	Emission from coal – based industries-development of predictive models. Project Code : EE/42 Impl Agencies NEIST, Jorhat	82.46

Annexure-B**R&D Projects funded by CIL sanctioned during 2012-13**

(₹ in Lakh)

SI No	Name of the Project.	Total Approved Cost
1	Design and development of an integrated system for monitoring and control of man and machine, to enhance safety and security in mines. Project Code-CIL/R&D/1/52/2012. Impl. agencies: - CIMFR, Dhanbad, Aryan IT Solutions(AITS), Dhanbad and CCL, Ranchi	437.29
2	Studies on shrinkage swelling characteristics of some Indian coal to ascertain recoverability of CBM from deep seated coal and shale resources. Project Code : CIL/R&D/1/53/13 Impl. Agencies: CBM Cell, CMPDI, Ranchi and IIT, Kharagpur	182.60
3	Development of Rubber Compound and Repair Techniques for Trailing Cables of Underground Mining Machines Project Code: CIL/R&D/1/54/2013 Impl Agencies : IIT, Kharagpur and ECL	187.84

SI No	Name of the Project.	Total Approved Cost
4	Research and development on efficient energy management pilot study and action plan. Project Code: CIL/ R&D/1/55/2013 Impl. agencies: Indian Institute of Social Welfare and Business Management (IISWBM), Kolkata and DFIC Management Consultants Pvt. Ltd., Kolkata.	66.19
5	Development of Dynamic GIS enabled Forward Cost Modeling (FCM) of land reclamation, control and monitoring of acid mine drainage problems in the context of continuation and expansion of the coal mining in Assam – an ICT based Environment Management Approach. Project Code: CIL/ R&D/4/07/2013 Impl. agencies: Birla Institute of Technology, Mesra, Kolkata Campus, Southern Conclave, Kolkata	95.68

Contd. Annexure-B**R&D Projects funded by CIL completed during 2012-13**

(₹ in Lakh)

Sl. No.	Name of the Project	Total Approved Cost
1	GPS based production reporting system in OCP Project Code: CIL/R&D/1/33/09 Implementing agency : Systems Department, CMPDI	54.00
2	Development of CMPDIL capacity for delineation of viable coal mine methane (CMM)/ Abandoned mine methane(AMM) blocks in the existing and would be mining areas having partly de-stressed coal in virgin coal seams. Project Code: CIL/R&D/1/28/08 Implementing agency : CMPDI	522.00
3	Generation/ analysis of coalfield wise database of physico-mechanical characteristics of rock/ coal and representative numerical models for appropriate solution to strata control problems. Project Code: CIL/R&D/1/36/10 Implementing agency : UMD Deptt., CMPDI	241.80
4	Development of guidelines for safe dragline dump profile under varying geo-engineering condition in opencast coal mines of Coal India Project code :CIL/R&D/1/38/10 Implementing agency : BIT, Mesra and CMPDI, CMPDI, Ranchi.	98.07
5.	Eliminating the possibility of ignition of gas and incidences of explosion in underground coal mines due to electrical faults by application of innovative technology of fault diversion Project code :CIL/R&D/1/44/10 Implementing agency: Internal Safety Organization (ISO), CIL, Kolkata & Society for Mining Research Sustainable Development and Environment, Kolkata.	11.022
6.	Development of Indigenous tool for carrying out Random Sampling & Testing of Explosives and Accessories used in mines of Coal India Limited. Project code - CIL/R&D/1/50/2012 Imple. Agency : Blasting Cell, CMPDI(HQ), Ranchi and IIT, Kharagpur	428.06

6.0 LABORATORY SERVICES**6.1 Chemical Laboratory**

Characterization study of coal core samples were carried out for 32 blocks explored by CMPDI studies during the year 2012-13. A total 15356 m of coal cores was processed

and 44061 nos. of samples were analyzed for quality evaluation and their downstream utilization. Under the project “Augmentation of capacity of coal core analysis at CMPDI (HQ)” all imported & indigenous equipments have been procured and commissioned.

6.2 Coal Petrography Laboratory

During the year 2012-13 the laboratory has undertaken. Petrographic study on 765 coal samples from 32 exploration blocks have been carried out. Systematic characterization of raw & clean coal samples (Bore Hole coal core and ROM samples) from BCCL, CCL, MCL, have also been carried out during the year.

6.3 CIL R & D Project:

The Laboratory Service Division has successfully completed on CIL R&D project entitled: “Effective utilization of low rank and low volatile high rank Indian coking coal for BF coke making” in February 2013. It is a CMPDI-RDCIL SAIL joint project. The total outlay of the project is Rs. 265 lakh.

6.4 Technical paper:

One technical paper entitled “Coal Petrography and beneficiation studies of low volatile high rank coals of Damodar Valley Basin: Implication for augmentation of coking coal resource in India” was presented in the 34th International Geological Congress at Brisbane, Australia from 5th to 10th August 2012.

6.5 Subsidence Prediction and Calculation Studies

Bulk/LD/Permitted (PF)

One sample for first 200 tonnes and subsequently for every 300 tonnes are additional one samples to taken.

Detonator

One sample for every 5 lakhs samples

DF

One sample for 1 lakh meter

Cord Relay/MS Connector

1 sample for every 2.5 lakh No. of last year consumption.

Nonel

1 sample for every 1 lakh meter of last year consumption

Booster

2 samples in each quarter

6.6 Coal Preparation Laboratory

1. Washability Test of Coal Samples of Bore Holes

- a) CTMN, Mahanadi block, MCL- 185, 188, 191, & 192 (05 samples)
- b) CMBB, Banapatra block, MCL – 301, 302, 303 & 304 (07 samples).
- c) CMRE, Ramgarh block, CCL – 66, 66A, 66B, 68, 68A, 68B (09 samples)
- d) CMWG, Gauri central block, WCL – 374, 384, 391, 392 & 398 (03 samples)
- e) MGPW – Gare Pelma Block (06 Samples)
- f) CMBMW, Mandwa block, WCL – 57, 59, 60, 69 & 81. (01 sample)
- g) CMIP, Prajapara block, MCL -107, 111, 115, 118 & 121 (10 Samples)

2. Testing of RoM Coal Samples from

- a) N-S Tisra Mines, BCCL for Bhojudih washery.
- b) Proposed Moonidih washery.

3. Flootation test and Sieve analysis for Thickener underflow at Sawang washery, CCL.

6.7 Coalbed Methane (CBM) Laboratory

CBM Lab has carried out the field

desorption study at the borehole sites in 8 boreholes during 2012-13 and has generated total gas content and gas composition data under PRE funding. In addition, studies have been carried out in 4 boreholes for assessment of shale gas potentiality.

CBM lab has also carried out Adsorption Isotherm (AI) test on 46 numbers of samples through the in-house facility created in CMPDI in addition to carrying out TOC test in 16 numbers of samples.

The lab has also carried out analysis of 928 mine air samples received from different collieries of CCL and the results have been submitted.

7.0 ENVIRONMENTAL SERVICES

7.1 EIA / EMPs

During the year 2012-13, Environment Department prepared a total of 30 nos. of Form-1 and formulated 29 nos. of Draft EMPs.

7.2 Environmental Monitoring of Air, Water and Noise

Once MoEF accords the environmental clearance to the mining projects, routine environmental monitoring is required to ascertain the efficacy of the pollution control measures taken at the project level during the operation.



Figure 1: Analysis of Water Samples at Environment Lab

During the year 2012-13, environmental monitoring of 289 projects/ establishments of CIL (ECL-30, CCL-60, WCL-81, SECL-80, NCL-13 and MCL-25) were carried out through nine environmental laboratories located at Asansol, Nagpur, Bilaspur, Kusunda, Hasdeo, Jayant, Talcher, Ib Valley and Ranchi.

7.3 Accreditation to CMPDI as EIA Consulting Organisation

CMPDI has been accredited as EIA Consulting Organisation by Quality Council of India (A ministry of Environment & Forest's designated agency) for Mining of Minerals including Opencast/ Underground mining sector and Coal Washeries sector.

7.4 Establishment / Upgradation of Environmental Laboratory

Adhering to the practice of adopting the state-of-the-art environmental monitoring, a Scheme of environmental laboratory for Regional Institute-II, Dhanbad has been prepared.



Figure 2: A View of Environment Lab at CMPDI, HQ

Schemes of environmental laboratories, approved by CMPDI Board, for Regional Institute-I, Asansol and Regional Institute-VII, Bhubaneswar have been taken up and in progress. The up gradation of RI-VI laboratory at Jayant has also been taken up and is in progress.

7.5 ETP & WTP for Coal Projects

Two Schemes for Effluent Treatment Plant (ETP) for Balram OCP of MCL and Integrated Block-B (revised) of NCL have been prepared. A Scheme for Water Treatment Plant (WTP) of 0.8 MGD cap for Kathara OCP of CCL also has been prepared.

7.6 Base Line document for Fly Ash Utilisation in Coal & Mining sector

Draft Base Line document for “Fly Ash Utilisation in Coal & Mining sector”, Project funded by FAU, Deptt of Science & Technology, GOI have been prepared.



Figure 3: Glimpses of Fly Ash Utilization in Coal & Mining Sector

7.7 Quick Comments on Mine Closure Plan for Coal Blocks sent by MOC to CMPDI

Quick comments on 44 nos. of mine closure plans were prepared and sent to MOC during the year.

7.8 Slope Stability / Soil Erosion Control Studies

Requirement of slope stability study for OC mines and the requirement of soil erosion control study is one of the conditions of the environmental and forestry clearances issued by Ministry of Environment & Forests, Government of India. Accordingly, 7 nos. slope stability study and determination of ultimate slope angle of high wall were completed.

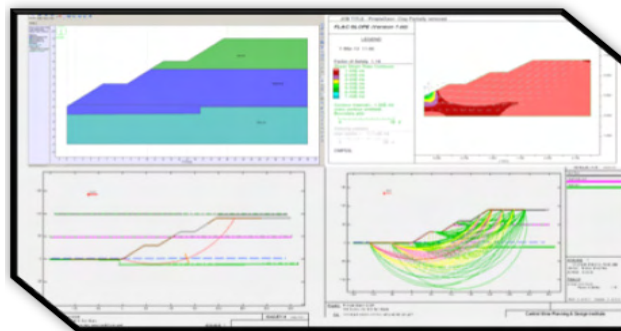


Figure 4: Slope Stability analysis of OB Dump at Pimplegaon OCP using FLAC & GALENA

Besides, 4 nos. of soil erosion control studies of CCL projects and 2nos. of Top Soil Management of CCL projects were also completed.

7.9 Celebration of World Environment Day



Figure 5: Drawing Competition for children held on 5th June, 2013

The World Environment Day was celebrated on 5th June, 2012.

A number of programmes viz. drawing competitions for children, quiz competition, plantation programmes and guest lecture were organized to create awareness amongst employees of CMPDI.

7.10 Sustainable Development

As per DPE Guidelines, CMPDI has taken up five projects for sustainable development, three from Schedule A and

two from Schedule B. These projects are meant to achieve Water Conservation (By way of Rain Water Harvesting at CMPDI (HQ), Ranchi), Energy Conservation (by replacing existing conventional tube-lights with T-5 fittings), Satellite Surveillance of Major OC projects / mines of CIL for land Restoration & Reclamation. All these projects have been successfully completed at CMPDI headquarters.



Figure 6: View of Sustainable development projects carried out by CMPDI

A one day Workshop on Sustainable Development (SD) was organized at CMPDI on 23rd March, 2013 for fulfillment of a project under Schedule B of DPE guidelines.



Figure 7: Workshop on Sustainable Development held on 23rd March, 2012

This workshop was focused on discussing various facets of sustainable development specifically in relation to mining industry and to increase awareness of employees and other stakeholders on the work which is being done under sustainability head at CMPDI.

7.11 S&T Projects

A S&T project titled “Fly Ash Characterization for Mine Void Reclamation”, approved by Ministry of Coal at an estimated cost of Rs 287.684 lakhs has been submitted.



Figure 8: Glimpses of Fly Ash disposal in SoutBalanda Mines of MCL

7.12 Technical papers

Following two technical papers were contributed/ presented:

- A. K. Debnath, Dr. V.Arora, “Coal India’s Sustainable” at MGMI, 17th Nov 2012.
- A. K. Debnath, V.K.Pandey, Ms Monika Agarwal, “Mine Void as fresh Water Reservoir-An Eco-friendly concept of Coal India Ltd” at World Mining Congress’2013, Montreal, Canada to be held in Aug’2013.

8. INFORMATION & COMMUNICATION TECHNOLOGY

In addition to providing in-house support, ICT Division CMPDI has been extending consultancy services to CIL and subsidiaries. Some of the major jobs during Financial Year 2012-13 are given below:

1. Web enabled Executive Information System for CIL and subsidiaries has been developed and maintained by

- ICT division to facilitate establishing a system for managing Executive related HR information. During financial year 2012-13 Manpower report (Company wise, Discipline wise, Grade wise - Sanctioned Strength, Working Strength, Vacancy Position) generated using EIS has become the accepted reporting mechanism in CIL. This along with the Retirement Profile is being used for carrying out the Manpower Planning exercise at CIL.
2. Web enabled On-Line recruitment application portal has been a successful project developed under consultancy for Mahanadi Coalfields Limited, Sambalpur & ECL Sanctoria. This is tool for Recruitment Division to accelerate the direct recruitment process for non-executive employees governed by NCWA.
3. Online recruitment, e-recruitment, or web based recruitment is the use of online technology or the internet to attract candidates, searching for the talented candidates and aid the recruitment process. A job vacancy advertisement on a job board or website is there 24 hours a day, 7 days a week.
4. Vendor Bill Tracking & Vigilance Complaints for MCL.
5. Coal Consumer Complaints for MCL.
6. Annual Property Returns NCL.

8.1 INFORMATION MANAGEMENT SYSTEM

In context to the above, the different activities/jobs pertaining to the publication department is as follows:

1. Publication of Deshkal Sampada – 4 issues of our in-house magazine have been published during the year. This includes editing, DTP work, layout and publication of the magazine.
2. Publication of Minetec- 4 issues of our technical magazine 'Minetec' have been done during the year. This includes editing, DTP work, layout and publication of the magazine.
3. Dispatch of magazines - Dispatch of approximately 14000 copies of the magazine to different places like MoC, CIL & subsidiary HQs and units etc.
4. Publication of book - Work order placed to CCL Press for publication of book titled 'Coal- Its Properties and Characterisation'.

8.2 VIGILANCE

Summary of activities taken up by Vigilance Department, CMPDI during 2012-13

For 2012-13, Vigilance Department, CMPDI had set for itself a target to adopt a more proactive approach as against punitive vigilance, leveraging technology, computerization of major activities and creating awareness to plug loopholes in the system through increased and active participation of all stakeholders.

Towards this end, the major tasks accomplished during the 2012-13 fiscal are as follows:

1. Introduction of online Integrated Vigilance Information System to facilitate instant generation of MIS reports to be submitted to CVC, Ministry of Coal, Coal India etc, prompt issuance of vigilance clearance reports
2. Implementation of online bill tracking system, on the initiative of the Vigilance Department, ; Trial runs have commenced to ensure that First In First Out system is followed for payment of bills of suppliers/ contractors
3. Implementation of E tendering for high

value tenders have been commenced and trial runs are underway, on the initiative of the Vigilance Department,

4. Effective steps have been initiated to update all provided fund records of all CMPDI employees with the ultimate aim of ensuring that retiring employees are paid all their superannuation dues on the day of their superannuation and pension payments can commence immediately thereafter;
5. Online reporting of daily drilling meterage has already been successfully implemented, on the initiative of the Vigilance Department and efforts are underway to implement online e logging data so that the quality of drilling data can be visualized;
6. In course of examination of files pertaining to procurement of drilling accessories, it was observed that inventory management needs to be improved. Exploration Division, CMPDI has assured that this aspect will be studied in detail and corrective measures initiated to reduce carry forward of high value stores from year to year while at the same time ensuring that drilling activities are not hampered for want of spares ;
7. A manual of Standard Operating Procedures has been drawn up, on the initiative of the Vigilance Department, to ensure that all activities relating to outsourced drilling conform to NIT provisions ;
8. Systems study of CHP contracts were undertaken for Amlohri, Krishnshila and Block B of NCL were undertaken highlighting problems faced in execution of turn key contracts vis a vis existing provisions of CIL Contract Management Manual (CMM). Suggestions were also made to explore possibilities of amending CMM in keeping with the requirements.

9.0 SPECIALISED SERVICES

9.1 GEOMATICS

Geomatics Division provides services in Remote Sensing and Surveying in the field of excavated overburden measurement, satellite surveillance for land reclamation monitoring, land use mapping. Siting of power stations, topographical survey, underground correlation survey etc.

9.1.1 REMOTE SENSING

- (i) Satellite surveillance of 50 OC projects producing >5 million cu.m. (coal+OB) and 40 OC projects producing <5 million cu.m. (coal+OB) have been completed based on the satellite data of the year 2012.
- (ii) Vegetation cover mapping of following coalfields have been completed for creating the geo-environmental database for land, vegetation cover, infrastructure, surface water bodies etc. for assessing the impact of coal mining on land use pattern on regional basis in the coalfield.
 - Karanpura coalfield.
 - East Bokaro coalfield.
 - West Bokaro coalfield.
 - Singrauli coalfield.
 - Korba coalfield.
 - Bander coalfield.
- (iii) Siltation study in Govind Ballabh Pant Sagar near Singrauli coalfield completed based on satellite data of the year 2006 and 2011 for assessing the storage capacity as well as source of siltation.
- (iv) Selection of potential thermal power station location in the State of Punjab using satellite data and GIS for Central Electricity, Ministry

- of Power, Govt. of India has been completed.
- (v) Coal mine fire mapping in Raniganj, Jharia, East Bokaro, West Bokaro and Karanpura coalfields based on ASTER Thermal Infrared satellite data have been taken up during the year. Mine Fire Information System (MFIS) is being developed on GIS platform for creating the digital mine fire database and for taking effective decision for mine fire management and for monitoring the latest status of fire.
 - (vi) Land use/cover mapping of core and buffer zone of 12 OC projects based on satellite data have been completed for environmental management planning.
 - (vii) Topographical mapping of 27 major coalfields of CIL on 1:5000 with 2 meter contour interval based on remote sensing technique is under progress in collaboration with Survey of India. Airborne data for 10 coalfields have been acquired and data processing is under progress. Aerial data acquisition for phase-II covering 17 coalfields is scheduled in the month of April 2013.

9.1.2 SURVEY WORK

Following jobs are completed/under progress related with Survey:

- (i) Periodic OBR check measurement of OC mines of CIL subsidiaries as well as outsourcing patches (total 103) are carried out during 2012-13.
- (ii) Coal block boundary demarcation of Coal India Africana Limitada (CIAL) block at Mozambique completed.
- (iii) DGPS survey for coal block boundary demarcation in Nuagaon
- (iv) Abandoned mine survey in CCL command area for mine reclamation.
- (v) DGPS survey for preparation of digital map of forest area for forestry clearance.
- (vi) 32 km profile line survey for geophysical survey in WCL.

9.2 BLASTING

CMPDI has developed technical expertise and capabilities to render value added services in the field of controlled blasting and vibration study, testing of explosives and accessories, fragmentation assessment and improvement study for gainful utilization of HEMM. It has also technical niche in solving Intricate Blasting Problems viz. assimilation and application of new technology/concept, as for example, digital image analysis, cast blasting, induced caving by blasting, blasting in hot strata, structural demolition etc. In addition, R&D/S&T projects related to blasting domain and funded by CIL R&D Board are also under implementation for improvement of production, productivity & safety in coal mines.

Blasting Cell of CMPDI is equipped with the state-of-art equipment viz. High Speed Camera, Data Trap-II for in-the hole VOD measurement, fragmentation assessment and measurement by WipFrag software, Blast simulation by JK Simblast and High frequency Oscilloscope with high sampling rate for carrying out explosive and accessories testing.

Technical services rendered to different subsidiaries of Coal India Limited & outside agencies during 2012-13

1. Digital Image analysis for fragmentation assessment for all mines of NCL.
2. Random sampling & testing of explosives

- and accessories in the mines of CCL
- 3. Random sampling & testing of explosives and accessories in the mines of BCCL
- 4. Controlled Blasting at Bharatpur OCP, MCL
- 5. Controlled Blasting and Vibration study at Balram OCP, Hingula Area, MCL
- 6. Powder Factor determination at ROCP,L-6 hired Patch, BCCL
- 7. Powder Factor determination at ROCP Departmental, BCCL
- 8. Powder Factor determination at Kuya OCP, BCCL
- 9. Study on improvement on specific Explosive Consumption for four mines of MCL
- 10. Powder Factor determination at outsourcing patch of Tapin OCP, CCL
- 11. Powder Factor determination at Bera OCP, BCCL
- 12. Powder Factor determination at Nichitpur OCP, BCCL
- 13. Powder Factor determination at Damagoria OCP, BCCL
- 14. Random Sampling at Neyveli Lignite Corporation

R&D Project under implementation during 2012-13

- 1. Study of Techno-Commercial efficacy of ANFO with Low Density Porous prilled Ammonium Nitrate for blasting in overburden of coal mines in collaboration with Deepak fertilisers & Petrochemicals Corporation limited, Pune.
- 2. Assessment of performance of explosives/ Blast results based on explosive energy utilisation in collaboration with NITK, Surathkal.
- 3. Investigations of Bolt Behaviour in Development and Depillaring Panels

under Blast Induced Dynamic Loading in collaboration with IIT KGP, and SAIL (RDCIS).

- 4. Development of indigenous tool for carrying out Random Sampling & Testing of Explosives and Accessories used in mines of Coal India Ltd. in collaboration with IIT KGP.

9.3 MINING ELECTRONICS

Mining Electronics Division of CMPDI renders services in preparing Feasibility Reports, Detailed Design Reports and Tender Documents for establishing communication network, Telemonitoring of Environmental Parameters for U/G and O/C mines. It also renders valuable services to subsidiary companies in repairing and calibration of methane gas detectors used in underground mines for safety purpose, as well as in repairing of Imported/Indigenous HEMM cards. The department has also undertaken the R&D/S&T Projects for Open Cast and Underground Mines. The following jobs were completed during the year.

9.3.1 Preparation of Reports/Schemes/ NIT

- 1) NIT for Environmental Telemonitoring System of Hirakhand-Bundia, MCL has been submitted.
- 2) MoC approved S&T Project on “Integrated communication system to communicate and locate trapped underground miners”. The field trial for Phase-I and Phase-II is completed and the field trial for Phase-III is in progress at Bhurkunda Colliery, CCL.
- 3) CIL R&D Project on – “Indigeneous Development of Integrated Dumper Collision Avoidance System for Open cast Mine”- Laboratory testing of indigenously developed Prototype is completed at BEL and ready for Field Trial at KDH O/C of CCL.

- 4) Chapters on Electronics & Telecommunication for 28 Nos. of U/G and OCP for inclusion in Project Reports of different subsidiaries of CIL and outside agencies have been prepared.

9.3.2 Repairing/Calibration/Testing of Electronic Cards/Gas Monitors

- 1) Repairing of HEMM cards -162 Nos.
- 2) Repairing & Calibration of Methanometers – 90 Nos.

9.3.3 Special achievements of Electronics for the 2012-13

- 1) Installation of Medium Frequency Communication System in Jhanjhra U/G Mine for both way communications in Disaster Scenario.
- 2) Through-The-Earth Disaster Communication System and RFID tracking system for last known position of miners. Both the systems are under field trial and fully operational at Bhurkunda U/G mine of CCL. Now, it is possible for direct communication between U/G miners and any GSM mobile.

9.4 COAL TECHNOLOGY

A. The following jobs were undertaken during the year under review:

- (i) Technical support to S&T Department for projects funded by MoC/ CIL
- (ii) Technical services to Ministry of Coal / CIL on issues relating to Coal Technology/ Utilisation

B. Implementation of following S&T project is in progress:

“Development of indigenous catalyst through pilot scale studies of coal to liquid (CTL) conversion technology” – Coal S&T job with CIMFR as Principal Implementing Agency

C. Technical papers published:

- (i) One technical paper entitled “Coal

Petrography and beneficiation studies of low volatile high rank coals of Damodar Valley Basin: Implication for augmentation of coking coal resource in India” was presented in the 34th International Geological Congress at Brisbane, Australia from 5th to 10th August 2012.

- (ii) A technical paper entitled “Petrology of coal and lignite of India-Implication for assessment of CBM potentiality was presented in the first International Conference on “Developing unconventional oil & gas resources “ DUOG 2013, 1-3 March, 2013, IIT Madras.

9.5 MANAGEMENT SYSTEM CONSULTANCY

Central Mine Planning & Design Institute Ltd., Ranchi had diversified into consultancy service for implementation of the various management systems way back in 1998. Over the years, it has substantially expanded its capabilities in this field. It now offers consultancy services for a whole bunch of management systems that include ISO 9001 Quality Management System (QMS), ISO 14001 Environmental Management System (EMS), OHSAS 18001 Occupational Health and Safety Management System (OHSMS), ISO 27001 Information Securities Management System (ISMS), ISO 50001 Energy Management System (EnMS), SA8000 Social Accountability Management System (SAMS), application of other management techniques like Six Sigma, and industry specific translations of ISO 9001, eg, ISO 17025, ISO 16949, etc.

CMPDI provides such consultancies through the design and implementation of either the individual management system standards or Integrated

Management Systems (IMS) conforming simultaneously to different management system standards as may be required under various combinations.

CMPDI facilitates creation and documentation of management systems, provides training and auditing support, initial implementation and certification support and post certification support/assessments etc. for all the management systems mentioned above.

9.5.1. Management System Consultancy for CIL and its Subsidiary Companies

Being the nodal setup for all such work in CIL, CMPDI has so far facilitated all CIL subsidiary companies to achieve a total of 349 certifications against ISO 9001, ISO 14001, OHSAS 18001 and SA8000 through in various mines, hospitals, workshops, washery, training institute, etc. Additionally, NCL was also facilitated to achieve 4 company-level certifications of such management systems, viz, ISO 9001, ISO 14001, OHSAS 18001 and SA8000 – this being the first such achievement in the world for a mining company.

9.5.2. Job Completed during 2011-12

Management systems consultancy worth about ₹ 1.29 crores were completed during the year. This resulted into a total 43 management-system certifications – 21 of ISO 9001 re-certifications, 16 of ISO 14001 re-certifications, and 6 of OHSAS 18001 certification.

Integrated certification audits for ISO 9001, ISO 14001 & OHSAS 18001 was conducted for a total of 21 units of BCCL & CCL (19 OCs, 1 CPP, 1UG) during this year.

9.5.3. Work in Progress

Presently, CMPDI is providing Management System Consultancy worth

about ₹ 10.6 crores. This is for 150 new certifications against ISO 9001, ISO 14001, OHSAS 18001, ISO 27001, ISO 50001 and SA8000 in various CIL establishments. This includes all major opencast coalmining projects, major underground projects, various hospitals and HEMM workshops, and also some company-level certifications.

CMPDIL has also started NABH (National Accreditation Board for Hospitals & health Care Services) certification consultancy for CCL Gandhi Nagar Hospital at Ranchi. This will be the first hospital of Coal India Ltd to be accredited with NABH under our consultancy.

10.0 MATERIAL MANAGEMENT

10.1 Disposal of Scrap and Obsolete Items:

The scrap and obsolete items are disposed off on a regular basis based on approved Survey-off Report submitted by different departments and Regional Institutes. Company has a Selling Agency Agreement with M/s. MSTC which facilitate on-line disposal of such items through e-auction. During the year under review, scrap and obsolete items worth ₹ 107.00 lakh have been disposed off against Annual Target of ₹ 100.00 lakh.

10.2 Inventory Control :

There are 55 Nos. Of drills deployed at different sites by the Regional Institutes which are in continuous operations. Consumables like drill rods, core barrel, drill bit, TC bit etc. are regularly required during the operation of the said drills. Hence, sufficient stock of these items has to be maintained to ensure continuous operation. As a part of inventory control, supply orders are placed for consumables with phased delivery to avoid building-up of inventory. The inventory as on 31.03.2013 was valued to ₹ 583.17 lakh

as against ₹ 648.00 as on 31.03.2012. Hence there is decline in inventory. The inventory is mainly comprising of drill rod, casings, drill bit, core barrel, Tungsten Carbide (TC) bit etc. The inventory also consists of accessories and consumables for 4 Nos. Hydrostatic Drills added in the fleet during 2012-13. This inventory will be consumed in due course before supply of fresh lot of items.

10.3 Procurement related to different Laboratory items:

As per CMPDI's Plan, Laboratory was expanded to include additional tests at CMPDI(HQ) and Regional Institutes. 17 new instruments were added in the lab during 2012-13 which has enhanced the capability of Laboratory to take up new jobs.

10.4 Purchase of items related to Drilling:

Purchase of drills, its accessories and consumables in time is essential to meet the drilling target of CMPDI. All indents received for these items have been finalized on priority to ensure that the Regional Institutes do not have shortage of either drills or consumables which could impede the drilling target. The items required by Regional Institutes were made available to them in time and there have no instance of any complaint from any of the drilling cap regarding

non-fulfillment of their requirement. There was sufficient stock of the items to take care of continuous operation.

10.5 Purchase of Drill Machines:

During 2012-13, 05Nos. Mechanical Drills were received and order was placed for 04 Nos. of Mechanical Drills. These drills will be received in 2013-14.

10.6 e-Procurement of goods:

All the tenders for purchase of goods above ₹ 10.00 lakh are being finalized through e-tendering. In addition, as per directives of Govt. of India all the tenders, irrespective of value, are being hosted on the website of CMPDI as well as Central Public Procurement Portal for information.

10.7 e-Procurement of Works and Services:

CMPDI has started e-procurement of Works and Services through MCL portal. As of now tenders related to Drilling outsourcing contracts and Supply, Installation and Commissioning of Central Air-conditioning Plant for Regional Institute-VII office building at Bhubaneswar has been taken up. In due course all tenders related to turnkey contracts for CHP and Coal Washeries and Civil Work will be done through electronic procurement system. This facility will be extended to the Regional Institutes by July, 2013.

11.0 HUMAN RESOURCE DEVELOPMENT

During the year 2012-13, exposures were given to CMPDI employees in the following major areas:

Major Area	STC	IICM	External	Foreign	Total
Managerial	133	23	29	0	185
Technical/Functional	229	74	147	7	457
Cross Functional	217	29	15	0	261
Total	579	126	191	07	903

Special exposures were given to our executives in the following areas:

Foreign training

During the year 2012-13, total 07 nos. of executives from CMPDI had visited foreign countries for attending Seminars / Conferences / Trainings.

External training

Every year quite a good number of executives are being sent to different institutions / places for attending Training, Conference, Workshop, Symposium etc. This year 191 nos of executives and non-executives have attended programmes at different places in India. Nominations are generally made by the Head of the Divisions of HQ / Regional Directors of Regional Institutes and approved by CMD / Director as per the need of the company.

Some of the topics on which executives have attended the Training, Workshop, Seminar, Conference etc at external organization are listed below :

- GRIHA Evaluators and Trainers Workshop.
- 9th Advanced Executive CDM Training Programme (AECTP) .
- Personality Development Programme.
- Water Resource Management and Conservation.
- Mine Planners Seminar with Surface Miners.
- MGMI Paper Session.
- Annual Seminar and co-ordinator's meet of WIPS by CIL, Kolkata.
- Seminar on "Emerging Usages of the GIS Technology in Mining".
- Short Term course on "Land Acquisition and rehabilitation and resettlement of Project affected people".
- Fundamentals of Project Management Professional.
- Surface Miners-An Innovative Technology for a Mineral Sector-2nd International Conference.
- All India Conference of Chartered Accountants.
- International Gas Hydrate Workshop at IIT, Madras.
- Workshop on Waterproofing for tunnel and underground Structures.
- Third Shale Gas India 2012.
- Training Program on "Application of FLAC to Mining Problems".
- 3 day event on "Mining, Exploration, Convention & Trade Show(Mining Mazma 2012)".
- Energy & Environment Committee of Bengal Chamber, Annual Environment & Energy Enclave.
- Gemcom Mining Technology Seminar.
- Application of Statistics in ground water data analysis.
- Workshop on Increasing Production and Productivity in Coal, Power, Steel and Allied Sectors.
- Workshop for Carbon and Water Footprints.
- Analysis of Pumping test data.
- ASNT Pasonic Testing Level II Course & Exam.
- Clean Coal India 2012.
- 40th National Convention of Company Secretaries.
- Indian Conference on mine surveying.
- Professional development for executive secretary.
- Submission of abstract in a national

- conference on environment and biodiversity of India.
- 13th International symposium on environmental Issues & waste Management in energy & Mineral production.
 - 6th World Aqua Congress International Conference on Water.
 - Emerging Issues in Management of Taxation.
 - Sustainable development of energy sector challenges ahead.
 - 4th Coal Summit 2012.
 - Training course on conjunctive use of Surface & Ground water.
 - Application of Surface Geophysical Techniques for Aquifer Mapping.
 - 10th International Symposium (Workshop Flagblast - 10) on Rock Fragmentation by Blasting.
 - VIth World Aqua Congress International congress on water.
 - Five days course on "Evaluation of water resource and management".
 - Pee Symposium Tutorial on LIBAD Technology and its applications.
 - Submission of abstract in a national conference on environment and biodiversity of India.
 - International Training program on Air pollution modeling.
 - National Seminar & Exhibition on Non-Destructive Evaluation (NDE-2012).
 - Regional Meet of the Forum of WIPS: Eastern region.
 - Leadership Skill Development program.
 - Regional Meet of the Forum of WIPS: Eastern region.
 - International workshop on exploration & exploitation of shale gas.
 - 13th ESRI India users conference 2012.
 - Corporate social responsibility.
 - National Seminar on "Safety, Security and recent trends in explosives".
 - Symposium "Geospatial for coal mining" and be a Government partner of India geospatial Forum 2013.
 - Seminar on XBRL and Indirect Taxation.
 - Errors & Approximation in Air pollution Monitoring & Analysis.
 - Research Methodology & data Analysis.
 - World petro coal congress 2013.
 - HI power workshop on CSR .
 - National seminar CPT 2013 ,Recent trends and future needs in coal preparation.
 - 10th Directors Training Program for Accelerating Professionalization of the boards of CPSE's.
 - Workshop on achieving performance excellence .
 - Indian Mineral congress & exhibition sustainable mineral development Integrating CSR and Elogical restoration vision 2050.
 - 23rd National Meet of forum of women in Public Sector (WIPS).
 - Management of R& D projects.
 - Environmental Data interpretation, compilation, analysis presentation and reporting.
 - Induction Level training Course.
 - Developing Executive Secretary personal Assistants & office Staff for future.

- Training of Trainers on Youth & Human Rights.
- International Conference on Developing non-conventional oil & gas resource-2016.
- Solar power professional workshop.

Training at IICM

Every year HRD Division nominates large number of senior and middle level executives for training at IICM as per IICM's calendar programme. Nominations are being made as per the recommendation of different Head of the Divisions & Regional Directors, based on the requirement of company & customer need.

At IICM, 126 numbers of executives have been trained in 2012-13.

Some of the topics are listed below:

- Vigilance Awareness.
- Training for Internal Audit.
- Program for system (Auto Cad).
- Computer Basics for Senior Executives.
- Corporate Social Responsibility.
- Earth Moving Equipments.
- EIS Review Meeting.
- Enterprise Resource Planning.
- Environment Sustainability & Inclusive growth in coal sector.
- Right to Information Act-2005.
- General Management Programme.
- Functional cum Managerial Awareness Programme.
- Goods, Service Tax and Direct Tax Code.
- Functional cum Managerial Awareness Programme.
- Project Management for Coal Companies.
- General Management Programme.
- Functional cum Managerial Awareness Program.
- Coal Preparation Head.
- Functional skill program for system (LINUX & N/W).
- General management program.
- Outsourcing Emerging Issues.
- Functional Skill Program for Mines Safety.
- Functional cum Managerial Awareness Programme.
- Advanced Management Program.
- Earth Moving Equipments.
- Self Management of Excessive Tension.
- Project Management for Coal Companies.
- SP:Land Acquisition & R&R.
- Functional Skill Program For Mining Engineering.
- ISO 9001 QMS Lead Auditor Training.Course For MCL.
- Functional Cum Managerial Awareness Program (E&M).
- Functional Skill Program For E&M Engineering.
- Environment Sustainability & Inclusive growth in coal sector.
- Seminar on Transparency in Public Procurement.
- Program on contract Management.
- Leadership Development Program.
- Enterprise Resource Planning.
- Preparatory Program for retiring executives.
- Training for Internal Audit.
- EIS Review Meeting.

- General Management Program.
- Workshop On Total Cost Management.
- Self Management of Excessive Tention.

Training at Staff Training College

Training of non executives and CMPDI specific training of executives are being organized at STC. A total of 579 executives and non executives have attended training, workshop etc. at STC during 2012-13.

Apart from the regular Training Programmes, such as : Functional & upgradation of Technical Skill/ Knowledge for MT(Geology, Geophysics), special technical program on “Minex Software” was also organized for the executives at STC, CMPDI as per the need of the company.

Major areas of Training / Workshop were the following :

- Upgraded Version of Liscard .
- Upgradation of Technical Skill for MT(Geology) and MT(Geophysics.).
- Integrated Internal Auditing (ISO 9001 QMS + ISO 27001 ISMS).
- हिन्दी कार्यशाला
- Training Prog for MT(Geology and Geophysics) for functional and Upgradation.
- Stress Management.
- Systematic Application Of Drilling Equipments/Accessories, Mud and Additive application in Diamond Core Drilling.
- AutoCAD and Surfer for carrying out AQIP.
- Training Prog for MT(Geology) for Upgradation of technical knowledge
- Functioning and Application of

DGPS.

- Training for ICRIS Team at STC.
- Yoga and Stress Management (Male).
- Yoga and Stress Management (Female).
- Minex Software.
- 2 day workshop on drilling practices.
- Hindi Karyashala.
- WIPS Seminar.
- Organisational Culture Building Initiative.
- Awareness on Personal Competence record & Data Analysis.
- Awareness Program on Enhancement of Exploration capacities of CMPDI.
- Balance Score Card.

Training at CMPDI for students of different Institutions

As a Corporate Social Responsibility, training of the students of various institutions are being organized by HRD Division at different divisions of CMPDI. Total 107 numbers of students have been trained at CMPDI in 2012-13. The students have undergone these Trainings / Project works for 7 days to 2 months. After completion of training / Project, HRD Division has issued certificates for successful completion of Training / Project.

The institutions approached for training are :

1. Indian Institute of Technology, Kharagpur.
2. Indian School of Mines, Dhanbad.
3. BIT, Mesra.
4. NIPM, Kolkata.
5. SRM University, Chennai.
6. PDGE, Nagpur.
7. MIT, Manipal.

8. BHU, Varanasi.
9. IIPM, New Delhi.
10. Asansol Engineering College, Asansol.
11. KIIT, BBSR.
12. Ranchi Women's College, Ranchi.
13. St. Xaviers College, Ranchi.
14. IIT, Varanasi.
15. VIT, Vellore.
16. NITK, Surathkal.

12.0 OUTSIDE CIL CONSULTANCY

During the year 2012-13, 28 consultancy jobs were completed for 20 organisations outside CIL. Some of the major clients/organisations for whom jobs were completed are Directorate General of Hydrocarbons, Manganese Ore (India) Ltd., National Thermal Power Corporation Ltd., Central Electricity Authority, Steel Authority of India Ltd., Mahaguj Collieries Ltd., Monnet Ispat & Energy Ltd., Jindal Steel & Power Ltd., etc.

Presently, 30 outside-CIL consultancy jobs are in hand for 18 organisations like Hindustan Copper Ltd., Manganese Ore (India) Ltd., National Thermal Power Corporation Ltd., Neyveli Lignite Corporation Ltd., Orissa Mining Corporation, Mahaguj Collieries Ltd., Baitarni West Coal Company Ltd., Jindal Steel & Power Ltd., Odisha Power Generation Corporation, Mahan Coal Comapny Ltd., etc.

During the year 2012-13, 32 outside-CIL consultancy jobs worth ₹ 35.08 crores from 20 organisations were procured by CMPDI. This includes consultancy jobs worth ₹ 7.62 crores from M/s Odisha Industrial Infrastructure Development Corporation (IDCO) for preparation of "Comprehensive Master Plan for Talcher and Ib-Valley Coalfields."

13.0 MANPOWER AND WELFARE ACTIVITIES

STATUS OF MANPOWER :

Particulars	As on 31 March, 2012	As on 31 March, 2013
Executive	855	957
Non-Executive:		
Monthly Rated	1312	1228
Daily Rated	962	957
Grand Total	3129	3142

WELFARE ACTIVITIES:

1. CMPDI has 2518 nos. of quarters at its Headquarters and Regional Institutes with housing satisfaction of 100%.
2. Adequate supply of drinking water has been made available to employees of CMPDI.
3. All the employees and their dependents are provided medical facilities through its dispensaries and the hospitals owned by subsidiary companies of CIL. Patients are also referred to renowned institutions as per requirement.
4. CMPDI provides financial assistance/grant of Rs.1.00 lakh to DAV Public School, Gandhi Nagar, Ranchi.
5. There are 31 nos. of school buses including hired small vehicles for school going children of employees.
6. The dependents of employees who represented District/State/Nation in the field of sports were awarded cash prize.
7. Cash Award amounting to Rs. 78630/- (Rupees Seventy eight thousand six hundred thirty) only was given to the wards of the employees who secured 90% and above marks in the Xth & XIIth Board Examination held in the year 2012.

8. Gratuity Cheque is being given to the employees on the day of their superannuation.
9. All the employees of CMPDIL are getting their salary through Bank
10. 200 Nos. Plastic Chairs were given to Gondwana Club.
11. 02 Nos. of Carrom Board with stand were given to Recreation Club.
12. A Grant of Rs. 74,000/- (Rupees Seventy four thousand) only was given to WIPS for organising one day Seminar.
13. World AIDS Day was celebrated on 1st Dec., 2012.
14. CMPDI conducted summer coaching camp for the period from 21.05.2012 to 04.06.2012 for the ward of employees.
15. A Grant of Rs. 8,000/- was given for celebrating Ambedkar Jayanti.
16. A Grant of Rs. 20,000/- (Rupees Twenty thousand) only was given to Gondwana Club.
17. A Grant of Rs. 30,000/- (Rupees Thirty thousand) only was given to Recreation Club.
4. General Medical-cum-Eye-cum-Bood Check-up Camp was organised at Gondwana Primary School, Kanke Road, Ranchi in which 119 students were clinically checked and were given free medicine.
5. General Medical-cum-Eye Check-up Camp was organised at Patragonda, Kanke Road, Ranchi in which 180 villagers were clinically checked and were given free medicine.
6. For celebrating 15th August, 2012 an amount of Rs.6,000/- has been given to Gondwana Primary School, Kanke Road, Ranchi for distribution of sweets among the students of the school.
7. For celebrating 15th August, 2012 an amount of Rs.15,000/- has been given to Birsa High School, Hathiagonda, Kanke Road, Ranchi for distribution of sweets among the students of the schools.
8. General Medical-cum-Eye Check-up Camp was organised at Birsa High School, Hathiagonda, Kanke Road, Ranchi, in which 286 students were clinically checked and were given free medicine.
9. General Medical Check-up Camp was organised at Hathiagonda, Kanke Road, Ranchi in which 160 villagers were clinically checked and were given free medicine.
10. General Medical-cum Dental Check-up Camp was organised at Gondwana Primary School, Kanke Road, Ranchi in which 150 students were clinically checked and were given free medicine.
11. A cheque for Rs. 15,000/- was handed

CSR ACTIVITIES:

1. General Medical Check-up Camp was organised at Lower Misirgonda, Kanke Road, Ranchi in association with Lions Club, Ranchi East, in which 144 villagers were clinically checked and were given free medicine.
2. General Medical Check-up Camp was organised at Birsa School, Hathiagonda, Kanke Road, Ranchi in association with Lions Club, Ranchi East, in which 254 students were clinically checked and were given free medicine.
3. An Awareness Programme on HIV/AIDS was organised in association with Jharkhand AIDS Control Society at

- over to the Principal, Gondwana Primary School, Kanke Road, Ranchi towards Annual Day Celebration.
12. A cheque for Rs. 21,780/- was handed over to the Principal, Gondwana Primary School, Kanke Road, Ranchi towards fee of the meritorious & poor students for the year 2012-13.
 13. A cheque for Rs. 48,960/- was handed over to the Principal, Birsa High School, Hathiagonda, Kanke Road, Ranchi towards fee of the meritorious & poor students for the year 2012-13.
 14. General Medical Check-up Camp was organised at Birsa High School, Hathiagonda, Kanke Road, Ranchi, in which 205 students were clinically checked and were given free medicine.
 15. General Medical Check-up Camp was organised at Bukru Village, Kanke Road, Ranchi in association with Lions Club, Ranchi East, in which 176 villagers were clinically checked and were given free medicine.
 16. An Awareness Programme on HIV/ AIDS was organised in association with Jharkhand AIDS Control Society at Bukru village, Kanke Road, Ranchi. About 190 villagers attended the programme and they were made aware about the causes, symptoms and prevention of HIV/AIDS.
 17. 25 Nos. of Plastic Chairs were handed over to the Principal, Birsa High School, Hathiagonda, Kanke Road, Ranchi.
 18. 60 Nos. of Tubelight were handed over to the Principal, Birsa High School, Hathiagonda, Kanke Road, Ranchi.
 19. Study materials (Copy, Pencil & Pencil Box) were supplied to the 950 students of Birsa High School, Hathiagonda, Kanke Road, Ranchi.
 20. School fees for one year of 13 poor students of J.M.J. School, Doranda, Ranchi was given.
 21. A Cheque of Rs. 60,000/- was handed over to Principal, Braj Kishore Netraheen Vidyalaya, Bariatu, Ranchi towards sponsorship of 5 blind girl students.
 22. A Cheque of Rs. 8,000/- was handed over to Principal, Gondwana Primary School, Kanke Road, Ranchi towards Annual Sports Day.
 23. Sports Materials were handed over to the Principal, Gondwana Primary School, Kanke Road, Ranchi.
 24. 01 No. Almirah, 01 Office Table, 05 Nos. Office Chair, 83 Nos. Desk Bench, 125 Nos. School Uniform, Sports Material & Lab. Materials were handed over to the Principal, Birsa High School, Hathiagonda, Kanke Road, Ranchi.
 25. An amount of Rs.6,000/- has been given to Gondwana Primary School, Kanke Road, Ranchi. for celebrating 26th Jan. 2013.
 26. One Inverter & 03 Nos. of Battery handed over to Madhur Muskan, working for the blind.
 27. 05 Nos. of Sewing Machine were handed over to nearby villages.
 28. A cheque for Rs. 15,000/- was handed over to the Principal, Birsa High School, Hathiagonda, Kanke Road, Ranchi towards Republic Day Celebration.
 29. A cheque for Rs. 35,000/- was handed over to the Principal, Birsa High School, Hathiagonda, Kanke Road, Ranchi towards Annual Sports Day Celebration.
 30. 66 Nos. School Uniform were distributed to the students of Gondwana Primary School, Kanke Road, Ranchi.
 31. General Medical Check-up Camp was organised at Birsa High School, Hathiagonda, Kanke Road, Ranchi, in which 111 students were clinically checked and were given free medicine

32. 04 Nos. of UPS were handed over to Gondwana Primary School, Kanke Road, Ranchi.
33. Three class rooms were constructed at Birsa High School, Hathiagonda, Kanke Road, Ranchi.
34. 3 seaters desks & benches have been provided to Shyama Devi Free Primary School/ Swami Vivekananda School, Asansol, W.B./ Ethora Free Primary School, Distt.- Burdwan, W.B./ Dr. Shyama Prasad Vidyalaya, Asansol, W.B. by RI- I, Asansol.
35. Desk-benches, School Bag, Uniform and stationery have been provided to Utkramit Madhya Vidyalaya Gopinathdih/ Utkramit Madhya Vidyalaya, Gopinathdih/ Malidih by RI- II, Dhanbad.
36. Desk-benches to utkramit Madhya Vidyalaya, Bongahara, Puranpaniyan, School/ utkramit Vidyalaya Chalkari/ Pundi School. Medical Camps were organized in nearby villages of Exploration Camps. Shade flooring and Platform has been constructed in nearby villages of Exploration Camps by RI- III, Ranchi.
37. RCC Stage & Shade has been constructed at Chandanwahi School, Rajura by RI- IV, Nagpur.
38. Construction/repair of bathing ghats of School ponds has been done by RI- V, Bilaspur.
39. Desk-benches have been provided as well as passengers shade has been constructed in nearby villages by RI- VI, Singrauli.
40. Boundary wall of Govt. U.G. High School, Barapada has been constructed. Further, toilet have also been constructed in schools by RI- VII, Bhubaneswar.

SPORTS ACTIVITIES:

1. Sri P.K. Bisoi, Dy. Manager (System) and Sri Ramesh Prahasan, Sr. ES were selected to participate in the Sr. National Carrom Championship as player and veteran player to represent Jharkhand State held at Akola (Maharashtra).
2. CMPDI conducted Inter-Regional Institutes Tournament for Badminton, TT, Carrom, Chess, AthlMeet, Volley Ball and Bridge.
3. CMPDI conducted Inter-Regional Institute Canvas Ball Cricket Tournament..
4. CMPDI hosted Inter Coal Company Chess Tournament for the period from 25th to 27th Feb. 2013.

14.0 RAJBHASHA

Your company continued to implement the statutory provisions of the Official Language Act, Official Language Rules and the directives of the Ministry of Home Affairs (Official Language), Ministry of Coal, Coal India Limited and Town Official Language Implementation Committee and made multidimensional efforts to enhance the progressive use of Official Language Hindi in official work during the period under review.

Your company achieved the target of Hindi correspondence in Region "C" and was very close to achieve the target of Hindi correspondence in Region "A"& "B" fixed by the Ministry of Home Affairs, Department of Official Language, New Delhi in its Annual Programme during the year under review .

Besides, documents under Section 3 (3) of the Official Language Act, the minutes of the different meetings held at the level of C M D/Directors, the Monthly and Annual Reports of your company also continued to be prepared bilingually. The publication of "Desh Kaal Sampada", a Renowned & National Level House Magazine of your company also continued to promote the creative writing

in Hindi, which fetched laurel all over the country.

In the month of September, 2012, “Raj Bhasha Pakhwara” was organized as per the directives of Ministry of Coal. In order to promote and make Hindi popular among the employees of the company, several Hindi competitions were organized on this occasion. A large number of employees participated in all the competitions held during the month and the winners were awarded cash prize as well as books. In addition, two departments and two RI's, who have done most of their official work in Hindi were awarded Chairman's Winner and Runner Shield respectively.

Four Hindi workshops were also organized under the aegis of Staff Training College, Human Resource Development Division to facilitate the use of Official Language “Hindi” in day-to-day Official Work. All Hindi Workshops

were very much effective in removing hesitation of the employees in the field of use of Hindi in daily routine work.

Four quarterly meetings of Official Language Implementation Committee were also organized under the Chairmanship of CMD to review quarterly progress of Official Language in different departments of your company as per the Directive and Annual Programme issued by Department of Official Language, Ministry of Home Affairs, New Delhi. In addition, Progress of Hindi is also included as permanent Agenda in Regional Directors' Co-ordination Meeting to improve the use of Hindi in day-to-day Official Work of all Regional Institutes and reviewed regularly.

Your company also continued to participate in the meeting of Town Official Language Implementation Committee (Nagar Rajbhasha Karyanwyan Samiti).



General Medical Check-up Camp was organised at Lower Misirgonda, Kanke Road, Ranchi



Study materials (Copy, Pencil & Pencil Box) being supplied to the 950 students of Birsa High School, Hathiagonda, Kanke Road, Ranchi under Corporate Social Responsibility.



Medical Check-up Camp-cum Awareness Programme on HIV/ AIDS was organised in association with Jharkhand AIDS Control Society at Bukru village, Kanke Road, Ranchi under Corporate Social Responsibility.



Medical-cum-Dental check-up camp was organised at Gondwana Primary School, Kanke Road, Ranchi.

15.0 MoU Performance

Impressive performance of CMPDI got reflected in getting excellent MoU consistently rating from 2007-08 to 2009-10 and adjudging it the 'Best performing Subsidiary Company of CIL' for the year 2008-09 as per MoU rating. CMPDI achieved excellent MoU rating for 2011-12 and is also expected to get Excellent MoU rating in 2012-13. Details of parameters of Memorandum of Understanding of CMPDIL for the year 2012-13 is appended to this report.

16.0 Activities of Forum of Women in Public Sector (WIPS), CMPDI in the year 2012-13

Women in Public Sector (WIPS), CMPDI was in hibernation for more than a decade and in the year 2009, WIPS, CMPDI was revived under the leadership of Dr. Jhumjhum Moitra, Chief Manager (Geology) by registering as a corporate member of this forum in 2010. It began with a membership of 84 women employees (21 executives & 63 non-executives) i.e. only 5.5% of the total workforce.

After the General Body Meeting, under the new leadership that has been entrusted upon Ms. Suchandra Sinha, Senior Manager (E&M) as Co-ordinator, WIPS, CMPDI, we intend to go places and achieve new heights in contributing to the organizational goals of CMPDI.

In the last In the last twelve months, we have embarked upon a volley of activities

- New membership drive, 89 new members added, 173 women employees (63 executives & 110 non-executives) i.e. only 6.3% of the total workforce.

- Meeting of office bearers & executive members of the Functional Management Committee, attended by 20 women employees, Meetings Conducted on 16.07.12, 14.09.12 & 09.10.12
- A General Body Meeting was conducted on 07.01.2013, attended by 54 women employees
- Seminars and Meetings outside CMPDI attended by WIPS members of CMPDI chapter are:
 - Annual Seminar” and “Coordinator’s Meet” of WIPS, organized by CIL(HQ) on 4th & 5th of July, 2012 at Kolkata
 - Meeting of “Regional Executive Body” of WIPS (Eastern Chapter) for all PSUs in Eastern India on 23rd August, 2012 at Kolkata
- Regional Meet, Eastern Chapter, held at Dhanbad. It was attended by 10 WIPS members
- WIPS, CMPDI conducted a “Health Awareness and Wellness Campaign” at Pundi village in West Bokaro, Dist. Ramgarh, Jharkhand on 25th September 2012
 - WIPS members contributed by educating more than 150 village women on
 - Health and hygiene issues
 - Breast feeding
 - Precautions to be taken by lactating mothers and pregnant women
 - Nutrition to be taken by women in the village situation
 - Encouraging health centre delivery instead of home delivery of newly-borns
 - Awareness about Govt. schemes for women and birth control methods that may be easily adopted etc.



- To commemorate Swami Vivekananda's 150th Birth Anniversary, a pioneering effort by Ramakrishna Mission, Morabadi, Ranchi has been started where around 100 poor underprivileged children (age group 6-12 years) from villages are trained/educated to become “Swawalambi” or self independent. It is a child development mission relating to their health & hygiene, value based education, cultural/social awareness & vocational training to equip them in their later lives.
- WIPS members participated in this mission at Vivekananda Balak Balika Seva

Sangh on 09.09.2012 by sparing time on Sundays to help with the children's music lessons and contributing in general awareness issues relating to the environment, health, safety, general knowledge and current affairs.



- WIPS members participated in voluntary Teaching in “Anurag Singh Charitable Trust” during the months of October-November, 2012.
- WIPS members voluntarily offered to teach around 15 children from the hutments and out-houses in Doranda, Ranchi from Classes II to VIII to aid and support their school studies that are being sponsored by this trust.
- WIPS members, under their banner have already taken several classes for 2-3 hours on Saturday afternoons.



- WIPS members conducted AIDS Awareness campaign in Hatma Basti, in close vicinity of CMPDI(HQ), Kanke Road, Ranchi on 27.12.2012. The AIDS Awareness was imparted by Dr. Debashish Chakravarty, Consultant, Jharkhand AIDS Control Society along with WIPS representative Dr. Shilpi Swaroop. Badges, posters and awareness material were distributed amongst 100 basti dwellers who attended the campaign. Cakes & chocolates were also distributed before the arrival of the New Year 2013.



- On 22.01.13, the Forum hosted a first-ever One-day Seminar for all women employees of CMPDI to celebrate its new found space in the CMPDI official domain and to bring all its women employees including the women working in the CMPDI Headquarters and all its seven regional institutes, under a common umbrella of the WIPS Forum, CMPDI.
- Brought out our first newsletter “Aarohan” for providing a platform of expression for our women employees by way of technical articles, articles of literary interest, current affairs, health awareness and environment related issues.

17.0 DIRECTOR’S RESPONSIBILITY STATEMENT :

- 17.1** In the preparation of the annual accounts, the applicable accounting standards had been followed along with proper explanation relating to material departures.
- 17.2** The directors had selected such accounting policies and applied them consistently and made judgments and estimates that are reasonable and prudent so as to give a true and fair view of the state of affairs of the company at the end of the financial year and of the profit or loss of the company for that period.
- 17.3** The directors had taken proper and sufficient care for the maintenance of adequate accounting records in accordance with the provisions of this Act for safeguarding the assets of the company and for preventing and detecting fraud and other irregularities.
- 17.4** The Directors had prepared the Annual Accounts on a going concern basis.

AUDITORS :

On the advice of the comptroller and Auditor General of India M/s Todi Tulsyan & Co., Chartered Accountants, Patna were appointed as Auditors of the Company for the financial year 2012-13. They were also appointed Tax-Auditors for the year U/S 44 (AB) of the Income-Tax Act, 1961.

ACKNOWLEDGEMENT :

Your Directors are grateful to the Government of India particularly the Ministry of Coal, Coal India Ltd., and its Subsidiaries, State Governments and other Public Sector Undertakings with whom your Company has to work in close contact for their co-operation and encouragement in fulfilling the tasks of the Company. We are thankful to our esteemed clients Neyveli Lignite Corporation Ltd., SAIL-ISP, IIFCO-Chattisgarh Power Ltd., Central Electricity Authority, Tata Steel, HINDALCO, Mahaguj Colliery Ltd., Director General of Hydrocarbons, DSCL, Reliance Coal Resource Ltd. (M/s Sasan Power Ltd.) OMC etc. for the confidence reposed in us and the patronage extended to us and to the dedicated employees of the company.

ADDENDUM :

Particulars of employees required under Section 217(2A) of the Companies Act, 1956 (Nil Report) and Comments of the Comptroller & Auditor General of India under section 619 (4) of the Companies Act, 1956 are attached. The reports of Statutory Auditor and Management replies, Auditor reports on compliance on Corporate Governance, certification of CEO & CFO and reports on MoU 2012-13 are also Annexed to this report.

For and on behalf of the Board of Directors

sd/-

(A. K. Debnath)

Chairman-cum-Managing Director

Ranchi

Date: 22.05.2013

ANNEXURE TO DIRECTORS' REPORT

Information as required to be given in the Directors' Report under Section 217(1) (e) of the Companies Act, 1956 read with the Companies (Disclosure of Particulars in the Report of Board of Directors) Rules, 1988 regarding conservation of energy, technology absorption and foreign exchange earning and outgo.

A. CONSERVATION OF ENERGY

(a) Energy Conservation Measures Taken

The following measures have been taken by CMPDI (HQ)

- (i) Conventional HPSV / Metal Halide street light luminaries have been replaced by LED street light luminaries.
- (ii) Conventional FTL fittings have been replaced by energy saver T5 luminaries in office.
- (iii) Most of the conventional resistance type fan regulators have been replaced by electronic regulators.
- (iv) In common areas of office and residential premises energy saver CFL fittings have been fitted in place of FTL fittings.

(b) Additional investment and proposal, if any, being implemented for reduction of consumption energy

Total additional investment incurred - Rs.49.31 lakhs.

Proposals from different Regional Institutes have been received for schemes of Energy Conservation for using LED luminaries for street lights for colony and T5 luminaries for office. These proposals are considered for additional investment and are under finalization.

(c) Impact of the measures taken to reduce energy consumption

There has been substantial reduction of electricity consumption (Industrial & Domestic) at CMPDI (HQ) premises.

The overall impact is being monitored:

(d) Total energy consumption and energy consumption of per unit of production as per Form –A of the Annexure is given below:

Form – A

(a) Power & Fuel consumption:

i. Power

(Amount in Rs.)

Sl.No.	Particulars	2011-12	2012-13
1.	Industrial consumption	22393944.75	20981148.99
2.	Township consumption	20454329.85	24895794.00

ii. Diesel

(Amount in Rs.)

Sl.No.	Particulars	2011-12	2012-13
1.	Diesel	46681884.08	55713625.37

(b) Consumption per unit**i. Power**

Sl.No.	Particulars	2011-12	2012-13
1.	Meterage drill	273018.2	276198.6
2.	Total units consumed – Kwh - Industrial	38821149	3556127
3.	Total units consumed – Kwh - Township	3552860	4219626
4.	Average rate per unit (Rs.) - Industrial	5.72	5.9
5.	Average rate per unit (Rs.) - Township	5.76	5.9

ii. Diesel

Sl.No.	Particulars	2011-12	2012-13
1.	Meterage drill	273018.2	276198.6
2.	Total units consumed – Kwh	1076115.35	1106966.53
3.	Average rate per unit (Rs.)	43.38	50.33

B. TECHNOLOGY ABSORPTION

Central Mine Planning and Design Institute Limited (CMPDIL) was established on November 1, 1975 as a wholly owned subsidiary of Coal India Ltd. (CIL) to render consultancy services to CIL and its subsidiaries in the areas of coal exploration, mine planning & design, coal beneficiation & utilization, allied engineering services, and human resource development. Subsequently, CMPDI expanded its services to the areas of environmental engineering, information & communication technology, and laboratory & field services.

The Government of India through its Coal Science & Technology (S&T) Plan and Coal India Limited through its R&D Board have launched R&D activities. Standing Scientific Research Committee

(SSRC) under the Chairmanship of Secretary (Coal) is the Apex Body to administer coal related research activities and, research grant of Coal India is administered through CIL R&D Board under the Chairmanship of Chairman, CIL.

Having state-of-the-art facility and well equipped laboratory facilities etc, CMPDI has been recognised as an in-house Research & Development (R&D) unit from the Department of Science and Industrial Research, Ministry of Science & Technology (S&T), New Delhi.

The required details Under Section 217(1)(e) read with Rule – 2 of Companies (Disclosure of particulars in the report of Board of Directors) Rules 1988 are furnished below:-

FORM B – (Form for disclosure of particulars with respect to absorption)**I. RESEARCH AND DEVELOPMENT (R&D)****1. Specific area in which R&D carried out by the Company**

- i. The Government of India through its Coal Science & Technology (S&T) Plan and Coal India Limited through its R&D Board have launched R&D activities with substantial funds being earmarked annually for improvement in production, productivity and safety in coal mines, coal beneficiation and utilization and protection of environment and ecology in coal and lignite sector.
- ii. CMPDI is the nodal agency for coordination and monitoring of Coal S&T and CIL R&D projects. These projects are being implemented by various research and academic institutes related to coal and allied industries with active participation of coal and lignite mining companies.
- iii. CMPDI besides being the nodal agency, a number of research projects have also been implemented /being implemented by CMPDI.
- iv. An R&D Project on microgrid system has been taken up towards use of non conventional energy as well as conventional energy conservation.

2. Benefits derived as a result of the above R&D

- i. Many of these projects have yielded considerable benefits, resulting in operational improvement, safer working conditions, better resource recovery and protection of the environment. While some research projects have produced tangible impact on the industry directly, there are others which have

strengthened mine planning, design and technical services required by both operating mines and future mining projects.

- ii. Design tools developed specifically for Indian geo-mining conditions are now available for a variety of problems, like underground coal pillar design, analysis of roof capability and stability of partings between multiple seam workings, prediction of surface subsidence, optimum blast design for various rock conditions, opencast slope stability etc.
- iii. The findings from some projects, like the study in engineering classification of roof rocks, have led to stipulation by the Directorate - General of Mines Safety (DGMS) that the design procedures developed should be employed for all underground mines while seeking statutory permission to work.
- iv. To ensure safety of underground workings significant advances through R&D work have been made for introduction of modern techniques like Ground Penetrating Radar for detection of old unapproachable water logged workings, trial of blind back filling of underground voids has also been made with promising results.
- v. Advanced methods like remote sensing for mapping of underground fires have been established as a viable technique.
- vi. Further, meaningful studies have been carried out for improvement in coal beneficiation techniques, especially for high ash Indian coals. Significant results have also been obtained from research related to combustion techniques for effective utilisation of high – ash coals. Some of the major

projects related to dry beneficiation of coal are also presently being executed by CMPDI in association with other organisations.

- vii. Notable trials have also been made for re-vegetation of mined out areas, use of fly ash and production of humic acid from lignite for use as fertilizer etc.

3. Future plan of action

- i. For enhancing the quantum of research work needed to address the complexity of operations of the coal industry and wider involvement of research organizations including private organizations with adequate infrastructure and expertise, CMPDI on behalf of Ministry of Coal has invited Expression of Interest (Eoi) for areas related to mining methods, strata control, and mine safety, coal bed methane(CBM), etc., for funding under S&T Grant of Ministry of Coal.
- ii. Future R&D efforts will address areas like liquidation of developed pillar in underground mines, pit and dump slope stability in opencast mines, hydraulic mining, high wall mining, Early warning systems for roof prediction and dump & highwall failures, assessment of shale gas potentiality in Indian coal fields, CBM reserves estimation, CBM from fugitive emissions from opencast mines, in-situ coal gasification, coal liquefaction, and development of predictive models for air quality and pollution etc.
- iii. A research project related to mine communication is under implementation at one of the underground mine of CCL. This consists of Through-The-Earth (TTE) one way messaging system and two way voice communication and tracking system. The integrated system is now being used with

digital wireless telephones in Bhurkunda mine of CCL. Now one can make and receive a telephone call from underground.

- iv. In another research project, self advancing goaf edge (mobile) chock type supports of 2x240 Tonne have been developed and field trial is under progress at Bastacola mine of BCCL.
- v. Another important research project, Shale gas potentiality evaluation of Damodar basin of India is started recently.
- vi. Emphasis has been put on “coal to oil” conversion technology. The prevailing high prices level of crude and petroleum products warrants a fresh look at coal liquefaction process. The rising costs and issues related to adequate and assured supply of oil from overseas have a significant bearing on both the national economy and energy security. One important project for development of indigenous catalyst for coal – to - liquid (CTL) is under implementation with an objective to eliminate the dependency on technology provider for supply of catalysts for future CTL plants likely to be established in India.

4. Expenditure on R&D during 2012-13:

(a) Capital	Rs. 22.75 crore
(b) Revenue	
(c) Total:	Rs. 22.75 crore
(d) Total R&D expenditure as a percentage of total turnover of CMPDI: 3.78%	

(II) TECHNOLOGY ABSORPTION, ADAPTATION AND INNOVATION

- 1. Efforts, in brief, made towards technology absorption, adaptation and innovation.

The main R&D in coal sector is mainly for improvement of efficiency parameters in mining operations including mine safety and related activities like coal beneficiation/utilization and also on control of mine environment.

2. Benefits derived as a result of above efforts, e.g product improvement, cost reduction, product development, import substitution etc.

- a. Notable advances have been made through R&D efforts in coal exploration techniques, introduction of mining methods like “blasting gallery and cable bolting” for recovery of coal in thick seams and shortwall mining at SECL with an output of more than 1000T per day being replicated now in more panels. “Controlled blasting” has also been introduced through R&D and is being used now for removal of overburden rocks and coal in opencast mines as close as to 50m from surface structures successfully. More than 150 Mt of coal so far has been extracted in more than 116 mines by introduction of “Controlled Blasting” which otherwise would have been remained sterilized.
- b. A quantified assessment of roof strata called Rock Mass Rating (RMR) developed under R&D is now being used for designing support in underground mines. So far, over 835 districts in about 273 underground coal mines have been covered.
- c. A number of research projects have yielded considerable gains in the area of land reclamation after mining and utilization of fly ash. Humic acid from lignite as a fertilizer in agriculture has shown 35% increase of yield in case of capsicum, tomato crops

and also substantial increase in other crops. This product has been commercialized and is being used by the farmers in Tamil Nadu, Andhra Pradesh, Karnataka and Kerala.

- d. A multi institutional funded (UNDP/ GEF, CIL and MoC) demonstration research project on “Coal Bed Methane Recovery and Commercial Utilization” has successfully concluded at Moonidih underground project, BCCL with encouraging results. The gas recovered under this project is almost 98% pure methane, which is being utilized to run gas based generators to supply electricity to Moonidih mine residential colony.
- e. Significant improvement has been achieved in both “coking and non-coking coal washing” and “recovery of fine coals”. Encouraging results have also been obtained from research related to “combustion techniques” for effective utilization of high-ash coals. Major R&D projects on fine coal beneficiation are under implementation through CIL R&D funding.
- f. A number of research projects has been taken up in the area of environment and ecology to integrate coal mining activities with ecological conservation and hazards due to mining. The findings of these research projects have made a significant impact on the industry resulting in the adoption of proper environment control. Efforts to delineate unstable working below Howrah- Dhanbad Railway line (Eastern Railway Main Line), stability analysis by numerical modeling and possible remedial measures for stabilization of railway line have been made successfully with CIL R&D funds. Programmable Logic

- Control(PLC) based monitoring & control system has been successfully designed, developed and introduced in an underground mine of CIL duly approved by DGMS through another research project funded by CIL R&D Board.
- g. New areas, like application of robotics and latest two-way communication systems for rescuing miners trapped in underground mines, Coal Bed Methane (CBM)/Coal Mine Methane(CMM)/Abandoned Mine Methane(AMM) recovery and utilization, utilization of low rank low volatile high rank Indian coking coals, numerical models to address strata control problems for appropriate solution, safe dragline dump profiles for varying geo-mining conditions, Green House Gas(GHG) emissions in mine fire areas, treatment of acid mine water generated in Indian coal mines, roof fall prediction in underground coal mines, dry coal beneficiation, development of integrated dumper collision avoidance system for opencast mines, assessment of shale gas Gondwana basin with special reference to CIL areas are being addressed through on-going research projects with CIL R&D fund.
- h. An indigenous tool for carrying out the job of random sampling and testing of explosives and accessories for mines of CIL has been developed by CMPDI in association with IIT, Kharagpur through CIL R&D project.
- i. Substantial funds are being earmarked annually A research project under S&T grant of Ministry of Coal regarding delineation of barrier thickness against waterlogged workings in underground mines has been completed. In this project, a Ground Penetrating Radar (GPR) was developed. After making field trials it was observed that the GPR developed is capable of detecting anomaly in barrier thickness up to a distance of 60m.
3. In case of imported technology (Imported during the last 5 years reckoned from the beginning of the financial year) following information may be furnished.
- | | | |
|-------|--|--------------|
| (i) | Technology Imported | Not related. |
| (ii) | Year of Import | |
| (iii) | Has technology been fully absorbed? | |
| (iv) | If fully absorbed, area where this has not taken place, reasons therefore and future plans of action | |

C. FOREIGN EXCHANGE EARNING AND OUTGO

Sl. No.	Particulars	2012-13
1.	Activities relating to export, initiatives to increase export; development of new export markets for products and services and export plans	Company is not engaged in exports
2.	Total foreign exchange used and earned (a) Total foreign exchange earned (Rs.in lakh) (b) Total foreign exchange used (Rs.in lakh)	Nil 0.26

ANNEXURE FORMING PART OF DIRECTORS' REPORT FOR THE YEAR ENDED 31.03.2013 INFORMATION AS PER SECTION 217(2A) OF THE COMPANIES ACT, 1956 READ WITH COMPANIES (PARTICULARS OF EMPLOYEES) RULES 1975.

Sl. No.	Name	Designation / Nature of work	Remuneration During the year (Rs.)	Nature of employment Permanent / temporary	Qualification	Experience (yrs.)	Date of commencement	As on 31 st Mar 2013 (Yrs)	Last employment held
1	2	3	4	5	6	7	8	9	10
(a)	<p>Employed through out the financial year under review and were in receipt of remuneration for that financial year in the aggregate of not less than Rs.60, 00,000/-.</p> <p>-----Nil-----</p>								
(b)	<p>Employed for the part of the financial year under review and were in receipt of remuneration for any part of that financial year at a rate which in the aggregate was not less than Rs. 5, 00,000/- per month.</p> <p>----- Nil -----</p>								

Auditor's Report on Compliance of conditions of Corporate Governance

TODI TULSYAN & CO.
CHARTERED ACCOUNTANTS

602, LUV KUSH TOWER,
EXHIBITION ROAD,
PATNA – 800 001
Phone: 2320211 / 2320056 (0)
Fax: 0612-2320056

To,
The Members,
Central Mine Planning & Design Institute Ltd.

1. We have examined the compliance of conditions of Corporate Governance by **Central Mine Planning & Design Institute Ltd., Ranchi** for the year ended 31st March 2013 although clause 49A of the Listing agreement is not applicable to the Company.
2. The compliance of conditions of Corporate Governance is the responsibility of the management of the company. Our examination was limited to procedures and implementation thereof, adopted by the company for ensuring the compliance of conditions of Corporate Governance. It is neither an audit nor an expression of opinion on the financial statement of the company.
3. In our opinion and to the best of our information and according to the explanations given to us and the representation made by the Directors and the Management, we certify that the company has complied with of conditions of Corporate Governance.
4. We further state that such compliance is neither as assurance as to the future viability of the company nor the efficiency or effectiveness with which the management has conducted the affairs of the company.

FOR TODY TULSYAN & CO.
CHARTERED ACCOUNTANTS
FRN: 002180C

Sd/-

(Sushil Kumar Tulsyan)

Partner

Membership No. 075899

Date : 10.05.2013

Place: Ranchi

CEO and CFO Certification

To

The Board of Directors

Central Mine Planning & Design Institute Limited

We, A. K. Debnath, Chairman-cum-Managing Director and A. K. Soni, General Manager (Finance), responsible for the finance function certify that:

- a. We have reviewed financial statements and the cash flow statement for the year ended 31st March, 2013 and that to the best of our knowledge and belief :
 - i. these statements do not contain any materially untrue statement or omit any material fact or contain statements that might be misleading;
 - ii. these statements together present a true and fair view of the company's affairs and are in compliance with existing accounting standards, applicable laws and regulations.
- b. To the best of our knowledge and belief, no transaction entered into by the company during the year ended 31st March, 2013 are fraudulent, illegal or violative of the company's code of conduct.
- c. We accept responsibility for establishing and maintaining internal controls for financial reporting and we have evaluated the effectiveness of internal control systems of the company pertaining to financial reporting and we have disclosed to the auditors and the Audit Committee, deficiencies in the design or operation of such internal controls, if any, of which they are aware and the steps they have taken or proposed to take to rectify these deficiencies.
- d. We have indicated to the auditors and the Audit Committee
 - i. There has not been any significant changes in internal control over financial reporting during the quarter under reference;
 - ii. There has not been any significant changes in accounting policies during the year; and
 - iii. We are not aware of any instance of significant fraud with involvement therein of the management or an employee having a significant role in the company's internal control system over financial reporting.

Sd/-

(A. K. Soni)

General Manager (Finance)

Sd/-

(A. K. Debnath)

Chairman-cum-Managing Director

STATUTORY AUDITORS' REPORT AND REPLIES OF MANAGEMENT	
AUDITORS' REPORT	MANAGEMENTS' REPLY
<p>To The Members, Central Mine Planning and Design Institute Limited</p> <p>1 We have audited the accompanying financial statements of Central Mine Planning and Design Institute Limited ("the Company"), which comprise the Balance Sheet as at 31st March 2013, Statement of Profit and Loss and Cash Flow Statement for the year then ended, and a summary of significant accounting policies and other explanatory information.</p> <p>2 The management is responsible for the preparation of these financial statements that give a true and fair view of the financial position, financial performance and cash flows of the Company in accordance with the Accounting Standards referred to in sub-section (3C) of section 211 of the Companies Act, 1956 ("the Act"). This responsibility includes the design, implementation and maintenance of internal control relevant to the preparation and presentation of the financial statements that give a true and fair view and are free from material misstatement, whether due to fraud or error.</p> <p>3 Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with the Standards on Auditing issued by the Institute of Chartered Accountants of India. Those Standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.</p> <p>4 An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Company's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of the accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.</p> <p>5 We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.</p> <p>6 In our opinion and to the best of our information and according to the explanations given to us, the financial statements give the information required by the Act in the manner so required and give a true and fair view in conformity with the accounting principles generally accepted in India:</p> <p>(a) in the case of the Balance Sheet, of the state of affairs of the Company as at March 31, 2013;</p> <p>(b) in the case of the Profit and Loss Account, of the profit for the year ended on that date; and</p> <p>(c) in the case of the Cash Flow Statement, of the cash flows for the year ended on that date.</p> <p>7 As required by the Companies (Auditor's Report) Order, 2003 ("the Order") issued by the Central Government of India in terms of sub-section (4A) of section 227 of the Act, we give in the Annexure a statement on the matters specified in paragraphs 4 and 5 of the Order.</p>	

STATUTORY AUDITORS' REPORT AND REPLIES OF MANAGEMENT	
AUDITORS' REPORT	MANAGEMENTS' REPLY
<p>8 Further to our comments in the Annexure referred to in paragraph 3 above, we report that:-</p> <p>i.) Buildings cost includes Rs.8.00 crores constructed on land belonging to other CIL subsidiaries, which has not been conveyed in favour of the Company. (para No.1.1.2 of Note-34).</p> <p>ii) Balances of Sundry Debtors are yet to be confirmed and also balances in loans and advances and sundry creditors are also not confirmed.</p> <p>9 As required by section 227(3) of the Act, subject to our comments in paragraph (8) above, we report that:</p> <p>a) we have obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purpose of our audit;</p> <p>b) in our opinion proper books of account as required by law have been kept by the Company so far as appears from our examination of those books;</p> <p>c) the Balance Sheet, Statement of Profit and Loss, and Cash Flow Statement dealt with by this Report are in agreement with the books of account;</p> <p>d) in our opinion, the Balance Sheet, Statement of Profit and Loss, and Cash Flow Statement comply with the Accounting Standards referred to in subsection (3C) of section 211 of the Companies Act, 1956;</p> <p>e) In view of Notification No. GSR 829(E) dated 21.10.2003 issued by the Central Government; the provisions of Section 274(1) (g) of the Companies Act, 1956 are not applicable to a Government Company.</p> <p>f) Since the Central Government has not issued any notification as to the rate at which the cess is to be paid under section 441A of the Companies Act, 1956 nor has it issued any Rules under the said section, prescribing the manner in which such cess is to be paid, no cess is due and payable by the Company.</p> <p style="text-align: right;">FOR TODI TULSYAN & CO. CHARTERED ACCOUNTANTS FRN – 002180C</p> <p style="text-align: right;">Sd/- (CA. SUSHIL KUMAR TULSYAN) Partner (Membership No. 075899)</p> <p>Place : Ranchi Dated: 10.05.2013</p>	<p>Reconciliation of Sundry Debtors with CIL Subsidiaries is under progress. Letters have already been issued for confirmation of balance in Debtors (other than CIL Subsidiaries).</p>

STATUTORY AUDITORS' REPORT AND REPLIES OF MANAGEMENT	
AUDITORS' REPORT	MANAGEMENTS' REPLY
<p align="center">ANNEXURE TO THE AUDITOR'S REPORT</p> <p><u>(Referred to in paragraph 7 of our report of even date on the accounts of Central Mine Planning and Design Institute Limited for the year ended 31st March, 2013)</u></p> <p>i In respect of Fixed Assets:</p> <p>a. The Company has generally maintained proper records of fixed assets showing full particulars, including quantitative details and situation of fixed assets. <i>However in case of Assets belonging to S&T Fund, Fixed Asset Register is maintained year wise instead of Asset wise.</i></p> <p>b. A major portion of the high value assets have been physically verified by the management in accordance with a phased program of verification adopted by the Company. As explained to us, no material discrepancies were noticed on such verification.</p> <p>c. In our opinion, the Company has not disposed off a substantial part of the fixed assets during the year and the going concern status of the Company has not been affected.</p> <p>ii In respect of its inventories:</p> <p>a The stock of high value stores and spare parts has been physically verified by the management during the year. Some low value items have also been verified on test basis. In our opinion, the frequency of verification is reasonable.</p> <p>b In our opinion, and according to the information and explanations given to us, the procedure of physical verification of stock followed by the management is reasonable and adequate in relation to the size of the Company and the nature of its business.</p> <p>c The Company has maintained proper records of its inventories. As explained to us, the discrepancies noticed on physical verification of stock as compared to book records were not material and have been properly dealt with in the books of accounts.</p> <p>iii As informed, the Company has not granted/taken any loans, secured or unsecured to companies, firms or other parties covered in the register maintained under section 301 of the Companies Act, 1956. Accordingly, paragraphs (iii) (b), (c), (d), (f) and (g) of the Companies (Auditors Report) Order 2003 (as amended) are not applicable.</p> <p>iv. In our opinion, there is an adequate internal control system commensurate with the size of the Company and the nature of its business, for the purchase of inventory and fixed assets and for sale of goods and services. During the course of our audit, we have not observed any major weakness in internal control system.</p> <p>v. In respect of transactions covered under Section 301 of The Companies Act, 1956:-</p> <p>a. In our opinion and according to the information and explanations given to us, there were no transactions made in pursuance of contracts or arrangements that needed to be entered in the register maintained under Section 301.</p> <p>b. In our opinion and according to the information and explanations given to us, there were no transactions made in pursuance of contracts or arrangements entered in the register maintained under Section 301 and exceeding Rs. Five lakhs at prices which are not reasonable having regard to the prevailing market prices at the relevant time.</p>	<p>Preparation of Asset wise Fixed Asset Register belonging to S&T Fund is under progress.</p> <p>No Comments</p> <p>No Comments</p> <p>No Comments</p> <p>No Comments</p> <p>No Comments</p> <p>No Comments</p> <p>No Comments</p> <p>No Comments</p> <p>No Comments</p> <p>No Comments</p> <p>No Comments</p>

STATUTORY AUDITORS' REPORT AND REPLIES OF MANAGEMENT

AUDITORS' REPORT						MANAGEMENTS' REPLY
vi	The Company has not accepted any deposits from the public within the meaning of Section 58A and 58AA or any other relevant provision of the Act.					No Comments
vii	The Company has appointed outside firms of Chartered Accountants/ Cost Accountants for internal audit of Headquarter and Regional Institutes. In our opinion, the Company has an internal audit system commensurate with its size and nature of business.					No Comments
viii	We have been informed that the Central Government has not prescribed the maintenance of cost records under Section 209(1) (d) of The Companies Act, 1956 for the Company.					No Comments
ix	In respect of statutory dues:					
a	According to the records of the Company, the Company is generally regular in depositing undisputed statutory dues such as provident fund, investor education and protection fund, income tax, sales tax, wealth tax, service tax, customs duty, excise duty, cess and any other dues with the appropriate authorities. According to the explanations given to us, Employees State Insurance Scheme is not applicable to the Company. According to the information and explanations given to us, no undisputed amounts payable in respect of the aforesaid dues were outstanding as at 31 st March, 2013 for a period of more than six months from the date they became payable.					No Comments
b	The following disputed statutory dues, and against some of which company has paid in protest but not recognized as liability, that have not been deposited on accounts of matters pending before appropriate authorities are as under:					No Comments
Sl. No.	Name of Statute	Nature of Dues	Amount (₹ in Lakh)	F.Y. to which the amount relates	Forum where Dispute is Pending	
1.	Service Tax	Service Tax	40.24	1996-97	Service Tax Tribunal, Kolkata	
2.	Service Tax	Service Tax	505.53	1998-99, 1999-00, 2000-01, 2001-02, 2002-03	CESTAT, Kolkata	
3.	Sales Tax Act	Entry Tax	20.97	2001-02	Sales Tax Authority	
4.	Income Tax Act	Income tax	244.43	1992-93, 1994-95, 1995-96, 1996-97, 2005-06, 2006-07	ITAT, Ranchi	
5.	Income Tax Act	Income tax	1968.83	2007-08, 2008-09	CIT (A), Ranchi,	
6.	Income Tax Act	Income tax	16.30	2009-10	CIT (A), Ranchi,	

STATUTORY AUDITORS' REPORT AND REPLIES OF MANAGEMENT	
AUDITORS' REPORT	MANAGEMENTS' REPLY
<p>x The Company has no accumulated losses as at 31st March 2013 and has also not incurred any cash losses from operating activities during the financial year ended on that date and in the immediately preceding financial year.</p> <p>xi According to the information and explanations given to us, we are of the opinion that the Company has no dues to financial institutions, banks or debenture holders.</p> <p>xii According to the information and explanations given to us, the Company has not granted any loans or advances on the basis of security by way of pledge of shares, debentures and other securities.</p> <p>xiii The Company is not a Chit Fund, Nidhi or Mutual benefit fund/society. Therefore, clause (xiii) of CARO is not applicable to the Company.</p> <p>xiv In our opinion the Company is not dealing or trading in shares, securities, debentures and other investments,</p> <p>xv According to the explanations and information given to us, the Company has not given any guarantee for loans taken by others from banks or financial institutions.</p> <p>xvi The Company has not raised any term loans during the year.</p> <p>xvii In our opinion and according to the explanations given to us, the Company has not raised any short term funds and used it for long term purposes or vice versa.</p> <p>xviii During the year, the Company has not made any preferential allotment of shares to parties and companies covered in the register maintained under Section 301 of The Companies Act, 1956.</p> <p>xix The Company has not issued any debenture during the year.</p> <p>xx The Company has not raised any money by public issue during the year.</p> <p>xxi As per information and explanation received from the management, no fraud on or by the company has been noticed or reported during the course of our audit.</p> <p style="text-align: right;">FOR TODI TULSYAN & CO. CHARTERED ACCOUNTANTS FRN – 002180C</p> <p style="text-align: right;">Sd/- (CA. SUSHIL KUMAR TULSYAN) Partner (Membership No. 075899)</p> <p>Place : Ranchi Dated: 10.05.2013</p>	<p>No Comments</p> <p>No Comments</p> <p>No Comments</p> <p>No Comments</p> <p>No Comments</p> <p>No Comments</p> <p>No Comments</p> <p>No Comments</p> <p>No Comments</p> <p>No Comments</p> <p>No Comments</p> <p>No Comments</p> <p>No Comments</p> <p>No Comments</p> <p>No Comments</p> <p>No Comments</p> <p>No Comments</p> <p>No Comments</p> <p>No Comments</p>

Comments of the Comptroller & Auditor General of India Under Section 619 (4) of the companies Act, 1956 on the accounts of Central Mine Planning & Design Institute Limited for the year ended 31ST MARCH 2013.

The preparation of financial statements of Central Mine Planning & Design Institute Limited for the year ended 31st March 2013 in accordance with the financial reporting framework prescribed under the Companies Act, 1956 is the responsibility of the management of the company. The statutory auditors appointed by the Comptroller and Auditor General of India under Section 619(2) of the Companies Act, 1956 are responsible for expressing opinion on these financial statements under section 227 of the Companies Act, 1956 based on independent audit in accordance with the auditing and assurance standards prescribed by their professional body the Institute of Chartered Accountants of India. This is stated to have been done by them vide their Audit Report dated 10.05.2013.

I, on the behalf of the Comptroller and Auditor General of India, have conducted a supplementary audit under section 619(3) (b) of the Companies Act, 1956 of the financial statements of Central Mine Planning & Design Institute Limited, Ranchi for the year ended 31st March 2013. This supplementary audit has been carried out independently without access to the working papers of the statutory auditors and is limited primarily to inquiries of the statutory auditors and company personnel and a selective examination of some of the accounting records. On the basis of my audit nothing significant has come to my knowledge which would give rise to any comment upon or supplement to Statutory Auditors' Report under section 619(4) of the Companies Act, 1956.

For and on behalf of the Board of Directors
Comptroller & Auditor General of India

Sd/
(Yashodhara Ray Chaudhuri)
Principal Director of Commercial Audit
& Ex-officio MAB – II, Kolkata-20

Place: Kolkata
Date: 17.05.2013

Auditor's Report on Mou

TODI TULSYAN & CO.
CHARTERED ACCOUNTANTS

602, LUV KUSH TOWER,
EXHIBITION ROAD,
PATNA – 800 001
Phone: 2320211 / 2320056 (0)
Fax: 0612-2320056
E-mail : ttco@sify.com

To,
Central Mine Planning & Design Institute Ltd.
Gondwana Place, Kanke Road,
Ranchi

1. The achievement stated in attached Performance Evaluation Sheet with respect to Financial and Dynamic Parameters are calculated in terms of guidelines for MoU for the year 2012-13 issued by the Ministry of Heavy Industries & Public Enterprises (MoU Division), Government of India.
2. The achievement stated against Financial and Dynamic Parameters are ratified from means of verification stated in respective parameters are correct to the best of our knowledge.

FOR TODY TULSYAN & CO.
CHARTERED ACCOUNTANTS
FRN: 002180C

Sd/-
(Sushil Kumar Tulsyen)
Partner

Place: Ranchi
Date : 05.06.2013

MEMORANDUM OF UNDERSTANDING - 2012 - 13

ANNEXURE IV

SUBSIDIARY: Central Mine Planning & Design Institute Ltd. (CMPDI)

	Evaluation Criteria	Unit	Weight (in %)	MoU Target					Means of verification	Performance Actual	Score
				Excellent	Very Good	Good	Fair	Poor			
				1	2	3	4	5			
1	Static / Financial Parameters								Annual Report		
	(a) Financial Indicators - Profit related ratios										
	(i) Gross Margin / Gross Sales	%	10	5.55	5.44	5.17	4.91	4.66		7.09	0.10
	(ii) Operating turnover / Employee	Rs. Cr	12	0.1766	0.1731	0.1644	0.1562	0.1484		0.1913	0.12
	(b) Financial Indicators - Size related										
	(i) Gross Margin	Rs. Cr	8	30.41	29.80	28.31	26.90	25.55		42.61	0.08
	(ii) Gross Sales (Excl. service tax)	Rs. Cr	4	547.76	536.80	509.96	484.47	460.24		601.05	0.04
	(c) Financial Returns- Productivity related										
	(i) PBDIT / Employee	Rs. Cr	7	0.0098	0.0096	0.0091	0.0087	0.0082		0.0136	0.07
	(ii) Added Value / Gross Sales	%	9	1.2900	1.2642	1.2010	1.1409	1.0839		3.76	0.09
	Sub Total		50								0.50
2	Dynamic Parameters										
	(a) Human Resource Management		5						Independent HR Auditor Report/Annual Report		0.08
	(i) HRM performance as per DPE Guideline		3		Enclosed as Annexure XIV					87.5 points out of 100#	0.06
	(ii) Certified Training in Project Management	No of Executives	1	3	2	1	-	-		4	0.01
	(iii) Certified Training in Contract Management	No of Executives	1	3	2	1	-	-		3	0.01
	(b) R & D / New initiatives		5		Enclosed as Annexure XII						0.05
	(c) Corporate Social Responsibility		5		Enclosed as Annexure XI						0.05
	(i) Expenditure on CSR	% of PAT of 2011-12	1	3.50	3.15	2.80	2.45	2.10	Independent R&D Advisory Committee Report/Annual Report/Independent Expert Report/Annual Report	5.41	0.01
	(ii) 5 Projects chosen under CSR										
	(iia) Support to Birsa High School, Hathia, Kanke Road, Ranchi - Construction of 3 classrooms with all amenities, Study material for 925 students, Laboratory material for School, School Fees for meritorious & poor students, sports materials and school dress	Date	0.8	21st Feb.13	1st Mar.13	11th Mar.13	21st Mar.13	31st Mar.13		18th Feb.13	0.008
	(iib) Organising four Medical Camps for students of Birsa High School, Hathia, Kanke Road, Ranchi	Date	0.8	21st Feb.13	1st Mar.13	11th Mar.13	21st Mar.13	31st Mar.13		21st Jan.13	0.008
	(iic) Support to Gondwana Primary School, Kanke Road, Ranchi - School Fees for meritorious & poor students, school dress, sports material, etc. for poor students, Financial assistance on specified occasions, e.g. Independence day and Republic day.	Date	0.8	21st Feb.13	1st Mar.13	11th Mar.13	21st Mar.13	31st Mar.13		20th Feb.13	0.008

Sd/-
HoD (TS)Sd/-
GM (Finance)Sd/-
Statutory Auditor

	(iid)	Organising two Medical Camps for students of Gondwana Primary School, Kanke Road, Ranchi	Date	0.8	21st Feb.13	1st Mar.13	11th Mar.13	21st Mar.13	31st Mar.13	Independent Expert Report/Annual Report	11th Oct.12	0.008	
	(iie)	Organising four Medical Camps for inhabitants in four near-by villages	Date	0.8	21st Feb.13	1st Mar.13	11th Mar.13	21st Mar.13	31st Mar.13		29th Nov.12	0.008	
	(d)	Sustainable Development		5	Enclosed as Annexure XIII								0.05
	(e)	Corporate Governance		5									0.05
		(i) Compliance of Corporate Governance norms as per Corporate Governance Guidelines issued by DPE as applicable to CMPDI (Format attached as Annexure XV)	(%)	4	85 & Above	84 - 75	74 - 60	59 - 50	Below 50	Score awarded by Ministry	99	0.04	
		(ii) Submission of data for Public Enterprises Survey published by DPE (in line with DPE's Directives)	Date	1	15th Sep.2012	1st Oct.2012	15th Oct.2012	31st Oct.2012	After 31st Oct.12	DPE	7th Sep.2012	0.01	
		Sub Total		25								0.28	
3	Sector Specific Parameters:												
	(i)	Drilling								Annual Report			
		(ia) Drilling - Through departmental drills	000 Meters	3	257.00	251.86	239.27	227.30	215.94		276.20	0.03	
		(ib) Drilling - Outsourcing	000 Meters	2	325.00	318.50	302.58	287.45	273.07		286.71	0.08	
	(ii)	Geological Reports	No.	3	14	13	12	11	10		15	0.03	
	(iii)	Project Reports	No.	4	26	25	24	23	22		29	0.04	
	(iv)	Other Reports	No.	3	124	122	115	110	104		168	0.03	
	(v)	EIA/EMP (including Form-I)	No.	3	32	31	29	27	25		59	0.03	
	(vi)	Periodical OBR check measurement of OC mines of CIL subsidiaries (No. of Mines including outsourcing patches)	No.	2	62	61	58	55	52		103	0.02	
	(vii)	Obtaining Consultancy orders for Outside Consultancy	Rs. Cr	1	33.60	32.00	30.00	28.00	26.00		35.08	0.01	
		Sub Total		21.0								0.27	
4	Compliance of DPE's Guidelines												
	(i)	Issue of Bonus Share		Not applicable as per guideline as CMPDI is a subsidiary of CIL									
	(ii)	Reservation for SC, ST, OBC in appointment	Yes/No	1	Yes				No		YES		
	(iii)	Posting of deputatationist	Yes/No	0.5	Yes				No		YES		
	(iv)	Implementation of 2007 pay revision (As per Proforma-I)	Provisions implemented	1	10	9	8	7	6		10		
	(v)	Switching over from CDA to IDA pattern of pay scale (As per Proforma-II)		1	4	3	2	1	-		4		
	(vi)	Submission of Compliance report to DPE	Date	0.5	30 Jun.'12	31 Jul.'12	31 Aug.'12	30 Sep.'12	31 Oct.'12		23rd June'12		
		Grand Total		100								1.09	

Note: # Considering the performance as Very Good, the score has been taken as 0.06

Sd/-
HoD (TS)Sd/-
GM (Finance)Sd/-
Satutory Auditor

Annexure-XI

CSR REVIEW

TABLE 1
DETAILS OF 5 CHOSEN PROJECTS (2012-13)

Sl. No.	Name of the Project	Starting Date	Completion Date (Very Good)	Amount Allotted with Year wise Breakup (Rs. in Lakhs)	Date of Completion of Need Assessment/ Baseline Survey & Name of Agency	Name of Implementing Agency and Date of Appointment	Amount Spent on Documentation and Dissemination and Name of Agency Appointed	Name of Monitoring Agency	Brief Details of Evaluation Report (Separate Sheet to be Attached)
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
A) Support to Birsa High School, Hathiagonda, Kanke Road, Ranchi									
1	Construction of 3 class rooms with all amenities, Study materials to 925 students, Laboratory materials to School, School Fees for meritorious & poor students, sports materials and school dress to poor students, financial assistance on special occasions, e.g. Republic Day, Independence day.	1 st May, 2012	1 st March, 2013	20.00 (Tentative)	31.12.2011 by in-house Committee consisting of Union Representative, Officers' Association Rep. & Mgt. Rep. and Principal of the School	Contracted Agency for infrastructure: M/s Pradeep Electrical Boriya, Ranchi and for other activities, Principal, Birsa High School, Hathiagonda, Kanke Rd., Ranchi is the implementing person.	Total Cost of Construction: Rs.32.80 lakh only Name of Contractor/ Agency: M/s Pradeep Electrical Boriya, Ranchi	In House Committee consisting of Union Representative, Officers' Association Rep. & Mgt. Rep.	Total work has been completed and found to be satisfactory by the CSR Monitoring Committee.
2	Organising Four Medical Camps	1 st April, 2012	1 st March, 2013	1.00 (Tentative)	31.12.2011 by in-house Committee consisting of Union Representative, Officers' Association Rep. & Mgt. Rep. and Principal of the School	N i r a m a y a Hospital of Lions Club, Ranchi East under supervision of CMPDI	Total Expense: Rs.0.87 lakh only Completed in association with Niramaya Hospital of Lions Club, Ranchi East. Fifth Medical camp also organized and expenditure was Rs.0.29 lakh only.	In House Committee consisting of Union Representative, Officers' Association Rep. & Mgt. Rep.	All four camps were held successfully within time frame and found to be satisfactory by the CSR Monitoring Committee.

Sl. No.	Name of the Project	Starting Date	Completion Date (Very Good)	Amount Allotted with Year wise Breakup (Rs. in Lakhs)	Date of Completion of Need Assessment/ Baseline Survey & Name of Agency	Name of Implementing Agency and Date of Appointment	Amount Spent on Documentation and Dissemination and Name of Agency Appointed	Name of Monitoring Agency	Brief Details of Evaluation Report (Separate Sheet to be Attached)
B) Support to Gondwana Primary School, Kanke Road, Ranchi									
3	School Fee to meritorious & poor students, school dress, sports material, etc. to poor students, Financial assistance on specified occasions, e.g. Independence day and Republic day.	1 st May, 2012	1 st March, 2013	1.00 (Tentative)	31.12.2011 by in-house Committee consisting of Union Representative, Officers' Association Rep. & Mgt. Rep. and Principal of the School	Principal, Gondwana Primary School, Kanke Rd., Ranchi.	Total Expense: Rs.1.45 lakh only	In House Committee consisting of Union Representative, Officers' Association Rep. & Mgt. Rep.	Total support given to Gondwana Primary School on time and total work has been completed and found to be satisfactory by the CSR Monitoring Committee.
4	Organising Two Medical Camps	1 st April, 2012	1 st March, 2013	0.50 (Tentative)	31.12.2011 by in-house Committee consisting of Union Representative, Officers' Association Rep. & Mgt. Rep. and Principal of the School	Niramaya Hospital of Lions Club, Ranchi East under supervision of CMPDI	Total Expense: Rs.0.58 lakh only Conducted through Niramaya Hospital of Lions Club, Ranchi East under the supervision of CMPDI.	In House Committee consisting of Union Representative, Officers' Association Rep. & Mgt. Rep.	Both Medical camps were held in time and found to be satisfactory by the CSR Monitoring Committee.
C) Medical Camp in nearby Village									
5.	Organising four Medical Camps for inhabitants in four near-by villages	1 st April, 2012	1 st March, 2013	1.00 (Tentative)	Completed on 14.07.2010 in Patragonda village and on 05.08.2010 in Hathiagonda village. To be completed on 15.12.2011 in Lower Misirgonda village. Agency - In House Committee consisting of Union Representative, Officers' Association Rep. & Mgt. Rep.	Niramaya Hospital of Lions Club, Ranchi East. under supervision of CMPDI	Total Expense: Rs.1.14 lakh only Conducted through Niramaya Hospital of Lions Club, Ranchi East under the supervision of CMPDI.	In House Committee consisting of Union Representative, Officers' Association Rep. & Mgt. Rep.	All four Medical camps were held successfully within time frame and found to be satisfactory by the CSR Monitoring Committee.
Total expenditure (Tentative)				23.50					

TABLE 2
Format for List of All Projects/Activities Reported to TISS HUB

Sl. No.	Name of the CSR	Date of Reporting of Details to TISS Database	Date of Acceptance Conveyed by TISS
1	2	3	4
1	Support to Birsa High School, Hathiagonda, Kanke Road, Ranchi (925 students)	Handed over to TISS on 8 th April, 2013.	Acceptance not yet received.
2	04 Medical Camps in Birsa High School, Hathiagonda, Kanke Road, Ranchi		
3	Support to Gondwana Primary School, Kanke Road, Ranchi		
4	02 Medical Camps in Gondwana Primary School, Kanke Road, Ranchi		
5	04 Medical Camps in nearby villages.		

TABLE 3
Details of CSR Expenditure

Sl. No.	Item	Amount in Crores or percentage
1	2	3
1.	PAT for the year under review	Rs. 19.61 crore (2011-12).
2.	CSR expenditure	Rs.1.06 crore.
3.	CSR expenditure as percentage of PAT	5.41%
4.	CSR expenditure as percentage of minimum prescribed	180% (Minimum Prescribed: 3% of PAT).
5.	Training expenditure on CSR (to be treated as CSR expenditure)	NIL
6.	Unspent Balance amount of CSR Budget rolled over to the following year	Rs.0.57 crore
7.	Contribution to CSR HUB as percentage of CSR Budget.	CIL is contributing to CSR Hub for CIL and its subsidiary companies.

Annexure-XII

R&D PERFORMANCE TARGET SETTING CUM EVALUATION FOR 2012-13
(REF. ANNEXURE- III OF R&D GUIDELINES OF DPE)

A. R&D Expenditure**Table 1: Mandatory Parameter-Total R&D Expenditure as a percentage of PAT**

Sl No	Particular	Unit	Weightage	Performance Target (as % of PAT of 2011-12)					Achievement
				Excellent (105% of target)	Very Good (100% of target)	Good (90% of target)	Fair (80% of target)	Poor (less than 70% of target)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	R&D expenditure as % of PAT of 2011-12	%	2.5	0.525	0.500	0.450	0.400	Less than 0.350	Rs.594.42 lakh

PAT (2011-12) : Rs. 19.61 crores.

B. Selection of R&D projects (As per para 3.10 of the R&D guidelines of DPE)

The R&D in coal sector is meant for improvement of efficiency parameters in mining operations/related activities and control of mining environment and safety aspects.

Therefore, key performance indicator for each of the project of the R&D selected may be chosen from the following (Ref. Annexure-II of R&D Guidelines of DPE):

- (i) Improvement in production, productivity
- (ii) Underground/Opencast mine safety
- (iii) Technologies transferred/acquired
- (iv) Reduce environmental impact due to mining
- (v) Process development /improvement
- (vi) Knowledge generation/dissemination
- (vii) Addition of new facilities/equipment
- (viii) Equipment/material development

As per the R&D guidelines of DPE, the following projects have been selected by CMPDI for inclusion in MoU 2012-13:

Sl. No.	Name of the Project	Performance indicator
1	Generation/analysis of coalfield wise database of physico-mechanical characteristics of rock / coal and representative numerical models for appropriate solution to strata control problems.	Underground Mine Safety
2	Development of guidelines for safe dragline dump profile under varying geo-engineering condition in opencast coal mines of Coal India	Opencast Mine safety
3	Investigations of Bolt Behaviour in Development and Depillaring Panels under Blast Induced Dynamic Loading.	Knowledge Generation/ dissemination

Table 2: Project chosen by CMPDI

				Target value					
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Sl. No.	Project Chosen	Performance Indicator	Weightage	Excellent	Very Good	Good	Fair	Poor	Actual
2.1	Generation/analysis of coalfield-wise database of physico-mechanical characteristics of rock/coal and representative numerical models for appropriate solution to strata control problems.	Underground Mine Safety	0.90	If Preparation of representative of numerical models is completed by -					
				30 th Nov,12	15 th Dec'12	31 st Dec'12	15 th Jan'13	31 st Jan'13	Nov.'12
2.2	Development of guidelines for safe dragline dump profile under varying geo-engineering condition in opencast coal mines of Coal India	Opencast Mine safety	0.80	If Report Preparation is completed by -					
				31 st Jan'13	15 th Feb'13	28 th Feb'13	15 th Mar'13	31 st Mar'13	Jan.'13
2.3	Investigations of Bolt Behaviour in Development and Depillaring Panels under Blast Induced Dynamic Loading.	Knowledge Generation/ dissemination	0.80	If Completion of 25 Numerical models for different rock bolt assembly is done by -					
				1 st Mar'13	9 th Mar'13	17 th Mar'13	24 th Mar'13	31 st Mar'13	Jan.'13

CHECKLIST FOR EVALUATION OF THREE R&D PROJECTS SELECTED FOR MOU 2012-13

(REF. SL. NO. 8 OF R&D GUIDELINES OF DPE)

1	Project code	CIL/R&D/1/36/10		
2	Title	Generation/analysis of coalfield-wise database of physico-mechanical characteristics of rock/coal & representative numerical models for appropriate solution to strata control problems.		
3	Start date	Feb., 2010		
4	Scheduled completion date	30 Nov., 2012		
5	Objective	Generation/analysis of coalfield-wise database of physico-mechanical characteristics of rock/coal & representative numerical models for appropriate solution to strata control problems.		
6	Background to Description	Comprehensive database of physico-mechanical properties and the representative numerical models for different rocks/ coal at different depths for mine planning work are presently not available.		
7	Base line survey	Mines are becoming larger and cost intensive. Accurate and less time consuming mine planning to ensure safety, environmental protection and conservation of coal are the prime need of today. Database of physico-mechanical properties and the representative numerical models will help planners to achieve these objectives.		
8	Milestones (Work plan)	i. Collection, compilation and analysis of existing data ii. Creation of database design and creation of database with the existing data. iii. Testing of cores with new set of parameters iv. Addition of new data with additional parameters v. Preparation of 2D & 3D representative models		
9	Action Plan	Activities	2012-13	
			Date of start	Probable date of completion
		Laboratory testing of core samples of different areas/ coalfields	Feb 2012	30 Nov., 2012
		Preparation of representative of numerical models	Jan 2012	30 Nov, 2012
10	Collaboration, if any	-		
11	Detailed documentation	Project file with relevant details & status reports		
12	Resource employed	Executives of Underground Mining Divn. of CMPDI(HQ), Ranchi		
13	Project Cost	Rs. 241.81 lakh		
14	Beneficiaries	On completion of this project, the ground control studies and appropriate mine design will be easier because of availability of characteristics of rock/coal and representative numerical models. It will reduce the time for getting DGMS approval for depillaring and will give a scientific basis for support design and systematic support rules for development and depillaring. This work will be helpful for support estimation for powered support longwall faces also.		
15	Impact	The ground control studies and appropriate mine design will be easier because of availability of characteristics of rocks/coal and representative numerical models. It will reduce the time for getting DGMS approval for depillaring and will give a scientific basis for support design and systematic support rules for development and depillaring.		
16	Status	Installation of 200T Servo controlled UTM is under progress. After installation, testing of physico-mechanical characteristics of rock/coal will be done to establish numerical models for appropriate solution to strata control problems in underground mines.		

1	Project code	CIL/R&D/1/38/10	
2	Title	Development of guidelines for safe dragline dump profile under varying geo-engineering condition in opencast coal mines of Coal India Ltd.	
3	Start date	Feb. 2010	
4	Scheduled completion date	Jan. 2013	
5	Objective	Development of guidelines for dragline dumps under varying geo-engineering conditions in opencast mines of CIL.	
6	Background to Description	To accommodate the maximum amount of waste rock within the quarry/mine due to scarcity of land for external dumping. Mine operators are unable to decide optimum dragline dump profile in varying geo-mining parameters like mine floor inclination, water table within the dumps, effect of seismic and blast vibration on dump masses and different geo-mining characteristics.	
7	Base line survey	To develop new guideline for safe dragline dump profile under varying geo-mining condition. This study will help mine planner and operators in different coal fields of CIL to determine optimum re-handling volume of dragline dump under varying geo-engineering conditions.	
8	Milestones (Work plan)	(i) Laboratory testing of collected dump/interface materials (ii) Development of Guideline for safe dragline dump profile	
9	Action Plan	Activities	2012-13
			Date of start Probable date of completion
		Laboratory testing of collected dump/ interface materials	April 2012 Oct., 2012
		Submission of Interim reports	Jul., 2012 Sep., 2012
		Development of Guidelines for dump profile	Jun., 2012 Nov., 2012
		Report preparation	Dec., 2012 Jan., 2013
10	Collaboration, if any	BIT, Mesra, Ranchi	
11	Detailed documentation	Project file with relevant details & status reports	
12	Resource employed	Executives of Open Cast Deptt. of CMPDI(HQ), Ranchi and academic personnel of BIT, Mesra.	
13	Project Cost	Rs. 75.60 lakh	
14	Beneficiaries	Coal India Ltd. & others	
15	Impact	Lesser land will be required for back filling of the huge amount of waste material within the de-coaled areas. Apprehension of accident due to slope failure of dump would be obviated to a great extent.	
16	Status	BIT, Mesra has submitted interim reports on "Slope stability study of Dragline Dumps of Khadia, Jayant and Bina opencast projects, NCL. Which were scrutinized and necessary observations were sent to BIT, Mesra for incorporation in final report. Interim reports on Dragline Dump profile of Nigahi OCP(NCL), Amlohri OCP(NCL) and Sonapur Bazari OCP, ECL are under preparation.	

1	Project code	CIL/R&D/1/42/10		
2	Title	Investigations of Bolt Behaviour in Development and Depillaring Panels under Blast Induced Dynamic Loading.		
3	Start date	Dec., 2010		
4	Scheduled completion date	Nov., 2013		
5	Objective	(i) Investigation of bolt performance in development panel. (ii) Investigation of bolt performance in depillaring panel and comparison with results of development panel. (iii) Study of bolt performance under blast induced dynamic loading. (iv) Development of a simple monogram or chart or computer program for determining the best suited bolt for a given geo mining conditions.		
6	Background to Description	In Indian coal mines, majority of accidents occurred due to ground control problems especially due to roof or rock fall. Bolting is practiced as primary support system to prevent such roof & rock falls. Health and safety of mine workers and officers are the primary concern of mine management. The management trust on the good bolting practices for safe and secure working environment in underground. It is also required to understand the mechanics of bolt-grout-rock interaction so that proper design can be put to practice under a given geo-mining condition.		
7	Base line survey	Understanding of bolt performance is required before any effective design can be put to practice. Till date, several lacunas exist in bolt design due to lack of knowledge.		
8	Milestones (Work plan)	(i) To investigate the bolt behavior & performance in respect of rock bolts having diameter 20, 22 & 25 mm at Jhanjra & Kottadih mine (ii) To investigate the performance of instrumented bolts (iii) Blast Vibration Monitoring in proximity to Installed Bolts		
9	Action Plan	Activities	2012-13	
			Date of start	Probable date of completion
		Roof vibration monitoring and analysis	March 2012	January 2013
		25 Numerical models for different rock bolt assembly	Dec. 2011	March 2013
10	Collaboration, if any	IIT, Kharagpur and RDCIS, SAIL, Ranchi		
11	Detailed documentation	Project file with relevant details & status reports		
12	Resource employed	Executives of Blasting Cell, CMPDI(HQ), Ranchi in association with academicians from IIT, Kharagpur and executives from RDCIS,(SAIL), Ranchi		
13	Project Cost	Rs. 491.08 lakh		
14	Beneficiaries	Findings of this study may help the regulatory bodies to take decision and provide bolting (support design) suggestions to the mine management for a specific case.		
15	Impact	Based on the finding, spacing of bolts can be ascertained for a given bolt length and diameter such that maximum utilization of bolts can be obtained. Further, bolting practice being employed in any mine would be scientifically proven to work in the given condition and not be designed based on the thumb rule.		
16	Status	Majority of equipment has been procured by IIT, Kharagpur. Laboratory investigations in respect of 20mm, 22mm and 25mm Fe-640 bolts supplied by SAIL is under trial at IIT, Kharagpur. Resin with variable setting time is being used during laboratory experimentation. Fabrication for laboratory pull-out test has been done and few pull-out tests have been performed with casting samples. IIT and CMPDI team has visited Khottadih mine and Jhanjra mine of ECL for site selection. Full fledged field and laboratory work will be started shortly.		

S.No.	Activity	
1	Whether Specific SD Plan and Budget passed by Board or its Designated Committee	Yes/No. No. and Date of Board Resolution
	1	2
	Yes	No. Nil, Dated 01.02.2012

Table 1. SD Committee details

Board level Designated Committee Name	Chairman of Board level Designated Committee	Number of regular meetings held	Key decisions during the year
1	2	3	4
Committee on Sustainable Development	Dr. Mukesh Khare, Professor, IIT, Delhi Independent Director	2	<ul style="list-style-type: none"> Performance of SD activities for the year 2012-13 was found to be satisfactory. Identification & estimation of Sustainable Development activities for the year 2013-14 (Rooftop rain water harvesting & replacement of existing conventional tube lights at RIs uniformly; consideration of use of solar energy for outdoor lights and wind energy) "Recycling of paper" to be taken up as lead activity under Sustainable Development program in the year 2013-14.

Total Score for this Table

0.5

Score allotted by the Task Force

Table 2 Total SD Expenditure as a percentage of PAT

*Target Value as % of PAT (on a five-point scale: Para 6.5.2 of Guidelines) (Rs. Lakhs)	Total expenditure (Current FY) (Rs. Lakhs)	Profit after tax (Previous FY) (Rs. Lakhs)	Actual Expenditure as % of PAT				
1	2	3	4				
			Excellent	Very Good	Good	Fair	Poor
0.5% of PAT of 2011-12 (0.5% - 9.8 Lakhs)	75.39*	1961	0.55%	0.50%	0.45%	0.40%	0.35%
Total Score for this Table			1.0				

Score allotted by the Task Force

* **Note:** This expenditure excludes the expenditure incurred on the satellite surveillance project as that project is funded by CIL. Total expenditure on SD activities in the year 2012-13 by CMPDI is **3.84% of the PAT for the year 2011-12 (Rs.1961 lakh)**.

Table 3 Projects Chosen by CPSE

Sl. No.	Schedule A/B	Project / activity (Please refer Annex-I)	Performance Indicator (Please Refer Annex-II and Para 6.5.3 of Guidelines)	Total expenditure on Project / Activity (Rs. Lakhs)	Duration S / M / L	Weight	Target Set (on a five point scale : Para 6.5.3 of Guidelines					Target Achieved
							Excellent	Very Good	Good	Fair	Poor	
1	2	3	4	5	6		7					8
1	A	Roof Top (7000 sq m) Rain Water Harvesting of balance quarters & balance Service Buildings at CMPDI (HQ), Ranchi	Water Conservation & Recharging of Ground Water	44.77 (Awarded value)	By 31 st Mar'13	0.5	On completion of the Project by 1 st Mar'13	9 th Mar'13	17 th Mar'13	24 th Mar'13	31 st Mar'13	Yes, project commenced on 26.01.12 and completed on 25.07.12
2	A	Energy conservation by replacing existing conventional tube lights	No. of conventional tube lights replaced	11.00 (Estimated)	By 31 st Mar'13	0.5	570 lights	559	531	504	479	Yes, The work started on 13.12.12 & is expected to go on till 12.5.13 but target of 570 lights has been achieved
3	A	Satellite Surveillance of Major OC projects / mines of CIL for land Restoration & Reclamation	No. of projects / mines completed	Rs. 352 lakhs for 44 projects (@Rs. 8.0 lakhs per project/mine) (Being funded by CIL)	By 31 st Mar'13	0.5	44 Projects	43	41	39	37	Yes, All the 44 projects have been completed by 31 st March, 2013.
4	B	Workshop on Sustainable Development	No. of workshop organised	2.0 (estimated)	By 31 st Mar'13	0.5	1 workshop	-	-	-	-	Yes, held on 23.03.13.
5	B	Sustainable Development reporting	Whether reported or not	-	By 31 st Sept. 2012 for the year 2011-12	0.5	Excellent if Reported	-	-	-	-	Reported in the annual report & accounts of CMPDI for the year 2011-12

Total Score for this Table

2.5

Score allotted by the Task Force

Table 4- Evaluation of Projects

No. of projects evaluated by an Independent External Agency /Expert / Consultant, etc.

Excellent	Very Good	Good	Fair	Poor
5	4	3	2	1

Note: All the 5 projects undertaken and completed in the financial year 2012-13 have been evaluated by Mr. Shashi Shekhar, an independent external expert.

Total Score for this Table	0.5
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Score allotted by the Task Force	
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Table 5 - Publication of SD Performance Report

Activity	Yes / No	Mode of SD Report (If reported, whether a stand-alone SD Report or a part of Annual Report, etc.)
1	2	3
SD performance Report	YES	Shall be included as a standalone report and summary of the report as a part of the annual report 2012-13

Total Score for this Table	0.5
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Score allotted by the Task Force	
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Total Score for all Table	5
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Total allotted Score for all Tables	
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Annexure-XIV
HRM PERFORMANCE EVALUATION UNDER MEMORANDUM OF UNDERSTANDING

Sl.	HRM - PERFORMANCE INDICATORS	Measurement Unit	Weightage	Target value under five point scale - Basic Target (Very Good)	Excellent	Good	Fair	Poor	Actual Performance (To be filled at the time of submission of performance evaluation by CPSE)	Self-Evaluation Score(to be filled up at the time of submission of performance evaluation by CPSE)
A	Competency & Leadership Development									
	A1 Compulsory									
1	% actualization of Training Plan	% fulfillment (out of 29 training plan)	2.5	90% (26 training plan)	100%	70%	60%	50%	100%	2.5
	Training Days per employee per year	Days per employee per year	2.5	1.2 training days per employee	1.25	1.15	1.10	1.05	1.025	-
2	Developing critical mass of leaders through a system of career planning & development	% fulfillment of planned leadership development programmes	5	75% (3 persons out of maximum 4 to be nominated in the 2 planned training program on leadership development at IICM)	100% (4 persons)	50% (2 persons)	25% (1 person)	-	100% (4 persons)	5
3	Training budget as % of employee cost	% of employees cost	5	0.12% (Rs.38 lakhs out of Employee cost of Rs.312.94 crs. (budget) of 2011-12)	0.13	0.11	0.10	0.09	0.49	5
4	% fulfillment of training plan for Multi-skilling / Skill Upgradation of non-executives	%	5	75% (3 programs out of 4 planned)	100% (4 programs)	50% (2 programs)	25% (1 program)	-	100% (4 programs)	5

Sl.	HRM - PERFORMANCE INDICATORS	Measurement Unit	Weightage	Target value under five point scale - Basic Target (Very Good)	Excellent	Good	Fair	Poor	Actual Performance (To be filled at the time of submission of performance evaluation by CPSE)	Self-Evaluation Score(to be filled up at the time of submission of performance evaluation by CPSE)
	A2 Optional									
7	Training interventions in new/advanced technology - % fulfillment of training plan in new technology	%	5	75% (3 training programs to be organised out of 4 planned)	100% (4 programs)	50% (2 programs)	25% (1 program)	-	100% (4 programs)	5
	Total		25							22.5
B	Performance Management									
11	Linkage of Developmental Plan of Executives with Performance Management System	Yes/ No	5	Yes	Yes	-	-	No	Yes	5
12	Implementation of PRP linked to PMS	Yes/No; details	5	Yes	Yes	-	-	No	In line with CIL	5
	Total		10							10
C	Recruitment, Retention & Talent Management									
13	Manpower Rationalization through	%	5	0.8 % (through transfer/ posting) (About 25 nos. out of total manpower of 3102(projected) employees)	0.85%	0.75%	0.7%	0.65%	7.89%	5
	- Voluntary retirements									
	- Redeployment									
	- Any other									
14	Attrition as % of total employees	%	5	4% (by super-annuation) (About 125 nos. out of total manpower of 3102 (projected) employees)	4.1%	3.8%	3.6%	3.4%	4.99%	5

Sl.	HRM - PERFORMANCE INDICATORS	Measurement Unit	Weightage	Target value under five point scale - Basic Target (Very Good)	Excellent	Good	Fair	Poor	Actual Performance (To be filled at the time of submission of performance by CPSE)	Self-Evaluation Score(to be filled up at the time of submission of performance by CPSE)
15	Presence of Mentorship Development Programme - Nos. of Mentors & Mentees	Yes / No ; Numbers	5	Yes No. of Mentors -1, Mentees -5	Yes No. of Mentor -2, Mentees -10	-	-	No Nil	No Nil	-
16	Formulation / Implementation of systems for management of Talent such as - Job rotation system, reward system, sponsoring sr. executives for Advanced Management Programme, growth opportunities etc	Schemes / Initiatives & their details	5	1 no. executive to be nominated to Advanced Management Programme organised by IICM	2 nos.	-	-	-	3 nos.	5
	Total		20							15
D	Enabling Creativity & Innovation									
17	Nos. of Nominations/entries submitted for National Awards (PM Shram Awards, Vishwakarma Rashtriya Puraskar)	Nos. of nominations/ entries submitted for national awards	5	1	2	-	-	-	2	5
18	Number of suggestions generated per employee per year	Nos. per employee	5	0.01	0.011	0.009	0.008	0.007	0.0121	5
19	% of Quality Circle projects completed against total Quality circle projects undertaken in a year	% fulfillment	5	50% (1 out of 2 Quality Circle Projects)	100%	-	-	-	Nil	-
	Total		15							10
E	Employee Relations & Welfare									

Sl.	HRM - PERFORMANCE INDICATORS	Measurement Unit	Weightage	Target value under five point scale - Basic Target (Very Good)	Excellent	Good	Fair	Poor	Actual Performance (To be filled at the time of submission of performance evaluation by CPSE)	Self-Evaluation Score(to be filled up at the time of submission of performance evaluation by CPSE)
20	Effectiveness of Grievance Redressal system - % of grievances settled vis-à-vis received during the year	% settlement	4	10% (out of total grievance applications received)	10.2%	9.5%	9%	8.6%	100% (No Grievance)	4
21	Pension, medicare, Yoga classes to reduce stress where the job is stressful, setting up of wellness centre such as Gym etc.	Number of programs / date of implementation of scheme	4	2 nos. (Yoga class) (Pension & Medical facilities already exist)	3 nos.	1 no.	-	-	4 nos.	4
22	Employee satisfaction survey – by engaging External Agency	No	4	Date	Dec 12	Jan 13	Feb 13	Mar 13	Nov 12	4
23	Formulation & Implementation of social security scheme	Yes/ No	4	Yes	Yes			No	Yes	4
24	Number of structured meetings with employees' representatives	Number of meetings	4	4	5	3	2	1	5	4
	Total		20							20
F	HR Branding & Excellence - Indicate achievement in this field for initiatives such as :									
25	Organization Culture Building initiatives	No. of programmes organised	10	3 nos. of counseling programs on Organisation culture under which 50 executives to be covered.	4 nos.	2 nos.	1 no.	-	4 nos.	10
	Total		10							10
	Grand Total		100							87.5
	NB: Total score out of 100 awarded on HRM to CPSE will be converted into score out of 3 in MoU on pro-rata basis									

ANNUAL ACCOUNTS 2012-13

ANNUAL ACCOUNTS 2012-13

CENTRAL MINE PLANNING & DESIGN INSTITUTE LIMITED
Balance Sheet as at 31st March, 2013

₹ in crore

	LIABILITIES	Notes		As at 31-03-13 (Audited)		As at 31-03-12 (Audited)
I	EQUITY AND LIABILITIES					
(1)	Shareholders' Fund					
	a) Share Capital	1	19.04		19.04	
	b) Reserves & Surplus	2	115.85		91.88	
				134.89		110.92
(2)	Non-Current Liabilities					
	a) Long Term Borrowing	3	-		-	
	b) Deferred Tax Liability (Net)		-		-	
	c) Other Long Term Liabilities	4	-		-	
	d) Long Term Provisions	5	173.02		170.40	
				173.02		170.40
(3)	Minority Interest			-		-
(4)	Current Liabilities					
	a) Short Term Borrowing	6	-		-	
	b) Trade Payables	7	32.43		33.45	
	c) Other Current Liabilities	8	226.90		161.43	
	d) Short Term Provisions	9	195.82		94.84	
				455.15		289.72
	Total			763.06		571.04
II	ASSETS					
(1)	Non-Current Assets					
	(a) Fixed Assets	10A				
	i) Tangible Assets - Gross Block		181.85		177.77	
	Less : Depreciation, Impairment & Provisions		106.67		99.71	
	Net Carrying Value			75.18		78.06
	ii) Intangible Assets - Gross Block	10A	5.61		5.20	
	Less : Depreciation, Impairment & Provisions		5.61		5.20	
	Net Carrying Value			-		-
	iii) Capital Work-in-Progress	10B		11.37		11.52
	iv) Intangible Assets under Development	10C		-		-
	(b) Non-Current Investment	11		-		-
	(c) Deferred Tax Assets (Net)			95.54		71.67
	(d) Long Term Loans & Advances	12		0.74		0.84
	(e) Other Non-Current Assets	13		0.02		0.02

CENTRAL MINE PLANNING & DESIGN INSTITUTE LIMITED

Balance Sheet Contd.

		Notes		As at 31-03-13 (Audited)		As at 31-03-12 (Audited)
(2)	Current Assets					
	(a) Current Investments	14	-		-	
	(b) Inventories	15	6.04		6.77	
	(c) Trade Receivables	16	323.80		246.92	
	(d) Cash & Cash equivalents	17	117.89		61.21	
	(e) Short Term Loans & Advances	18	132.43		93.98	
	(f) Other Current Assets	19	0.05		0.05	
				580.21		408.93
	Total			763.06		571.04
	Significant Accounting Policies	33				
	Additional Notes on Accounts	34				
	The Notes referred to above form an integral part of Balance Sheet					
	For and on behalf of Board of Directors Central Mine Planning & Design Institute Limited					

Sd/-
(P. Lazar)
Company Secretary

Sd/-
(A. K. Soni)
General Manager
(Finance)

Sd/-
(B. N. Basu)
Director

Sd/-
(A. K. Debnath)
Chairman- cum - Managing Director

In terms of our report of even date attached
For TODI TULSYAN & CO.
Chartered Accountants
Firm Registration No. : 002180C

Sd/-
(CA SUSHIL KUMAR TULSYAN)
PARTNER
Membership No. : 075899

Date : 10th May, 2013
Place : Ranchi

CENTRAL MINE PLANNING & DESIGN INSTITUTE LIMITED
Statement of Profit & Loss for the Year ended 31st March, 2013

₹ in crore

<u>INCOME</u>	Notes	For the Year ended 31-03-13 (Audited)	For the Year ended 31-03-12 (Audited)
Sale of Coal			
Less : - Excise Duty			
Other Levies		-	-
Revenue From Operations	20	601.05	524.03
Other Income	21	4.16	4.69
Total Revenue		605.21	528.72
<u>EXPENSES</u>			
Cost of Material Consumed	22	15.28	16.67
Change in inventories of finished goods work in progress and Stock in trade	23	-	-
Employee benefit expenses	24	367.72	340.08
Power & Fuel		2.10	2.24
Welfare Expenses	25	19.37	3.48
Repairs	26	13.58	9.61
Contractual Expenses	27	114.13	93.00
Finance Costs	28	0.09	-
Depreciation/amortization/Impairment		7.56	6.74
Provisions	29	0.39	(0.52)
Write off	30	-	0.08
Overburden Removal Adjustment		-	-
Other Expenditure	31	30.03	27.40
Total Expenses		570.25	498.78
Profit/Loss before exceptional & extraordinary items & tax		34.96	29.94
Prior Period Adjustment { charges/ (incomes) }	32	5.19	(0.85)
Exceptional Items		-	-
Profit/ (Loss) before extraordinary items and tax		29.77	30.79
Extraordinary Items { charges/ (incomes) }		-	-

₹ in crore

INCOME	Notes	For the Year ended 31-03-13 (Audited)	For the Year ended 31-03-12 (Audited)
Profit/ (Loss) before Tax		29.77	30.79
Less : Tax Expenses			
- Current year		28.58	22.97
- Deferred Tax		(23.86)	(11.76)
- Earlier years		-	(0.03)
Profit/ (Loss) for the period		25.05	19.61
Earning per equity share (in) (Face Value of 1000/- per share)			
(1) Basic (in ₹.)		1316.00	1030.00
(2) Diluted (in ₹.)		1316.00	1030.00
Significant Accounting Policies	33		
Additional Notes on Accounts	34		
The Notes referred to above form an integral part of Profit & Loss Account.			

Sd/-
(P. Lazar)
Company Secretary

Sd/-
(A. K. Soni)
General Manager (Finance)

Sd/-
(B. N. Basu)
Director

Sd/-
(A. K. Debnath)
Chairman- cum - Managing
Director

In terms of our report of even date attached
For TODI TULSYAN & CO.
Chartered Accountants
Firm Registration No. : 002180C

Sd/-
(CA SUSHIL KUMAR TULSYAN)
PARTNER
Membership No. : 075899

Date : 10th May, 2013
Place : Ranchi

** The coal Issue for other Purpose Schedule is under discussion and will be informed shortly.

NOTES TO BALANCE SHEET (CONTD...)

NOTE - 1

SHARE CAPITAL

₹ in crore

SHARE CAPITAL		As at 31-03-13 (Audited)		As at 31-03-12 (Audited)
(i)	Authorised			
	500000 Equity Shares of ₹ 1000/- each	50.00		50.00
		-		-
		50.00		50.00
	Issued, Subscribed and Paid-up			
	(Held by Coal India Ltd. , the Holding Co. & its nominees)	-		-
	8 Equity Shares of ₹ Rs 1,000/- each fully paid in Cash (Previous Year 8 Equity shares of ₹ 1,000/- each)	-		-
	85392 Equity Shares of ₹ 1,000/- each allotted as fully paid up for consideration received other than cash (Previous Year 85392 Equity Shares of ₹ 1,000/- each)	8.54		8.54
	105000 Equity Shares of ₹ 1000/- each allotted as fully paid for Cash to Holding Company by converting loan in equity	10.50		10.50
		19.04		19.04
Name of Shareholder		No. of Shares Held (Face value of ₹ 1000 each)		% of Total Shares
Coal India Limited		190400		100%

NOTES TO BALANCE SHEET (CONTD...)

NOTE - 2

RESERVES & SURPLUS

₹ in crore

RESERVES & SURPLUS	As at 31-03-13 (Audited)	As at 31-03-12 (Audited)
RESERVES :		
Capital Reserve		
As per last Balance Sheet	12.25	8.86
Add: Addition during the year	0.71	5.16
Less: Adjustment During the year	1.79	1.77
(Additional Note - 34 Para 5.0 Capital Reserve)	11.17	12.25
Capital Redemption Reserve		
As per last Balance Sheet	-	-
Add: Addition during the year	-	-
Less: Adjustment During the year	-	-
Reserve for Foreign Exchange Transactions		
As per last Balance Sheet	-	-
Add: Addition during the year	-	-
Less: Adjustment During the year	-	-
CSR Reserve		
As per last Balance Sheet	0.65	0.38
Add: Addition during the year	0.98	0.76
Less: Transfer to General Reserve	1.06	0.49
	0.57	0.65
Sustainable Development Reserve		
As per last Balance Sheet	-	-
Add: Addition during the year	0.10	-
Less: Transfer to General Reserve	-	-
	0.10	-
General Reserve		
As per last Balance Sheet	2.67	2.18
Add: Transfer from CSR Reserve	1.06	0.49
Add:/ Less: Adjustment During the year	-	-
	3.73	2.67
Surplus in Profit & Loss Account		
As per last Balance Sheet	76.31	57.46
Profit/(Loss) after Tax During the Year	25.05	19.61
Profit/(Loss) available for Appropriation	101.36	77.07
LESS APPROPRIATION		
Reserve for Foreign Exchange Transaction	-	-
Transfer to General Reserve	-	-
Transfer to CSR Reserve	0.98	0.76
Transfer to Sustainable Development Reserve	0.10	-
Interim Dividend	-	-
Proposed Dividend on Equity Shares	-	-
Corporate Dividend Tax	-	-
	100.28	76.31
Miscellaneous Expenditure (to the extent not written off)		
Preliminary Expenses	-	-
Pre-Operational Expenses	-	-
Total :	115.85	91.88

NOTES TO BALANCE SHEET (CONTD...)

NOTE - 3

LONG TERM BORROWING

₹ in crore

LONG TERM BORROWING	As at 31-03-13 (Audited)		As at 31-03-12 (Audited)
Term Loan			
IBRD	-		-
JBIC	-		-
Export Development Corp., Canada			
Liebherr France S.A., France			
Loan From Coal India Limited	-		-
Total (A+B)	-		-
CLASSIFICATION 1			
Secured	-		-
Unsecured	-		-
CLASSIFICATION 2			
Loan Guaranteed by directors & others			
Particulars of Loan	Amount ₹ in crores	Nature of Guarantee	
	NIL	NIL	

NOTE - 4

OTHER LONG TERM LIABILITIES

₹ in crore

OTHER LONG TERM LIABILITIES	As at 31-03-13 (Audited)		As at 31-03-12 (Audited)
Shifting & Rehabilitation Fund			
Opening Balance	-		-
Add: Interest from Investment of the fund	-		-
Add: Contribution Received	-		-
Less : Amount utilised	-		-
	-		-
Trade Payable			
Security Deposits	-		-
Others (Specify Nature)	-		-
Total	-		-

NOTES TO BALANCE SHEET (CONTD...)

NOTE - 5**LONG TERM PROVISIONS**

₹ in crore

LONG TERM PROVISIONS	As at 31-03-13 (Audited)	As at 31-03-12 (Audited)
For Employee Benefits		
- Gratuity	107.27	98.97
- Leave Encashment	65.75	58.10
- Other Employee Benefits	-	13.33
For Foreign Exchange Transactions (Marked to Market)	-	-
OBR Adjustment Account	-	-
Mine Closure	-	-
For Others	-	-
TOTAL	173.02	170.40

NOTE - 6**SHORT TERM BORROWING**

₹ in crore

SHORT TERM BORROWING	As at 31-03-13 (Audited)	As at 31-03-12 (Audited)
Loan From Bank	-	-
Loans Repayable on Demand		
Balance with Coal India Limited & other Subsidiaries of Coal India Limited	-	-
Overdraft against Pledge of Term Deposit	-	-
Other Loans and Advances		
Deferred Credits	-	-
Total :	-	-
CLASSIFICATION 1		
Secured	-	-
Unsecured	-	-
CLASSIFICATION 2		
Loan Guaranteed by directors & others		
Particulars of Loan	Amount ₹ in crore	Nature of Guarantee
	NIL	NIL

NOTE - 7**TRADE PAYABLE**

₹ in crore

TRADE PAYABLE	As at 31-03-13 (Audited)	As at 31-03-12 (Audited)
Sundry Creditors For Revenue Stores/Others	32.43	33.45
TOTAL	32.43	33.45

NOTES TO BALANCE SHEET (CONTD...)

NOTE - 8

OTHER CURRENT LIABILITIES

₹ in crore

OTHER CURRENT LIABILITIES	As at 31-03-13 (Audited)	As at 31-03-12 (Audited)
Current Maturities of Long Term Borrowings		
Term Loan From IBRD	-	-
Term Loan From JBIC	-	-
Term Loan From Export Development Corp., Canada	-	-
Term Loan From Liebherr France S.A., France	-	-
Loan From Coal India Limited	-	-
Surplus Fund from Coal India	-	-
For Capital (including Stores)	6.80	5.96
FOR EXPENSES :		
Salary Wages & Allowances	39.16	48.40
Power & Fuel	0.41	0.61
Others	61.19	36.50
	107.56	91.47
STATUTORY DUES :		
Sales Tax/VAT	-	-
Provident Fund & Pension Fund	14.07	11.17
Central Excise Duty	-	-
Royalty & Cess on Coal	-	-
Stowing Excise Duty	-	-
Clean Energy Cess	-	-
Other Statutory Levies	4.04	9.93
	18.11	21.10
Income Tax Deducted at Source	1.53	0.69
Security Deposit	1.90	1.73
Earnest Money	1.72	1.68
Advance & Deposit from customers / others	4.65	3.36
Interest Accrued and due on Borrowings	-	-
Interest Accrued but not due on Borrowings	-	-
Cess Equilisation Account	-	-
Current Account with IICM	-	-
Unpaid Dividend	-	-
Advance Deposit other Pre-Nationalisation	-	-
Others Liabilities	91.43	41.40
TOTAL	226.90	161.43

CENTRAL MINE PLANNING & DESIGN INSTITUTE LIMITED

NOTES TO BALANCE SHEET (CONTD...)

NOTE - 9**SHORT TERM PROVISIONS**

₹ in crore

SHORT TERM PROVISIONS	As at 31-03-13 (Audited)	As at 31-03-12 (Audited)
For Employee Benefits		
- Gratuity	23.81	15.27
- Leave Encashment	10.17	8.65
- PPLB	5.88	4.75
- PRP (Additional Note - 34 Para 7.4)	137.15	65.83
- Other Employee Benefits	18.80	0.33
For Proposed Dividend	-	-
For Corporate Dividend Tax	-	-
For Excise Duty on Closing Stock of Coal	-	-
For Others	0.01	0.01
TOTAL	195.82	94.84

NOTE - 10A
FIXED ASSETS

(Additional Note - 34 Para 4.0)

₹ in crore

PARTICULARS	GROSS BLOCK			DEPRECIATION			IMPAIRMENT LOSS			Total De- preciation/ Impairment Loss	NET BLOCK	
	As on 01-04-12	Addition during 2012-13	Adj./Sales/ Transfer 2012-13	As on 31-03-13	As on 01-04-12	Addition during 2012-13	Adj./Sales/ Transfer 2012-13	As on 31-03-13	As on 01-04-12	Addition during 2012-13	As on 31-03-13	As on 31-03-12
Tangible Assets												
Land												
(a) Freehold	1.15	-	-	1.15	-	-	-	-	-	-	1.15	1.15
(b) Leasehold	2.19	-	-	2.19	0.75	0.04	-	0.79	-	-	1.40	1.44
Building/WaterSupply/Road & Culverts	42.27	1.16	(1.80)	41.63	14.34	0.73	(0.47)	14.60	-	-	27.03	27.93
Plant & Machinery	104.93	4.69	(1.24)	108.38	67.26	6.70	(1.19)	72.77	-	-	35.61	37.67
Telecommunication Railway Sidings												
Furniture&fittings/Office Tools & Equipments/ ElectricalFittings/FireArms	14.47	1.66	(0.19)	15.94	11.13	0.54	(0.12)	11.55	-	-	4.39	3.34
Vehicle	12.76	-	(0.20)	12.56	6.23	0.92	(0.19)	6.96	-	-	5.60	6.53
Aircraft												
Development												
Assets taken on Nationalisation												
TOTAL	177.77	7.51	(3.43)	181.85	99.71	8.93	(1.97)	106.67	-	-	75.18	78.06
Tangible Assets (As on 31.03.12)	165.93	14.90	(3.06)	177.77	93.98	8.30	(2.57)	99.71	-	-	78.06	71.95
Intangible Assets												
Computer Software	5.20	0.41	-	5.61	5.20	0.41	-	5.61	-	-	-	-
Development											-	-
Prospecting & Boring											-	-
Total	5.20	0.41	-	5.61	5.20	0.41	-	5.61	-	-	-	-
Intangible Assets (As on 31.03.12)	4.05	1.19	(0.04)	5.20	4.05	1.19	(0.04)	5.20	-	-	-	-

NOTE - 10B
CAPITAL WORK-IN-PROGRESS

₹ in crore

PARTICULARS	COST			PROVISION			IMPAIRMENT LOSS			Total Depreciation/ Impairment Loss	NET BLOCK	
	As on 01-04-12	Addition during 2012-13	Adj./Sales/ Transfer 2012-13	As on 31-03-13	Addition during 2012-13	Adj./Sales/ Transfer 2012-13	As on 01-04-12	Addition during 2012-13	Adj./Sales/ Transfer 2012-13	As on 31-03-13	As on 31-03-13	As on 31-03-12
Tangible Assets												
Building/Water Supply/ Road & Culverts	4.08	1.27	(1.65)	3.70			-	-	-	-	3.70	4.08
Plant & Machinery	6.97	2.96	(2.80)	7.13	0.03	(0.03)	-	-	-	-	7.13	6.94
Railway Sidings												
Development												
Others												
TOTAL	11.05	4.23	(4.45)	10.83	0.03	(0.03)	-	-	-	-	10.83	11.02
Tangible Assets (As on 31.03.12)	5.16	18.73	(12.84)	11.05	0.03		0.03	-	-	-	11.02	5.13
Surveyed off Assets	10.08	0.06	(9.60)	0.54	9.58	(9.58)	-				0.54	0.50
Surveyed off Assets (As on 31.03.12)	10.12	2.60	(2.64)	10.08	9.61	(2.51)	9.58				0.50	0.51
Grand Total	21.13	4.29	(14.05)	11.37	9.61	(9.61)	-	-	-	-	11.37	11.52
Grand Total (As on 31.03.12)	15.28	21.33	(15.48)	21.13	9.64	(2.51)	9.61	-	-	-	11.52	5.64

NOTE - 10C
INTANGIBLE ASSET UNDER DEVELOPMENT

₹ in crore

PARTICULARS	COST As on 01-04-12	Addition during 2012-13	Adj./Sales/ Transfer 2012-13	As on 31-03-13	PROVISION				IMPAIRMENT LOSS			Total Depreciation/ Impairment Loss	NET BLOCK	
					As on 01-04-12	Addition during 2012-13	Adj./Sales/ Transfer 2012-13	As on 31-03-13	As on 01-04-12	Addition during 2012-13	Adj./Sales/ Transfer 2012-13	As on 31-03-13	As on 31-03-13	As on 31-03-12
Intangible Assets														
Development	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prospecting & Boring	-	-	-	-	-	-	-	-	-	-	-	-	-	-
For the year ended 31.03.12														
Intangible Assets	-	-	-	-	-	-	-	-	-	-	-	-	-	-

NOTES TO BALANCE SHEET (CONTD...)

NOTE - 11

NON - CURRENT INVESTMENTS - Unquoted at Cost

₹ in crore

NON - CURRENT INVESTMENTS	Number of shares/bonds/ securities current year / (previous year)	Face value per shares/bonds/ security current year / (previous year)	As at 31-03-13 (Audited)	As at 31-03-12 (Audited)
TRADE				
8.5% Tax Free Special Bonds (Fully Paid up) :				
(on securitisation of Sundry Debtors)				
<u>Major State-wise Break-up</u>				
UP	-	-	-	-
Haryana	-	-	-	-
Maharashtra	-	-	-	-
Madhya Pradesh	-	-	-	-
Gujarat	-	-	-	-
West Bengal	-	-	-	-
Others	-	-	-	-
Equity Shares in Joint Venture Companies (with name of joint ventures)	-	-	-	-
Equity Shares in Subsidiaries Companies (with name of Subsidiaries)	-	-	-	-
Others (in Co-operative Shares)	-	-	-	-
NON-TRADE				
7.55% Non Convertible IRFC Tax Free Bonds 2021 Series	-	-	-	-
Total :			-	-
Aggregate of Quoted Investment			-	-
Aggregate of Unquoted Investment			-	-
Market Value of Quoted Investment			-	-
Provision made for diminution in the value of Investment			-	-

NOTES TO BALANCE SHEET (CONTD...)

NOTE - 12

LONG TERM LOANS & ADVANCES

₹ in crore

LONG TERM LOANS & ADVANCES	As at 31-03-13 (Audited)	As at 31-03-12 (Audited)
LOANS		
ADVANCES		
For Capital		
- Secured considered goods	-	-
- Unsecured considered goods	0.03	0.03
- Doubtful	-	-
	0.03	0.03
Less : Provision for Doubtful Loans and Advances	-	-
	0.03	0.03
For Revenue		
- Secured considered goods	-	-
- Unsecured considered goods	-	-
- Doubtful	-	-
	-	-
Less : Provision for Doubtful Loans and Advances	-	-
	-	-
Security Deposits		
- Secured considered goods	-	-
- Unsecured considered goods	0.12	0.12
- Doubtful	-	-
	0.12	0.12
Less : Provision for Doubtful Loans and Advances	-	-
	0.12	0.12
Deposit for P&T, Electricity etc.		
- Secured considered goods	-	-
- Unsecured considered goods	0.44	0.44
- Doubtful	-	-
	0.44	0.44
Less : Provision for bad and doubtful Loans trade receivables	-	-
	0.44	0.44
LOAN TO EMPLOYEES & OTHERS		
For House Building		
- Secured considered goods	0.15	0.25
- Unsecured considered goods	-	-
- Doubtful	-	-
	0.15	0.25
For Motor Car and Other Conveyance		
- Secured considered goods	-	-
- Unsecured considered goods	-	-
- Doubtful	-	-
	-	-
For Others		
- Secured considered goods	-	-
- Unsecured considered goods	-	-
- Doubtful	-	-
	-	-
Less : Provision for Doubtful Loans and Advances	-	-
	-	-
Loan To Subsidiaries		
- Secured considered goods	-	-
- Unsecured considered goods	-	-
- Doubtful	-	-
	-	-
TOTAL	0.74	0.84

Note

	CLOSING BALANCE		MAXIMUM AMOUNT DUE AT ANY TIME DURING	
	As on 31.03.13	As on 31.03.12	During 2012-13	During 2011-12
Due by the Companies under the same management	NIL	NIL	NIL	NIL
Due by the parties in which the Director(s) of company is /are interested	NIL	NIL	NIL	NIL

NOTES TO BALANCE SHEET (CONTD...)

NOTE - 13**OTHER NON-CURRENT ASSETS**

₹ in crore

OTHER NON-CURRENT ASSETS		As at 31-03-13 (Audited)		As at 31-03-12 (Audited)
Long Term Trade Receivable				
- Secured considered goods		-		-
- Unsecured considered goods		-		-
- Doubtful		-		-
		-		-
Less Provision for bad and doubtful trade receivables		-		-
		-		-
Exploratory Drilling Work				
- Secured considered goods		-		-
- Unsecured considered goods		-		-
- Doubtful		-		-
		-		-
Less Provision for bad and doubtful trade receivables		-		-
		-		-
Other Receivables				
- Secured considered goods		-		-
- Unsecured considered goods		0.02		0.02
- Doubtful		-		-
		0.02		0.02
Less Provision for bad and doubtful trade receivables		-		-
		0.02		0.02
TOTAL		0.02		0.02
Note				
	CLOSING BALANCE		MAXIMUM AMOUNT DUE AT ANY TIME DURING	
	As on 31.03.13	As on 31.03.12	During 2012-13	During 2011-12
Due by the Companies under the same management	NIL	NIL	NIL	NIL
Due by the parties in which the Director(s) of company is /are interested	NIL	NIL	NIL	NIL

NOTES TO BALANCE SHEET (CONTD...)

NOTE - 14**CURRENT INVESTMENTS - Quoted /
Unquoted at Cost**

₹ in crore

	Number of shares/bonds/ securities current year / (previous year)	Face value per shares/bonds/ security current year / (previous year) (₹)	As at 31-03-13 (Audited)	As at 31-03-12 (Audited)
NON-TRADE				
Mutual Fund Investment (with name of mutual fund)	-	-	-	-
7.55% Non Convertible IRFC Tax Free Bonds 2021 Series				
TRADE				
<u>8.5% Tax Free Special Bonds (Fully Paid up) :</u>				
(on securitisation of Sundry Debtors)				
<u>Major State-wise Break-up</u>	-	-	-	-
Total :			-	-
Aggregate of Quoted Investment			-	-
Aggregate of Unquoted Investment			-	-
Market Value of Quoted Investment			-	-
Market Value of Unquoted Investment			-	-
Provision made for diminution in the value of Investment			-	-

NOTES TO BALANCE SHEET (CONTD...)

NOTE - 15

INVENTORIES

₹ in crore

	INVENTORIES (Valuation as per Accounting Policy No. 5.1 Note - 33)	As at 31-03-13 (Audited)	As at 31-03-12 (Audited)
	Stock of Coal	-	-
	Coal Under Development	-	-
	Less : Provision	-	-
A	Stock of Coal (Net)	-	-
	Stock of Stores & Spare Parts (at cost)	6.24	7.03
	Stores -in -transit	0.13	0.07
	Less : Provision (Additional Note-34 Para 2.1.2)	0.33	0.33
B	Net Stock of Stores & Spare Parts (at cost)	6.04	6.77
C	<u>Workshop Jobs :</u>		
	Work-in-progress and Finished Goods	-	-
	Less : Provision	-	-
	Net Stock of Workshop Jobs	-	-
D	<u>Press :</u>		
	Work-in-Progress and Finished Goods	-	-
E	Stock of Medicine at Central Hospital	-	-
F	Prospecting & Boring/ Development Exp./Coal Blocks meant for Sale	-	-
	Total (A to F)	6.04	6.77

NOTES TO BALANCE SHEET (CONTD...)

NOTE - 16

TRADE RECEIVABLE

₹ in crore

TRADE RECEIVABLE	As at 31-03-13 (Audited)	As at 31-03-12 (Audited)
Debts outstanding for a period exceeding six months from the due date		
- Secured considered goods	-	-
- Unsecured considered goods	69.78	78.73
- Doubtful	3.11	2.72
	72.89	81.45
Less Provision for bad and doubtful trade receivables	3.11	2.72
	69.78	78.73
Other Debts		
- Secured considered goods		-
- Unsecured considered goods	254.02	168.19
- Doubtful	-	-
	254.02	168.19
Less Provision for bad and doubtful trade receivables	-	-
	254.02	168.19
Total	323.80	246.92

Note

	CLOSING BALANCE		MAXIMUM AMOUNT DUE AT ANY TIME DURING	
	As on 31.03.13	As on 31.03.12	During 2012-13	During 2011-12
Due by the Companies under the same management				
Eastern Coalfields Limited	20.76	17.77	21.43	17.77
Bharat Coking Coal Limited	39.18	16.52	43.93	24.10
Central Coalfields Limited	38.83	66.77	66.77	66.77
Western Coalfields Limited	15.67	3.80	15.88	21.97
South Eastern Coalfields Limited	61.09	24.70	69.47	71.68
Northern Coalfields Limited	15.50	17.72	18.56	29.62
Mahanadi Coalfields Ltd.	22.48	16.49	27.97	27.48
North East Coalfields	0.52	0.94	1.36	4.13
Kakri CHP (NCL)	0.14	0.14	0.14	0.14
Dankuni Coal Complex (CIL)	0.02	0.02	0.02	0.02
Bharatpur CHP (MCL)	0.01	0.01	0.01	0.01
CIL, Kolkata	41.33	30.09	41.33	30.09
MJSJ Coal Co. Ltd	0.24	0.24	0.24	0.24
MNH Shakti Ltd.	0.29	0.12	0.29	0.12
Total	256.06	195.33	307.40	294.14
Due by the parties in which the Director(s) of company is / are interested	NIL	NIL	NIL	NIL

NOTES TO BALANCE SHEET (CONTD...)

NOTE - 17**CASH & CASH EQUIVALENTS**

₹ in crore

CASH & CASH EQUIVALENTS	As at 31-03-13 (Audited)	As at 31-03-12 (Audited)
Cash & Cash Equivalents		
Balances with Scheduled Banks		
- SBI Dividend Account (unpaid/unclaimed dividend account)		
- In Deposit Accounts with maturity upto 3 months	-	-
- In Current Accounts	117.71	60.13
- In Cash Credit Accounts	-	-
Balances with Non - Scheduled Banks		
In Account with Banks outside India	-	-
Remittance - in transit	-	-
Cheques, Drafts and Stamps on hand	0.01	0.01
Cash on hand	0.07	0.05
Deposit with Scheduled Banks under Shifting and Rehabilitation Fund Scheme with maturity upto 3 months	-	-
Other Bank Balances		
Balances with Scheduled Banks		
- In Deposit Accounts with maturity more than 3 months	0.10	1.02
Deposit with Scheduled Banks under Shifting and Rehabilitation Fund Scheme with maturity more than 3 months	-	-
Deposit with Scheduled Banks under Mine Closure Plan Scheme	-	-
Total	117.89	61.21
Maximum amount outstanding with Banks other than Scheduled Banks at any time during the year	-	-
Note:		
1 Balances with banks to the extent held as margin money or security against the borrowings, guarantees, other commitments, other earmarked balances shall be disclosed separately.	0.19	0.11
2 Repatriation restrictions, if any, in respect of cash and bank balances shall be separately stated.	NIL	NIL
3 Bank deposits with more than 12 months maturity	NIL	NIL
4 To be in Escrow Account	NIL	NIL

NOTES TO BALANCE SHEET (CONTD...)

NOTE - 18

SHORT TERM LOANS & ADVANCES

₹ in crore

SHORT TERM LOANS & ADVANCES	As at 31-03-13 (Audited)	As at 31-03-12 (Audited)
LOANS		
ADVANCE		
(Recoverable in cash or in kind or for value to be received)		
ADVANCE TO SUPPLIERS		
For Revenue		
- Secured considered good	-	-
- Unsecured considered good	0.24	0.45
- Doubtful	-	-
	0.24	0.45
Less Provision for bad and doubtful trade receivables	-	-
	0.24	0.45
	0.24	0.45
ADV PAYMENT OF STATUTORY DUES		
Sales Tax		
- Secured considered good	-	-
- Unsecured considered good	0.10	0.09
- Doubtful	-	-
	0.10	0.09
Less Provision for bad and doubtful trade receivables	-	-
	0.10	0.09
Advance Income Tax / Tax Deducted at Source (Reference Additional Note 34 Para 6.0)	134.23	96.59
Less : Provision for Income Tax	86.58	58.00
	47.65	38.59
Others		
- Secured considered good	-	-
- Unsecured considered good	0.86	0.92
- Doubtful	-	-
	0.86	0.92
Less Provision for bad and doubtful trade receivables	-	-
	0.86	0.92
	48.61	39.60
Advance to Employees		
- Secured considered good	-	-
- Unsecured considered good (Additional Note 34 Para 7.4)	43.94	0.92
- Doubtful	-	-
	43.94	0.92
Less Provision for bad and doubtful trade receivables	-	-
	43.94	0.92
Current Account with Coal India Limited & other Subsidiaries of Coal India Limited	-	17.93
Loan Account with Subsidiaries		
- Secured considered good	-	-
- Unsecured considered good	-	-
- Doubtful	-	-
Less Provision for bad and doubtful trade receivables	-	-
	-	-
Claims Receivables		
- Secured considered good	-	-
- Unsecured considered good	39.25	34.86
- Doubtful	0.16	0.16
	39.41	35.02
Less Provision for bad and doubtful trade receivables	0.16	0.16
	39.25	34.86
Prepaid Expenses	0.39	0.22
	83.58	53.93
TOTAL	132.43	93.98

Note

	CLOSING BALANCE		MAXIMUM AMOUNT DUE AT ANY TIME DURING	
	As on 31.03.13	As on 31.03.12	During 2012-13	During 2011-12
Due by the Companies under the same management	Nil	17.93	Nil	22.19
Due by the parties in which the Director(s) of company is /are interested	Nil	Nil	Nil	Nil

NOTES TO BALANCE SHEET (CONTD...)

NOTE - 19

OTHER CURRENT ASSETS

₹ in crore

OTHER CURRENT ASSETS	As at 31-03-13 (Audited)	As at 31-03-12 (Audited)
Interest Accrued		
- Investment	-	-
- Deposit with Banks	-	-
- Others	-	-
Ex Owner's Account	-	-
Other Advances	-	-
Less : Provision		
DEPOSITS		
Deposit for Customs Duty, Port Charges etc.	-	-
Deposit with Coal India Limited	-	-
Deposit for Royalty, Cess & Sales Tax	-	-
Less : Provision	-	-
Others	0.05	0.05
Less : Provision	-	-
Amount Receivable from Govt of India for transactions on behalf of Ex-Coal Board	-	-
Less : Provision	-	-
Other Receivables	-	-
Less : Provision	-	-
TOTAL	0.05	0.05

NOTES TO PROFIT & LOSS ACCOUNT (CONTD...)

NOTE - 20**Revenue From Operations**

₹ in crore

Revenue From Operations	For the Year ended 31-03-13 (Audited)			For the Year ended 31-03-12 (Audited)
GROSS SALES	675.11			577.83
Less : Levies				
Excise Duty	-			-
Royalty	-			-
Cess on Coal	-			-
Stowing Excise Duty	-			-
Central Sales Tax	-			-
Clean Energy Cess	-			-
State Sales Tax/VAT	-			-
Other Levies (Service Tax)	74.06			53.80
TOTAL LEVIES	74.06			53.80
Revenue From Operations (Net Sales)	601.05			524.03

NOTES TO PROFIT & LOSS ACCOUNT (CONTD...)

NOTE - 21

OTHER INCOME

₹ in crore

OTHER INCOME	For the Year ended 31-03-13 (Audited)			For the Year ended 31-03-12 (Audited)
<u>Income From Long Term Investments</u>				
Dividend from Joint Ventures	-			-
Dividend from Subsidiaries	-			-
Interest from				
Government Securities (8.5% Tax Free Special Bonds) (Trade)	-			-
<u>Income From Current Investments</u>				
Dividend from Mutual Fund Investments	-			-
Interest from				
Government Securities (8.5% Tax Free Special Bonds) (Trade)	-			-
7.55% Non Convertible IRFC Tax Free Bonds 2021 Series (Non-Trade)	-			-
<u>Income From Others</u>				
Interest (Gross)				
From Deposit with Banks	0.21			0.59
From Loans and Advances to Employees	0.02			0.03
From Income Tax Refunds	1.17			-
From Coal India	-			-
Others	-			0.03
Apex Charges				
Subsidy for Sand Stowing & Protective Works	-			-
Profit on Sale of Assets	0.19			0.29
Recovery of Transportation & Loading Cost	-			-
Gain on Foreign exchange Transactions	-			-
Exchange Rate Variance	-			-
Lease Rent	-			-
Liability Write Backs	-			-
Guarantee Fees from Subsidiaries	-			-
Other non-operating Income	-			-
	2.57			3.75
TOTAL	4.16			4.69

NOTES TO PROFIT & LOSS ACCOUNT (CONTD...)

NOTE - 22**COST OF MATERIAL CONSUMED**

₹ in crore

COST OF MATERIAL CONSUMED	For the Year ended 31-03-13 (Audited)				For the Year ended 31-03-12 (Audited)
Explosives	-				-
Timber	-				-
P O L	6.06				5.19
HEMM Spares	-				-
Other Consumable Stores & Spares	9.22				11.48
TOTAL	15.28				16.67

NOTES TO PROFIT & LOSS ACCOUNT (CONTD...)

NOTE - 23**CHANGE IN INVENTORIES OF FINISHED GOODS,
WORK IN PROGRESS AND STOCK IN TRADE**

₹ in crore

	CHANGE IN INVENTORIES OF FINISHED GOODS, WORK IN PROGRESS AND STOCK IN TRADE	For the Year ended 31-03-13 (Audited)		For the Year ended 31-03-12 (Audited)
	Opening Stock of Coal	-		-
	Add: Adjustment of opening stock	-		-
	Less: Deterioration of Coal	-		-
	Less:			
	Closing Stock of Coal / Coke	-		-
	Less: Deterioration of Coal	-		-
A	Change in Inventory of Coal			
	Opening Stock of Workshop made finished goods and WIP	-		-
	Less: Provision	-		-
	Less:			
	Closing Stock of Workshop made finished goods and WIP	-		-
	Less: Provision	-		-
B	Change in Inventory of workshop			
	Press Opening Job			
	i) Finished Goods	-		-
	ii) Work in Progress	-		-
	Less:			
	Press Closing Job			
	i) Finished Goods	-		-
	ii) Work in Progress	-		-
C	Change in Inventory of closing Stock of Press job made finished goods and WIP			
	Change in Inventory of Stock of trade	-		-
	(A+B+C)			

NOTES TO PROFIT & LOSS ACCOUNT (CONTD...)

NOTE - 24**EMPLOYEE BENEFIT EXPENSES**

₹ in crore

EMPLOYEE BENEFIT EXPENSES	For the Year ended 31-03-13 (Audited)			For the Year ended 31-03-12 (Audited)
Salary, Wages, Allowances ,Bonus & Benefits	197.43			181.37
Exgratia	6.87			5.88
PRP	27.70			24.53
Contribution to P.F. & Other Funds	26.92			22.69
Gratuity	19.40			34.53
Leave Encashment	20.50			20.76
VRS				-
Workman Compensation				-
Medical Expenses	6.03			5.40
Grants to Schools & Institutions	0.09			0.07
Sports & Recreation	0.33			0.33
Canteen & Creche	0.15			0.13
Power - Township	2.49			2.05
Hire Charges of Bus, Ambulance etc.	0.23			0.19
Other Employee Benefits	59.58			42.15
TOTAL	367.72			340.08

NOTES TO PROFIT & LOSS ACCOUNT (CONTD...)**NOTE - 25****WELFARE EXPENSES**

₹ in crore

WELFARE EXPENSES	For the Year ended 31-03-13 (Audited)		For the Year ended 31-03-12 (Audited)
Medical Expenses for retired employees	16.55		1.35
CSR Expenses	1.06		0.49
Environmental Expenses	0.10		0.10
Tree Plantation			-
Other Expenses	1.66		1.54
TOTAL	19.37		3.48

NOTE - 26

₹ in crore

REPAIRS	For the Year ended 31-03-13 (Audited)				For the Year ended 31-03-12 (Audited)
Building	5.40				3.57
Plant & Machinery	1.58				1.07
Others	6.60				4.97
TOTAL	13.58				9.61

NOTES TO PROFIT & LOSS ACCOUNT (CONTD...)

NOTE - 27**CONTRACTUAL EXPENSES**

₹ in crore

CONTRACTUAL EXPENSES		For the Year ended 31-03-13 (Audited)				For the Year ended 31-03-12 (Audited)
Transportation Charges :						
- Sand		-				-
- Coal & Coke		-				-
- Stores & Others etc.		-				-
Wagon Loading		-				-
Hiring of P&M		-				-
Other Contractual Work		114.13				93.00
TOTAL		114.13				93.00

NOTES TO PROFIT & LOSS ACCOUNT (CONTD...)

NOTE - 28**FINANCE COSTS**

₹ in crore

FINANCE COSTS	For the Year ended 31-03-13 (Audited)			For the Year ended 31-03-12 (Audited)
INTEREST				
Deferred Payments	-			-
Bank Overdraft / Cash Credit	-			-
Interest on IBRD & JBIC Loan	-			-
CIL Fund Loan Interest	-			-
Interest to Subsidiaries	-			-
Others	0.09			-
TOTAL(A)	0.09			-
OTHER BORROWING COSTS				
Guarantee Fees on (IBRD & JBIC) Loan	-			-
Other Expenses / Bank Charges	-			-
TOTAL(B)	-			-
TOTAL (A+B)	0.09			-

NOTES TO PROFIT & LOSS ACCOUNT (CONTD...)

NOTE - 29

PROVISIONS

₹ in crore

PROVISIONS	For the Year ended 31-03-13 (Audited)				For the Year ended 31-03-12 (Audited)
(A) PROVISION MADE FOR					
Doubtful debts	-				-
Doubtful advances & Claims	-				-
Foreign exchange Transaction	-				-
Stores & Spares	-				-
Reclamation of Land/Mine Closure Expenses	-				-
Surveyed of Fixed Assets/Capital WIP	-				-
Others	0.39				-
TOTAL (A)	0.39				-
(B) PROVISION WRITTEN BACK					
Doubtful debts	-				0.27
Doubtful advances & Claims	-				-
Stores & Spares	-				0.23
Reclamation of Land	-				-
Surveyed of Fixed Assets/Capital WIP	-				-
Others	-				0.02
TOTAL (B)	-				0.52
TOTAL (A-B)	0.39				(0.52)

NOTES TO PROFIT & LOSS ACCOUNT (CONTD...)**NOTE - 30****WRITE OFF**

₹ in crore

WRITE OFF	For the Year ended 31-03-13 (Audited)			For the Year ended 31-03-12 (Audited)
Doubtful debts	-			0.08
Doubtful advances	-			-
Others	-			-
TOTAL	-			0.08

NOTES TO PROFIT & LOSS ACCOUNT (CONTD...)

NOTE - 31

OTHER EXPENDITURE

₹ in crore

OTHER EXPENDITURE	For the Year ended 31-03-13 (Audited)			For the Year ended 31-03-12 (Audited)
Travelling expenses				
- Domestic	12.25			11.91
- Foreign	0.68			0.85
Training Expenses	0.40			0.38
Telephone & Postage	0.61			0.62
Advertisement & Publicity	0.66			1.19
Freight Charges	-			0.02
Demurrage	-			-
Donation/Subscription	-			-
Security Expenses	4.77			4.47
Service Charges of CIL	-			-
Hire Charges	2.29			1.93
CMPDI Expenses	-			-
Legal Expenses	0.23			0.38
Bank Charges	0.04			0.05
Guest House Expenses	0.05			0.05
Consultancy Charges	1.29			0.41
Under Loading Charges	-			-
Loss on Sale/Discard/Surveyed of Assets	-			-
Auditor's Remuneration & Expenses				
- For Audit Fees	0.03			0.03
- For Taxation Matters	0.01			0.01
- For Company Law Matters	-			-
- For Management Services	-			-
- For Other Services	0.12			0.07
- For Reimbursement of Expenses	-			-
Internal Audit Expenses	0.36			0.34
Rehabilitation Charges	-			-
Royalty & Cess	-			-
Central Excise Duty	-			-
Rent	0.63			0.55
Rates & Taxes	0.58			0.34
Insurance	0.01			0.01
Loss on Exchange Rate Variance	-			-
Lease Rent	-			-
Rescue/Safety Expenses	-			-
Dead Rent/Surface Rent	-			-
Siding Maintenance Charges	-			-
Land/Crops Compensation	0.01			-
Miscellaneous Expenses	5.01			3.79
TOTAL	30.03			27.40

NOTES TO PROFIT & LOSS ACCOUNT (CONTD...)

NOTE -32**EXCEPTIONAL ITEMS**

₹ in crore

EXCEPTIONAL ITEMS				
<u>PRIOR PERIOD ADJUSTMENT</u>				
	For the Year ended 31-03-13 (Audited)			For the Year ended 31-03-12 (Audited)
(A) Expenditure				
Travelling Expenditure	-			-
Employees Remuneration & Benefits	-			(0.08)
Contractual Expenses	-			(0.08)
Other Expenditure	-			(0.21)
TOTAL (A)	-			(0.37)
(B) Income				
Sale of Service	(5.19)			0.48
TOTAL (B)	(5.19)			0.48
TOTAL (A-B)	5.19			(0.85)

CASH FLOW STATEMENT**Cash Flow Statement for the year ended 31st March, 2013**

Amount ₹. in crore

	Particulars		Figures for the Current year 2012-13	Figures for the Previous year 2011-12
	1		2	3
I	CASH INFLOW			
(1)	From Operating Activities			
	(a) Profit from Operating Activities		29.77	30.79
	Adjustments			
	Depreciation and Amortization		7.37	6.88
	Amortisation of Stock			
	Amount transferred to CSR Reserve			
	Compensation			
	(Gain)/Loss on sale of Fixed Assets			
	Assets written off			
	Provision/ (Reversal) for Doubtful Debts & Advances			
	(b) Working Capital Changes			
	Decrease in Inventories		0.73	
	Decrease in Trade Receivables			
	Decrease in Short Term Loans & Advances			
	Decrease in Other Currnet Assets			
	Increase in Trade Payables			10.50
	Increase in Current Liabilities		65.47	36.04
	Increase In Provisions - Short Term		100.97	
	Increase In Provisions - Long Term		2.62	28.69
	(c) Deferred Tax Assets/Liabilities			
	Total of (1)		206.93	112.90
(2)	From Investing Activities			
	(a) Proceeds from Sale of Fixed Assets			
	(b) Proceeds from Sale of Investments			
	© Realisation of Long Term Loans & Advances from Sublidiaries/Associates/Business Ventures			
	(d) Decrease in other Long Term Loans & Advances		0.10	1.26
	(e) Decrease in Deposit Accounts with maturity more than 3 months		0.92	0.20
	(f) Dividend Received			
	(g) Interest Received			
	(h) Other Income			
	Total of (2)		1.02	1.46
(3)	From Financing Activities			
	(a) Proceed from Issue of Share Capital			
	(b) Share Application Money pending Allotment			
	(c) Proceed from Long Term Borrowings/Provisions			
	(d) Proceed from Short Term Borrowings/ Govt Grants			3.39
	Total of (3)			3.39
	TOTAL CASH INFLOW (1+2+3)		207.95	117.75

			Amount ₹. in crore	
	Particulars		Figures for the Current year 2012-13	Figures for the Previous year 2011-12
	1		2	3
II	CASH OUTFLOW			
(1)	From Operating Activities			
	(a) Loss from Operating Activities			
	Adjustments			
	Depreciation and Amortization			
	Amortisation of Stock			
	Compensation			
	(Gain)/Loss on sale of Fixed Assets			
	Assets written off			
	Provision/ (Reversal) for Doubtful Debts & Advances			
	(b) Working Capital Changes			
	Increase in Inventories			
	Increase in Trade Receivables		76.88	56.46
	Increase in Short Term Loans & Advances		38.45	0.63
	Increase in Other Current Assets			
	Decrease in Trade Payables		1.02	
	Decrease in Current Liabilities			
	Decrease in Provisions - Long Term			
	Decrease in Provisions - Short Term			18.48
	(c) Deferred Tax Assets/Liabilities		23.86	11.76
	(f) Direct Tax Paid (Net of Refunds)		4.72	11.18
	Total of (1)		144.93	98.51
(2)	From Investing Activities			
	(a) Purchase of Tangible Assets / Capital Work -in-progress		3.93	17.72
	(b) Purchase of intangible Assets / Assets under Development		0.41	1.15
	(c) Purchase of Investments			
	(d) Investment in Subsidiaries/Associates/Business Ventures			
	(e) Payment of Long Term Loans & Advances to Subsidiaries/Associates/Business Ventures			
	(f) Increase in other Long Term Loans & Advances			
	(g) Increase in other Non-Current Assets			
	Total of (2)		4.34	18.87
(3)	From Financing Activities			
	(a) Repayment of Long Term Borrowings			
	(b) Repayment of Short Term Borrowings			
	(c) Dividend Paid (including distribution Tax)			
	(d) Proceed from Short Term Borrowings/ Govt Grants		1.08	
	(e) Interest and Other Financial Cost			
	(e) Share Issue Expenses			
	Total of (3)		1.08	
	TOTAL CASH OUTFLOW (1+2+3)		150.35	117.38
III	Net (decrease)/Increase in Cash and Cash equivalent (I - II)		57.60	0.37
	Add cash and Cash Equivalents at the beginning of the Period		60.19	59.82
IV	Cash and Cash Equivalents at the end of the Period		117.79	60.19
	In Deposit Accounts with maturity more than 3 months		0.10	1.02
	Balance as per Note 17 (Includes MOC fund ₹ 68.92 crores)		117.89	61.21

sd.-
(P. Lazar)
Company Secretary

sd.-
(A. K. Soni)
General Manager (Finance)

sd.-
(B. N. Basu)
Director

sd.-
(A. K. Debnath)
Chairman- cum - Managing Director

In terms of our report of even date attached

For TODI TULSYAN & CO.

Chartered Accountants

Firm Registration No. : 002180C

sd/-

(CA SUSHIL KUMAR TULSYAN)

PARTNER

Membership No. : 075899

Date : 10th May, 2013

Place : Ranchi

SIGNIFICANT ACCOUNTING POLICIES**(Forming part of accounts for the year ended on 31/03/2013)****NOTE - 33****1.0 Accounting Convention:**

Financial statements are prepared under the historical cost convention and on accrual basis of accounting and going concern concept, in accordance with the generally accepted accounting principles in India and the relevant provisions of the Companies Act, 1956 including accounting standards notified there under, except otherwise stated.

2.0 Subsidies / Grants from Government:

2.1 Subsidies / Grants on capital account are deducted from cost of respective assets to which they relate. The unspent amount at the Balance Sheet date, if any, is shown as current liabilities.

2.2 Subsidies / Grants on revenue account are credited to Statement of Profit & Loss under the head - Other income and the expenses are debited to respective heads.

2.3 Subsidies / Grants from Government received as an implementing agency:

2.3.1 Certain Grants / Funds received under S&T, PRE, EMSC, CCDA etc. as an implementing agency and used for creation of assets are treated as Capital Reserve and depreciation thereon is debited to Capital Reserve Account. The ownership of the asset created through grants lies with the authority from whom the grant is received.

2.3.2 Grant / Funds received as Nodal/Implementing Agency are accounted for on the basis of receipts and disbursement.

3.0 Fixed Assets:

3.1 Land:

Value of land includes cost of acquisition and cash rehabilitation expenses and resettlement cost incurred for concerned displaced persons. Other expenditures incurred on acquisition of land viz. compensation in lieu of employment etc. are, however, treated as revenue expenditure.

3.2 Plant & Machinery:

Plant & Machinery includes cost & expenses incurred for erection / installation and other attributable costs of bringing those assets to working condition for their intended use.

4.0 Investments:

Current investments are valued at the lower of cost and fair value as at the Balance Sheet date. Investments in mutual fund are considered as current investments.

Non-Current investments are valued at cost.

5.0 Inventories:**5.1 Stores & Spares:**

5.1.1 The Closing stock of stores and spare parts has been considered in the accounts as per balances appearing in priced stores ledger of the Central Stores and as per physically verified stores lying at the collieries/units.

5.1.2 Stock of stores & spare parts at central & area stores are valued at cost calculated on the basis of weighted average method. The year end inventory of stores & spare parts lying at collieries / sub-stores / drilling camps/ consuming centers, initially charged off, are valued at issue price of Area Stores, Cost / estimated cost. Workshop jobs including work-in-progress are valued cost.

5.1.3 Stores & spare parts include loose tools.

5.1.4 Provisions are made at the rate of 100% for unserviceable, damaged and obsolete stores and at the rate of 50% for stores & spares not moved for 5 years.

5.2 Stock of Stationery (other than lying at printing press), bricks, sand, medicine (except at Central Hospitals), aircraft spares and scrapes are not considered in Inventory.

6.0 Depreciation:

6.1 Depreciation on Fixed Asset is provided on straight line method at the rates and manner specified in Schedule-XIV to the Companies Act, 1956 (as amended) except for telecommunication equipment and photocopying machine, which are charged at higher rates on the basis of their technically estimated life, as follows:-

Telecommunication equipment : - 15.83% p.a. and 10.55% p.a.

Photocopying machine : - 10.55% p.a.

Depreciation on Earth Science Museum and high volume samplers and respiratory dust are charged @5.15% and 33.33% respectively on the basis of their technically estimated life.

Further depreciation on certain equipments /HEMM is charged over the technically estimated life at higher rates viz. 11.88%; 13.57% and 15.83% as applicable.

Depreciation on SDL and LHD (equipments) are charged @19% p.a. and @15.83% p.a. respectively on the basis of technical estimation.

Depreciation on the assets added/disposed off during the year is provided on pro-rata basis with reference to the month of addition/disposal, except on those assets attracting 100% depreciation p.a. (SLM basis), which are fully depreciated in the year of their addition. Assets attracting 100% depreciation are taken out from the Assets after expiry of two years following the year in which these are fully depreciated.

7.0 Impairment of Asset:

Impairment loss is recognized wherever the carrying amount of an asset is in excess of its recoverable amount and the same is recognized as an expense in the statement

of profit and loss and carrying amount of the asset is reduced to its recoverable amount.

Reversal of impairment losses recognized in prior years is recorded when there is an indication that impairment losses recognized for the asset no longer exist or have decreased.

8.0 Foreign Currency Transactions:

- 8.1 Balance of foreign currency transaction is translated at the rates prevailing on the Balance Sheet date and the corresponding effect is given in the respective accounts. Transactions completed during the year are adjusted on actual basis.
- 8.2 Transactions covered by cross currency swap options contracts to be settled on future dates are recognized at the rates prevailing on the Balance Sheet date, of the underlying foreign currency. Effects arising out of such contracts are taken into accounts on the date of settlement.

9.0 Retirement benefits / other employee benefits:

- a) Defined contributions plans:

The company has defined contribution plans for payment of Provident Fund and Pension Fund benefits to its employees. Such Provident Fund and Pension Fund are maintained and operated by the Coal Mines Provident Fund (CMPF) Authorities. As per the rules of these schemes, the company is required to contribute a specified percentage of pay roll cost to the CMPF Authorities to fund the benefits.

- b) Other employee benefits:

Further liability on the Balance Sheet date of certain other employee benefits viz. benefits on account of LTA/LTC; Life Cover Scheme, Group Personal Accident Insurance Scheme, Settlement Allowance, Retired Executive Medical Benefit Scheme and compensation to dependants of deceased in mines accidents etc. are also valued on actuarial basis by applying projected unit credit method.

10.0 Recognition of Income and Expenditure:

Income and Expenditure are generally recognized on accrual basis and provision is made for all known liabilities.

10.1 Sales:

- a) Revenue in respect of sales is recognized when the property in the goods with the risks and rewards of ownership are transferred to the buyer.
- b) The revenue recognition is done where there is reasonable certainty of collection. On the other hand, revenue recognition is postponed in case of uncertainty as assessed by management.

11. Taxation:

Provision of current income tax is made in accordance with the Income Tax Act, 1961.

Deferred tax liabilities and assets are recognized at substantively enacted tax rates, subject to the consideration of prudence, on timing difference, being the difference between taxable income and accounting income that originate in one period and are capable of reversal in one or more subsequent period.

12. Provision:

A provision is recognized when an enterprise has a present obligation as a result of past event; it is probable that an outflow of resources embodying economic benefit will be required to settle the obligation, in respect of which a reliable estimate can be made. Provisions are not discounted to present value and are determined based on best estimate required to settle the obligation at the balance sheet date.

13.0 Contingent Liability:

Contingent liability is a possible obligation that arises from past events and the existence of which will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the enterprise or a present obligation that arises from past events but is not recognized because it is not probable that an outflow of resources embodying economic benefit will be required to settle the obligations or reliable estimate of the amount of the obligations cannot be made.

14. Prior Period Adjustments and Prepaid Expenses:

Income / expenditures relating to prior period and prepaid expenses, which do not exceed Rs. 0.10 Cr. in each case are treated as income / expenditure of current year.

Additional Notes on Accounts**(Forming part of accounts for the year ended on 31/03/2013)****Note – 34****1.0 FIXED ASSETS & DEPRECIATION****1.1 Fixed Assets**

1.1.1 Legal transfer of assets and liabilities from the Holding Company, Coal India Limited (CIL) on its reorganisation on 01/11/1975 is yet to be effected.

1.1.2 The Company has got constructed houses and office complex in BCCL Township in Dhanbad ₹ 3.80 Crores (Pr. Yr. ₹ 3.80 Crores), and NCL Township in Singrauli ₹ 4.20 Crores (Pr. Yr. ₹ 4.20 Crores) on the land belonging to other subsidiaries of the Holding Company.

1.2 Depreciation

1.2.1 Computer Software is depreciated in the year of purchase @100%.

1.2.2 Value of lease-hold land is amortized over the lease period.

1.2.3 Assets whose actual cost does not exceed ₹ 5000/- are depreciated at 100% leaving a token value of ₹ 1/- for each of such assets.

2.0 STOCK OF STORES & SPARE PARTS

2.1.1 Machine-specific spares are capitalized along with the machines .There are no spares being machine- specific and of infrequent use which are to be capitalized in terms of Accounting Standard (AS) 2 read with AS 10.

2.1.2 The provision for Non-Moving & Obsolete Stores have remained at ₹ 0.33 crores, as there is no addition / disposal in obsolete Stores [Reference Note No -15].

3.0 LOANS & ADVANCES / DEBTORS**3.1 Current Accounts and Sundry Debtors Accounts with CIL Subsidiaries**

3.1.1 Reconciliation of inter-company transactions in Current Accounts with other Subsidiaries of CIL has been carried out upto 31/03/2013. The agreed Current Account balances with the CIL Subsidiaries as on 31/03/2013 were transferred to CIL Current Account. Subsequently, if during the course of audit or otherwise any debit/credit advice received/sent from/to the Subsidiaries with respect to the periods upto 31/03/2013 is considered under Subsidiary Suspense Account.

3.1.2 Sundry Debtors of ₹ 326.91 Crores (Pr. Yr. ₹ 249.64 Crores) includes ₹ 256.06 Crores (Pr. Yr. ₹ 195.33 Crores) due from companies under same management [Reference Note No.-16]. Since 01/4/1993 the system of acceptances of bills by CIL Subsidiaries has been introduced for adjustment of accounts with CIL. Acceptances of bills are regularly monitored.

CENTRAL MINE PLANNING & DESIGN INSTITUTE LIMITED

4.0 Details of Assets as per Note No. 10A

(A) Fixed Assets & Software (Excluding Assets - S&T CCDA, EMSC, UNDP, PRE, CIL R&D etc.)

PARTICULARS	GROSS BLOCK				DEPRECIATION				Amount (₹ in crore)	
	As on 01.04.12	Addition during 2012-13	Adj./Sales/ Transfer 2012-13	As on 31.03.13	As on 01.04.12	Addition during 2012-13	Adj./Sales/ Transfer 2012-13	As on 31.03.13	As on 31.03.13	As on 31.03.12
Land										
(a) Freehold	1.15	-	-	1.15	-	-	-	-	1.15	1.15
(b) Leasehold	2.19	-	-	2.19	0.75	0.04	-	0.79	1.40	1.44
Buildings	41.96	1.16	(1.80)	41.32	14.30	0.73	(0.48)	14.55	26.77	27.66
Plant & Machinery	70.42	4.14	(1.30)	73.26	40.47	5.03	(1.17)	44.33	28.93	29.95
Furniture & fittings/ Office Equipments etc.	14.00	1.66	(0.13)	15.53	10.90	0.52	(0.12)	11.30	4.23	3.10
Vehicle	12.72	-	(0.20)	12.52	6.19	0.92	(0.19)	6.92	5.60	6.53
TOTAL (A) - Fixed Assets	142.44	6.96	(3.43)	145.97	72.61	7.24	(1.96)	77.89	68.08	69.83
Software	2.48	0.32		2.80	2.48	0.32		2.80		
(B) Fixed Assets & Software (S&T CCDA, EMSC, UNDP, PRE, CIL R&D etc.)										
Land										
(a) Freehold	-	-	-	-	-	-	-	-	-	-
(b) Leasehold	-	-	-	-	-	-	-	-	-	-
Buildings	0.31	-	-	0.31	0.04	-	0.01	0.05	0.26	0.27
Plant & Machinery	34.51	0.55	0.06	35.12	26.79	1.67	(0.02)	28.44	6.68	7.72
Furniture & fittings/ Office Equipments etc.	0.47	-	(0.06)	0.41	0.23	0.02	-	0.25	0.16	0.24
Vehicle	0.04	-	-	0.04	0.04	-	-	0.04	-	-
TOTAL (B) - Fixed Assets	35.33	0.55	-	35.88	27.10	1.69	(0.01)	28.78	7.10	8.23
Software-	2.72	0.09	-	2.81	2.72	0.09	-	2.81		
TOTAL (A+B) Fixed Assets	177.77	7.51	(3.43)	181.85	99.71	8.93	(1.97)	106.67	75.18	78.06
TOTAL (A+B) Software	5.20	0.41	-	5.61	5.20	0.41	-	5.61	-	-
5.0. CAPITAL RESERVE : (Note No.2) Grant / Funds received under S&T, PRE, EMSC, CCDA etc as an implementing agency and used for creation of assets are treated as Capital Reserve and depreciation thereon is debited to Capital Reserve Account. The ownership of the asset created through grants lies with the authority from whom the grant is received. The details of Capital Reserve are as below :										
PARTICULARS	S&T Grants	UNDP Grants	CCDA Grants	EMSC Grants *	CIL R&D Grants	P.R.E Grants	CMM/CBM Clearing House Grants	Total		
As per last Account	5.10	0.05	0.11	0.00	6.42	0.47	0.10	12.25		
Addition	0.00	0.00	0.00	0.00	0.72	0.00	0.00	0.72		
Less : Depreciation & Adjustment	0.97	0.00	0.02	0.00	0.66	0.13	0.01	1.79		
TOTAL	4.13	0.05	0.09	0.00	6.48	0.34	0.09	11.18		
Figures as on 31.03.2012	5.10	0.05	0.10	0.00	6.43	0.47	0.10	12.25		

6.0 INCOME TAX:

Income Tax advance of ₹ 134.23 Crores (Pr. Yr. ₹ 96.59 Crores). [Reference Note No-18] includes ₹ 21.71 Crores payments under protest against assessments for the years upto Assessment Year 2010-11. Income Tax provision of ₹ 86.58 Crores [Reference Note No-18] includes provision relating to assessment for the years up to Assessment Year 2013-14 upto year ended 31/03/2013.

7.0 CURRENT LIABILITIES & PROVISIONS:

7.1 Liabilities under Coal Mines Pension Scheme

7.1.1 Current Liabilities includes ₹ 0.39 Crores (Pr. Yr. ₹. 0.35 Crores) deductions which could not be remitted due to certain employees being Non-CMPF members and deceased CMPF members not yet opted for pension.

7.1.2 There is also a liability for ₹ 0.04 Crores (Pr. Yr. ₹ 0.02 Crores) payable to the Pension Scheme being the additional increments granted by the Company w.e.f. 01/7/1995.

7.1.3 The above amounts of liabilities are inclusive of interest at the rate applicable to CMPF.

7.1.4 As against these liabilities ₹ 0.10 Crores (Pr. Yr. ₹ 0.55 Crores) is held in Fixed Deposits with Bank.

7.2 Others

7.2.1 The liability for contractual drilling is provided on the basis of 100% value of meterage drilled for the period less payments made against such drilling.

7.2.2 Provision of ₹ 12.71 Crores (Pr. Yr. ₹ 10.24 Crores) and ₹ 28.72 Crores (Pr. Yr. ₹ 23.10 Crores) have been made in respect of Pension and Superannuation Benefit respectively w.e.f. 01.01.2007 (for executives only) as per actuarial valuation.

7.2.3 Under the Micro, Small and Medium Enterprises Development Act, 2006, which came into force on October, 2, 2006, certain disclosures are required to be made relating to Micro, Small and Medium Enterprises. The company is in the process of compiling relevant information from its suppliers about their coverage under the Act. Since the relevant information is not complete, no disclosures have been made in the Accounts.

7.4 Performance Related Pay

The company has made provision for Lumpsum Recoverable Advance against Performance Related Pay (PRP) for Executives ₹ 137.15 crore (i.e 137.15 crores (i.e. for financial years 2007-08, 2008-09, 2009-10, 2010-11, 2011-12 & 2012-13 amounting to ₹ 16.05 crores, 10.90 crores, 28.20 crores, 29.77 crores, 24.53 crores and 27.70 crores in respective years) [Reference Note No-9]. The net amount of PRP ₹ 43.20 crores included in Note No.18 "Advance to Employee" is net of PRP Advance recovered from retiring employees on their superannuation.

8.0 THEFT & SNATCHING CASES

Theft cases involving an amount of ₹ 0.04 Crores (Pr. Yr. ₹ 0.02 Crores) have been reported during the period . Most of the items covered under the reported thefts are

charged off items and as such provision against such losses in the accounts has not been made.

9.0 DIRECTORS' REMUNERATION

Amount (₹ in Crores)

		Current Year 2012-13	Previous Year 2011-12
(i)	Salary & Allowances including LTC/Leave Encashment	0.72	0.56
(ii)	Provident Fund	0.08	0.07
(iii)	Medical Expenses	0.01	0.01
(iv)	Value of Perquisites	0.18	0.15
(v)	Gratuity Paid	0.10	0.20

10.0 EARNINGS, EXPENDITURE ETC. IN FOREIGN CURRENCY

10.1 Expenditure in Foreign Currency

Amount (₹ in Crores)

		Current Year 2012-13	Previous Year 2011-12
(i)	Foreign training /tour, books & others	0.26	0.40
(ii)	Consultancy fee	0.00	0.44
	TOTAL	0.26	0.84

10.2 Value of Imports Calculated on CIF Basis.

Amount (₹ in Crores)

		Current Year 2012-13	Previous Year 2011-12
(i)	Capital Goods	0.95	0.78
(ii)	Spares & Components	0.00	0.00
	TOTAL	0.95	0.78

10.3 Earnings in Foreign Exchange

Nil

Nil

10.4 Value of imported and indigenous stores and spare parts consumed and percentage thereof to the total consumption

Amount (₹ in Crores)

		Current Year 2012-13		Previous Year 2011-12	
		Value	Percentage	Value	Percentage
(i)	Imported	0.00	0.00	0.00	0.00
(ii)	Indigenous	15.28	100.00	16.67	100.00
	TOTAL	15.28	100.00	16.67	100.00

11.0 CONTINGENT LIABILITY**11.1 Claims against the Company not acknowledged as debt**

- 11.1.1 Income Tax: In respect of completed assessment pending in appeal ₹21.71 Crores (Pr. Yr. ₹ 22.17 Crores).
- 11.1.2 Entry Tax : In respect of F/Y 2002-03 pending before Commissioner of Commercial Tax ₹ 0.17 Crores (Pr. Yr. ₹ 0.17 Crores).
- 11.1.3 (i) Service Tax : In respect of completed assessment ₹ 5.46 crores (Pr. Yr. ₹ 5.46 Crores) the appeal is not admitted for hearing by the Tribunal. The company is in the process of filing appeal again before the tribunal. ₹ 0.75 crores has been paid under protest.
(ii) In respect of observation raised by Central Excise, Customs & Service Tax Department, Bhubaneshwar ₹ 0.58 Crores.
(iii) In respect of demand raised by OSHB, Bhubaneshwar ₹ 0.16 Crores
- 11.1.4 Other disputed claims pending in the courts and not provided for amount to ₹ 8.20 Crores (Pr. Yr. ₹ 6.43 Crores).

11.2 LC opened pending maturity during the period ₹ Nil (Previous year as on 31/03/2012 ₹ Nil).**11.3 Estimated value of contracts remaining to be executed on capital account and not provided for amounts to ₹ 5.90 Crores (Pr. Yr. ₹ 6.65 Crores).****11.4 Other matters :**

- 11.4.1 There are certain suits pending in courts arising out of industrial and other disputes. The quantum of contingent liability in this regard could not be ascertained.
- 11.4.2 There is a counter guarantee of ₹ 0.11 Crores (Pr. Yr. 0.20 Crores) issued by the Company in favour of Bank for issuing Bank Guarantee on behalf of the Company.

12.0 REVENUE RECOGNITION

Services rendered to CIL Subsidiaries for P&D and Exploration are billed on Cost Plus Basis on accrual except Inspection Charges which are accounted for on receipt basis.

13.0 WRITE BACK

- 13.1. Stale cheques, which are more than three years old at the end of the period are written back.
- 13.2 Earnest Money and Security Deposit which are more than five years old at the end of the period are written back except disputed cases pending with court/arbitration.
- 13.3 Unclaimed liability other than that related to employees, lying for more than five years are written back except disputed cases pending with court/arbitration.

14. ACTUARIAL VALUATION OF GRATUITY LIABILITY AS AT 31.03.2013**TABLE 1::DISCLOSURE ITEM 120 (C)****TABLE SHOWING CHANGES IN PRESENT VALUE OF OBLIGATIONS :**

₹ in crores

	As at
Table Showing Changes in Present Value Of Obligations	As at 31/03/2013
Present Value of Obligation at Beginning of year	124.30
Acquisition Adjustment	0.00
Interest Cost	9.17
Past Service Cost	0.00
Current Service Cost	6.97
Curtailment cost	0.00
Settlement Cost	0.00
Benefits Paid	19.40
Actuarial gain/loss on Obligations	9.29
Present Value of Obligation at end of Year	130.33

TABLE 2::DISCLOSURE ITEM 120(E)**TABLE SHOWING CHANGES IN FAIR VALUE OF PLAN ASSETS:***NOT APPLICABLE AS SCHEME IS UNFUNDED***TABLE 3::DISCLOSURE ITEM 120(F)****TABLE SHOWING FUNDED STATUS***NOT APPLICABLE AS SCHEME IS UNFUNDED***TABLE 4::DISCLOSURE ITEM 120(G)****TABLE SHOWING EXPENSE RECOGNIZED IN STATEMENT OF PROFIT/LOSS:**

₹ in crores

Table Showing Changes in Present Value Of Obligations	As at 31/03/2013
Current Service Cost	6.97
Past Service Cost	0.00
Interest Cost	9.17
Expected Return on Plan Asset	0.00
Curtailment cost	0.00
Settlement Cost	0.00
Actuarial gain/loss recognized in the year	9.29
Expense Recognized in Statement of Profit & Loss	25.43

TABLE 7::DISCLOSURE ITEM 120(L)
TABLE SHOWING ACTUARIAL ASSUMPTIONS

	As at 31.03.2013
Mortality Table	LICI 1994-1996
Superannuation Age	60
Early Retirement & Disablement	10 PER THOUSAND P.A
	6 above age 45
	3 between 29 and 45
	1 below age 29
Discount Rate	8.00
Inflation Rate	6.25
Return on Asset	0.00
Remaining Working Life	11
FORMULA USED	Projected Unit Credit Method

TABLE 10::DISCLOSURE ITEM 120(P)
MOVEMENTS IN THE LIABILITY RECOGNIZED IN BALANCE SHEET:

₹ in crores

	As at 31.03.2013
Opening Net Liability	104.90
Expenses as above	25.43
Contributions	0.00
Closing Net Liability	25.43
Closing Fund/Provision at end of Year	130.33

Note to Appendix B of AS - 15 (Revised 2005)

As the scheme is unfunded charges to profit /loss account has been based on following assumptions :-

1. previous obligation was provided for at last accounting date
2. benefit to exits has been paid to debit of above provision
3. current obligation will be provided for at current accounting date

15.0 DEFERRED TAX

As per Accounting Standard (AS - 22) on Accounting for taxes on Income issued by the Institute of Chartered Accountants of India, the provision for deferred tax assets and liabilities as at 31.03.2013 has been computed at ₹ 102.76 Crores and ₹ 7.22

Crores respectively. Net Deferred tax as at 31.03.2013 comprises of the following:

		Amount (₹ in Crores)	
		As on 31/03/2013	As on 31/03/2012
A)	Deferred Tax Asset		
	VRS	0.00	0.00
	Software	0.09	0.06
	Provision for obsolescence/ Non - moving	0.11	0.10
	Provision for doubtful debts	1.06	0.88
	Provision for Leave Encashment, Gratuity & other terminal benefits	101.50	78.38
	TOTAL (A)	102.76	79.42
	Deferred Tax Liability		
	Difference in WDV of assets	7.22	7.75
	TOTAL (B)	7.22	7.75
C)	Deferred Tax Asset (Net A – B)	95.54	71.67

16.0 SEGMENT-WISE PROFIT & LOSS STATEMENT :

Amount (₹ in crore)

PARTICULARS	P&D	EXPLORATION	ENVIRONMENT	TOTAL
REVENUE				
Sales of Services	214.80	361.92	24.33	601.05
Misc. Income	3.73	0.35	0.08	4.16
Total Revenue	218.53	362.27	24.41	605.21
Result	54.13	67.40	6.94	128.47
Unallocated Corporate Expenses				98.70
Profit/Loss before Tax				29.77
Provision for Income Tax				28.58
Provision Deferred Tax				-23.86
Profit after Tax				25.05

17.0 CORPORATE SOCIAL RESPONSIBILITY (C. S. R.) :

A provision of ₹ 0.98 Crores (being 5% of retained profit of previous year) has been made towards Corporate Social Responsibility (C. S. R.) funds for the year ended 31st March, 2013. An amount of ₹ 1.06 Crores has been incurred during the period on this account.

18.0 SUSTAINABLE DEVELOPMENT RESERVE :

A provision of ₹ 0.10 Crores (being 0.5% of retained profit of previous year) has been made towards Sustainable Development Reserve funds for the year ended 31st March, 2013. No expense has been incurred during the period on this account.

19.0 PREVIOUS YEAR'S FIGURES

Previous Year's figures have been re-arranged / re-grouped / re-classified wherever necessary to make them comparable with those of the Current Year.

Signatures to Notes 1 to 19 for Balance Sheet, Notes 20 to 32 for Statement of Profit & Loss Account and Notes 33 & 34 for Accounting Policy and Additional Notes on Accounts.

Sd/-
(P. Lazar)
Company Secretary

Sd/-
(A. K. Soni)
General Manager (Finance)

Sd/-
(B. N. Basu)
Director

Sd/-
(A. K. Debnath)
Chairman- cum - Managing
Director

In terms of our report of even date attached
For TODI TULSYAN & CO.
Chartered Accountants
Firm Registration No. : 002180C

Sd/-
(CA SUSHIL KUMAR TULSYAN)
PARTNER
Membership No. : 075899

Date : 10th May, 2013
Place : Ranchi

**INFORMATION AS REQUIRED BY PART - IV OF SCHEDULE VI
TO THE COMPANIES ACT, 1956**
Balance Sheet Abstract and Company's General Business Profile
03 Jharkhand (State Code)

I. Registration Details ;

Registration No. : -

0	0	1	2	2	3
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 State Code: -

	0	3
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Balance Sheet

Date

3	1
Date	

0	3
Month	

2	0	1	3
Year			

II. Capital Raised during the year (Amount in Rs '000)

Public Issue							Rights Issue						
				N	I	L					N	I	L
Bonus Issue							Private Placement						
				N	I	L					N	I	L

III. Position of Mobilisation and Deployment of Funds (Amount in Rs. '000000)

Total Liabilities							Total Assets						
		7	3	6	0	6			7	3	6	0	6

Sources of Funds :							Paid-up Capital							Reserve & Surplus						
				1	9	0	4			1	1	5	8	5						
Secured Loans							Unsecured Loans													
				N	I	L					N	I	L							
Application of Funds:							Net Fixed Assets							Investments						
				8	6	5	5					N	I	L						
Net Current Assets/Non Current Assets							Misc. Expenditure													
		(-)	4	7	2	0					N	I	L							
Accumulated losses							Deferred Tax													
				N	I	L					9	5	5	4						
Intangible Assets																				
				N	I	L														

IV. Performance of Company (Amount in Rs '00000)

Turnover						Total Expenditure							
		6	0	1	0	5			5	7	1	2	8

+ / - Profit/Loss before Tax										+ / - Profit/Loss after Tax									
+					2	9	7	7		+					2	5	0	5	

(+ for Profit , - for Loss)

Earning per share in Rs.						Dividend		
		1	3	1	6	N	I	L

V. Generic Names of three Principal Products/Services of Company

(As per monetary terms)

Item Code No.
(ITC Code)

N	O	T		A	V	A	I	L	A	B	L	E
---	---	---	--	---	---	---	---	---	---	---	---	---

Product
Description

M	I	N	E		P	L	A	N	N	I	N	G		&	
										D	E	S	I	G	N

Item Code No.
(ITC Code)

N	O	T		A	V	A	I	L	A	B	L	E
---	---	---	--	---	---	---	---	---	---	---	---	---

Product
Description

G	E	O	L	O	G	Y		&		D	R	I	L	L	-
												I	N	G	

Item Code No.
(ITC Code)

N	O	T		A	V	A	I	L	A	B	L	E
---	---	---	--	---	---	---	---	---	---	---	---	---

Product
Description

N	A	T	U	R	A	L		R	E	S	O	U	R	C	E
M	A	N	A	G	E	M	E	N	T		A	N	D		
F	I	E	L	D		S	E	R	V	I	C	E	S		

Signed for Schedules A to O and 1 to 15

For and on behalf of Board of Directors Central Mine Planning & Design Institute Limited

Sd/-
(P. Lazar)
Company SecretarySd/-
(A. K. Soni)
General Manager (Finance)Sd/-
(B. N. Basu)
DirectorSd/-
(A. K. Debnath)
Chairman- cum - Managing
Director

GENERAL NOTE FOR SHAREHOLDERS OF COAL INDIA LIMITED

The Annual Accounts of CMPDI would be kept for inspection and also would be available at the Headquarter for providing information to any Shareholder of Coal India Limited on demand.