

ANNUAL REPORT & ACCOUNTS
2011-12



CENTRAL MINE PLANNING & DESIGN INSTITUTE LIMITED

(A Subsidiary of Coal India Limited)

A Mini Ratna Company

GONDWANA PLACE, KANKE ROAD

RANCHI - 834 031

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MANAGEMENT DURING 2011-12

Shri Ashok Kumar Singh : Chairman-cum-Managing Director
(From 01.01.2008)

Functional Directors

Shri Amal Kumar Debnath : Director (Technical) (From 01.08.2007)
 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)
 Shri S. K. Mitra : Director (Technical) (From 01.09.2007
to 27.06.2011)
 Shri N. Khurana : Director (Technical) (From 22.06.2007
to 24.06.2011)

Part-time Official Directors

Shri Devulapalli Narasimha Prasad : Director, Ministry of Coal, (From 27.01.2010)
 Shri Nirmal Chandra Jha : Director (Technical) / Chairman, (Additional charge)
Coal India Ltd. (From 02.03.2007 To 31.01.2012)
 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

Company Secretary :

Shri P. Lazar : (From 01.04.2011)

Board of Directors



Shri Ashok Kumar Singh
Chairman-cum-Managing Director



Shri A. K. Debnath



Shri B.N. Basu



Shri D.K. Ghosh



Shri R. K. Chopra



Shri N. Kumar



Shri D.N. Prasad



Prof. V.R. Sastry



Prof. P.K.J. Mohapatra



Dr. Mukesh Khare



Shri Pramod Kumar Misra

MEMBERS OF THE BOARD AS ON 01.05.2012

Functional Directors

| | | |
|--------------------------|---|--------------------------------|
| Shri Ashok Kumar Singh | : | Chairman-cum-Managing Director |
| Shri Amal Kumar Debnath | : | Director (Technical) |
| 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 | : | Director, 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 |
| Company Secretary | : | Shri P. Lazar |

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 37th ANNUAL GENERAL MEETING

Ref. No. CS/AGM-37/2012/448

Dated: 14.05.2012

Notice is hereby given to all the shareholders of Central Mine Planning & Design Institute Limited that the 37th Annual General Meeting of the Company will be held on 21.05.2012, the Monday 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 2012 and Profit & Loss Account for the year ended on that date along with the schedules 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 2011-12.
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

(P. Lazar)
Company Secretary

- 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 and 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 37th Annual General Meeting of CMPDIL and present to you the Annual Report of your Company for the financial year 2011-12. The Report of Directors and the Audited Accounts of your Company for the period ended 31st March, 2012 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.

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 MoPNG 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 design software, 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- 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 upgradation 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 2011-12, your company had achieved the highest turnover of ₹ 524.03 crore, registering an increase of ₹ 94.94 crore over last year turnover of ₹ 429.09 crore with a profit before tax of ₹ 30.79 crore as against the previous year profit of ₹ 23.69 crore. The net profit after tax has increased from ₹ 15.32 crore to `

19.61 crore. The net worth of your company has risen to ₹ 208.79 crore as on 31.03.2012 from ₹ 167.60 crore as on 31.03.2011. During the financial year the earning per share has gone up to ₹ 1030/- from ₹ 805/-. The procurement of outside consultancy services has also sharply increased from ₹13.16 crore to ₹33.26 crore. No adverse comments has been received from CAG under section 619 (iv) of the companies act 1956.

3. Drilling Performance:

Your company carried out 19.41 lakh meter of drilling during the XI Plan in comparison to about 10 lakh meter of total drilling carried out during the X Plan. Also, 4.98 lakh metre drilling was carried out in 2011-12 through departmental resources and outsourcing, whereas, the target for 2012-13 is 5.82 lakh meter. This substantial enhancement in drilling capacity of CMPDI could be ensured through adoption of a multi-pronged strategy like modernization of departmental drills by procurement of new mechanical and high capacity hydrostatic drills as well as mud-pumps and trucks. Moreover, outsourcing of coal blocks for drilling was also emphasized. For meeting the enhanced coal exploration programme, an MoU was signed in January, 2009 with MECL for exploration work involving 3.10 lakh metre of drilling in 7 blocks for taking up drilling at the rate of one lakh metre/annum. Though, the augmentation in exploration capacity is half-way accomplished as it is required to be raised to a level of 10 lakh meter per year considering over 50 lakh meter of drilling target for the XII Plan period, the tone of achievement has already been set. Moreover, requirement of detailed drilling in non-CIL blocks at a greater pace would necessitate further enhancement in exploration capacity beyond 10 lakh meter per annum.

4. UNFC Classification:

The coal resources and reserves of CIL have been classified as per the United Nations Framework Classification (UNFC). Also, 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.

5. Project Reports:

A total of 142 project reports were identified for preparation for the XI Plan resulting in capacity addition for coal production of about 371 Mt, against which, 130 project reports with capacity addition of about 349 Mt have already been prepared during 2007-12. Preparation of balance 12 Project Reports have either been shifted to XII Plan or shelved/merged. During XI Plan period, 67 additional project reports with capacity addition of about 137 Mt were also prepared.

6. Upgradation of Laboratories:

Most of the laboratories in your company had been upgraded. Chemical and Petrography laboratories were upgraded with sophisticated imported equipments and the capacities have been substantially enhanced (doubled). Apart from enhancing the internal capability, MoU with CSIR was signed in Dec., 2011 for enhancement of capacity for coal core analysis at its designated labs for analysing 2.55 lakh meter of coal cores through creation of additional infrastructure. Environment laboratories have been upgraded at HQ and RI-IV and established at RI-V. The Mining Technology laboratory has been approved by DGMS 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 to replace the old machine for determination of physico-mechanical properties. Facility for adsorption isotherm test has been created 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 its kind in India. Though the capacity enhancement carried out in the aforesaid 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 have been addressed to a large extent. Out of total requirement of 184 Management Trainees (MTs) in different disciplines in 2011-12, 89 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:

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 87 nos. of opencast projects of CIL based on high resolution satellite data was completed during 2011-12. 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, exercise relating to Mine fire monitoring of Damodar Valley coalfields including Raniganj, Jharia, Bokaro and Karanpura Coalfields, based on thermal satellite data for developing Mine Fire Information System (MIFS) has also been taken up and work in respect of Jharia Coalfield has been completed.

9. Assistance for setting up of coal washeries:

Your company has provided 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, upgradation of the Coal Preparation laboratory is underway with procurement and installation of new equipment to cater to the future requirement for washability tests, etc. R&D project for utilization of NLW and low rank high ash coal has been undertaken for coke making along with R&D, SAIL.

10. Environmental Services:

Environmental services rendered by your company to CIL during 2011-12 included preparation of 31 nos. of Form-I and formulation of 33 nos. of draft EMPs. 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. Also, the guidelines for Mine Closure, prepared by us in June'09, were published by the Ministry of Coal in Aug.'09. Accordingly, a total of 95 nos. and 324 nos. of Mine Closure plans were prepared during 2010-11 and 2011-12, respectively. 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. Topographical Maps based on Remote Sensing Technique:

Your company entered into an MoU with Survey of India in July, 2009 for preparation of updated topographical maps of 28 major Indian coalfields of India based on Remote Sensing technique on 1:5000 scale with 2 m contour interval. The Project is being jointly implemented by CMPDI & Survey of India and is expected to be completed in 5 years. Large scale digital topographical maps will be very useful for detail coal exploration, mine planning, infrastructure planning, railway siding for coal transportation, rehabilitation & resettlement and environmental management planning as well as integrated master planning of the coalfields. This is a major step taken up by CIL/CMPDI to expedite the coal exploration, mine planning, and environmental management.

12. 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. The services of CMPDI are being sought by MOPNG in generation of CBM related data under delineation of blocks, preparation of data dossiers, etc. Additionally, emerging area of Information and Communication Technology (ICT) in coal sector will also present additional opportunity for us in coming years.



Development of coal based alternate energy sources has been made one of the priority area of operation for your company. Coal Mine Methane project was successfully demonstrated at Moonidih project of BCCL. The generated electricity is being supplied to Moonidih colony since 27th June, 2008. 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. Steps for selection of suitable



developers for commercial development of 5 CMM Blocks within CIL areas has been taken. The matter regarding operationalisation of CMM is under deliberation between MOC/MOP&NG and further steps would have to be taken after settlement of the issue. Additionally, steps have been taken for commercial development of UCG in 2 blocks within CIL areas. For foray in the area of Shale Gas development, CMPDI is examining potentiality of development of Shale Gas within CIL areas and as a part of capacity building a R&D project is being pursued. DGH has also assigned the job for preparation of data dossiers on prospective Shale Gas blocks in Damodar Valley and Sohagpur Basin in June, 2011 pertaining to which draft reports have been submitted to DGH in March, 2012.

13. 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 37 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. Over 50 nos. of research projects were completed during 2008-12, whereas, during 2011-12, 12 nos. of R&D and S&T projects were completed. The completed projects were pertaining to Coal Bed Methane, Coal Mine Methane, Ground Penetrating Radar for detection of old unapproachable water logged workings, high resolution seismic monitoring for early detection of slope failure, development and use of fly ash based pesticides, etc. Some of the ongoing research projects related to tele-robotics & remote operation technology for underground mines, shale gas potentiality for different sedimentary basins, development of self advancing goaf edge supports, development of indigenous catalyst for coal to liquid conversion, etc. It is expected that future R&D efforts will also address frontier areas like liquidation of developed pillars, slope stability in opencast mines, hydraulic mining, underground coal gasification, coal liquefaction, "Zero" emission combustion of coal, carbon sequestration through bio-sequestration in the coal mining areas, 3D Seismic Survey for coal exploration and estimation of CBM resources. 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.

14. Corporate Social Responsibility:

Under Corporate Social Responsibility (CSR), sustainable development and inclusive growth was emphasized and practiced by CMPDI. In this programme participation of our Trade Union representatives is praise worthy. As per the CIL guideline on CSR, 5 % of the retained profit of the preceeding year had been allocated during the past years and activities were carried out which included providing study materials, school dresses, printers, ceiling fans, etc. in schools, setting up periodical medical check-up camps in surrounding villages, providing hand pumps in villages, etc.

15. Consultancy Services in the area of Quality Assurances:

Apart from 97 management system certification during 2011-12, consultancy work was completed pertaining to quality assurances included design and documentation of methodology, criteria, system, etc., for evolving 'energy baselines' and 'energy performance indicators' of all energy sources and 'reviewing energy performance' of opencast coal mines, etc. Documentation and issue of company-level integrated management system (IMS) for total Northern Coalfields Ltd. (NCL) company conforming to ISO 27001 & ISO 50001 and integrating it to the company's ISO 9001, ISO 14001, OHSAS 18001 and SA 8000 system was carried out during 2011-12 which is first such attempt in the country.

16. 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, in other minerals also. However, during the year 2011-12, we bagged prestigious jobs in Metal Mining sector, particularly, from Manganese Ore (India) Ltd. and Hindustan Copper Ltd. for providing consultancy services for their manganese and copper mines. Against the MoU target to obtain ₹ 32 crore worth consultancy jobs outside CIL during 2011-12, we have obtained 41 work orders worth ₹ 33.26 crores.

17. 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 is also expected to get Excellent MoU rating in 2011-12. Commendation Certificate of "SCOPE Meritorious Award for R&D, Technology Development & Innovation" for the year 2009-10 had been another milestone, which was received by me on your behalf

from Hon'ble President of India, Her excellency, Smt. Pratibha Devi Singh Patil at Vigyan Bhawan on 11th April, 2011. Additionally, excellent usage of Geospatial technology by us for Land Reclamation Monitoring of Coal Mines of CIL was recognized by giving "Geospatial World Excellence Award 2012" in Geospatial World Forum- a leading international organization focused on Geospatial technology. Out of 149 nominations, CIL was selected by a panel of eminent international jury for this prestigious award.

18. 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, whole-hearted 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.

A.K. SINGH

Chairman

Ranchi

21.05.2012

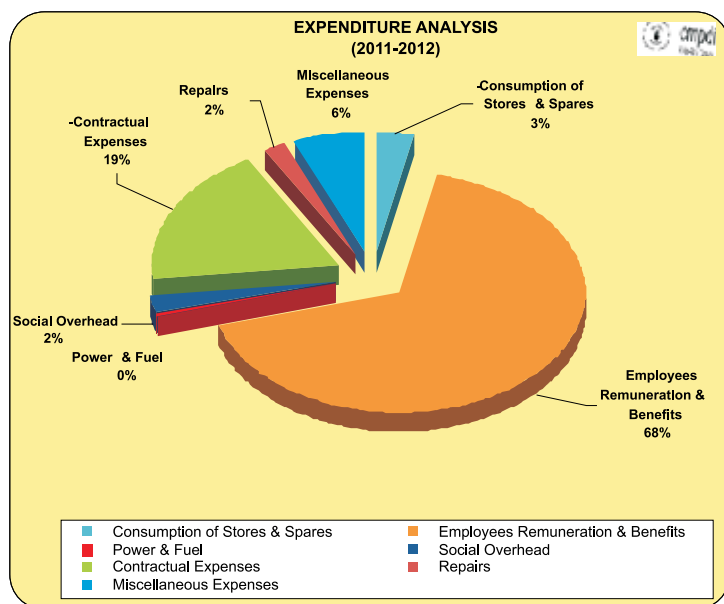
PERFORMANCE AT A GLANCE

| Particulars | Units | 2011-12 | 2010-11 |
|----------------------------|---------------------|---------|---------|
| Sale of services | Rs in crore | 524.03 | 429.09 |
| Profit before tax | Rs in crore | 30.79 | 23.69 |
| Profit after tax | Rs in crore | 19.61 | 15.32 |
| Dividend | Rs in crore | - | - |
| Dividend tax | Rs in crore | - | - |
| Retained Profit | Rs in crore | 19.61 | 15.32 |
| Net Fixed Assets | Rs in crore | 78.06 | 71.95 |
| Net Worth | Rs in crore | 208.79 | 167.60 |
| Loan Funds | Rs in crore | - | - |
| Capital Employed | Rs in crore | 208.79 | 167.60 |
| Value Added | Rs in crore | 33.71 | 23.58 |
| Number of Employees | Number | 3129 | 3102 |
| Value added per employee | Rupees in thousands | 107.73 | 76.01 |
| Debt to Equity Ratio | Percentage | 0.00 | 0.00 |
| Return on Capital Employed | Rs in crore | 14.75 | 14.13 |
| Face Value Per Share | Rupees | 1000 | 1000 |
| Dividend Per Share | Rupees | - | - |
| Book Value Per Share | Rupees | 5182 | 4152 |
| Earnings Per Share | Rupees | 1030 | 805 |

FINANCIAL STATISTICS

| | ₹ in crore As at 31.03.2012 | | ₹ in crore As at 31.03.2011 | | ₹ in crore As at 31.03.2010 | |
|--|-----------------------------------|---------------|-----------------------------------|---------------|-----------------------------------|---------------|
| SOURCES OF FUNDS | | | | | | |
| EQUITY AND LIABILITIES | | | | | | |
| Shareholders' Fund | | | | | | |
| a) Share Capital | 19.04 | | 19.04 | | 19.04 | |
| b) Reserves & Surplus | 91.88 | | 68.88 | | 54.74 | |
| | | 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 | 170.40 | | 141.71 | | 154.83 | |
| | | 170.40 | | 141.71 | | 154.83 |
| Current Liabilities | | | | | | |
| a) Short Term Borrowing | - | | - | | - | |
| b) Trade Payables | 33.45 | | 22.95 | | 39.87 | |
| c) Other Current Liabilities | 161.43 | | 125.39 | | 166.17 | |
| d) Short Term Provisions | 152.84 | | 171.32 | | 111.22 | |
| | | 347.72 | | 319.66 | | 317.26 |
| Total | | 629.04 | | 549.29 | | 545.87 |
| APPLICATION OF FUNDS | | | | | | |
| ASSETS | | | | | | |
| Non-Current Assets | | | | | | |
| (a) Fixed Assets | | | | | | |
| i) Tangible Assets - Gross Block | 177.77 | | 165.93 | | 155.31 | |
| Less : Depreciation, Impairment & Provisions | 99.71 | | 93.98 | | 87.75 | |
| Net Carrying Value | | 78.06 | | 71.95 | | 67.56 |
| ii) Intangible Assets - Gross Block | 5.20 | | 4.05 | | 2.23 | |
| Less : Depreciation, Impairment & Provisions | 5.20 | | 4.05 | | 2.23 | |
| Net Carrying Value | | - | | - | | - |
| iii) Capital Work-in-Progress | | 11.52 | | 5.64 | | 2.58 |
| iv) Intangible Assets under Development | | - | | - | | - |
| (b) Non-Current Investment | | - | | - | | - |
| (c) Deferred Tax Assets (Net) | | 71.67 | | 59.91 | | 54.51 |
| (d) Long Term Loans & Advances | | 0.84 | | 2.10 | | 3.32 |
| (e) Other Non-Current Assets | | 0.02 | | 0.02 | | 0.02 |
| Current Assets | | | | | | |
| (a) Current Investments | - | | - | | - | |
| (b) Inventories | 6.77 | | 6.77 | | 6.29 | |
| (c) Trade Receivables | 246.92 | | 190.46 | | 275.87 | |
| (d) Cash & Cash equivalents | 61.21 | | 61.04 | | 69.24 | |
| (e) Short Term Loans & Advances | 151.98 | | 151.35 | | 66.43 | |
| (f) Other Current Assets | 0.05 | | 0.05 | | 0.05 | |
| | | 466.93 | | 409.67 | | 417.88 |
| Total | | 629.04 | | 549.29 | | 545.87 |

| | ₹ in crore | ₹ in crore | ₹ in crore |
|---|--|--|--|
| | 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 | 524.03 | 429.09 | 453.53 |
| Other Income | 4.40 | 4.46 | 3.72 |
| Total Revenue | 528.43 | 433.55 | 457.25 |
| EXPENSES | | | |
| Cost of Material Consumed | 16.67 | 15.77 | 12.37 |
| Change in inventories of finished goods work in progress and Stock in trade | - | - | - |
| Employee benefit expenses | 334.36 | 269.75 | 290.92 |
| Power & Fuel | 2.24 | 2.07 | 2.30 |
| Welfare Expenses | 11.48 | 10.79 | 8.84 |
| Repairs | 9.61 | 11.11 | 13.53 |
| Contractual Expenses | 93.00 | 76.55 | 77.16 |
| Finance Costs | - | 0.03 | 0.26 |
| Depreciation/amortization/Impairment | 6.74 | 5.48 | 4.84 |
| Provisions | (0.81) | (3.21) | 0.21 |
| Write off | 0.08 | 0.43 | - |
| Overburden Removal Adjustment | | | |
| Other Expenditure | 25.12 | 23.78 | 23.67 |
| Total Expenses | 498.49 | 412.55 | 434.10 |
| Profit/Loss before exceptional & extraordinary items & tax | 29.94 | 21.00 | 23.15 |
| Prior Period Adjustment { charges/ (incomes) } | (0.85) | (2.69) | 2.59 |
| Exceptional Items | - | - | - |
| Profit/ (Loss) before extraordinary items and tax | 30.79 | 23.69 | 20.56 |
| Extraordinary Items { charges/ (incomes) } | - | - | - |
| Profit/ (Loss) before Tax | 30.79 | 23.69 | 20.56 |
| Less : Tax Expenses | | | |
| - Current year | 22.97 | 13.22 | 21.04 |
| - Deferred Tax | (11.76) | (5.40) | (10.93) |
| - Earlier years | (0.03) | 0.55 | (1.01) |
| Profit/ (Loss) for the period | 19.61 | 15.32 | 11.46 |



**Year ending
31st March 2012
(₹ in Crores)**

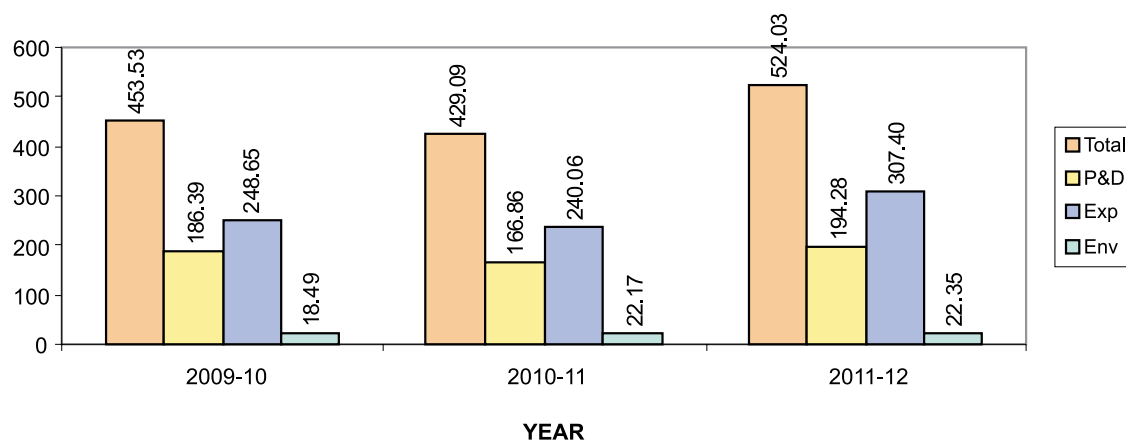
EXPENDITURE

| | |
|-----------------------------------|--------|
| Consumption of Stores & Spares | 16.67 |
| Employees Remuneration & Benefits | 334.36 |
| Power & Fuel | 2.24 |
| Social Overhead | 11.48 |
| Contractual Expenses | 93.00 |
| Repairs | 9.61 |
| Miscellaneous | 25.88 |

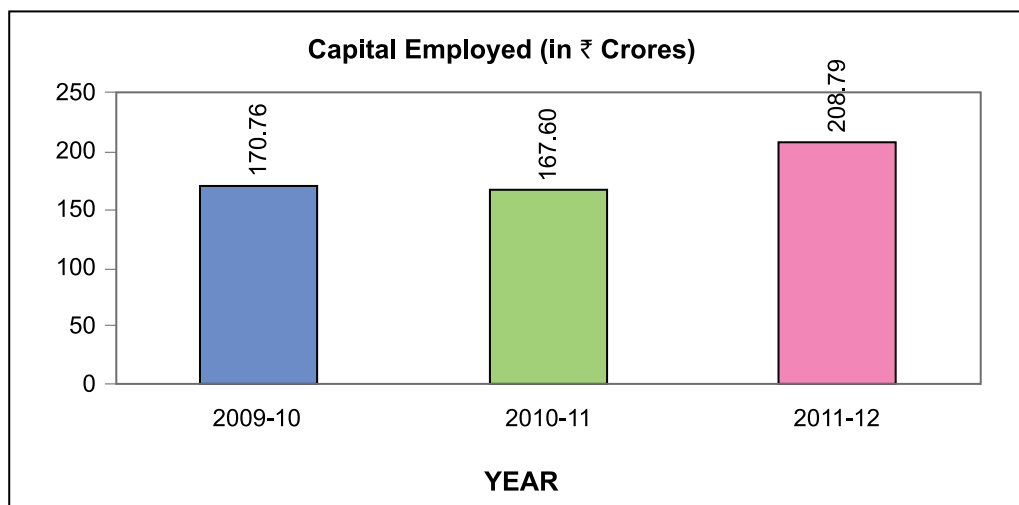
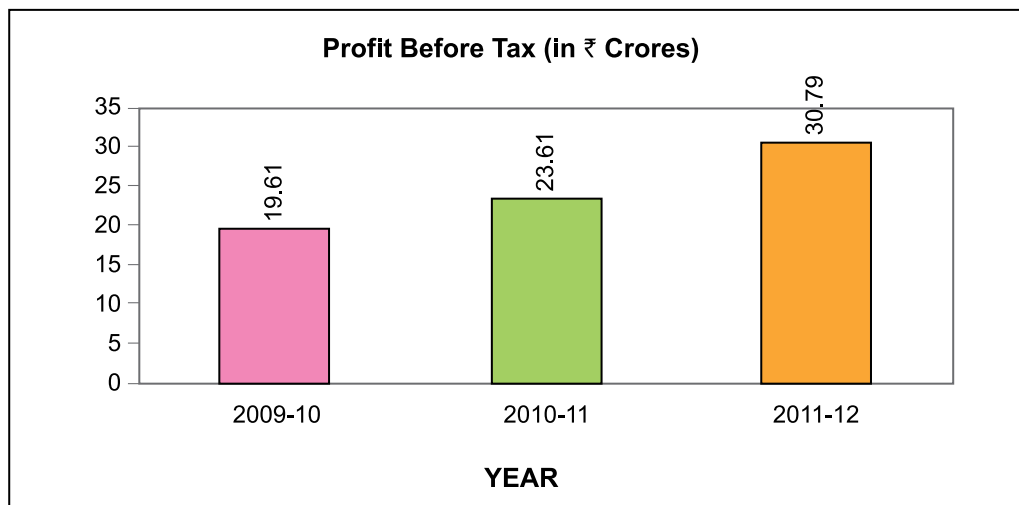
Total Expenditure

493.24

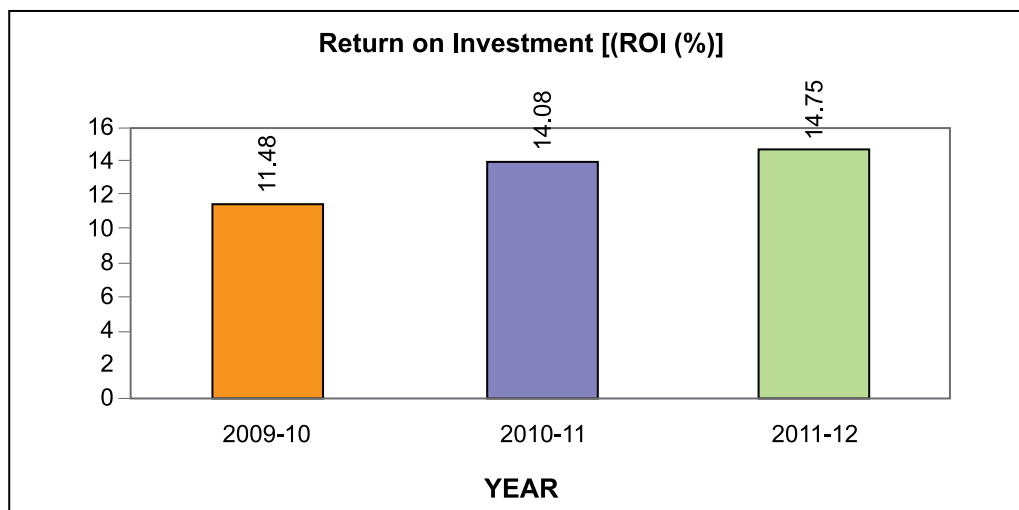
Sales Breakup (in ₹ Crores)



FINANCIAL OVERVIEW OF CMPDIL



Note : Previous year's figures have been re-arranged/ re-gouped/ re-classified wherever necessary to make comaprable with those of current period.



DIRECTORS' REPORT

To
The Shareholders
Gentlemen,

On behalf of the Board of Directors, I have great pleasure in presenting the 37th Annual Report on the working of your Company along with the Accounts for the year ended 31st March, 2012 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 headquarters at Ranchi. Seven Regional Institutes designated as 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 Naini Coal Co. Ltd., Goa Industrial Development Corporation, OPGCL, NALCO, SAIL-ISP, NTPC, CMDC Ltd., MMTC, SCCL, MECL, JSPL, Usha Martin, Baitarni West Coal. Co. Ltd., Mesco Steel, Ultratech Cement, etc. were provided mainly through CMPDI (HQ). CMPDI also handled specialised assignments of Ministry of Coal and CIL.

Major Services Offered

1.1 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 ₹ 19.61 Crores (after deferred tax). The working results of the company are given below:

| | (₹ in Crore) |
|-------------------------------------|---------------|
| Sales | 524.03 |
| Less: Total Net Expenditure | 494.09 |
| Profit before P.P. Adjustment & Tax | 29.94 |
| Less: Prior Period Adjustment | (-) 0.85 |
| [Debit (+) / Credit (-)] | |
| Profit before Taxation | 30.79 |
| Provision for Income Tax: | |
| Less: For current period | 22.97 |
| For earlier years | (-) 0.03 |
| Add: For Deferred Tax | (-) 11.76 |
| | 11.18 |
| Net Profit after Tax | 19.61 |

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 CMPDI

The year 2008 witnessed the global economy being hit by one of the unprecedented financial crisis in history which was triggered by the sub-prime crisis in the US. However, India was one of the few large economies which were not severely impacted by this financial crisis. India's economic growth, though slowed down a bit from 9% level of 2007-08 to about 6.7% in 2008-09, looked up once again with the weaning effect of the crisis and grew at the rate of 8.4 percent during 2009-10 and 2010-11. But, even before the contagion impact of this global economy melt-down could have been weaned completely, the Euro-zone crisis emerged and hit the global economy.

Though, India is primarily a domestic economy, its exports are positively linked to the global economic growth. As a result, this euro-region slowdown is likely to come out in the form of export sluggishness in coming times. Additionally, FDI inflows from European Countries may also be affected in near future. Though, the growth is likely to be impacted marginally as our export exposure to this region is low, the inflationary tendencies and high interest regime have resulted in the deceleration in the industrial output. The estimated growth of the Indian economy (as per Centre for Monitoring Indian Economy) during 2011-12 is 6.8 percent and the GDP growth in 2012-13 is expected to be 7.6 per cent +/- 0.25 per cent. Nevertheless, by any cross-country comparison, India remains among the front-runners.

Moreover, the growth of the coal sector in the country, being consumption driven, is not likely to have any discernible impact of this melt-down. Presently, coal accounts for about 52 % of the commercial energy in the country. 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 715 Mt (556.40 Mt for CIL) in 'Business As Usual' scenario and 795 Mt (615 Mt for CIL) in 'Optimistic' scenario. This 'Business As Usual' scenario has been drawn up considering the current trends of delays in obtaining Environment & Forestry Clearances, land acquisition and Rehabilitation & Resettlement (R&R) issues, law & order problem and the development of coal evacuation facilities. Under the 'Optimistic' scenario, it is assumed that the requisite clearances will be fast-tracked and delivered within the specified schedule and the issues affecting land acquisition, R&R and law & order will be addressed to facilitate expeditious growth of coal production through the active involvement of all concerned Central and State Government agencies. Hence, the demand & indigenous supply gap by 2016-17 is projected to be 265.5 Mt in case of 'Business As Usual' scenario and 185.5 Mt in Optimistic scenario. 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.

Despite being the third biggest coal producing country in the world and having fourth biggest proven coal reserves, Indian coal sector is passing today through a crisis situation. Power Sector, the backbone of our economy and the single largest consumer, has started facing coal shortages. The situation has arisen due to more-or-less stagnant performance from domestic producers during the last two years, i.e. 2010-11 and 2011-12. The coal production could not be achieved as planned primarily due to restrictions arising out of imposition of Comprehensive Environmental Pollution Index (CEPI) guidelines and non-availability of forestry clearances in time. Land acquisition in a large number of new/expansion projects is held up due to various issues of problems of inconsistent land records, R&R issues, etc. Also, deteriorated law and order situation, mainly in parts of coalfields of Orissa and Jharkhand States, adversely affected production augmentation efforts. On distribution front, under-developed infrastructure, including poor evacuation logistics of the railways, has been creating problems for transportation of coal to various power plants across the country in spite of huge pit head stock.

At the international level, rising demand of coal at home has prompted Indian and Chinese companies to invest in the coal sector in Australia and Indonesia, causing prices of thermal and metallurgical coal to rise and leading governments there to seek a greater share of revenue. Consequently, in Australia, the Mineral Resource Rent Tax (MRRT) has been passed, under which, a tax of 30 percent will be levied on the profit of coal mining companies operating there. Similarly, Indonesia had hiked the levy on coal mined by foreign companies there to benchmark Indonesian coal price to international market prices. High cost of imported coal is now impacting the revenue of power companies in India and these companies are finding it difficult to get buyers. Further to this, hike in the export tariff of the Indonesian coal is also on the card. With imported Indonesian coal having lost the price advantage and Australian coal also getting dearer due to proposed tax burden on profit of coal companies there, power plants have started considering for the coal imported from Africa or the use of domestic coal instead if it supply can be assured.

Uncertainty over coal supply in respect of the growing demand from power companies during XII Plan and beyond got manifested in the recent directive of the Government to have the Fuel Supply Agreements between CIL, the contributor of over 80% of the country's coal production and power plants that have been commissioned between 1st April, 2009 to 31st Dec., 2011 which have entered into long-term Power Purchase Agreements (PPAs) with Power distribution companies (DISCOMs).

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.

Value addition in coal through washing is gaining momentum amidst realization of the gains and compulsions from environmental stipulations. This is likely to give further boost to CMPDI's expert services. Switching over to

the international best practice of Gross Calorific Value (GCV) based grading and pricing of thermal coals from 1st January, 2012 is likely to ensure quality aspects of coal supplies. This will call for strengthening the required infrastructure for crushing, sizing, washing and sampling of coal.

The presently known coal resource base of the country is about 293.5 Bt, out of which, about 118.1 Bt (40 %) has been explored in detail to bring them under the Proved Category. The remaining 60%, i.e. around 175.4 Bt, are still in Indicated / Inferred category and require detailed drilling to be upgraded to Proved Category. For proving the coal resources, exploration of coal is being intensified. About 51.22 lakh meter of total drilling has been envisaged in the XII Plan (2012-17) document of Ministry of Coal (March, 2012) which is to be carried out by CMPDI during XII Plan period through departmental and outsourced drilling.

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. Additionally, emerging area of Information and Communication Technology (ICT) in coal sector will also present additional opportunity for CMPDI 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
- (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 exploration and planning support to the coal industry
- (ix) Better cost control measures and monitoring.
- (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. 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, 4.70 lakh metre of drilling was carried out in 2009-10 and 4.98 lakh metre in 2011-12 through departmental resources and outsourcing. Target for drilling in the beginning year of the XII plan, i.e., 2012-13 is 5.82 lakh meter.

This substantial enhancement in drilling capacity of CMPDI was ensured through modernization of departmental drills, procurement of 25 new mechanical drills (out of which, 8 are deployed as additional drills and 17 as replacement drills). In addition, 4 high capacity Hydrostatic drills have been procured and deployed as replacement drills. CMPDI has also replaced 38 mud-pumps and 46 trucks in last three years. Supply Order for 5 more Mechanical drills has also been placed.

Under outsourcing, the work of 18 blocks, involving 7.28 lakh meter of drilling, was awarded in 2008-09, out of which, drilling has been concluded in 14 blocks. A long term MoU (5 Years), involving 1 lakh m/annum of drilling, was also signed with MECL. To further enhance

the capacity, Global Tender of eight additional blocks involving 4.37 lakh meter of drilling was floated. Out of eight blocks, work order for four blocks has been issued. Out of these four blocks, work in two blocks has already been started and in balance two blocks namely, Salaipahar and Brahmani, work could not be started due to local problem. Remaining four blocks have been re-tendered and work order has been issued. Drilling in two blocks has been started and in balance two blocks, it is likely to start shortly.

CMPDI was to prepare 142 project reports identified for the XI Plan resulting in capacity addition for coal production of about 371 Mt, against which, 130 project reports with capacity addition of about 349 Mt have already been prepared during 2007-12. Preparation of balance 12 Project Reports have either been shifted to XII Plan or shelved/merged.

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 also being proposed. Action for establishment of new environmental lab at RI-VII, Bhubneswar and upgradation of environment laboratory at Asansol and Jayant has 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.

Apart from enhancing the internal coal core testing capability, MoU with CSIR (Council of Scientific & Industrial Research) was signed on 3rd Dec., 2011 for enhancement of capacity for coal core analysis at its designated labs at CIMFR, Dhanbad, NML, Jamshedpur and IMMT (Institute of Mineral and Material Technology, Bhubaneswar. CIL will provide a fund of Rs. 19.31 crore to CSIR labs for analysing

2,55,000 m of coal cores for creating additional infrastructure and procurement of additional equipment.

Manpower requirement of Exploration, Planning and Design as well as allied engineering services have been addressed. Out of total requirement of 184 Management Trainees (MTs) in different disciplines in 2011-12, 89 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 as well as through outside recruitment and the process 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 taken steps for selection of suitable developers for commercial development of 5 CMM Blocks within CIL areas (3 in BCCL and 2 in CCL). The matter regarding operationalisation of CMM is under deliberation between MOC/MOP&NG and further steps will be taken after settlement of the issue. 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 floated. Tenders could not be pursued due to technical reasons. Foray in the area of Shale Gas development is also under consideration. CMPDI is examining potentiality of development of Shale Gas within CIL areas and as a part of capacity building is pursuing a R&D project. Additionally, DGH has also assigned job for preparation of data dossiers on prospective Shale Gas blocks in Damodar Valley and Sohagpur Basin in June, 2011. Draft reports submitted to DGH in March, 2012.

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 87 nos. of opencast projects of CIL based on high resolution satellite data has been completed during 2011-12. Mine fire monitoring of

Damodar Valley coalfields including Raniganj, Jharia, Bokaro and Karanpura Coalfields, based on thermal satellite data for developing Mine Fire Information System (MIFS) is under progress. Work in respect of Jharia Coalfield, based on the data of 2011, has been completed. Additionally, Siltation Study in Govind Ballabh Pant Sagar Dam has been taken up.

CMPDI is providing assistance (from concept to commissioning) to the subsidiary companies of CIL for setting up of coal washeries. The work includes testing of run-of-mine (ROM) coal, planning, BID process management and assistance in construction & commissioning of washeries. For strengthening the capability, engineers from prestigious institutions have been inducted. Additionally, the Coal Preparation laboratory of CMPDI is also being upgraded with new equipments to cater to the future requirement.

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 Nigahi CHP (10

Mty), Amlohri CHP (10 Mty), Krishnashila CHP (4 Mty) has been carried out by CMPDI in the recent past, whereas, tendering for Block-B CHP (3.5 Mty) and Jayant Incremental CHP (5 Mty) is in process. CMPDI has also future plan for tendering of Khadia Incremental CHP (6 Mty) and Nigahi Incremental CHP (5 Mty).

Environmental services rendered by CMPDI to CIL during 2011-12 included preparation of 31 nos. of Form-I and formulation of 33 nos. of draft EMPs. 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. A total of 324 nos. of mine closure plans were also prepared during the year 2011-12.

Apart from 97 management system certification during 2011-12, consultancy work was completed pertaining to quality assurances included design and documentation of methodology, criteria, system, etc., for evolving 'energy baselines' and 'energy performance indicators' of all energy sources and 'reviewing energy performance' of opencast coal mines, etc. Documentation and issue of company-level integrated management system (IMS) for total Northern Coalfields Ltd. (NCL) company conforming to ISO 27001 & ISO 50001 and integrating it to the company's ISO 9001, ISO 14001, OHSAS 18001 and SA 8000 system was carried out during 2011-12 which is first such attempt in the country.

1.4.0 Financial Overview of CMPDIL

During the year the company made a net profit of Rs. 19.61 Crore (After deferred Tax). The summary of the working results for the last three years is as follows:

| Eligibility Criteria | | Status of CMPDIL | | |
|----------------------|-----------------------------------|------------------|---------|---------|
| | | 2009- 10 | 2010-11 | 2011-12 |
| 1. | Profit before Taxes (Rs.in Crore) | 19.61 | 23.69 | 30.79 |
| 2. | Profit after Taxes (Rs.in Crore) | 11.46 | 15.32 | 19.61 |
| 3. | Net worth (Rs. in Crore) | 170.76 | 167.60 | 208.79 |
| 4. | Net profit to net worth (%) | 6.71 | 9.14 | 9.39 |
| 5. | Turnover (Rs.in Crore) | 453.53 | 429.09 | 524.03 |
| 6. | Profit before tax to Turnover (%) | 4.32 | 5.52 | 5.88 |

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 2012, the Board of Directors of CMPDIL comprises of 11 (eleven) Directors out of which 5 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 2012 is as follows:

Whole-Time Directors

1. Shri Ashok Kumar Singh
2. Shri Amal Kumar Debnath
3. Shri B.N.Basu
4. Shri D.K.Ghosh
5. Shri R.K.Chopra

Part-Time Official Directors

1. Shri Nagendra Kumar
2. Shri Devulapalli Narasimha Prasad

Part-Time Non-Official Directors

1. Prof. Vedala Rama Sastry
2. Shri 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. Five board meetings were held during the financial year 2011-12 on 17.05.2011, 06.08.2011, 08.11.2011, 13.01.2012 and 16.03.2012 respectively.

| Sl. No. | Dates | Day | Place |
|---------|------------|----------|---------------|
| 1. | 17.05.2011 | Tuesday | CMPDIL Ranchi |
| 2. | 06.08.2011 | Saturday | CMPDIL Ranchi |
| 3. | 08.11.2011 | Tuesday | CMPDIL Ranchi |
| 4. | 13.01.2012 | Friday | CMPDIL Ranchi |
| 5. | 16.03.2012 | 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 31.03.2012 | No. of Directorship / Chairmanship in Board Committees (CMPDIL) on 31.03.2012 |
|---|--------------------------|--|--------------------------------|--------------------------|--|---|
| Functional Directors | | | | | | |
| 1. | Shri A.K. Singh | 5 | 5 | Yes | Nil | Nil |
| 2. | Shri Amal Kumar Debnath | 5 | 4 | No | Nil | 1 |
| 3. | Shri N. Khurana | 1 | 1 | No | - | Nil |
| 4. | Shri S. K. Mitra | 1 | 1 | No | - | Nil |
| 5. | Shri B.N.Basu | 3 | 3 | - | Nil | Nil |
| 6. | Shri D.K.Ghosh | 3 | 3 | - | Nil | Nil |
| 7. | Shri R.K.Chopra | 2 | 2 | - | Nil | Nil |
| Part-time official Directors | | | | | | |
| 8. | Shri Nirmal Chandra Jha | 4 | 1 | No | - | - |
| 9. | Shri D. N. Prasad | 5 | 5 | No | 2 | 1 |
| 10. | Shri Nagendra Kumar | 1 | - | - | 4 | 1 |
| Part-time Non-official Directors | | | | | | |
| 11. | Prof. Vedala Rama Sastry | 5 | 3 | No | 1 | 1 |
| 12. | Shri Pramod Kumar Misra | 5 | 5 | No | Nil | 1 |
| 13. | Dr. Mukesh Khare | 5 | 3 | No | 1 | 2 |
| 14. | Prof. P.K.J. Mohapatra | 5 | 2 | No | 1 | 1 |

Note : Shri N. Khurana and Shri S.K. Mitra ceased to be Directors with effect from 24.06.2011 and 27.06.2011 respectively.

(E) Information placed before the Board meeting

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

- Annual operating plans, Capital and

Revenue budgets & updates.

- 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.
- Award of large contracts / Agreements
- HR related issues & Safety / Security related matters.
- 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 Ashok Kumar Singh (59) has B.Tech. in Mining Engineering (in 1974) from Indian School of Mines (ISM), Dhanbad, India and was awarded Gold Medal of ISM and Pickering Medal of Mining, Geological & Metallurgical Institute of India (MGMI). He also did Post Graduate Certificate in Industrial Engineering & Mine Management in 1976 and Post Graduate Diploma in Longwall Mine Mechanisation (DISM) in 1990 from ISM. He has working experience of over three and half decades in coal mining sector, wherein, he served in various capacities in production and planning and management in different subsidiaries of Coal India Ltd. viz. Bharat Coking coal Limited (BCCL), Central Coalfields Limited (CCL), Central Mine Planning and Design Institute Ltd. (CMPDIL), Northern Coalfields Limited (NCL). He also served as Chairman-cum-Managing Director of Mahanadi Coalfields Limited (MCL) and South Eastern Coalfield Limited (SECL), the two companies being the wholly owned subsidiaries of the Holding company Coal India Limited (CIL) which is the largest coal producing company in the World. A. K. Singh is currently the Chairman-cum-Managing Director of Central Mine Planning and Design Institute (CMPDI). He has been conferred with National Mineral Award (2007) of Govt. of India for outstanding contribution in the field of mining technology and he represents

India in the Technical Sub-Committee on Coal Mine Methane of M2M Partnership of USEPA as member as well as Co-chair and is also a member of Indo-US Working Group; Executive Board & Academic Council of Indian School of Mines (ISM); Governing Council of Indian Institute of Coal Management (IICM); Standing Scientific Research Committee (SSRC); R&D Board of CIL; Mining, Geological & Metallurgical Institute of India (MGMI) and Indian Mine Manager's Association (IMMA). A.K. Singh has a large number of technical papers presented in Conferences / Symposia / Seminars as well as referred in standard journals. He has travelled widely to many countries like USA, UK, Russia, China, Germany, France, Indonesia, Australia, Netherland, etc.

Shri Nagendra Kumar (52) 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 has assumed the charge of Director(Technical) of Coal India Limited from 01.02.2012.

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.

Shri Amal Kumar Debnath, (56) has a B.Tech. 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 A.K. Debnath is currently the Director

(Technical / Planning & Design) 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. 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 travelled widely to many countries like USA, UK, China, Germany, Sweden, South Africa, Australia, Poland, Turkey, etc.

Sri Badya Nath Basu, Director (Technical)/CRD, CMPDI, aged 58 years (30.05.1953) is a Mining Engineer and obtained degree in Mining Engineering from Indian School of Mins, Dhanbad in 1975 and 1st 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 11/2 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.

Shri Dilip Kumar Ghosh (56), 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.

Shri Rajesh Kumar Chopra, Director (Technical/ Research, Development & Technology), CMPDI, aged 57 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.

Dr. Vedala Rama Sastry (52), 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, 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.

Shri Pramod Kumar Misra (54), 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.

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 quantitative 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
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 | Shri 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 | Shri D. N. Prasad | Govt. nominee Director |
| 6. | Member | Shri A. K. Debnath | Director (Technical) |

Meeting and Attendance:

Five meetings were held during the year 2011-12 during the financial year 2011-12 on 17.05.2011, 06.08.2011, 07.11.2011, 12.01.2012 and 16.03.2012 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 | 2 |
| Prof. Mukesh Khare | Member | 5 | 3 |
| Shri D. N. Prasad | Member | 5 | 5 |
| Shri A. K. Debnath | Member | 5 | 4 |

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 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.

1.5.5 Sustainable Development Committee

The Board constituted the Sustainable Development Committee in its 164th meeting held on 13.01.2012 with the following members:

1. Dr. Mukesh Khare, Independent Director
- *Chairman*

2. Director (Technical/P&D), CMPDI
- *Member*
3. Director (Technical/ES), CMPDI
- *Member*
4. Company Secretary
- *Member Secretary*
5. GM (Environment)
- *Permanent Invitee*

No meeting was held during the financial year 2011-12.

1.5.6 Remuneration of Directors:

(A) Functional 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.

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

(Figure in ₹)

| 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 | 1996096.00 | 449716.00 | - | 184993.00 | 2424944 | 5055749.00 | 17985.00 |
| Sri A. K. Debnath | Director (T) | 1902973.71 | 395388.00 | - | 180355.00 | 2343341 | 4822057.71 | 14631.00 |
| Sri B.N. Basu | Director (T) | 1994839.37 | 389260.00 | 63088.00 | 184541.00 | 814542 | 3446270.37 | 26603.00 |
| Sri D.K. Ghosh | Director (T) | 637185.10 | 144949.00 | - | 58884.00 | 796196 | 1637214.10 | 6511.00 |
| Sri R.K. Chopra | Director(T) | 1858645.20 | 362479.00 | - | 178988.00 | 796196 | 3196308.20 | 3772.00 |
| Sri A.N. Sahay | Director(T) | 148484.00 | 32318.00 | 14206.00 | 12188.00 | - | 207196.00 | - |
| Sri N. Khurana | Director(T) | 574937.00 | 123285.00 | 54192.00 | 47503.00 | - | 799917.00 | 46801.00 |
| Sri S. K. Mitra | Director(T) | 573983.20 | 123094.00 | 54108.00 | 47430.00 | - | 798615.20 | 2528.00 |

(B) Part-Time Official Directors

No remuneration is being paid to the Part-Time Official Directors of the Company.

(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 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 | Shri Pramod Kumar Misra | 75,000.00 | 90,000.00 | 1,65,000.00 |
| 2 | Dr. V. R. Sastry | 45,000.00 | 45,000.00 | 90,000.00 |
| 3 | Prof. PKJ Mohapatra | 30,000.00 | 30,000.00 | 60,000.00 |
| 4 | Prof. Mukesh Khare | 45,000.00 | 45,000.00 | 90,000.00 |

1.5.7 Annual General Meetings:-

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

| Details | 2008-2009 | 2009-2010 | 2010-2011 |
|--------------------|---|---|---|
| Date | 02.07.2009 | 14.05.2010 | 26.05.2011 |
| Time | 11.30 A.M. | 4.00 P.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 2012.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 2011-12.

- 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.

- **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 2012.

- **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 incurred 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 2011-12.

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 2012 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 2012 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 2011-12.

Following activities under ‘Sustainable Development’ were planned, included & performed in the year 2011-12:

| Activity | Planned | Performed |
|--|-----------------------------|-----------|
| Environmental Monitoring | 200 projects/ establishment | 289 |
| Environment Management Plans (including Form-1) | 32 | 64 |
| Conducting workshop for awareness on Sustainable Development | 01 | 01* |

*A 2 day Seminar/workshop on Environmental Challenges & its Management with the objective of Sustainable Development was organized at IICM from 6th -7th January 2012 & was attended by about 40 delegates from different subsidiary companies of CIL including CMPDI. Seminar/workshop was structured in 5 technical sessions besides the inaugural session which was graced by Sri A.K Singh, CMD, CMPDI, Sri R.K Saha, the then CMD, CCL, Dr. R.K.Garg, Advisor (E&F), CIL, Dr. T.Chandini, Director, MoEF & Prof. S. Ghosh, ED, IICM. Seminar/workshop was extensively discussed & deliberated by the participants with the speakers all through.



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

- 1.0.1 CMPDI continued to carry out coal exploration activities in 2011-12 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 for captive mining.
- 1.0.2 CMPDI has substantially improved the capacity of drilling during XI plan period. As against the achievement of 2.09 lakh metre in 2007-08, CMPDI has achieved 4.98 lakh metre in 2011-12 through departmental resources and outsourcing. For capacity expansion through modernization of departmental drills, 25 new Mechanical drills have been procured, out of which 8 are deployed as additional drills and 17 as replacement drills. Supply Order for 5 more Mechanical drills has been placed. In addition 4 high capacity Hydrostatic drills have been procured and deployed as replacement drills. CMPDI has also replaced 38 mud pumps and 46 trucks in last three years.
- 1.0.3 To meet the increased work load, recruitment has been taken up through campus interview / open examination. 115 geologists, 14 geophysicists and 27 Mechanical Engineers (MT-Drilling/Excavation) have joined CMPDI since 2008-09. Out of which 17 geologist and 6 (MT-Drilling/Excavation) have resigned. To meet the shortage of non-executive staff, transfers have been sought from other subsidiaries of CIL. About 203 employees have been inducted for exploration work. Additionally 23 employees have been inducted in June'2011.
- 1.0.4 Under outsourcing, the work of 18 blocks involving 7.28 lakh m of drilling was awarded in 2008-09, out of which drilling has been concluded in 14 blocks. A long term MoU (5 Years), involving 1 lakh m/annum of drilling, was also signed with MECL. To further enhance the capacity, Global Tender of 8 additional blocks involving 4.37 lakh m of drilling was floated. Out of 8 blocks, work order for four blocks has

been issued. Out of these four blocks, work in two blocks has already been started and in 2 blocks (i.e. Salaipahar & Brahmani) work could not be started due to local problem. Remaining 4 blocks have been retendered and work orders have been issued.

- 1.0.5 Under MOU between CMPDI and MECL, drilling has been taken up in 6 blocks by MECL. A total of 24,145 m was drilled in 2009-10 and 28,160 m in 2010-11. During 2011-12, three more blocks have been taken up for detailed exploration under MOU. A total of 0.96 lakh m has been drilled in MOU blocks in 2011-12.
- 1.0.6 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 and MoU between CMPDI (on behalf of Coal India Ltd.) and CSIR for "Quality Evaluation of coal explored from different regions of India" was signed at CMPDI, Ranchi on 03.12.2011.
- 1.0.7 Besides routine Geophysical logging and surface survey work, CMPDI intends to introduce 3-D Seismic Survey in coal exploration as a part of R&D project. A Project Proposal, in consultation with ONGC, was submitted for the purpose. However, Apex Committee of CIL R&D Board decided that initially small area should be taken up for 3-D Seismic Survey. However, it did not materialise. Later Apex Committee of CIL decided to examine the 3D seismic survey data acquired in Margrehta Coal Mines by HOEC, but it was found not be useful.

Recently DMT GmbH & Co., Germany gave a presentation on 3D seismic survey over coal in CMPDI, Ranchi and discussed some case studies. The involvement of DMT GmbH with their equipment & manpower in one of our area and carrying out 3D seismic survey on turnkey basis was discussed. The area was identified and base plan alongwith geological details were mailed to the party. No response has yet been received.

1.1 Drilling Performance in 2011-12:

CMPDI deployed its departmental resources for exploration of CIL/Non-CIL/Promotional blocks whereas State Govts. of MP and Orissa deployed resources in CIL blocks only. Besides, four other contractual agencies have



Atlas Copco CT-14 Hydrostatic Drill in Operation at Kudumkela Camp, RI – V, Bilaspur.

also deployed resources for detailed drilling/exploration in CIL/Non-CIL blocks. A total of 100 to 111 drills were deployed in 2011-12 out of which 55 were departmental drills. Apart from it, CMPDI continued the technical supervision of Promotional Exploration work undertaken by MECL in Coal Sector (CIL & SCCL areas) and monitored work of GSI for Promotional Exploration in Coal Sector (CIL area) on behalf of MoC.

1.1.2 In 2011-12, CMPDI and its contractual agencies took up exploratory drilling in 90 blocks/mines of 21 coalfields situated in 6 States. These coalfields are Raniganj (9 blocks/mines), Jharia (5 blocks/mines), W.Bokaro (2), Ramgarh (1), South Karanpura(3), Pathakhera (1), Pench Kanhan (2), Kamptee (4), Nand-Bander (3), Wardha Valley(12), Sohagpur (8), Johilla (1), Mand

Raigarh (14), Korba (3), Hasdo-Arand (1), Bistrampur (1), Sonhat (1), Tatapani-Ramkola-(2), Singrauli (3), Talcher (10) and Ib Valley (4) . Out of 90 blocks/mines, 24 were Non-CIL/Captive blocks, 1 Consultancy block and 65 CIL blocks/mines. Departmental drills of CMPDI took up exploratory drilling in 58 blocks/mines whereas contractual agencies drilled in 32 blocks/mines.

1.1.3 Under Promotional (regional) Exploration Programme, MECL has undertaken Promotional drilling in 7 blocks (Mand Raigarh = 3, Wardha Valley = 1 & Godavari Valley = 3), GSI has undertaken 12 blocks for Promotional drilling (Raniganj CF=1, Talcher CF=4, Ib Valley = 2, Sohagpur = 3 & Tatapani Ramakola=2) 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 2011-12 is given below:

| Agency | Target 2011-12 (metre) | Performance of Exploratory Drilling in 2011-12 | | | Achieved Prev. Year: 2010-11 (m) | Growth % |
|---|------------------------------|---|-----------------|------------|---|-------------|
| | | Achieved (metre) | Achieved (%) | +/- (m) | | |
| A. Detailed Drilling by CMPDI (including Promotional Drilling)*: | | | | | | |
| i.Departmental | 2,50,000 | 2,73,018 | 109% | +23,018 | 2,68,059 | 2% |
| ii. Outsourcing: | | | | | | |
| State Govts. | 5,000 | 6,815 | 136% | + 1,815 | 7,206 | -5% |
| MECL (MOU) | 83,000 | 96,207 | 116% | +13,207 | 28,160 | 242% |
| Tendering (CIL blocks) | 12,000 | 17,605 | 147% | +1,731 | 14,581 | 21% |
| Tendering (non-CILblocks) | 1,00,000 | 1,04,779 | 105% | +4,779 | 1,73,785 | -40% |
| Total Outsourcing | 2,00,000 | 225,406 | 113% | +25,406 | 2,23,732 | 1% |
| Total A: | 4,50,000 | 4,98,425 | 111% | + 48,425 | 4,91,791 | 1% |
| B. Promotional Drilling by MECL, GSI & Nagaland Govt. in Coal Sector: | | | | | | |
| MECL | 52,000 | 25,998 | 50% | -26,002 | 29,920 | -13% |
| GSI | 13,000 | 17,872 | 137% | +4,872 | 13,943 | 28% |
| DGM, Nagaland | 500 | 289 | 58% | -211 | 83 | 249% |
| DGM, Assam | 500 | 0 | | -500 | | |
| Total B: | 66,000 | 44,158 | 67% | - 21,842 | 43,946 | 0.5% |
| Total A+B: | 5,16,000 | 5,42,583 | 105% | + 26,583 | 5,35,737 | 1% |

* includes 2,13,689m in CIL blocks, 55,126m in Non-CIL/Captive Mining Blocks and 4,204m for consultancy work.

In 2011-12, CMPDI achieved its departmental and overall drilling targets by 109% and 111%, respectively. The performance of departmental drilling was better than previous year with 2% growth and recording average operational drills productivity of 416m/drill/month. Non-availability of permission to explore in forest areas has affected the performance of outsourced drilling. MECL could not achieve the targets of Promotional drilling in coal sector due to forest problems.

1.1.5 Drilling in Non-CIL/Captive Mining Blocks:

CMPDI had submitted a scheme to the Govt. for conducting 13.50 lakh metre of detailed drilling in Non-CIL/Captive Mining Blocks in XI plan, through departmental resources and outsourcing. An allocation of Rs.893.89 crores was requested for the purpose under this Central Sector Scheme. However, MoC has conveyed the approval of Rs.472.94 crore only for XI plan. The enhancement of outlay has been taken up by MoC with Planning Commission.

In 2011-12, a total of 1,96,000m of drilling was targeted in Non-CIL blocks (departmental = 56,000m, outsourcing = 1,40,000m). As against this, the departmental drills of CMPDI have carried out 55,230m of exploratory drilling whereas 1,66,648m of drilling has been achieved through outsourcing. The block-wise achievement of drilling in such blocks in 2011-12 is given in following table:

| Agency/ Command Area | Coalfield | Block | Drilling in 2011-12 (m) |
|------------------------------------|---------------|------------------------------|-------------------------|
| A. CMPDI (Departmental): | | | |
| WCL | Kamptee | Bharatwada | 3163 |
| | Nand-Bander | Mandwa | 9999 |
| | Nand-Bander | Indapur | 524 |
| | Wardha Valley | Rajur-Manikgarh | 2161 |
| | | Bahmani Palasgaon | 4878 |
| | | Jamni-Buzurg | 1285 |
| | | Bhatali | 5299 |
| | | Sub-Total WCL | 27,309 |
| MCL | Talcher | Sakhigopal 'B' | 8660 |
| | | Mahanadi | 5981 |
| | Ib Valley | Prajapara & Dip Extension | 6990 |
| | | Ghogharpalli & Dip Extension | 6290 |
| | | Sub-Total MCL | 27,921 |
| Sub-total A (Departmental): | | | 55,230 |

| | | | |
|---|--------------|------------------|-----------------|
| | Mand-Raigarh | Banai | 25797 |
| | | Elong | 12991 |
| | | Syang East 'A' | 2417 |
| | | Syang East 'B' | 232 |
| | | Chirra NE 'A' | 4350 |
| | | Chirra NE 'B' | 1896 |
| | | Syang North West | 7518 |
| | | Syang South | 21022 |
| | | Chirra North | 25342 |
| | Hasdo-Arand | Morga South | 21866 |
| Sub-total B (Outsourcing): | | | 1,66,648 |
| Grand Total of Drilling in Non-CIL blocks: | | | 2,21,878 |

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.

1.1.6 Promotional Drilling by CMPDI:

As stated earlier, CMPDI has also carried out technical supervision of Promotional Exploration carried out by MECL in Coal Sector (7 blocks), monitored Promotional Exploration conducted by GSI in 12 blocks and DGM(Nagaland) in 1 block under the scheme. The performance of Promotional drilling in coal sector is given in para 1.1.3 above.

1.2 Hydrogeology:

1.2.1 Hydro geological studies of a number of mining projects were taken up for preparation of 'Groundwater Clearance Application' for CGWA approval and EMP clearance. Hydro geological studies for 34 mining projects in ECL, BCCL, CCL, WCL, SECL, NEC and Outside consultancy were completed during 2011-12.

1.2.2 CMPDI is also carrying out groundwater

monitoring of 73 MOEF cleared projects in WCL area. Water level monitoring in other areas of ECL, BCCL, CCL, SECL, NCL and NEC are in progress.

1.2.3 Hydrogeological notes on ground water condition of 11 WCL and 3 MCL projects, as part of PR and GR, have been completed during the year.

1.2.4 Hydrogeological studies in 10 projects of WCL, SECL and MCL have been carried out for water supply arrangement to mines, colony, washeries and villages.

1.3 Geological Reports:

1.3.1 In 2011-12, a total of 19 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 3.2 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 4.9 Billion Tonnes of coal resources, mainly 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

2011-12, a total of 1,36,055 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, 62,376 depth meter of logging was done by 5 no. of departmental geophysical logging units and 73679 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 186.59 line km of Resistivity profiling, 90 no. of Vertical Electrical Sounding (VES) and 3633 no. of stations of Magnetic survey have been carried out in 2011-12 for such purpose. With 48-Channel signal enhancement Seismograph a total of 31.534 line kms of reflection survey and 31.174 line kms of refraction survey has been carried out in Sakhigopal-B block of Talcher Coalfield (MCL) and Ghogarpali block of Ib valley Coalfield (MCL)

1.4.3 Reports: A total of 37 Geophysical reports have been submitted during the year 2011-12. It includes 25 reports on geophysical logging, 8 on resistivity survey, 1 on magnetic survey, 1 on refraction survey and 2 on HRSS survey.

1.5 Geosystem:

1.5.1 In the Government funded project Integrated Coal Resources Information System (ICRIS), a consultant was engaged to design and integrate database, which was completed in November'2011. Georeferenced maps of all the major coalfields of CIL area has been uploaded in the database (RF: 1:50,000) with easy accessibility through ICRIS web page.

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

1.6.1 Coalbed Methane Recovery and Commercial Utilization Project

Under R&D efforts, a Govt. of India (GoI) / United Nations Development Programme (UNDP) / Global Environment Facility (GEF) funded demonstration project on "Coalbed Methane Recovery & Commercial Utilization" has been successfully implemented at Moonidih coal

mines of BCCL in Jharia Coalfield in the state of Jharkhand.

This demonstration project is a path finder for coal mine methane development in Indian mining scenario as methane gas from coal seams have been successfully recovered through vertical wells and is being used as fuel in the gas based generator for electricity generation. The generated electricity is being supplied to Moonidih colony since 27th June, 2008.

The total disbursed amount under GoI S&T grant have been fully utilized after which Ministry of Coal vide letter no. 34012/7/2007-CRC (Part) dated 5th July, 2010 has decided to formally closed the project and a completion report of the project has been submitted. As decided, the project equipment were handed over to BCCL in August, 2010 for continuing activities and CMPDI is extending technical assistance to BCCL for carrying out further activities at Moonidih, Dhanbad.

Achievement of the project:

The successful implementation of the high technology demonstration project has created enough awareness in the Indian coal mining industry and replicating such projects in other suitable areas is being contemplated. The project has opened a new era in harnessing and utilization technique of coal mine methane, which is otherwise a wasted clean energy resource. The other achievements of the project are summarized as under:

- Capacity built-up both in terms of equipment and manpower
- Proving the efficacy of the technology for CMM extraction and its utilization in Indian mining scenario.
- Utilization potential of recovered methane has been established and electricity that is being generated from the harnessed CMM has created enough awareness among the local populace.
- The cost of electricity generated from the recovered gas is comparable with that of from fossil fuel even in this demonstration project

1.6.2 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 development of coalbed methane. These projects are being implemented by CMPDI on behalf of CIL.

1.6.2.1 Jharia CBM Block:

The Govt. of Jharkhand granted Petroleum Exploration License (PEL) to the consortium of CIL-ONGC in 28th August'03 for Jharia CBM 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 in Feb'08. This report has facilitated formulation of Development Plan by ONGC.

ONGC has completed drilling of exploratory wells and the requisite tests are being carried out. ONGC is also continuing Horizontal multilateral in-seam drilling in the CBM block. ONGC has submitted Development Plan having budgetary outlay of Rs 1290 Crores for Parbatpur Sector of Jharia CBM Block to DGH for consideration and competent approval. However, DGH has asked ONGC to submit an integrated Development Plan for the entire Jharia CBM Block including Parbatpur Sector. In the meantime sale of incidentally produced gas has started in the Jharia block; consequent to the approval of the Govt.

The participating interest (PI) of CIL in Jharia CBM block is 10% with an option to increase it to 26% from Development Phase. Increasing the PI of CIL to 26% is under consideration.

1.6.2.2 Raniganj CBM Block:

The Govt. of West Bengal granted Petroleum Exploration License (PEL) for Raniganj CBM block on 09.06.04. The drilling of slimholes commenced on 23rd March, 06 and all the 8 slimholes have been completed in Nov. '07

involving 7853.50m of drilling. A report based on slimhole drilling & other available data has been prepared by CMPDI and submitted to ONGC in March 09. This report will facilitate ONGC to prepare Development Plan.

ONGC has completed drilling of envisaged exploratory well in the block wherein CBM specific tests are being carried out.

1.6.3 CBM RELATED STUDIES UNDER PROMOTIONAL EXPLORATION DURING XI PLAN:

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 (XI 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 50 boreholes (30 by CMPDI and 20 by GSI) were to be taken up for studies during the XI Plan Period with a total plan expenditure of Rs.8.59 crore.

During 2011-12, a total of 6 boreholes located in different coal/lignite fields were taken up for studies by CMPDI and samples collected for desorption and other tests. So far such studies have been carried out in 50 boreholes during XI Plan Period (30 by CMPDI and 20 by GSI). Further, three CBM assessment reports based on the data generated have been submitted during 11-12 by CMPDI.

1.6.4 COAL MINE METHANE (CMM) R & D PROJECT:

A CIL R&D project titled "Development of CMPDI capacity for delineation of viable coalmine methane (CMM)/ abandoned mine methane (AMM) blocks in the existing and would be mining areas having partly de-stressed coal in virgin coal seams", having a total estimated cost of Rs.5.22 Crores has been successfully completed by CMPDI. The completion report of the project has been submitted for consideration at competent level.

Following objectives as envisaged in the project have been fulfilled:

- Five prospective CMM areas in coalfields of BCCL and CCL have been identified. Detailed assessment of these blocks have been completed and Data Dossiers for 5 CMM blocks (3 in BCCL area and 2 in CCL area) have been prepared incorporating all technical details including coal/gas in place resource etc.
- The business model for taking up CMM development, keeping in the view the best interest of CIL, was chalked out and a Model Tender Document was prepared with the help of a consultancy firm.
- Studies were carried out to determine the quantity of fugitive methane emission from few selected opencast mines for creation of reliable base line data.
- Visit to the operational sites by the officials of CMPDI/CCL/BCCL has built confidence for taking up such projects in CIL areas.

The activities taken up in this R & D project has created confidence in the CIL/CMPDI officials to take up commercial development of CMM within the identified areas within CIL leasehold areas.

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 (referred earlier) 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 for the purpose an EoI was floated for identification of a suitable service provider for development of CMM and views of the respondents were taken. A tender document, bid evaluation criteria has been prepared by the consultant hired for the purpose final tender document was prepared after incorporation of the acceptable inputs from the respondents.

After competent approval, a global tender for identification of a suitable developer for harnessing CMM from the 5 identified

prospective blocks (Moonidih CMM Block, Pootkee-Bulliary CMM Block, Mohuda Sub-Basin CMM Block under BCCL leasehold areas and Asnapani-Jarangdih Shaft, North Kathara Phase I-III & Uchitdih under CCL leasehold areas has been floated by CMPDI on behalf of CIL/concerned Coal Company on 29.04.2011. The last date of submission of offer was however extended till further notice so that the issue related to operationalization is resolved between MoC and MoP&NG.

The matter is under deliberation at the competent level of both the ministries and is likely to be settled soon after which further steps for commercialization will be taken.

1.6.5 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 commercialization will be taken after resolving the issue of operationalization between MoC and MoP&NG.

1.6.6 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.cmmcclearinghouse.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 11 and steps are being taken for further extension of the US EPA grant for the clearinghouse.

1.7.0 DEVELOPMENT OF UCG

CMPDI has taken following steps for commercial development of UCG

1.7.1 CIL ONGC Collaborative project in Kasta UCG block:

Consequent to signing of MoU between CIL & ONGC in Nov.2006 for taking up pilot scale studies for UCG, CMPDI prepared data packages for 5 prospective UCG sites. Out of the five sites, one Kasta block in Raniganj coalfield was identified by Skochinsky Institute of Mining (SIM), Russia, the consultant appointed by ONGC, for generation of additional data for examining possibility of taking up pilot scale UCG project.

Drilling of boreholes in Kasta UCG block have been completed and an assessment of data has been sent to ONGC for examination by experts engaged for the purpose.

1.7.2 Commercial development of UCG in CIL command area:

CMPDI identified two prospective areas within CIL command area and steps were initiated for commercial development of UCG. A suitable tender document has been prepared after deliberations with the prospective developers in pre NIT meeting.

CMPDI on behalf of CIL floated global tender for selection of developers for UCG development in two coal blocks viz, Kaitha block, Ramgarh Coalfield (CIL Command area) and Thesgora 'C' block (WCL Command area and the offers received were opened 16.03.2011 and 26.05.2011. The offers were evaluated by the tender committee in June 11 and the same was sent to CIL for competent approval for award of work.

The matter were deliberated in the CIL FDs meeting held in July'11 and August'11 and it has been suggested that criteria for technical evaluation should be re-visited and should be considered for retendering.

1.8 CIL R & D Project on "An investigation on Adsorption characteristics of Indian coals to ascertain recoverability Of CBM from deep seated coal and lignite:

CMPDI successfully implemented a CIL R&D Project titled "An investigation on adsorption characteristics of Indian coal to ascertain recoverability of CBM from deep seated coal & lignite resources" (Project Code CIL/R&D/1/40/10) wherein IIT, Kharagpur as co-implementing agency. The project was completed in December 2011 as per schedule.

1.9 CIL R & D Project on "Assessment of prospect of Shale Gas in Gondwana basin with special reference to CIL areas"

Keeping in view the opportunities in development of shale gas resource CMPDI took up a R&D project titled "Assessment of prospect of Shale Gas in Gondwana basin with special reference to CIL areas" with an estimated cost of Rs. 400.00 lakh (Rupees four hundred lakh only) and duration of 2 ½ years with Advance Resources International, USA as sub-implementing agency. The Apex Committee of R&D Board of CIL approved the project in March 2011.

The project is under implementation since 1st April 2011 and envisaged actions are being taken.

1.10 Delineation and preparation of Data-dossiers for six prospective Shale gas blocks within Gondwana basin for DGH:

Director General of Hydrocarbons (DGH) has issued work order to CMPDI in May 2011 for delineation and preparation of Data-dossiers for six prospective Shale gas blocks within Gondwana basin on paid consultancy basis. Such type studies are being carried out for the first time in coal bearing Gondwana basins.

CMPDI carried out detailed shale gas related studies and requisite data related to Rock Eval Test, Ro etc were generated. The draft assessment reports on six Shale gas blocks have been sent to DGH in March 2012. Final Data-dossiers on the blocks will be prepared by CMPDI after deliberations with CMPDI which will facilitate commercial development of Shale gas.

1.11 Delineation and preparation of Data-dossiers on prospective CBM blocks: DGH Consultancy jobs:

Director General of Hydrocarbons (DGH) has issued work order to CMPDI in May 2011 for delineation and preparation of Data-dossiers on prospective in Cambay basin, Singrauli and Johila Coalfields for offer of these blocks under CBM Round-V global bidding.

CMPDI carried out detailed studies in the identified areas which included studies of data generated through slimholes and also seismic data available for Cambay basin. The draft assessment reports on the studies have been sent to DGH in March 2012. Final Data-dossiers on the blocks will be prepared by CMPDI after deliberations with CMPDI which will facilitate commercial development of CBM in these blocks.

1.12 EU funded Research Project titled “Greenhouse Gas Recovery from Coal Mines and Un-minable Coal beds and conservation of Energy”(GHG2E)

The above multi organizations/multi country project has been approved under partial funding scheme of European Union Research Commission (Project # 268194/Call Identifier: FP7-ENERGY-2010-12). In this project there are 11 participating organization from 7 countries and CMPDI and IIT Kharagpur are the participating organization from India.

CMPDI has got partial funding for execution of the research project and for the balance fund R&D proposal has been submitted to CIL R&D Board for its consideration and approval to meet the balance funding.

Prof. Sevket Durucan, Imperial College, London (UK) along with project team visited CMPDI



CBM Rig Unit

and project site Moonidih (Dhanbad) during 16th-17th November, 2011. The project related activities have been taken up.

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 2011-2012 for building additional coal production capacity. 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 XI Plan and Mine Closure Plans of OC and UG mines.

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

- 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 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 Global Bids for deployment 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 2011-2012, 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 2011-2012, a total of 275 reports have been prepared for CIL and its subsidiary companies.

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

| REPORTS | Nos. |
|---|------------|
| Geological Reports | 19 |
| Project Reports/ Revised Cost Estimates | 28 |
| Operational Plans | 14 |
| Other Studies | 150* |
| Draft EMPs (including 31 Form-I) | 64 |
| TOTAL | 275 |

* This includes Master Plan for North Eastern Coalfield. Detail of reports prepared during the period 2011-2012 is furnished in Annexure-I.

LIST OF COMPLETED REPORTS DURING 2011-12

| Regional Institute/HQ | Name of the Reports | Regional Institute/HQ | Name of the Reports |
|---------------------------|---|------------------------|---|
| Geological Reports | | | |
| RI-I | 1. Rangamati Integrated (Tumni, Kanchanpur & Gour Bazar Sector) | | 5. Religara OC |
| RI-II | 1. Block-VI (Revised) | | 6. Hesalong OC |
| RI-III | 1. Ramgarh-III | RI-IV | 1. Visapur OC |
| | 2. Rajbar C (Non-CIL) | | 2. Ghugus Expn. (Sector-C) OC / Nakoda UG to OC |
| | 3. Ashok Karketta | | 3. Padmapur Extn. Deep OC |
| RI-IV | 1. Pimpalgaon Deep | | 4. Mugoli Nirguda Deep OC |
| | 2. Pauni & Pauni South Integrated | | 5. Magrahi Urdhan OC |
| | 3. Wani Mander | | 6. Parsoda OC |
| RI-V | 1. Chhal | RI-V | 1. Kusmunda OC Expn. |
| | 2. Madan Nagar North | RI-VI | 1. Jhingurda OCP including bottom seam (Recast) |
| | 3. Naraibodh-II | | 2. Bina-Kakri OC Amalgamation |
| RI-VI | 1. Ruhela | RI-VII | 1. Bharatpur OCP Reorg. |
| RI-VII | 1. Naini (Captive) | | 2. Lilari OCP Expn. |
| | 2. Belpahar-I, II & III (Comb.) | HQ | 1. Argada OCP (Revised FR) |
| | 3. Ghoghrapalli & its Dip Extn. | | 2. Jagannath UG Mine, MCL |
| HQ | 1. Sakhigopal B & North Extn. | | 3. Jagannath OCP (Reorg), MCL |
| | 1. Sayang Central A (Contractual) | | 4. Jagun OCP, NEC |
| | 2. Dongrital (Contractual) | | 5. Tikak Integrated OCP, NEC |
| | 3. Patpaharia (Contractual) | | |
| Project Reports | | Operation Plans | |
| RI-I | 1. RCE for Kottadih OCP | RI-I | 1. Rajmahal OC |
| | 2. Kumardih 'B' | | 2. Sonepur Bazari-A OC |
| | 3. Pandaveswar Dalurband | | 3. Chitra OC |
| RI-II | 1. Integrated Block-II OCP | | 4. Kottadih OC |
| | 2. Block-V OCP | RI-IV | 1. Sasti OC |
| | 3. Rajapur UG Mine | | 2. Ghugus OC |
| RI-III | 1. Sayal 'D' OC | RI-V | 1. Kusmunda OCM |
| | 2. Amlo/Dhori UG (Recast) | | 2. Gevra OCM |
| | 3. Kuju OC | | 3. Dipka OCM |
| | 4. Pindra OC | RI-VI | 1. Nigahi OCP (15 Mty) |
| | | | 2. Bina Extn. OCP (15 Mty) |
| | | | 3. Jayant OCP (15 Mty) |
| | | | 4. Dudhichua OCP (15 Mty) |

| Regional Institute/HQ | Name of the Reports |
|-----------------------|--|
| | 5. Amlohri OCP (10 Mty) |
| Other Reports | |
| RI-I | <ol style="list-style-type: none"> 1. Blasting and vibration studies at Sonapur Bazari Patch OCP 2. Blasting and vibration studies at Kapasara Patch OCP 3. Kottadih-Pandaveshwar-Dalurband (GR for PR) 4. Blasting and vibration studies at Madhabpur OCP 5. Blasting and vibration studies at Narainkuri OCP 6. Chitra (GR for PR) 7. Madanpur/Kumardihi (GR for PR) |
| RI-II | <ol style="list-style-type: none"> 1. Geological Note on Ghanoodih Colliery 2. Geological Note on Bhowrah South UG Mine 3. Mine closure plans for eight mines of BCCL 4. Mine closure plans for six mines of BCCL 5. Scheme for exploitation of IV bottom & lower seams at Dhansar Colliery 6. Geological Note on Sudamdih Shaft 7. Energy audit & benchmarking of SDL of VOCP (Dhansar) 8. Energy audit & benchmarking of SPC of Block-II OCP 9. Mining Plan for Bhutgoria Mine 10. Global Bid Document for Bhowrah South UG Mine (Technical Part) 11. Global Bid Document for Ghanoodih Colliery (Technical Part) |
| RI-III | <ol style="list-style-type: none"> 1. Subsidence study of Sarubera UG |
| RI-IV | <ol style="list-style-type: none"> 1. Energy Audit Report (Diesel) with benchmarking for Sasti |

| Regional Institute/HQ | Name of the Reports |
|-----------------------|--|
| | OC |
| | <ol style="list-style-type: none"> 2. Scheme for Pauni OC (Dipside extn.) 3. Scheme for recommissioning of 15/90 dragline and its deployment at suitable mine of WCL 4. Ground vibration study at Durgapur OCP 5. Mine Closure Plan of Majri Area (except New Majri UG) 6. Mine Closure Plan of Wani Area 7. Energy Audit Report (Electrical) with benchmarking for Ukni OC 8. Scheme of Motaghat OC 9. Mine Closure Plan of Umrer Area 10. Global document for Continuous Miner Technology at Kumbharkhani UG Mine 11. Mine Closure Plans of Bhatadi OC & Pauni OC 12. Mine Closure Plan of Nagpur Area (4 mines) 13. Mine Closure Plan of Wani North Area (3 mines) 14. Mine Closure Plan of Padmapur OC, Chandrapur Area 15. Parsoda OC (Geological Model in MINEX) 16. Mugoli Nirguda OC (Geological Model in MINEX) 17. Magrahi Urdhan OC (Geological Model in MINEX) 18. Padampur OC (Geological Model in MINEX) 19. Mine Closure Plan of Nagpur Area (4 mines), Chandrapur Area (3 mines) and Gouri I & II (A) OC Ballarpur Area 20. Mine Closure Plan of Pathakhera Area (5 mines), Ballarpur Area (3 mines), |

| Regional Institute/HQ | Name of the Reports | Regional Institute/HQ | Name of the Reports |
|-----------------------|--|-----------------------|---|
| RI-V | Pimpalgaon OC (Wani North Area) and DRC UG (Chandrapur Area) | | at surface level due to underground blasting at Surakachhar Colliery, Korba Area |
| | 21. Mine Closure Plan of Pench Area (10 mines), Ballarpur OC (Ballarpur Area), Junad OC & Kolarpimpri OC (Wani North Area) and Mahakali UG (Chandrapur Area) | | 7. Report on vibration study at surface level due to underground blasting at Meera UG |
| | 22. Energy Audit Report (Diesel) with benchmarking for Gondegaon OC | | 8. Updated Cost Estimate of Durgapur OC |
| | 23. Energy Audit Report (Diesel) with benchmarking for Niljai OC and Niljai (S) OC | | 9. RCE of Baroud OC |
| | 24. Energy Audit Report (Electrical) with benchmarking for Kumbherkhani UG | | 10. Report on controlled blasting at Amera OCM |
| | 25. Scheme for Amb river diversion (Phase-IV) of Umrer OC | RI-VI | 1. Mine Closure Pan of Amlohri OCP |
| | 26. Scheme for Ghonsa OC | | 2. Conceptual Note on mining potentiality of the CIL Blocks in the main basin of Singrauli Coalfields |
| | 27. Report for 2x10 MVA/2x12.5 MVA 220KV/66 or 33 KV Sub-station, Matradevi, Ghugus, wani Area | | 3. Mine Closure Pan of Dudhichua OCP |
| | 28. Mine Closure Plan of Pench Area (4 mines), Kanhan Area (10 mines), Wani North Area (1 mine) and Chandrapur Area (1 mine) | | 4. Mine Closure Pan of Jayant OCP |
| | 1. Report on controlled blasting at Mahamaya UG | RI-VII | 5. Scheme for air-conditioning in Central Hospital, Singrauli |
| | 2. Mine Closure Plans of Dugga OCP (1.5 Mty), Sharda OCP (0.85 Mty), Baiga OCP (0.3 Mty), Amlai UGP (0.36 Mty) & North Chirimiri UGP (0.5 Mty) | | 1. Scheme for CHP with SILO loading arrangement at Lingraj OCP |
| | 3. Report on Powder Factor improvement study at Bartarai UG Mine | | 2. Mining Plan of Nandira UG (0.33 Mty) |
| | 4. RCE of Jampali OC | | 3. Mining Plan of Bhubaneswari OCP (20 Mty) |
| | 5. Report on vibration study at surface level due to underground blasting at Balgi Colliery | | 4. Mine Closure Plan of Orient 1 & 2 |
| | 6. Report on vibration study | | 5. Mining Plan of Samleswari OCP (12 Mty) |
| | | | 6. Mine Closure Plan of Nandira UG |
| | | | 7. Mine Closure Plan of Jagannath UG |
| | | | 8. Mine Closure Plans of Orient UG Mine No.3 & Chhendipada OCP |
| | | | 9. Mine Closure Plans of Talcher UG & Lilari OCP |

| Regional Institute/HQ | Name of the Reports |
|-----------------------|--|
| HQ | 10. Mining Plan of Belpahar OCP (8 Mty)` |
| | 11. Scheme for fire fighting arrangement at Bharatpur CHP |
| | 12. Mine Closure Plans of Kulda OC, Jagannath OC & Hingir Rampur Colliery UG |
| | 13. Mine closure plan of Balram OCP |
| | 14. Scheme for dedicated road corridor from Bankibahal to Bhedabahal (Basundhara-Garjanbahal Area) |
| | 15. Mining Plans of Chhendipada OCP (0.35 Mty) and Lilari OCP (0.8 Mty) |
| | 1. Report on RMR and rock load of Kenda Colliery (R-IV Seam) & Kumardihi 'B' Colliery (R-V Seam), ECL |
| | 2. Slope stability study for Tapin OCP (in association with BIT, Mesra) |
| | 3. Master Plan of NEC |
| | 4. Report on soil erosion study for North Urimari OCP, CCL |
| | 5. Assessment of Normative Cost of sand stowing for all stowing mines (43 nos.) of J K Ropeways, ECL revised at 2009-10 price base |
| | 6. Report on conversion of steam winder to electrical winder of Talcher Colliery, Pit No.2 |
| | 7. Subsidence prediction report of Rangamati-A UG mine, ECL |
| | 8. Report on RMR and rock load of Topa UG Mine (VIII Seam), CCL |
| | 9. Land use/cover mapping of core and buffer zone of Kolegaon OCP and Naigaon-Bellora OCP of WCL |
| | 10. Land use/cover mapping of core and buffer zone of Motaghat OCP,WCL |

| Regional Institute/HQ | Name of the Reports |
|-----------------------|---|
| | 11. Report on Standard Price List |
| | 12. Gas survey of Ketki Mine, SECL |
| | 13. Scientific study report to start incline in II seam over goaved out area in 'O' seam at Bastacolla Colliery, BCCL |
| | 14. Land use/cover mapping of core and buffer zone of Ganpati Expn. UG, Niljai Deep OC and Sakri Irawati (Pauni-III) OCP, WCL |
| | 15. Study Report for technical feasibility of Man Riding System in R-VI seam of Jhanjra Project, ECL |
| | 16. Controlled blasting and vibration study at Hesagora Outsourcing Patch, Kuju Colliery, CCL |
| | 17. Land use/cover mapping of core and buffer zone of Murpar OC, Chinda OC and Ghonsa OC, WCL |
| | 18. Mine Closure Plans of Lekhapani OCP & Tikak Extn. OCP of NEC |
| | 19. Report on soil erosion study for Sarubera Colliery, CCL |
| | 20. Report on soil erosion study for Parej East Project, CCL |
| | 21. Land use/cover mapping of core and buffer zone of Ukni Deep OC, WCL |
| | 22. Gas survey of Piparia Seam-IV B, Johilla Area, SECL |
| | 23. Capacity assessment of CIL Underground Mines |
| | 24. Analysis of amalgamated Tandsi mine from ventilation point of view and reorganisation of ventilation system |
| | 25. Slope stability study for Jayant OCP, NCL |
| | 26. Land use/cover mapping of core and buffer zone of K D |

| Regional Institute/HQ | Name of the Reports |
|-----------------------|---|
| | Hesalong OC, Pichri OC and Gose OC, CCL |
| 27. | Report on determination of degree of gassiness of R-V seam, Kumardih UG, ECL |
| 28. | Assessment of OC Mine Capacity and Capacity Utilisation of CIL Mines during 10-11 |
| 29. | Annual benchmarking of 14 OCPs identified by CCL |
| 30. | Annual benchmarking of 3 OCPs identified by SECL |
| 31. | Performance analysis of HEMM during 2010-11 |
| 32. | Analysis of specific consumption of Diesel, Electric Power and Explosives during 2010-11 |
| 33. | Slope stability study for Naigaon OCP, WCL |
| 34. | Study report for improvement of H/L ratio in Panel-C of upper cemani & lower semana seams in Sirka UG mine, CCL |
| 35. | Report on RMR and support layout of Hingir Rampur Colliery (HR Seam), Orient 1&2 mine (HR Seam III) and Orient Colliery, Mine No.4 (HR Top Seam), MCL |
| 36. | Annual benchmarking of 14 OCPs identified by BCCL |
| 37. | Annual benchmarking of 8 OCPs identified by NCL |
| 38. | Annual benchmarking of 9 OCPs identified by ECL |
| 39. | Annual benchmarking of 5 OCPs identified by MCL |
| 40. | Soil erosion study for Govindpur OCP, CCL |
| 41. | Mine Closure Plan of Bina OC, NCL |
| 42. | Mining Plan for Kakudi/Kishripal sand mine of Talcher |

| Regional Institute/HQ | Name of the Reports |
|-----------------------|---|
| | Coalfield, MCL |
| 43. | Report on RMR and Rock Load of Tilaboni Colliery (R-VIIA Seam), ECL |
| 44. | Report on RMR and support layout of Methani Colliery (Sripur Seam), ECL |
| 45. | Land use/vegetation cover mapping of Rajmahal Coalfield, ECL |
| 46. | Geological Note for Dilli Joypore, NEC |
| 47. | Soil erosion study for K.D. Hesalong OCP and Konar OCP, CCL |
| 48. | Mine Closure Plan of Kakri OC, NCL |
| 49. | Mine Closure Plan of Ledo OC, NEC |
| 50. | Study of blasting free OB removal using ripper dozer at Lakhanpur Area, MCL |
| 51. | Soil erosion study for Sayal-D OCP, CCL |
| 52. | Soil erosion study for Religarha OCP, CCL |
| 53. | Mining Plan for Hansamura, Katapalli & Deogaon villages of Jharsuguda Dist, Orissa |
| 54. | Gas survey of Ghusick (R-IX) & Ghusick A (R-IXA) seam of amalgamated Kaurdi-Tirat Colliery, BCCL |
| 55. | Gas survey of Vijay West Colliery, SECL |
| 56. | Gas survey of Raniatari Colliery, SECL |
| 57. | Subsidence prediction report of Rangamati-B UG mine, ECL |
| 58. | Report on RMR and Rock Load of Siduli Colliery (R-VII Seam) and Kumardhubi Colliery (SP Top & Bottom Seam), ECL |
| 59. | Report on cavability study for depillaring of top section |

| Regional Institute/HQ | Name of the Reports |
|-----------------------|---|
| | of Talcher Seam-I by caving method at Talcher Colliery, MCL |
| 60. | Mine Capacity Assessment of Opencast Mines - projections as on 1.4.2012 |
| 61. | Mining Plan and pre-feasibility report in respect of Mandapal sand mine in the river bed of Brahmani at Village Nizgarh Zami, Gopinathpur ore lease area of MCL |
| 62. | Report on RMR and Rock Load of South Samla Unit, Darula Colliery (R-II/III Seam), ECL |
| 63. | Report on RMR and support layout of Lakhimata Colliery (Mugma Spl. Seam, Local-I Seam and Metadih Seam), ECL |
| 64. | Reports on subsidence calculation of Katras Choitudih Colliery, Amalgamated Keshalpur & West Mudidih Colliery, Amalgamated Angarpathra & Ramkanali Colliery and Salanpur Colliery of BCCL |
| 65. | Controlled blasting and vibration study at Kathara OCP, CCL |
| 66. | Slope stability study for Cluster-IV Mines, BCCL |
| 67. | Slope stability study for Cluster-XVI Mines, BCCL |
| 68. | Scheme for STP of Block-B Project, NCL |
| 69. | Slope stability study for Cluster-III mines, BCCL |
| 70. | Soil erosion study for Selected Dhoru OCP, CCL |
| 71. | Soil erosion study for Sirka OCP, CCL |
| 72. | Vegetation cover mapping of Raniganj Coalfield of ECL, Sohagpur Coalfield of SECL |

| Regional Institute/HQ | Name of the Reports |
|--|--|
| | and Pench-Kanhan Coalfield & Umrer Coalfield of WCL |
| 73. | Land use/land cover mapping of core and buffer zone of Jharna OCP, Shivani OCP and Juna-Kunada OCP of WCL |
| Environment Management Plan (Draft EMP) | |
| Form-I | |
| RI-I | 1. Cluster-VIII Mines, ECL 2. Simlong OC 3. Cluster-X Mines, ECL 4. Cluster-XI Mines, ECL 5. Chitra Expn. OCP 6. Cluster-III Mines, ECL 7. Cluster-IV Mines, ECL |
| RI-II | 1. Dugda Washery FBC 2. Cluster-VI Mines, BCCL 3. Cluster-XII Mines, BCCL |
| RI-III | 1. Gose OC 2. Sonapur Bazari Washery 3. Tapin Integrated South OC 4. Piparwar OC 5. Pundi OCP |
| RI-IV | 1. Chinda OC Expn. 2. Bhajipani Opencast Patch 3. Shivani OC 4. Gandhigram UG 5. Juna Kunada OC Expn. 6. Wanoja OCP 7. Visapur OC |
| RI-VII | 1. Balram OCP 2. Bharatpur OCP Reorganisation 3. Lakhanpur OCP Expn. 4. Lajkura OCP Expn. 5. Samleshwari OCP Expn. |
| HQ | 1. Chitra Washery, ECL 2. Kusmunda Washery, SECL |

| Regional Institute/HQ | Name of the Reports |
|-----------------------|-------------------------------------|
| | 3. Krishnashila OCP, NCL |
| | 4. Hingula Washery, MCL |
| Draft EMP | |
| RI-I | 1. Simlong OC |
| | 2. Cluster-IX Mines, ECL |
| RI-II | 1. Cluster-VII mines, BCCL |
| | 2. Cluster-VIII Mines, BCCL |
| | 3. Cluster-XIII mines, BCCL |
| | 4. Cluster-XIV Mines, BCCL |
| | 5. Cluster-II Mines, BCCL |
| | 6. Cluster-IX Mines, BCCL |
| | 7. Cluster-X Mines, BCCL |
| RI-III | 1. KDH Expn. OC |
| | 2. Ashoka Washery & FBC Power Plant |
| | 3. Piparwar OC |
| | 4. Ashoka Expn. OC |
| RI-IV | 1. Tawa-II UG Expn. |
| | 2. Tawa-III UG |
| | 3. Ganpati UG Expn. |
| | 4. Murpar UG Expn. |
| | 5. Sakhri-Irawati (Pauni-III) OC |
| | 6. Chinda OC Expn. |
| | 7. Bhajipani OC |
| RI-V | 1. Gevra OCP |
| | 2. Dipka OCP |
| | 3. Jagannathpur OC |
| | 4. Pelma OC |
| | 5. Rajnagar OC |
| | 6. Mahan-II OC |
| | 7. Kusmunda OC Expn. |
| RI-VI | 1. Bina Extn. OCP |
| HQ | 1. Cluster-XVI mines, BCCL |
| | 2. Cluster-III Mines, BCCL |
| | 3. Cluster-IV Mines, BCCL |
| | 4. Cluster-XVII Mines, BCCL |
| | 5. Cluster-V Mines, BCCL |

2.1 COAL & MINERAL PREPARATION

CMPDI offers technology services in respect of Coal washeries, Mineral beneficiation Plant and Modification / Modernization of existing plants. The technological services encompass exhaustive Laboratory studies, Techno Economics Feasibility Report, Conceptual Report, Project Planning, Bid Process management and wide range of R&D activities.

CMPDI has already handled many prestigious assignments in the field of Beneficiation of coal and other minerals against stiff competition in the open market including World Bank aided project "Report on Techno-economic study of coal washeries for Cement Industry" and Asian Development Bank funded project "Implementation of clean coal technology through coal beneficiation in India." Some of the prestigious customers are Madhya Pradesh Electricity Board, Mineral Exploration Corporation Limited, Neyveli Lignite Corporation, Punjab State Electricity Board, Bharat Heavy Electricals Limited, National Thermal Power Corporation, Tata Steel, Integrated Coal Mining Private Limited, United Nations Development Programme, Manganese Ore (India) Limited, Singareni Collieries Company Limited and many more.

The following major works have been completed during the year 2011-12.

A. REPORTS / STUDIES

Report on Washery for Mine PR:

1. Balaram Expansion OCP, 15.0 MTY
2. Jagannath Reorganization OCP, 6.0Mty
3. Chinchila Chikalgaon amalgamated OCP, 5.0 Mty
4. Block V OCP, BCCL
5. Garjanbahal OCP, 10.0Mty.
6. Mungoli Nirguda Extn. deep OCP.
7. Lakhan-Belpahar-Lillari OCP 30.0 Mty
8. Report on balance of products for Block V OCP, BCCL
9. Report on Balance of Product based on Production Programme and Seam average

annual ash for south Loyabad UG mine, BCCL.

Reports on Washability tests for:

1. Coal Core Samples of Baitarni West Coal Company Ltd.
2. Coal Core Samples of CMBE- 97& 98.
3. Coal Core Samples of CMMW-002 & 003.
4. Coal Core Samples of CMBG-49 & 50.
5. Coal Core Samples of CMLR-7, 10 & 11.
6. Coal Core Samples of CMIP-26,30,33 & 36.
7. Report on effluent treatment plant of Krishnasheila Project,NCL.
8. Report on effluent treatment plant of Nigahi Project,NCL.

B. Preparation of Tender Document:

1. Preparation of RFP BID document for Kusmunda Washery,SECL(10.0Mty)
2. Preparation of RFP BID document for Sonepur Bazari Washery, ECL (8.0Mty)
3. Preparation of Tender specification Document(TSD) for fine coal beneficiation at Swang washery,CCL
4. Preparation of Tender Specification Document (TSD) for Dhori Washery (2.5 Mty) on Turnkey Basis.
5. Preparation of Common RFQ Bid Document for Basundhara & Jagannath Washery.

C. Tender Scrutiny :

1. Evaluation of Bids (RFP& Price) of Ashoka washery(10.0 Mty) CCL on 'BOM' concept.
2. Evaluation of Bids (RFQ &RFP) for Dugda NLW Coal washery (2.5 mty), BCCL on 'BOM' concept.
3. Evaluation of Bids(RFQ & RFP) for Dahibari NLW Coal washery, (1.6 Mty) BCCL on BOM concept (continuing)

D. R&D and S&T Projects :

1. Preparation of Tender Document for Radiometric Dry Deshaling Plant (Ardee Sort, 400 Tph) at Madhuband Washery,BCCL

2. Preparation of Tender Document Cost Effective Technology for Dry Deshaling of Coal by Allmineral Allair Jig.

E. Outside Consultancy :

1. Washability tests of borecore samples of M/s Baitarni West coal Company Ltd.

Jobs in Progress:

1. Preparation of Conceptual Report for Bhojudih Washery(2.0Mty),BCCL.
2. Preparation of conceptual Report for Konar Washery (3.5 Mty),CCL
3. Preparation of TEFR for Dhori Washery(2.5 Mty),CCL
4. Preparation of RFP part of BID Document for Chitra Washery(2.5 Mty),ECL
5. Preparation of RFP part of BID Document for Hingula Washery,(10.0 Mty),MCL
6. Preparation of RFP part of BID Document for Basundhara washery (10.0 Mty),MCL
7. Preparation of RFP part of BID Document for Jagannath washery (10.0 Mty),MCL
8. Preparation of RFP part of BID Document for Lakhanpur washery (10.0 Mty),MCL
9. Evaluation of RFP part of BID Document for Dahibari Washery(1.6 Mty),BCCL
10. Evaluation of RFP part of BID Document for Kusmunda Washery(10.0Mty),SECL
11. Evaluation of RFP part of BID Document for Sonepur Bazari Washery(8.0 Mty),ECL
12. Evaluation of RFQ part of BID Document for Jagannath & Basundhara washery,MCL
13. Evaluation of Tender for Extension of existing Bunkers at Swang Washery CCL
14. Evaluation of Tender for Primary and Secondary shaft sizer at Kedla Washery
15. Evaluation of Tender for fine coal beneficiation plant at Swang Washery CCL
16. Washability tests of bore-hole No. CMKG-170,174,177, & 181,Garjanbahal Block
17. Washability tests of bore-hole No. MGPW-1 to 10,Garepelma Coal Block.
18. Washability tests of bore-hole No.

CTMM- 185,188,191,& 192 Mahanadi Block.

19. Implementation of 400 Tph Radiometric dry Deshaling plant through Ardee Sort equipment.
20. Implementation of 260 Tph Allmineral Allair Jig for dry Deshaling of coal.
21. Performance Guarantee Test of Monnet Ispat washery at North Karanpura for Punjab State Electricity Board.

2.2 PROJECT APPRAISAL

1. Scrutiny and appraisal of 29 nos of draft PRs/EPRs/Other Reports prepared by Regional Institutes and HQ Departments of CMPDI during the year 2011-12, 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 22 nos of conceptual notes prepared by Regional Institutes, and coordination for their assessment by Director (T) (P&D) along with OC/UMD Department and PAD for finalizing the main technical parameters before preparation of the draft PR/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 XI 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

3.1 Underground Mining

A. OUTSIDE CONSULTANCY JOBS :

1. Assessment of Normative cost of sand stowing for Ravindra Khani no.1A Incline, Mandamari Area, SCCL, revised at 2009-10 price base.

2. Preparation of DPR for Gare-III sub block of Gare Pelma sector, Raigarh coalfields, C.G.
3. Estimation of coal reserve (tentative) available below the thermal power plant (existing & proposed extension) in Gare Pelma, Sector-I Block, Mand-Raigarh, Chattisgarh allocated to CMPDI
4. Preparation of EOI, Bid document & vetting of designs for construction equipping & furnishing of new shaft at Hutti Gold mines.
5. Preparation of Mining Plan & Project Report for Macherkunda coal block, Latehar, Bihar Sponge Iron Ltd.
6. 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
7. Consultancy services for vetting DPR, scope of work and participation in pre-bid meeting for Malajkhanda Copper Project, HCL
8. Detailed design of vertical shaft, winding installation & vetting of TEFR for vertical shaft at Ukwa mine, MOIL
9. Detailed design of vertical shaft, winding installation & vetting of TEFR for vertical shaft at Munsar mine, MOIL.
10. Preparation of Mining plan & expansion PR for enhancement of production from Balaghat mine

B. CIL JOBS :

1. Detailed design drawing of Air Shaft of Kurasia U/G mine, Chirimiri area, SECL
2. Report on conversion of steam winder to electrical winder of Talcher colliery, Pit no.2
3. Assessment of Normative Cost of sand stowing for all stowing mines (43 nos.) & sand transportation of J K Ropeways, ECL revised at 2009-10 price base
4. Gas survey of Ketki mine, Bishrampur area, SECL
5. Technical specification of man riding system for Churcha R.O. u/g mine SECL
6. Preparation of Standard Price list

7. Study Report for Technical Feasibility of Man Riding System in R-VI seam of Jhanjra Project, ECL.
 8. Master plan of NEC
 9. Detailed design of Incline mouth & U/g support for drivage of Incline no.2 at Kottadih Project, Pandaveswar Atra, ECL
 10. Analysis of the amalgamated Tandsi mine from ventilation point of view & reorganisation of the ventilation system for proper ventilation of the mine..
 11. Gas survey of Piparia seam IV-B, Johilla area, SECL.
 12. Capacity assessment of CIL under ground mines
 13. Determination of degree of gassiness of R-V seam, Kumardih U/G, ECL
 14. Study for improvement of H/L ratio in Panel-C of Upper Semana & Lower Semana seams in Sirka U/G mine, CCL
 15. Preparation of mining plan for Kakudi / Kishoripal sand mine of Talcher Coalfield, MCL
 16. Preparation of detailed design, BOQ & cost estimate for construction of Incline mouth in open cut, Fan drift, Fan house & incline supports for Natraj mine, MCL
 17. Preparation of Project Report for Jagannath u/g mine of Talcher area, MCL
 18. Stability analysis of headframe structure of Pit no.20 & 21 of Murulidih Colliery, WJ area, BCCL
 19. Preparation of Mining Plan for grant of mining lease for sand to an extent of 109.205 Ha in Hansamura Katapalli & Deogaon villages of Jasuguda distt., Orissa
 20. Gas survey of Ghusick (R-IX) & Ghusick A (R-IXA) seam of amalgamated Kaurdi -Tirat colliery of Satgram area, ECL
 21. Gas survey of Vijay west colliery, Chirimiri area SECL
 22. Preparation of mining plan & pre feasibility report in respect of Mandapal sand mine in the river bed of Brahmani at village Nizgarh Zami, and Gopinathpur over lease area of 17.805 Ha.
 23. Global bid evaluation of the offers for extraction of XVI top seam, Moonidih Project, BCCL
 24. Global bid evaluation for Lohapatti U/G mine (0.30 MTY) in turnkey basis.
 25. Evaluation of DPR for Muraidih U/G
 26. Preparation of draft NIT for operation of Chinakuri-I, U/G mine, ECL, through joint venture route.
 27. Stability test of headgear structure of 1 pit winder, PB project, BCCL
 28. Feasibility study of man riding system for Nandira u/g mine, MCL
 29. Proposal for procurement, installation & commissioning of Manriding system at Moonidih mine, BCCL
 30. Scheme for installation of man riding system at Moonidih mine , BCCL
 31. Preparation of mining plan for Bilenda / Biksar snad mine of Talcher coalfields, MCL
 32. Capacity assessment as on 1/4/12 & capacity utilization for 11-12 of CIL u/g mines
- ### 3.2 Opencast Mining
- #### I. JOBS COMPLETED DURING 2011-12
- ##### A. Outside Consultancy Jobs
1. FR for Palana Lignite Mine Project - Client : NLC
 2. DPR for Gare Pelma Sector III OCP – Client : Goa Industrial Development Corpn
- ##### B. Major Internal Consultancy Jobs
1. Revised FR for Argada OCP, CCL
 2. PR for Jagannath OCP (Reorg), MCL
 3. PR for Jagun OCP, NEC
 4. Master Plan for NEC – Client CIL
 5. FR for Tikak Integrated OCP – Client NEC
- ##### C. 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. Technical scrutiny of various Project Reports (Ref : Enclosed list)
5. Study of Blasting Free OB Removal using Ripper Dozer at Lakhanpur Area, MCL
6. Technical Paper "Slope Stability Mitigating risk in dragline dump slopes"
7. Technical Note on Opencast potentiality of identified Muraidih UG (Block III)
8. Technical Note on Revision of norms of HEMM
9. Response to EAC observations on Hadla EMP of NLC
10. Master Control network - Ledo, Lekhapani, Tikak Expn & PQ Block OCP
11. Technical support to High Powered Committee on Umrer Accident
12. Technical support to Conceptual Note on Block VI PR

II. JOBS IN PROGRESS :

A. Outside Consultancy Jobs

1. Mining Plan for Devangudi Lignite Mine Project – Client NLC
2. FR for Devangudi Lignite Mine Project – Client NLC
3. Mining Plan for Dongribuzurg OCP – Client MOIL
4. Expansion PR for Dongribuzurg OCP – Client MOIL
5. Mining Plan for Palana Lignite Mine Project (Draft submitted) – Client NLC
6. Mining Plan for Nuagaon-Talesahi block – Client OMC
7. FR for Nuagaon-Talesahi block – Client OMC

B. 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. Preparation of R&D Project of High Angle Conveying (HAC) in OC mines

C. 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
3. Strategic Plan for MoC

D. Technical Scrutiny of Project Reports - List (2011-12)

- Draft PR Block V OCP (5 MTY), BCCL
- Reorg PR for Lilari OC (1.2 MTY), MCL
- DPR of Kuju OCP (1.3 MTY)
- DPR of Pindra OCP (1 MTY), CCL
- DPR of Religara OCP (0.6 MTY), CCL
- RPR of Mohan OCP (1.0 MTY) & DPR of Mohan II, SECL
- DPR Parsoda OCP (0.8 MTY), WCL
- DPR Mugoli Nirguda OCP (3.0 MTY), WCL
- DPR Padmapur Ext Deep (2.5 MTY), WCL
- Draft RPR Amadand OCP (5 MTY) SECL
- Draft RPR Malachua OCP (3 MTY)
- Recast DPR Garjanbahal OCP (1- MTY)
- DPR Chitra Expn OCP (5.0 MTY) ECL
- Draft Integrated PR Lakhanpur-Belpahar-Lilari OCP (30 MTY) MCL

4.0 ENGINEERING SERVICES

Apart from providing consultancy services for coal handling plants, workshop, power supply, distribution and control systems, pumping and drainage system, industrial and residential buildings, roads and railway siding, townships, the following services were provided:

4.1 Civil Engineering

Following major services were carried out during the year 2011-12 :

PROJECT PLANNING JOBS

1. PR preparation of
 - i) Devanguri O/C , NLC,
 - ii) Jagun O/C NEC
 - iii) Tikok Integrated Mine NEC
 - iv) Jagannath O/C Mine MCL
2. Technical vetting of PR for
 - i) Kottadih O/C of Pandaveswar U/G, Kumardih B U/G, Chitra O/C of ECL
 - ii) Block V O/C, Rajapur South Jharia U/G of BCCL
 - iii) Sayal-D O/C, Kuju O/C, Pindra O/C, Religara, Govindpur Re-organisation Mines of CCL
 - iv) Nakoda O/C, Padampur Ext. O/C, Mungoli-Nirguda O/C and Pansoda O/C of WCL.
 - v) Kusumunda O/C, Mahan II O/C, Kakatpur U/G, Malancha O/C, Amlabad O/C, of SECL.
 - vi) Lilari O/C Reorganisation of MCL

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
6. Structural adequacy study for Madhabpur head frame structure
7. Design/Drawing of MTs' Hostel – 48 Unit model

TENDER EVALUATION :

1. Krishnashila CHP, NCL – Tender Awarded.

PREPARATION OF TENDER DOCEUMENT:

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

PREPARATION OF SCHEME

1. Preparation of scheme, NIT and cost estimate for augmentation of capacity of sub-station at Kaniha, Orient Area, MCL – completed.
2. Preparation of conceptual report for CTPS based on FBC technology using washery rejects as fuel at Ashoka OCP, CCL and Basundhara Area MCL

ARCHITECTURAL JOBS

1. Layout for rehabilitation colony at Kusum Vihar and Karmiknagar Colony for BCCL
2. Remodelling work of Shaheed Chowk at Argadda
3. Design of office complex at Margheritta for NEC
4. Design of Environmental Laboratory for RI-I CMPDI at Asansol
5. CSR related planning design and estimation for Hathia Gonda village and Patra Gonda village

DESIGN / DRAWING SCRUTINY

- a. Scrutiny of design and drawing for Bharatpur 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 580 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 Amlohri CHP of capacity 6 MTY with Rapid loading Silo of capacity 3000 tonne, Ground Bunker of capacity 20000 tonne, Receiving pit with Gyratory Crusher, associated conveyor Structures and associated civil /structural and infra-structure facility - total 600 Nos. of drawings were approved/ commented based on the scrutiny of the design documents/ drawings submitted by the contractor.



◀ Gyratory Crusher under test run prior to dispatch

Silo slip form completed ▶



Ground Bunker at Amlohri CHP, NCL (Under Construction) ▶

◀ Twin Silo of 4000 Tonne Each at Bharatpur CHP, MCL (Under Construction)



4.2 ELECTRICAL AND MECHANICAL ENGINEERING SERVICES

4.2.1 Mine Planning (Infrastructure)

- i) Outside Consultancy
 - Mine Planning for Devangudi Block, NLC.
- ii) CIL Projects
 - Tikok integrated Expansion OCP, NEC
 - Jagannath OCP Reorganisation, MCL
 - Jagun OCP, NEC

4.2.2 Coal Handling Plant

- Amlohri Phase-II CHP (6.0Mtpa): 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 (4.0Mtpa): Floating of Tenders, Evaluation of Bids, recommendation for award of work completed. 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 (3.5Mtpa): Preparation of Tender document, in Jan.2012, and floating of tenders is completed. Evaluation of Bids is going on.
- Jayant Interim CHP (5.0Mtpa): Preparation of Tender document in Feb.2012 completed. Floating of Tenders is going on.

4.2.3 FBC Based Power Plant

- The Model Bid Document (Request for Qualification & Request for Proposal) for setting up of FBC based thermal power plants using CIL washery rejects (Of the 20 proposed washeries).
- Planning of FBC based power plant utilizing washery rejects, for the chapters in the following Project Reports has been done:
 - i) Chinchala - Chikalgaon OCP, WCL (FBC based 2x40MW TPP for 3MTY washery)
 - ii) Garjanbahal OCP, MCL (FBC based 2x100MW TPP for 10MTY washery)

- iii) Nirguda, Mungoli of WCL (FBC based 2x20MW TPP for 3MTY washery)
- iv) Lakhanpur-Lilari Belpahar, MCL (FBC based 2x250MW TPP for 20MTY washery)
- v) Jagannath OCP (FBC based 2x40MW TPP for 8MTY washery)
- Conceptual report for FBC based power plant at :
 - i) Ashok, Piparwar Area, CCL (FBC based 2x30MW TPP for 10MTY washery)
 - ii) Chitra washery, ECL
 - iii) Dugda Washery utilizing washery rejects of Dugdha and Madhuband washery, BCCL (FBC based 2x75MW TPP for 7.5MTY washery)
 - iv) Baroud Washery, SECL
 - v) Basundhara Washery, MCL (FBC based 2x125MW TPP for 10MTY washery)
 - vi) Patherdih washery, BCCL
- Bid document for leasing and replacement of boilers of 3x10 MW Chinakuri captive TPP, ECL.

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 of Bina and Jayant OCP of NCL.
- Electrical safety audit report for Residential building of CMPDI (HQ)

4.2.5 Power supply and distribution & control system

- NIT for Power transmission and distribution for Krishnashila Coal & OB Sub-station.
- Scheme for augmentation of Kali- nagar Sub-station, Orient Area.
- NIT for augmentation of Amlohri OB (Tapovan) Substation & Coal Substation.
- Scheme for Kaniha 220/33 kV Sub station.

4.2.6 Inspection Services

CMPDI continued Third party inspection

services for Pre-dispatch inspection of equipment and materials purchased by various subsidiaries of CIL. Total revenue earned from these services was 2.69 crores during 2011-12.

4.2.7 Other Studies

- Study of Power Factor of Kathara Area, CCL.
- Scheme for fire detection & annuciation of office building of CMPDI (HQ).
- Case study for diesel bench marking of Surface miner at Ananta, Hingula and Lingraj OCP.
- NDT of Dragline (7 nos) / Cage Suspension Gear (5 sets) / CHP (2 nos) / Shovel (21 nos) of 15 mines of CIL.

4.3 Town Engineering Services

Following are the list of completed and running works under Special Repair, Capital works and CSR works in 2011-12 in Town Engineering Department of CMPDI(HQ). Highlighting the activities / jobs completed and work-in progress during the financial year 2011-12.

Completed Works :

| Sl NO. | Name of works | Work Value (Rs. in lakh) |
|--------|---|--------------------------|
| 1 | Renovation of Toilet & Kitchen of C&D type qtrs at CMPDI (HQ), Ranchi. | Rs 71.35 |
| 2 | Renovation of MT Laboratory at ground Floor of R&D building and setting up for a Lab for testing of cement / resin capsule of Mining Lab at CMPDI HQ. | Rs 41.72 |
| 3 | Development work Hillock area near B type quarters at CMPDI, HQ Ranchi. | Rs 3.48 |
| 4 | Roof top rain water harvesting of Block B1 to B7 Block B 4 (multi storied) and Block C5 to C7 for recharge of ground water at CMPDI (HQ) colony. | Rs 16.67 |
| 5 | Drilling and sinking of 250x200mm dia deep Borewell including supply and installation of Pump sets, pipes and allied works at NTS, Barkakana colony. | Rs 9.98 |

| | | |
|---|--|------------------|
| 6 | Rewiring 'A' type quarter Block No. A/49 to A/64, A/6 to A/80 and A/13 to A/24 at CMPDI (HQ), Ranchi. | Rs. 14,53,837.61 |
| 7 | Supply and installation of Pump at CMPDI (HQ), Ranchi. | Rs. 7,90,378.66 |
| 8 | Replacement of 1.1 KV cables, alternative cables of Community Hall, cables for separating power and light circuit at STC for distribution at CMPDI (HQ), Ranchi. | Rs. 15,70,530.36 |
| 9 | Supply, installation and commissioning of sound system of Community Hall at CMPDI (HQ), Ranchi. | Rs. 4,49,106.38 |

On-going works :

| | | |
|---|---|------------------|
| 1 | Creation of lecture hall at STC building and its surrounding areas at CMPDI(HQ) Ranchi. | Rs 173.78 |
| 2 | Repair and maint. Of boundary wall of CMPDI colony, renovation of of basement of Community Hall for Gymnasium and misc development work in colony and around CPEI building. | Rs 65.54 |
| 3 | Roof top rain water harvesting of balance quarters and balance service buildings at at CMPDI (HQ). | Rs 44.76 |
| 4 | Misc. repair and maintenance work at CDS, CWS and its premises at NTS, Barkakana. | Rs 71.02 |
| 5 | Replacement of feeder panel for JSEB power supply DG power supply at CMPDI(HQ), Ranchi. | Rs. 32,22,398.59 |

CSR Work:

| | | |
|---|---|----------|
| 1 | Construction of three rooms at Birsa High School, Hathia Gonda, Construction of approach to Hathia Gonda and Patra Gonda village. | Rs 25.42 |
|---|---|----------|

5.0 RESEARCH & DEVELOPMENT PROJECTS

5.1 R&D Projects Under S&T Grant Of Ministry Of Coal

1. 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.
2. 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.
3. CMPDI 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 31.03.2012) | 374 |
| Total no. of S&T projects completed (till 31.03.2012) | 302 |

4. Physical and financial performance during 2011 -12

5.1.1 Physical performance

During the XI Plan Period a total of 45 projects have been completed by various agencies. The status of Coal S&T projects during 2011 -12 is as follows:

| | |
|--|----|
| Projects on-going as on 01.04.2011 | 16 |
| Projects sanctioned by Gol during 2011-12 (Annexure-A) | 06 |
| Projects completed during 2011-12 (Annexure-A) | 07 |
| Projects on-going as on 01.04.2012 | 15 |

5.1.2 Financial status – Budget provisions and actual expenditure are shown below:

(₹ in Crores)

| 2011 -12 | | 2011 -12 | |
|----------|--------|----------|--------------------|
| RE | Actual | RE | Actual |
| 10.00 | 10.06 | 10.62 | 10.17 (un-audited) |

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 the Apex committee and also to CIL R&D Board. The Apex committee is now empowered to sanction individual research project having outlay up to ₹5.0 Cr and ₹25.0 Cr per annum considering all the projects together. CIL R&D Board which earlier had the power to sanction individual project up to ₹10.0 Cr can now sanction individual project up to ₹ 50.0 Cr. Altogether CIL R&D Board can now sanction research projects up to ₹500.0 Cr in a year. So far, 64 projects have been taken up under the fund of CIL R&D Board out of which 35 projects have been completed till March 2012. The status of CIL R&D Projects during 2011 -12 is as follows:

- i) Projects on-going as on 1.4.2011 : 24
- ii) Projects sanctioned during 2011-12 : 06 (Annexure- B)
- iii) Projects completed during 2011-12 : 05 (Annexure-B)
- iv) Projects foreclosed during 2011-12 : 01
- v) Projects on-going as on 1.4.2012 : 24

Total disbursement of fund to CIL R&D projects during 2011-12 is ₹ 16.25 Cr (un-audited).

Annexure-A

S&T Projects funded by Ministry of Coal sanctioned during 2011-12

(₹ in Lakh)

| SI No | Name of the Project. | Total Approved Cost |
|-------|--|---------------------|
| 1 | Development of software for prediction of subsidence by 3D numerical modeling Project Code-MT/160 Imple. agencies: - Anna University, Chennai & SCCL | 53.80 |
| 2 | Development of customized organic coatings for corrosion protection of special mining equipment at Neyveli Lignite mines Project Code : MT/161 Implementing Agency: NLC, Neyveli & CECRI, Karaikudi | 79.48 |
| 3 | Development of tribo-electrostatic separator for beneficiation of high ash Indian coals. Project Code : CP/44 Impl Agencies : IMMT, Bhubaneswar | 47.67 |
| 4 | Design and development of coal winnowing system for dry ben-eficiation of coal based on CFD modeling and simulation Project Code:CP/45 Impl. agencies: CIMFR Nagpur, Unit & NCL Pune | 181.40 |
| 5 | Design and development of truck mounted mobile coal sampler for instant coal ash & moisture analyser at site from railway wagon/truck Project Code:CP/46 Impl. agencies: CIMFR, Dhanbad & M/s Pranay Enterprises, Hyderabad | 167.60 |
| 6 | 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 2011-12

(₹ in Lakh)

| SI No | Name of the Project | Total Approved Cost |
|-------|--|---------------------|
| 1 | Delineation of barrier thickness against waterlogged workings in underground coal mines. Project Code-MT/153 Imple. agencies: - CIMFR, Dhanbad | 382.1192 |
| 2 | Model studies on gravity blind back filling method and evaluation of pre-jamming indication parameters in the field Project Code : MT/154 Implementing Agency: IIT, Kharagpur | 402.66 |
| 3 | Application of high strength steel roof-bolts in underground coal mines. Project Code : MT/156 Impl Agencies : RDCIS, Ranchi, DGMS, Dhanbad & CMPDI, Ranchi | 103.22 |

| | | |
|---|--|---------|
| 4 | Catalytic liquefaction of Neyveli Lignite Project Code:CU/54 Impl. agencies: MEPCO Schlenk Engg. College, Shivakasi | 103.22 |
| 5 | Biological production of clean fuels from coal Project Code:CU/55 Impl. agencies: R V College of Engineering, Bangalore | 45.36 |
| 6 | Fly ash characterisation for mine void reclamation Project Code:EE/30 Impl. agencies: CMPDI, Ranchi | 287.684 |
| 7 | Carbon Sequestration in re-vegetated coal mine wastelands Project Code:EE/40 Impl. agencies: CIMFR, Dhanbad | 64.76 |

Annexure-B

R&D Projects funded by CIL sanctioned during 2011-12

(₹ in Lakh)

| SI No | Name of the Project. | Total Approved Cost |
|-------|--|---------------------|
| 1 | Assessment of prospect of shale gas in Gondwana basin with special reference to CIL areas. Project Code-CIL/R&D/1/46/10. Imple. agencies: - CBM(Cell), CMPDI(HQ), Ranchi and Advance Resources International, Washington, DC, USA | 400.00 |
| 2 | Development of a notch cutting machine to facilitate construction of stoppings in underground coal mines. Project Code : CIL/R&D/1/47/11 Implementing Agencies: S&R Division CIL (HQ), Kolkata, Kolkata & Society for Mining Research Sustainable Development and Environment , Kolkata | 8.30 |
| 3 | Construction of quick setting stopping in case of fire in underground mines using expansion foam agent. Project Code: CIL/R&D/1/48/11 Impl Agencies : S&R Division CIL (HQ), Kolkata, NIT, Rourkela and M/s Trans Marketing, Kolkata. | 51.32 |
| 4 | Green House Gas Recovery from Coal Mines and Coal Beds for Conversion to Energy (GHG2E) Project Code: CIL/ R&D/1/49/2012 Impl. agencies: CBM Cell, CMPDI(HQ), Ranchi and European Union Research Commission, London | 80.00 |
| 5 | 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 Impl. agencies: Blasting Cell, CMPDI(HQ), Ranchi and IIT, KGP | 428.06 |
| 6 | Indigenous development of Integrated Dumper Collision Avoidance system for opencast mines Project Code: CIL/ R&D/1/51/2012 Impl. agencies: Mine Electronics Deptt, CMPDI(HQ), Ranchi and BEL, Panchkula, Haryana | 354.51 |

R&D Projects funded by CIL completed during 2011-12

(₹ in Lakh)

| SI No | Name of the Project | Total Approved Cost |
|-------|---|---------------------|
| 1 | Indigenous development of PLC based integrated control and monitoring system for conveyors and other equipment of underground mines. Project Code: CIL/R&D/1/26/06 Implementing agency : RDCIS(SAIL) & CMPDI | 182.00 |
| 2 | Delineation of workings below railway lines near Ratibati colliery, stability analysis by numerical modeling and possible remedial measures. Project Code: CIL/R&D/1/31/08 Implementing agency : CIMFR & ECL | 20.90518 |
| 3 | Development of immediate roof fall prediction system in U/G mines using wireless network. Project Code: CIL/R&D/1/27/08 Implementing agency : IIT, KGP and ECL | 216.98 |
| 4 | An investigation on Adsorption Characteristics of Indian coal and to ascertain recoverability of CBM from deep-seated coal and lignite resources. Project Code: CIL/R&D/1/40/10 Implementing agency : CMPDI and IIT, KGP | 98.07 |
| 5 | Establishment of co-relation between physico- mechanical properties, chemical properties and bonding strength of cement & Resin Capsul used in roof bolting. Project code - CIL/R&D/1/37/10 Imple. Agency :UMD Deptt, CMPDI | 126.98 |

6.0 LABORATORY SERVICES

6.1 Chemical Laboratory

Characterization study of coal core samples was carried out for 32 blocks explored by CMPDI studies during the year 2011-12. A total 10084 (M) processed and 22482 nos. of samples were analyzed for quality evaluation and their downstream utilization This includes 1090 coal samples received from MCL for determining GCV for a total value of Rs. 38.1 Lakhs. 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 11-12 the laboratory has undertaken. Petrographic study, shape/size study & cleat analysis through SEM on 607 coal samples from 20 exploration blocks. Apart from it 2 coal samples were studied as part of out side consultancy job. Systematic characterization of raw & clean coal samples (washery product) from BCCL, WCL, MCL, has also been carried out during the year. Comprehensive technical

reports on petrography, cleat and mineralization data on coal samples from promotional blocks for XI Plan were prepared for CBM assessment. Under the project "Augmentation of capacity of coal core analysis" two imported equipments were procured for the lab.

6.3 Mining Laboratory

In this financial year Mining laboratory was renovated and lots of efforts have been done to achieve the target. Mining laboratory has procured one Point load test apparatus and one Slake durability test apparatus.

In this period one Universal Testing machine of 2000 KN capacity has been installed in Mining laboratory. It works in both compressive and tensile mode. With the help of this machine we can test all Physico mechanical properties of rock/coal samples and also we can do the tensile test of roof bolt assembly, roof bolts, wire ropes etc. It started working in the month of March, 2012.

For strata control works our target for this year

was for 15 mines/seams, and achievement was of 21 mines/seams.

For subsidence prediction jobs the target was of 3 mines and achievement was of 4 mines. In addition to this, Subsidence calculation works for another 4 mines have been done.

The details of work done against the target is as follows:

6.3.1 Rock Mechanics :

| | Rock Testing | Target | Achievement |
|-----|---|--------|-------------|
| i) | Physico Mechanical Properties testing of rock/coal samples- | 1500m | 1773.87m |
| ii) | Rock samples tested for RMR studies | - | 21 |

6.3.2 Strata Control and Subsidence :

| | Rock Testing | Target | Achievement |
|------|--|--------|-------------|
| i) | RMR and Support layout study- | | |
| ii) | Specific gravity determination of coal seams | 15 | 21 |
| iii) | Cavability study for caving method | | |

6.3.3 Resin and Cement Capsule Testing

| | Rock Testing | Target | Achievement |
|-----|------------------------|--------|-------------|
| i) | Resin capsule testing | 02 | 07 |
| ii) | Cement capsule testing | 04 | 06 |

6.3.4 Subsidence Prediction and Calculation Studies

| | Rock Testing | Target | Achievement |
|-----|------------------------|--------|-------------|
| i) | Subsidence Prediction | 03 | 04 |
| ii) | Subsidence Calculation | - | 04 |

6.4 Coal Preparation Laboratory

1. Washability tests of bore-hole Nos.CMBI-120,121,122,123, Baitarni West block, Talcher Coalfields.
2. Washability tests of bore-hole Nos.CMIP-26,30,33 & 36 Gopalpur camp, RI-VII,
3. Washability tests of bore-hole Nos.CTBK-138,140,141, & 142 Bankui Block.

6.5 Coalbed Methane (CBM) Laboratory

CBM Lab has carried out the field desorption study at the borehole sites in 6 boreholes during 2011-12 and has generated total gas content and gas composition data under PRE funding. The targets both for the year (6 boreholes) and XI plan period (30 boreholes) have been achieved and valuable CBM specific data have been generated which will facilitate resource assessment and commercial development.

CMPDI has created facility for Adsorption Isotherm test and the same has been installed in the CBM lab of CMPDI. The equipment is capable of testing Adsorption capacity of coal samples up to 20MPa pressure (a pressure of about 2000m depth) and is probably first of its kind in India. With installation of this equipment, CBM Lab of CMPDI is fully equipped for generation of complete range of CBM related data. Adsorption Isotherm test for 14 samples of Shale and coal have been carried out in the year 2011-12.

In addition to the above, 1100 mine air samples received from different collieries of CCL, ECL, BCCL have been tested and the results submitted. Sample collection and analysis for ventilation air methane (VAM), CMM etc were also taken up by the CBM lab.

7.0 ENVIRONMENTAL SERVICES

7.1 EIA / EMPs

During the year, Environment Deptt. prepared a total of 31 nos. of Form-1 and formulated 33 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.

During the year 2011-12, 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 eight environmental laboratories located at Asansol,

Nagpur, Bilaspur, Kusmunda, Hasdeo, Jayant, Talcher and Ranchi.

7.3 Accreditation to CMPDI as EIA Consulting Organisation

CMPDI has been conditionally 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, implementation of schemes of environmental laboratories, approved by CMPDI Board, for Regional Institute-IV, Nagpur and Regional Institute-V, Bilaspur have been completed. Schemes of environmental laboratories, approved by CMPDI Board, for Regional Institute-I, Asansol and Regional Institute-VII, Bhubaneswar have been taken up and are in progress. The up gradation of RI-VI laboratory at Jayant has also been taken up and is in progress.

7.5 STP for Block-B Project

Scheme for a Sewage Treatment Plant (STP) & sewer network for Block-B Colony of Northern Coalfields Ltd. to treat 0.8 MLD sewage from Colony has been completed.

7.6 Mine Closure Plan for Coal Mining Projects

A total of 324 nos. of mine closure plans were prepared during the year.

7.7 Assessment of Stability and Safety for Fly Ash Disposal

A report on "Assessment of stability and safety for proposed overburden earth fill barrier and study of existing ash filling System" for NTPC, Talcher, using the abandoned quarry of 7,8,9 of Jagannath mine of Mahanadi Coalfields Ltd. (MCL) was prepared and submitted.

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, 6 nos. slope stability studies and determination of ultimate slope angle of high wall were completed. Besides, 10 nos. of soil erosion control studies of CCL projects were also completed.

7.9 Celebration of World Environment Day

The World Environment Day was celebrated on 5th June, 2011. 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.

A rainwater harvesting scheme was prepared for residential quarters in the CMPDI (HQ) Complex. The foundation stone of the scheme was laid on 5th June, 2011 (World Environment Day).

7.10 S&T Projects

- AS&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 completed in June 2011.

7.11 Technical papers

Following three technical papers were contributed and presented:

- A. K. Debnath, S. Shekhar, Ravi Ranjan; "Mine Closure-World Bank Approach Vis a Vis Indian Context"; published in the workshop on "Planning for mine closure-emerging challenges", organized by Journal of Mines, Metals & Fuels, 27-28 May'2011, Kolkata.
- A. K. Debnath, J.K. Goel, B. Dayal, V. Arora, "Eco Friendly Mining – Coal India's Initiative", 11- 16 September, 2011; 22nd World Mining Congress, Istanbul, Turkey
- S. Shekhar, A. K. Pati, G. Shahid, Monika Agarwal, "Green Mining Practices by CIL"; published in the National Seminar proceedings "Problems & Prospects of Mining, Metals, Power & Energy Sectors", organized by The Indian Institute of Metals, Kolkata Chapter, 16 December, 2011.

8. INFORMATION & COMMUNICATION TECHNOLOGY

Activities / Jobs completed

1. MPLS-VPN Wide Area Network of CMPDI (HQ) with Regional Institutes for video, voice and data communication supporting more than 800 clients across CMPDI. IT capacity was augmented by adding 6 HP Blade Servers with SAN Storage of 5 TB and a backup facility of tape library and more than 800 Desktop PCs, A0 size colour plotters and scanners.
2. Unified Threat Management has been installed at HQ, Ranchi and all Regional Institutes to enhance Network Security and to protect from external and internal threats.
3. Network licenses for MINEX, AutoCAD, Galena and Antivirus are served across the MPLS Network for users using these applications across the entire CMPDI Network to achieve uniformity and integrity of the data.
4. Deployment & Upkeepment of Website of MCL.
5. Payroll using CoalNet software running on MPLS-VPN in HQ, Ranchi and all Regional Institutes.
6. Central Drilling Stores at Barkakana is made online under material information is available to all Regional Institutes and Camps.
7. Drilling Information Management System made operational under drilling meterage data is getting captured from camps.
8. Consultancy services for technical report on Hardware Server Consolidations at BCCL and MCL is completed.
9. The Online Executive Information System (EIS) for all below board level executives, launched in Dec'2010 was further enhanced in 2011 to facilitate online transactions.

Work in progress

The EIS application has been used for the past one year primarily for supporting DPC related requirements within CIL. The application has been simultaneously addressing transaction related issues to address the complexities arising out of changes in policies. The applications

been designed to operate securely on the public Network using an Internet connection. The user authentication mechanism is entirely based on Oracle security.

8.1 INFORMATION MANAGEMENT SYSTEM

1. Funded as Coal India R&D project, e-library has been setup at CMPDI HQ premises which offers single point search engine to Coal India's employees on a variety of technical information pertaining to the Coal mining industry. Set up with an objective to establish web-enabled Information Centre to improve capability in information transfer and access on coal mining, the e-Information Centre at CMPDI has been a step towards facilitating ready access to encapsulated information on Coal Mining.
2. During the year 2011-12, the e-library was made accessible to Coal India Executives on Internet. The e-library is now available through links on the Coal India website and CMPDI website. Old issues of technical journal Minetech are now available on the e-library.
3. CMPDI publishes a premier technical journal 'Minetech' which is now financially supported by CIL for publication and distribution of the journal in all the coal mines of CIL. Two thousand copies of the journal are published quarterly and attracts readership throughout the Indian Coal Mining Industry, premier educational and research Institutions in the country. The journal even has overseas subscription. Soft copies are now available to readers throughout Coal India through e-Library.
4. CMPDI also publishes in-house quarterly journal 'Deshkal Sampada' in Hindi. The journal has been honoured by prestigious award from Hindi Sahitya Sammelan Prayag.
5. CMPDI is also engaged in publication of technical books. CMPDI has published a technical book on CBM in Hindi language titled "कोल बेड मिथेन: एक स्वच्छ ऊर्जा स्रोत" - "Coal Bed Methane: A Clean Energy Source". The book aims at creating general awareness about CBM for common masses in addition to fulfilling academic requirement of graduate and post graduates students of geosciences and environment. It is the first

book in Hindi in the field of CBM/CMM in the country. A booklet on Underground Support Design has also been published in hindi with a view to create general awareness in improving safety in underground mines. The latest techniques used in support design in underground mines has been discussed.

9.0 SPECIALISED SERVICES

9.1 GEOMATICS

CMPDI provides services in the field of remote sensing and survey for land reclamation monitoring, geo-structural mapping, sitting of power stations, washery and environmental baseline data generation for land and vegetation cover, topographical survey and OB measurement, underground mine correlation survey etc.

9.1.1 Remote Sensing

Following jobs are completed/in progress during the year 2011-12:

1. Satellite surveillance for land reclamation monitoring of opencast (OC) projects:

Land reclamation monitoring of total 50 OC projects having >5 million cu.m. production capacity (coal+OB) and 37 OC projects having <5 million cu.m. capacity of different subsidiaries of CIL was completed during the year 2011-12.

2. Land use / vegetation cover mapping of coalfields for creating the Geo-Environmental database on 1:50000 scale based on remote sensing and GIS:

Land use/vegetation cover mapping of 5 coalfields viz. Umrer, Pench-Kanhan, Rajmahal, Raniganj and Sohagpur based on satellite data are completed for creating the Geo-Environmental database of the coalfields for assessing the regional impact of mining on land use/vegetation cover at a regular interval of 3 years.

3. Land use mapping of core and buffer zone of mining projects:

Land use mapping of core and buffer zone of 17 mining projects of different subsidiaries are completed for generating the baseline data for EMP.

4. Outside Consultancy:

- i) Selection of potential sites for thermal

power stations in the coastal area of Karnataka and eastern part of Uttar Pradesh based on remote sensing and GIS are completed during the year for Central Electricity Authority, Ministry of Power.

- (ii) Land use mapping of core and buffer zone of Rohne block, North Karanpura coalfield completed for M/s. JSW.

5. Topographical Mapping:

Topographical mapping of 27 major coalfields on 1:5000 scale with 2 meter contour interval based on remote sensing technique is under progress in collaboration with Survey of India. Aerial photography of 10 coalfields of phase-I is completed and map preparation is under progress. Phase-II aerial photography for balance 17 coalfields is scheduled in the month of April-June 2012.

9.1.2 Survey Work

Major survey work completed by CMPDI during the year 11-12 are as follows :

1. Periodic OBR check measurement of OC mines of CIL subsidiaries (No. of mines including outsourcing patches) – 60.
2. Topographical survey work of mining lease area of Ultratech Cement at Jaitaran, Pali, Rajasthan.
3. Observance of Initial; RL of Hesagora Outsourcing patch, Kuru Area, CCL
4. Observance of Initial; RL of Dhori Outsourcing patch, Dhori Area, CCL.
5. DGPS Survey in Tandsi III & Tandsi III Extn. Coal Block of M/s MESCO Steel.
6. DGPS Survey for establishing Base Station in BCCL Area, ICRIS Project.
7. DGPS Survey for bringing survey reference points to a single origin in NCL under ICRIS Project.
8. DGPS Survey for bringing survey reference points to a single origin in Raniganj CF, ECL under ICRIS Project.
9. DGPS Survey for verification of co-ordinates on Forest Pillars in Talcher, Ib Valley, Basundhara & Garjanbahal Area, MCL.

10. Survey of Civil works at Sonepur Bazari Camp & Pragati camp, ECL
11. Traverse Survey in Nariankuri, Madhabpur & Bansara Searsole, ECL
12. Topographical survey in 5 Sq.Km area of Saktigarh & Pimpalgaon, WCL
13. Surface survey for Vasant Vihar, Apollo Hospital, SECL
14. Dump Survey of NCL mines-7 measurement
15. Measurement of rejects:- Bina OCP (near discharge chute), NCL – 12 measurements
16. Proposed BH location survey in RI-1,III,IV,V,VI & VII are 114 nos, 3 camps, 200 nos, 4 camps, 1 camp and 128 nos respectively.
17. BH coordinate survey by RI-1,III,IV,V,VI & VII are 62 nos, 3 camps, 150 nos, 4 camps, 1 camp and 61 nos respectively.
18. Annual Coal Stock measurement in different Coal Cos.:- as per directive of CIL

Summary of work done by Survey Deptt. of HQ and RIs during 11-12

| | Periodic OBR survey | | OC Patch | | Exploration | Misc. |
|---------------------------|---------------------|---------------|----------------|---------------|--|--|
| | No. of mines | No. of survey | No. of Patches | No. of survey | | |
| HQ - S&D Deptt | 16 | 16 | 2 | 2 | - | <ol style="list-style-type: none"> 1. Topographical survey work of mining lease area of Ultratech Cement at Jaitaran, Pali, Rajasthan. 2. Observance of Initial; RL of Hesagora Outsourcing patch, Kuju Area, CCL 3. Observance of Initial; RL of Dhorl Outsourcing patch, Dhorl Area, CCL. 4. DGPS Survey in Tandsi III & Tandsi III Extn. Coal Block of M/s MESCO Steel. 5. DGPS Survey for establishing Base Station in BCCL Area, ICRIS Project. 6. DGPS Survey for bringing survey reference points to a single origin in NCL under ICRIS Project. 7. DGPS Survey for bringing survey reference points to a single origin in Raniganj CF, ECL under ICRIS Project. 8. DGPS Survey for verification of co-ordinates on Forest Pillars in Talcher, Ib Valley, Basundhara & Garjanbahal Area, MCL. |
| R.I-I | 3 | 3 | 21 | 21 | BH coordinate survey (62 nos.) Proposed BH location: 114 nos. | <ol style="list-style-type: none"> 1. Survey of Civil works at Sonepur Bazari Camp & Pragati camp 2. Traverse Survey in Nariankuri, Madhabpur & Bansara Searsole |
| R.I-III | - | - | 10 | 19 | Borehole survey in 3 camps | - |

| | | | | | | |
|----------------|----|----|----|----|--|---|
| R.I-IV | 11 | 11 | - | - | Co-ordinate survey - 150 nos. BH BH location-200 nos. | 1. Topographical survey in 5 Sq.Km area of Saktigarh & Pimpalgaon. |
| R.I-V | 5 | 5 | 14 | 14 | Borehole survey in 4 camps | 1. Surface survey for Vasant Vihar, Apollo Hospital |
| R.I-VI | 8 | 65 | - | - | Borehole survey in 1 camp | 1. Dump Survey of NCL mines-7 meas. 2. Measurement of rejects of Bina OCP (near Discharge Chute), NCL- 12 nos. |
| R.I-VII | 6 | 6 | 5 | 8 | BH coordinate survey (61 nos.) Proposed BH location: 128 nos. | |

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, cast blasting, induced caving by blasting, blasting in hot strata, structural demolition etc. Additionally, four R&D projects in the area of blasting, funded by CIL, are also under implementation.

CMPDI is equipped with the state-of-art equipment viz. High Speed Camera, Data Trap-II for in-the hole VOD measurement & fragmentation assessment, High frequency Oscilloscope and softwares viz. WipFrag, Wipjoint, JK Simblast, MIDAS, GeoMos & AMIRA, Blastware, Liscad and BIMS.

Technical services rendered to different subsidiaries of Coal India Limited & outside agencies during 2011-12

1. Controlled Blasting & vibration study – 5 mines of BCCL, CCL, MCL and M/s Usha Martin Pvt. Ltd.
2. Optimization of blast parameters and improvement of Powder factor study – 10 mines of BCCL, CCL, NCL and MCL.
3. Random Sampling and Testing of explosives and accessories – In mines of CCL, BCCL,

NEC and Neyveli Lignite Corporation.

4. Introduction of SME explosives – 1 mine of MCL.
5. Performance evaluation of New explosive product – 5 products of M/s AKS Expo-Chem Pvt. Ltd., M/s Keltech Energies Ltd., M/s Economic Explosives Pvt. Ltd., M/s Premier Explosives Ltd. and M/s Asian Fuses Pvt. Ltd.
6. Digital Image Analysis- 5 mines of NCL.

R&D Projects under implementation during 2011-12

- 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

CMPDI renders services in preparing Feasibility Reports, Detailed Design Reports and Tender Documents for establishing communication network 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. R&D/S&T Projects were also undertaken. The following jobs were completed during the year.

9.3.1 Preparation of Reports/Schemes/NIT

- 1 NIT for Environmental Telemonitoring System of Muslia Colliery, ECL has been submitted.
- 2 CIL S&T Project on "Indigenous development of PLC-based integrated control & monitoring system for conveyors and other equipment of underground mine" at Churi U/G Mine, CCL has been completed.
- 3 MoC approved S&T Project on "Integrated communication system to communicate and locate trapped underground miners-Phase-I and Phase-II" is installed and under continuous field trial at Bhurkunda Colliery, CCL.
- 4 CIL R&D Project on - "Underground Trapped Miner Location System"- Fabrication of Prototype MCD and application software integration has been Completed. DGMS permission for field trial at Jhanjhra Mine, ECL is in progress.
- 5 Chapters on Electronics & Telecommunication for 26 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 – 178 Nos.
- 2) Repairing & Calibration of Methanometers – 83 Nos.

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 R&D / 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.

9.5 Management System Consultancy

CMPDI had diversified into management system consultancy in 1998. Over the years, it has substantially expanded its capabilities in this field. It now offers the whole gamut of management system consultancy services that cover 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 all 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.

All such consultancies include;

1. Creation and documentation of management-systems;
2. Providing training and auditing support;
3. Initial implementation and certification support; and
4. Post certification support/assessments etc.

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 306 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 Rs. 1.13 crores were completed during the year. This resulted into a total 101 management-system certifications – 45 of ISO 9001 (including 27 re-certifications and up-gradations), 50 of ISO 14001 (including 28 re-certifications), and 6 of OHSAS 18001 certification.

Under this consultancy, CMPDI also started the consultancy for ISO 50001 Energy Management Systems during the year. Documentation and issue of a company-level integrated management system (IMS) for NCL conforming to ISO 27001 and ISO 50001, and integrating it to company's existing ISO 9001, ISO 14001, OHSAS 18001, and SA 8000 system was a remarkable attempt, first time in the country.

Also, integrated certification audits for ISO 9001 and ISO 14001 for a total of 21 coalmines of MCL (14 opencast and 7 underground) during this year was the first such an extensive certification program of such large number of coalmines that was conducted under this consultancy work of CMPDI.

9.5.3 *Work in Progress*

Presently, CMPDI is providing Management System Consultancy worth about Rs. 15 crores. This is for 125 new certifications against ISO 9001, ISO 14001, OHSAS 18001, ISO 27001, ISO 50001 and SA8000 in various CIL establishments. Work for another such 103 certifications is also under consideration. All this includes all major opencast coalmining projects, major underground projects, various hospitals and HEMM workshops, and also some company-level certifications.

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 Rs. 153.00 lakh have been disposed off against Annual Target of Rs.150.00 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 31.03.2012 was valued to Rs. 648.00 lakh, mainly comprising of drill rod, casings, drill bit, core barrel, Tungsten Carbide (TC) bit etc. The inventory also consists of accessories and consumables for 2 Nos. Hydrostatic Drills added in the fleet during 2011-12. 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 for Coal Preparation was expanded to include additional tests at CMPDI, HQ. 17 new instruments were added in the lab during 2011-12 which has enhanced the capability of CP Lab. 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 2011-12 supply order was placed for 11 Nos. of mechanical drills against surveyed off of existing drills and 2 Nos. of Hydrostatic Drills. Out of this 5 Nos. of mechanical drills and 2 Nos. of Hydrostatic drills were received during the last financial year and have been deployed at different Regional Institutes. Remaining 6 Nos. of mechanical drills will be received during 2012-13 as per the delivery scheduled.

10.6 e-Procurement System:

Road Map for complete switchover to e-Procurement was placed before CMPDI Board of Directors. As informed to the Board, CMPDI has switched over to e-procurement system and approximately 90% tenders are being finalized through e-tendering.

11.0 HUMAN RESOURCE DEVELOPMENT

During the year 2011-12, exposures were given to CMPDI employees in the following major areas:

| Major Area | STC | IICM | External | Foreign | Total |
|--------------------------|-------------|------------|------------|-----------|-------------|
| Managerial | 97 | 53 | 3 | - | 153 |
| Technical/ Functional | 572 | 166 | 89 | 20 | 847 |
| Cross Functional | 495 | 129 | 69 | - | 693 |
| Total | 1164 | 348 | 161 | 20 | 1693 |

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

Foreign training

During the year 2011-12, total 20 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 161 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:

- Building a vibrant stake holder Environment through Effective Resettlement and Rehabilitation
- 30th Annual National conference of NIPM
- 3rd Special Short Course on High Resolution Image Analysis for Natural Hazards Assessment
- Accreditation scheme for EIA consultant organization
- Advances in Mine Surveying Technology
- APP Technology Transfer
- Application of numerical modeling for Tunnels, Caverns and Slopes
- Asian Mining Congress
- ASSOCHAM Post Budget Seminar
- Awareness programme on direct taxes code
- Business Dynamics in the Changing Economic Milieu
- Business Quiz for Corporates:UDAAN 2011
- Challenges in Mining Industry Focus Analysis and Solution for Environment Management for Sustainable Development
- Coal Preparation-Principles and Plant Practices
- Corporate Governance
- Digital Photogrammetry and Remote Sensing
- Effective Qualitative and Preventive Maintenance of Building / Roads and Repairs.
- Environmental issues in mining sector-Legal and statutory requirement
- Excellence in execution of CSR Projects-Capacity Building Programme on CSR in PSEs'

- Executive Development Programme on transportation and handling of bulk material in mines ports and plants
- Forum of Women in Public sector
- Gemcom Minex Coal Washability Module
- Geospatial Forum 2012
- Green Biz Quiz Contest
- Ground Water Regulation & Control
- Ground Water Resource Estimation
- HR Interventions for Business Success
- Improving soft skills of PS / PA's office staff
- Inspirational Leadership
- Integrating Geo-Engineering Workflows for Hydro Carbon Reservoirs
- Interactive Session with British outward Mining Mission to India on Underground Coal Mining System
- International Conference on Coal Washing
- International Seminar - Achieving Sustainable Corporate Growth : exploring new frontiers in Technology and Management
- Laboratory Management Practice (Quality Awareness & Laboratory Audit)
- Limit State Methods for Design of Steel Structures based on IS : 800-2007, code of practice for general construction in steel (Third revision)
- Management of Training Course
- Mathematical Modeling for Ground Water
- National Conference of Engineering Council
- National Conference on Emerging Trend in Accounting Profession
- National Seminar on Problems and Prospects of Mining, Metals, Power & Energy Sector
- National Seminar on Enhancing Production and Productivity in Coal Power and Allied Sector.
- National Seminar : Energy Security for the future Challenges Ahead (ESF2011)
- National Symposium on Satellite Remote Sensing in Delineation and Development of CBM
- Paper Session by MGMI
- Participation in National Management Games
- Presentation of Paper in the International Conference
- Programme on Fragmentation & Excavation in Mine & Quarries
- Programme on Inspirational Leadership
- Quest for Excellence : Imperatives for Indian PSUs
- Regional Conclave
- Rock Mechanics for Practicing Engineers
- Satellite Remote Sensing in Delineation and Development of CBM
- Sector for Sustainable Development Challenges and opportunities for Indian Corporate Sector
- Security and Vigilance Programmes and Prospectives
- Seminar on Corporate Governance in Central and Public Sector Undertakings
- Short term course on Rock Mechanics and ground control
- Six Sigma Yellow Belt Training
- Stress Management
- Sustainable Development
- Training and Workshop on CDM
- Training Program on Concrete Roads including Pavements Design, Construction and Testing
- Value in Administration
- Workshop cum seminar on 'We live for our hearts'
- Workshop on Disposal of appeal under RTI
- Workshop on IVP6
- Workshop on Planning for Mine Closure : Emerging Challenges
- Workshop on Sustainable Development

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, 348 numbers of executives have been trained in 2011-12.

Some of the topics are listed below :

- Advance Management Programme
- CDM & Climate Change
- Communication and Presentation Skill
- Computer Basics for Senior Executives
- Contract Management
- Corporate social responsibility
- Decision Making for Leaders
- Enterprise Resource Planning
- Finance for Non Finance Executives
- Functional Cum Managerial Awareness Programme (Finance, HR, Geology, Mining, Finance & Accounts)
- Functional skill Programme for E&M Engineers
- Functional skill Programme for Mining & Safety
- Functional skill Programme for Systems (Linux & Networking)
- Functional skill Programme for Systems (AutoCAD)
- Functional skill Programme for Finance Executives
- General Management Programme
- GIS / GPS application in Coal Mining
- Goods & service tax & direct tax code
- Governance and Corporate ethics
- Induction Programme for MTs'
- Internal Audit
- Land and Revenue
- Leadership Development Programme
- Maintenance Management
- Managerial Awareness Programme
- Preparatory Programme for Retiring Executives

- Programme on Discipline & Disciplinary Procedure
- Project Management for Coal Companies
- Right to Information Act-2005
- Self Management of Excessive Tension
- Seminar on Environment Management
- SP : Vigilance Awareness
- Strategic Management Programme
- Technology Awareness Programme
- Tendering Procedure & Contract Management
- Training for Trainers
- Training programme on Internal Audit
- Workshop on Environmental Management Plans
- Workshop on International Financial Reporting System
- Young Managers Development Programme

Training at Staff Training College

Training of non executives and CMPDI specific training of executives are being organized at STC. A total of 1164 executives and non executives have attended training, workshop etc at STC during 2011-12.

Apart from the regular Training Programmes, such as: MAP (Sales & Marketing), TAP(Geophysics), Orientation / Induction Training Programme (Geology, Mining, HR), FMAP (CP, Env., Geology, Geophysics), special technical program on "Minex Software" was also organized for the MTs at STC, CMPDI as per the need of the company.

Major areas of Training / Workshop were the following :

- Application of Geospatial in Coal India
- AUTOCAD 2010
- AutoCAD Civil 3D Survey Module
- Awareness of ISO 27000
- Computer Application In Office Work
- Corporate Social Responsibility
- Functional Cum Managerial Awareness Programme for MTs

- Hindi Software
- Hydraulic System for Drill Repair and Maintenance of Drills
- Importance of Strata Control
- Induction Programme for newly appointed MTs
- Internal Auditing Skills in Integrated Management System
- ISO 9001 / 14001 Internal Auditor Course
- Managerial Awareness Programme
- Mandatory Publication of Tender Enquiries on CPP (Central Public Procurement Portal)
- Minex Software
- Orientation Course for MT(Geo / Min.)
- Rajbhasha Karyashala
- SA 8000 Management System
- Systematic Application of Drilling and use of Drilling Equipments
- Technology Awareness Programme
- Tendering procedures based on CMM, Civil Engineering-Purchase-Finance manual, outsourcing, e-tendering.
- Training for Opencast Mine Planning and Design
- Training for promotion from Non-Executive to Executive
- Training for Underground Mine Planning and Design
- Training on Awareness on Coal Bed Methane
- Training on VB.net for ICRIS
- Training Programme on HIV / AIDS
- Validation Workshop by Right Management

Training at CMPDI for students of different Institutions

As a Corporate Social Responsibility, training of the students of various institutions is being organized by CMPDI at its different divisions. Total 147 numbers of students have been trained at CMPDI in 2011-12. The students undergo these Trainings / Project works for duration of 7 days to 2 months. After completion of training / Project, certificates for successful completion of Training / Project are issued.

The institutions which approached for training are :

1. Indian Institute of Technology, Kharagpur.
2. Indian Institute of Technology, Bombay.
3. Indian School of Mines, Dhanbad
4. Birla Institute of Technology, Ranchi
5. NIT, Raipur
6. NIT, Patna
7. Calcutta University, Calcutta
8. University of Petroleum and Energy Study, Dehradun
9. Satyabhama University, Chennai.
10. Ranchi University, Ranchi
11. SRM University, Chennai.
12. Dr MGR University, Chennai.
13. IISWBM, Kolkata.
14. KIT, BBSR.
15. Ranchi Women's College, Ranchi.
16. St. Xaviers College, Ranchi
17. Institute of Technology, Varanasi.
18. SMIT, Sikkim.
19. CIT, Bangalore.
20. AN College, Patna

12.0 OUTSIDE CIL CONSULTANCY

During the period April, 2011 to March, 2012, Consultancy services were provided to 30 organisations for 34 jobs. Some of the important clients/organizations to whom services were provided are Naini Coal Co. Ltd., Goa Industrial Development Corporation, OPGCL, NALCO, SAIL-ISP, NTPC, CMDC Ltd., MMTC, SCCL, MECL, JSPL, Usha Martin, Baitarni West Coal. Co. Ltd., Mesco Steel, Ultratech Cement, etc.

Presently, 31 outside consultancy jobs are in hand for 16 organisations like Hindustan Copper Limited, MOIL, NTPC, Bihar Sponge Iron Ltd., NALCO, Central Electricity Authority, Neyveli Lignite Corporation Limited, OMC, Mahaguj collieries Limited, Baitarni West Coal. Co. Ltd., Lanco Infratech Limited, Director General of Hydrocarbons, PSEB, MECL etc.

During the year 2011-12, 41 jobs worth Rs. 33 crores and 26 lakhs from 28 organizations were procured by CMPDI.

13.0 MANPOWER AND WELFARE ACTIVITIES

STATUS OF MANPOWER :

| Particulars | As on 31 st March 2011 | As on 31 st March 2012 |
|--------------------|---|---|
| Executive | 811 | 855 |
| Non-Executive: | | |
| Monthly Rated | 1361 | 1312 |
| Daily Rated | 930 | 962 |
| Grand Total | 3102 | 3129 |

Reservation for SC / ST / OBC (NCL)

As per Govt. Directives, following is the % age of reservation for SC / ST / OBC (NCL) in promotion / recruitment in CMPDIL :

| Outside Recritment | | | Promotion | |
|--------------------|------|-----------|-----------|------|
| SC | ST | OBC (NCL) | SC | ST |
| 15% | 7.5% | 27% | 15% | 7.5% |

WELFARE ACTIVITIES:

- CMPDI has 2518 nos. of quarters at its Headquarters and Regional Institutes with housing satisfaction of 100%.
- Adequate supply of drinking water has been made available to the employees of CMPDI.
- 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.
- All the employees of CMPDIL are getting their salary through Bank.
- Gratuity is being given to the employees on the day of their superannuation.
- CMPDI provides financial assistance/ grant of Rs. 1.00 lakh to DAV Public School, Gandhi Nagar, Ranchi.
- The dependents of employees who represented District/ State/ Nation in the field of Sports were awarded prize amounting to Rs. 10,000/- (Rupees ten thousand).
- Cash Award amounting to Rs. 86,000/- (Rupees eighty six thousand) 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 2009.

- Reimbursement of tuition fees & hostel charges amounting to Rs. 6,53,968/- (Rupees six lakh fifty three thousand nine hundred sixty eighty) only as per the schemes were made to employee's wards.
- A Grant of Rs. 70,000/- (Rupees Seventy thousand) only was given to Gondwana Club and Recreation Club both.
- A Grant of Rs. 20,000/- (Rupees twenty thousand) only was given to Kasturi Mahila Sabha for celebrating Sawan Utsav.
- A Grant of Rs. 8,000/- (Rupees eight thousand) only was given for celebrating Ambedkar Jayanti.
- A Coaching Camp for Lawn Tennis, Badminton, Table Tennis & Cricket along with physical fitness for the ward of the employees were organized at CMPDI for 15 days.
- A Multi Gymnasium has been established at CMPDI (HQ) for the use of its employees and their wards.
- 15 Nos. of employees have been imparted training on HIV/AIDS for Master Trainer, 08 Nos. of employees have been imparted training on HIV/AIDS for Peer Educator & 09 Nos. of employees have been imparted training on Awareness on HIV/AIDS.

CSR ACTIVITIES:

- One R.O. System has been provided to Maheshwari Balika Uchch Vidyalaya, Ashok Nagar, Ranchi.
- 68 Nos of School Dresses have been distributed among the girl students of Birsa High School, Hathiagonda, Kanke Road, Ranchi.
- 2 sets of cricket kit, 2 valley ball with net and 2 football with net have been provided to Rajkiya Madhya Vidyalaya, Ashok Nagar, Ranchi.
- 06 Nos. of Sewing Machine were handed over to Jan Kalyan Samiti, Misirgonda village & Mahila Samiti, Chandwe Village.

5. General Medical Camp was organised at Tikli Tola, Kanke Road, Ranchi, in which 83 villagers were clinically checked and given free medicine.
6. General Medical Camp was organised at Birsa High School, Hathiagonda, Kanke Road, Ranchi in which 179 students were clinically checked and given free medicine.
7. A medical check-up camp was organised in collaboration with SPARSH, a NGO, Asansol on 25.06.2011 for the boarders of Prantik, an Old Age Home at Dhakeshwari, Distt.- Burdwan, West Bengal. Medicines prescribed were supplied to the patient free of cost by RI- I. Cost of the pathological charges was also borne by RI- I.
8. An Awareness Programme on HIV/ AIDS was organised by RI- I CSR Committee on 28.06.2011 at 12 noon in the Community Hall CMPDI RI- I, Asansol. About a total no. of 150 participants attended the programme which includes the people from surrounding area, the working contractors and their workers, the drivers of hired vehicles and a few employees of RI- I, Asansol.
9. An Awareness Programme on HIV/ AIDS was organised by RI- I CSR Committee on 28.06.2011 at 4.00 PM in the Office Hall of Pragati Exploration Camp, CMPDI, RI- I, Asansol. About a total no. of 45 participants attended the programme which includes the people from surrounding area, the working contractors and their workers, the drivers of hired vehicles and some employees of Pragati Camp.
10. 250 students of Birsa High School, Hathiagonda have been provided study materials.
11. 50 Nos. of fruit bearing saplings provided by Environment Deptt., have been distributed among the students of Birsa High School, Hathiagonda, Kanke Road, Ranchi.
12. Rs. 9,900/- vide cheque No. 374494 dt. 19.07.2011 was granted to Gondwana Primary School, Kanke Road, Ranchi towards fee of the meritorious & poor students below poverty line for the year 2011-12.
13. For celebrating 15th August, 2011 an amount of Rs.6,000/- vide cheque no. 375535 dated 25.07.2011 has been granted to Gondwana Primary School, Kanke Road, Ranchi for distribution of sweets among the students of the school.
14. For celebrating 15th August, 2011 an amount of Rs.10,000/- vide cheque no. 375533 dated 26.07.2011 has been granted to Birsa High School, Hathiagonda, Kanke Road, Ranchi for distribution of sweets among the students of the schools.
15. For distribution of prizes among the students who performed well in the annual examination, an amount of Rs.5,000/- vide cheque no. 375534 dated 26.07.2011 has been granted to Birsa High School, Hathiagonda, Kanke Road, Ranchi on the occasion of 15th August, 2011.
16. General Medical Check-up Camp was organised at Patragonda, Kanke Road, Ranchi in association with Lions East, Ranchi, in which 111 villagers were clinically checked and given free medicine.
17. A Community Mandap constructed in the year 2010-11, a borewell and 04 numbers of Solar Light procured in the year 2010-11 have been handed over to the villager of Patragonda, Kanke Road, Ranchi.
18. An amount of Rs. 8,088/- vide cheque no. 375740 dated 12.08.2011 has been given to Shri Jagbandhu Sahoo, a poor labour, for his son, who is studying in DAV Gandhinagar, Kanke Road, Ranchi towards school dress, books & copies and fee for four months i.e from April, 2011 to July, 2011.
19. A medical check-up camp was organised in collaboration with SPARSH, a NGO, Asansol on 20.08.2011 for the boarders of Prantik, an Old Age Home at Dhakeshwari, Distt.- Burdwan, West Bengal. Medicines prescribed by Dr. were supplied to the poor patient free of cost by RI- I.
20. The Zakir Hussain Free Primary School at Kumarpur, Asansol was provided with 10 sets of wooden Low Benches & High Benches. The students of this school are from minority communities and are very poor.
21. The Sadhya Devi Free Primary School, Kalikapur, Asansol was provided with

- 10 sets of wooden Low Benches & High Benches. Most of the students of this school are from ST/SC communities and are very poor.
22. The Gopalpur Free Primary School, Asansol was provided with 10 sets of wooden Low Benches & High Benches. Most of the students of this school are from ST/SC communities and are very poor. Shri A.K. Palit, GM (C)/ Chairman, RI- I CSR Committee and other members of RI- I CSR Committee were present.
 23. 2 sets of uniform/ school dress was provided to each of the 42 students of Asansol Braille Academy. Most of the students of this school are from ST/SC communities and are very poor.
 24. A Cheque amounting to Rs. 2,400/- was handed over to the Principal, Birsa High School, Hathiagonda, Kanke Road, Ranchi towards fees of two disabled students for the year 2011-12.
 25. 04 Nos. Badminton Racket, 04 Nos. Football, 08 Box Shuttle Corck, 08 Box Tennis Ball and 02 Sets (12 each) Jerzy & Half Paint for Football Team have been handed over to the Principal of Birsa High School, Hathiagonda, Kanke Road, Ranchi.
 26. General Medical-cum- Eye Check-up Camp was organised at Gondwana Primary School, Kanke Road, Ranchi in association with Central Coalfields Ltd., Ranchi, in which 210 children were clinically checked and given free medicine.
 27. General Medical-cum-Eye Check-up Camp was organised at Birsa High School, Hathiagonda, Kanke Road, Ranchi in association with Lions Club, Ranchi, in which 201 students were clinically checked and were given free medicine.
 28. General Medical-cum-Eye Check-up-cum-Blood Test Camp was organised at Lower Misirgonda, Kanke Road, Ranchi in association with Lions Club, Ranchi East, in which 128 villagers were clinically checked and were given free medicine.
 29. World's AIDS Day was celebrated.
 30. 300 villagers of Hathiagonda & Patragonda Village, Kanke Road, Ranchi were distributed blanket.
 31. 160 villagers of Lower Misirgonda Village, Kanke Road, Ranchi were distributed blanket.
 32. For celebrating 26th Jan., 2012 an amount of Rs.10,000/- was granted to Birsa High School, Hathiagonda, Kanke Road, Ranchi for distribution of sweets among the students of the schools.
 33. For sports item Rs. 15,000/- was given to Birsa High School, Hathiagonda, Kanke Road, Ranchi
 34. For celebrating 26th Jan., 2012 an amount of Rs.6,000/- was granted to Gondwana Primary School, Kanke Road, Ranchi for distribution of sweets among the students of the school.
 35. 305 students of Birsa Primary School, Hathiagonda, Kanke Road, Ranchi were given sweater.
 36. Two hand pumps were provided for Barwatola and Turukasmar Village of Basantpur Panchayat, Near Hazaribagh Camp, RI- III, Ranchi.
 37. 175 School Bag, 175 Sweater (full), 17 water bottle (Milton), 175 Box (2 pencil, 1 rubber, 1 cutter and 1 pen), 175 set (6 copies in 1 set) were distributed to the 175 students of Nav Prathmik Vidyalaya, New Miner, Topa, Near Orla Camp, RI- III, Ranchi.
 38. Construction of common toilet at Deorikhurd village (Bilaspur).
 39. Construction of two Nos. of shed at Khamtarai village, Bilaspur.
 40. Construction of two Nos. of deep borewell at Deorikhurd village & Khamtarai village, Bilaspur.
 41. General Medical-cum-Eye Check-up Camp was organised at Bukru Village, Kanke Road, Ranchi in association with Lions Club, Ranchi East, in which 250 villagers were clinically checked and were given free medicine. In this Camp old cloths were also distributed amongst the villagers.
 42. General Medical-cum-Eye Check-up Camp was organised at Hathiagonda & Patragonda Village, Kanke Road, Ranchi

- in association with Lions Club, Ranchi East, in which 153 villagers were clinically checked and were given free medicine.
43. 25 Nos. of Ceiling Fan & 01 Laser Printer have been handed over to the Principal of Birsa High School, Hathiagonda, Kanke Road, Ranchi.
 44. 15 Desk-Bench, 10 Ceiling Fan, 01 Steel Almirah and 01 Computer Set have been handed over to the Principal of Global Public School, Kokar, Ranchi.
 45. 02 Nos. of Sewing Machine, 01 Embroidery Machine, 01 Cup Board and 01 Computer have been handed over to the Kartabya, Hatia, Ranchi.
 46. 90 Mtrs. Navy Blue Cloth, 90 Mtr. White Cloth, 90 Mtr. Cloth for Chunni, 25 Mosquito Net, 01 Pressure Cooker (10 Ltr. Capacity), 01 MP3 Player with Speaker, 12 Nos. of Plastic Chair, 04 Steel Almirah, 04 Ceiling Fan and 12 Nos. of Carpet have been handed over to the Braj Kishore Netraheen Balika Vidyalaya, Bariatu, Ranchi.
 47. General Medical Check-up Camp was organised at Chiraundi Village, Ranchi in association with Lions Club, Ranchi East, in which 217 villagers were clinically checked and were given free medicine.
 48. 08 Contractual security personnel have been imparted training on Awareness on HIV/AIDS.



Medical camp at Bukhru on 15.02.2012 under CSR Activity



Community Mandap was built at Patragonda village under CSR Activity



Distribution of Blanket at Hathiagonda on 4.01.2012 under CSR Activity



Distribution of Blanket at Hathiagonda on 4.01.2012 under CSR Activity

SPORTS ACTIVITIES:

1. CMPDI conducted sports tournament like- Inter Regional Institute Carrom, Chess, Bridge, Table Tennis, Volley Ball, Badminton Tournament and Inter Regional Institute Athletic Meet.
2. CMPDI conducted 24th Coal India Inter Company Badminton Tournament successfully at CMPDI (HQ), Ranchi.

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.

A grand "Akhil Bhartiya Hasya Kavi Sammelan" was organised successfully on 15th September 2011 to propagate Hindi and was praised by the audience.

In the month of September, 2011, "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 a cash prize of Rs.1500/- to 1000/- and books of equal amount by Hon'ble Member, Hindi Advisory Committee of Ministry

of Coal Md. Sahid Ali who was invited on this occasion. 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.

A book named “सीबीएम : एक स्वच्छ ऊर्जा स्रोत” written originally in Hindi jointly by Sri Ashok Kumar Singh, Sri Baidyanath Prasad and Sri Anand Vardhan Sahay was also released by the chief guest of this occasion Sri C.P. Singh, Hon'ble speaker of Jharkhand Vidhan Sabha.

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 the Ministry of Home Affairs, Department of Official Language, and 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. Apart from this, four committees were also constituted to review the progress of Official Language Hindi

in different departments of HQ and Regional Institutes. They used to suggest them how to improve the use of Official Language Hindi in day-to-day Official work and Present their reports in the meeting of Head Quarter Official Language Implementation Committee.

15.0 DIRECTOR'S RESPONSIBILITY STATEMENT:

- 15.1** In the preparation of the annual accounts, the applicable accounting standards had been followed along with proper explanation relating to material departures.
- 15.2** 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.
- 15.3** 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.
- 15.4** The directors had prepared the annual accounts on a going concern basis.
- 16.0** Details of Audited Financial & Non-Financial Parameters of Memorandum of Understanding of CMPDIL for the Year 2011-12. along with the report auditor is appended here with :

TODI TULSYAN & CO.

CHARTERED ACCOUNTANTS

602, Luv Kush Tower
Exhibition Road
Patna – 800001
Ph: 0612 – 2320211
Email: tto@sify.com

REPORT OF AUDITOR

To,
Central Mine Planning & Design Institute Ltd.
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 2011-2012 issued by Ministry of Heavy Industries and Public Enterprises.
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.
3. Impact of increase in salary and wages on account of NCWA IX for the period 01.07.2011 to 31.03.2012.

| | Particulars | Amount (Rs. in crores) |
|----|--|-----------------------------------|
| a. | Impact of NCWA IX on salary and wages other than actuarial liabilities | 18.53 |
| b. | Impact of NCWA IX on Actuarial Liabilities as on 31.3.2012 | 16.22 |
| c. | Total Impact (a+b) | 34.75 |

4. Financial Ratios based on old Schedule VI format with considering the impact of NCWA IX and without considering the impact of NCWA IX separately is attached herewith.

For TODI TULSYAN & CO.
CHARTERED ACCOUNTANTS
FRN: 002180 C

Sd/-
(Sushil Kumar Tulsyan)
Partner
M.No. 075899

Place: Ranchi
Date: 26.05.2012

MEMORANDUM OF UNDERSTANDING - 2011 - 12

ANNEXURE III

SUBSIDIARY: Central Mine Planning & Design Institute Ltd.

| Evaluation Criteria | | Unit | Weight (in %) | MoU Target | | | | | Performance | | | |
|---------------------|--|----------------------|------------------|------------|-----------|-------|-------|-------|-------------|------------------|---------------------|-------|
| | | | | Excellent | Very Good | Good | Fair | Poor | Actual | Score | Actual | Score |
| | | | | | | | | | | With NCWA IMPACT | Without NCWA IMPACT | |
| | | | | 1 | 2 | 3 | 4 | 5 | | (Audited) | (Unaudited) | |
| 1 | | | | | | | | | | | | |
| | Static / Financial Parameters | | | | | | | | | | | |
| (a) | Financial Indicators - Profit related ratios | | | | | | | | | | | |
| | (i) Gross Margin / Gross Block | % | 2 | 12.83 | 12.57 | 11.94 | 11.35 | 10.78 | 19.94 | 0.02 | 20.38 | 0.02 |
| | (ii) Net Profit / Net Worth | % | 10 | 14.48 | 14.19 | 13.48 | 12.81 | 12.17 | 20.01 | 0.10 | 20.57 | 0.10 |
| | (iii) Gross Profit / Capital Employed | % | 10 | 72.32 | 70.87 | 67.33 | 63.96 | 60.77 | 107.99 | 0.10 | 107.78 | 0.10 |
| (b) | Financial Indicators -Size related | | | | | | | | | | | |
| | (i) Gross Margin | Rs. Cr | 8 | 26 | 25 | 24 | 23 | 22 | 36.48 | 0.08 | 37.29 | 0.08 |
| | (ii) Gross Sales (Excl. Service tax) | Rs. Cr | 4 | 477 | 468 | 444 | 422 | 401 | 524.03 | 0.04 | 490.09 | 0.04 |
| (c) | Financial Returns- Productivity related | | | | | | | | | | | |
| | (i) PBDIT / Total Employment | Rs. Crs/ Employee | 7 | 0.008 | 0.008 | 0.008 | 0.007 | 0.007 | 0.012 | 0.07 | 0.012 | 0.07 |
| | (ii) Added Value / Gross Sales | % | 9 | 4.790 | 4.694 | 4.459 | 4.237 | 4.025 | 6.430 | 0.09 | 7.030 | 0.09 |
| | Sub Total | | 50 | | | | | | | 0.50 | | 0.50 |

MEMORANDUM OF UNDERSTANDING - 2011 - 12

SUBSIDIARY : Central Mine Planning & Design Institute Ltd.

ANNEXURE III

| Evaluation Criteria | | Unit | Weight (in %) | MoU Target | | | | | Performance | | | | |
|---------------------|--|-------------------|------------------|------------|-----------|---------|---------|---------|---|-------|---|-------|------|
| | | | | Excellent | Very Good | Good | Fair | Poor | Actual | Score | Actual | Score | |
| | | | | | | | | | | | | | |
| 2 | Dynamic Parameters | | | | | | | | | | | | |
| (a) | Human Resource Development | | 5 | | | | | | | | | | 0.05 |
| | (i) Executives to be trained (Total executives on roll on 1st Apr, 2010 - 824) | (%) | 1 | 22.00 | 21.56 | 20.48 | 19.46 | 18.49 | 52.30 | 0.01 | 52.30 | 0.01 | 0.01 |
| | (ii) Certified training in Project Management | No. of Executives | 1 | 3 | 2 | 1 | | | 17 | 0.01 | 17 | 0.01 | 0.01 |
| | (iii) Certified training in Contract Management | No. of Executives | 1 | 3 | 2 | 1 | | | 10 | 0.01 | 10 | 0.01 | 0.01 |
| | (iv) Training in Advanced Mine Planning softwares (Geologists and Planners) | No. of Executives | 1 | 10 | 9 | 8 | 7 | 6 | 33 | 0.01 | 33 | 0.01 | 0.01 |
| | (v) Representation of minority in Recruitment Committees | (%) | 1 | 100 | 90 | 80 | 70 | 60 | 100 | 0.01 | 100 | 0.01 | 0.01 |
| (b) | R & D / New initiatives | | 5 | | | | | | | 0.05 | | | 0.05 |
| | (i) Recasting of R&D Policy and Action Plan in line with guidelines issued by DPE | | 2 | Dec.'11 | Jan.'12 | Feb.'12 | Mar.'12 | Apr.'12 | Revised guideline document submitted to chairman, CIL on 12.2011. | 0.02 | Revised Guideline document submitted to Chairman, CIL on 6.12.2011. | 0.02 | |
| | (ii) Identification and formulation of R&D projects related to (i) Improvement in production (ii) productivity and safety in coal mines (iii) coal beneficiation and utilisation (iv) Protection of environment & ecology and (v) coal exploration | No. | 2 | 5 | 4 | 3 | 2 | 1 | 6 | 0.02 | 6 | 0.02 | |
| | (iii) R&D projects to be completed | No. | 1 | 5 | 4 | 3 | 2 | 1 | 5 | 0.01 | 5 | 0.01 | |
| (c) | Corporate Social Responsibility | | 5 | | | | | | | 0.05 | | | 0.05 |
| | (i) Nos. of students supported for support activities like study materials, school dresses, sports materials, financial assistance, infrastructural development, etc. | No. | 3 | 900 | 882 | 838 | 796 | 756 | >1000 | 0.03 | >1000 | 0.03 | 0.03 |
| | (ii) Medical check-up camps in surrounding villages & number of beneficiaries - 200 | No. | 2 | 4 | 3 | 2 | 1 | | 5 | 0.02 | 5 | 0.02 | |
| (d) | Sustainable Development | | 5 | | | | | | | 0.05 | | | 0.05 |
| | (i) Environmental Monitoring | No. of units | 2 | 200 | 196 | 186 | 177 | 168 | 289 | 0.02 | 289 | 0.02 | 0.02 |
| | (ii) Environment Management Plans (including Form-I) | No. | 2 | 32 | 31 | 29 | 27 | 25 | 64 | 0.02 | 64 | 0.02 | 0.02 |
| | (iii) Conducting workshop for Awareness on Sustainable Development | No. | 1 | 1 | - | - | - | - | 1 | 0.01 | 1 | 0.01 | 0.01 |

MEMORANDUM OF UNDERSTANDING - 2011 - 12

ANNEXURE III

SUBSIDIARY: Central Mine Planning & Design Institute Ltd.

| Evaluation Criteria | | Unit | Weight (in %) | MoU Target | | | | Performance | | | | |
|---------------------|--|------------|------------------|----------------|---------------|----------------|----------------|-------------------------------|-------------|-------|-------------|-------|
| | | | | Excellent | Very Good | Good | Fair | Poor | Actual | Score | Actual | Score |
| | | | | | | | | | | | | |
| e | Corporate Governance | | 5 | | | | | | | | 0.09 | 0.09 |
| | (i) Compliance of Corporate Governance norms as per Corporate Governance Guidelines issued by DPE as applicable to CMPDIL | (%) | 4 | 100 | 90 | 80 | 70 | 60 | 93 | 0.08 | 93 | 0.08 |
| | (ii) Submission of data for Public Enterprises Survey published by DPE (in line with DPE's Directives) | | 1 | 15th Sep. 2011 | 1st Oct. 2011 | 15th Oct. 2011 | 31st Oct. 2011 | After 31 st Oct.11 | 09.09. 2011 | 0.01 | 09.09. 2011 | 0.01 |
| | Sub Total | | 25 | | | | | | | 0.29 | | 0.29 |
| | | | | | | | | | | | | |
| 3 | Sector Specific Parameters: | | | | | | | | | | | |
| | (i) Drilling | 000 Meters | | | | | | | | | | |
| | (ia) Drilling - Through departmental drills | 000 Meters | 4 | 250.00 | 245.00 | 232.75 | 221.11 | 210.06 | 273.02 | 0.04 | 273.02 | 0.04 |
| | (ib) Drilling - Outsourcing | 000 Meters | 3 | 200.00 | 196.00 | 186.20 | 176.89 | 168.05 | 225.41 | 0.03 | 225.41 | 0.03 |
| | (ii) Geological Reports | No. | 3 | 14 | 13 | 12 | 11 | 10 | 19 | 0.03 | 19 | 0.03 |
| | (iii) Project Reports | No. | 4 | 26 | 25 | 24 | 23 | 22 | 28 | 0.04 | 28 | 0.04 |
| | (iv) Other Reports | No. | 2 | 123 | 121 | 115 | 109 | 103 | 150 | 0.02 | 150 | 0.02 |
| | (v) Operation Plans for all Mega Projects | No. | 1 | 12 | 11 | 10 | 9 | 8 | 14 | 0.01 | 14 | 0.01 |
| | (vi) CBM assessment Reports for 3 blocks | | 2 | Mar'12 | - | - | - | - | Jan.'12 | 0.02 | Jan.'12 | 0.02 |
| | (vii) Periodical OBR check measurement of OC mines of CIL subsidiaries (No. of Mines including outsourcing patches) | No. | 1 | 60 | 59 | 56 | 53 | 50 | 60 | 0.01 | 60 | 0.01 |
| | (viii) Coverage of Major OC Projects for Land Restoration & Reclamation through Satellite Surveillance | No. | 1 | 40 | 39 | 37 | 35 | 33 | 50 | 0.01 | 50 | 0.01 |
| | (ix) Obtaining Consultancy orders for Outside Consultancy | Rs. Cr | 2 | 32.00 | 30.00 | 28.00 | 26.00 | 24.00 | 33.26 | 0.02 | 33.26 | 0.02 |
| | (x) Preparation of Long term Action Plan * | Month | 2 | Oct.11 | Nov.11 | Dec.11 | Jan.12 | Feb.12 | Oct.'11* | 0.02 | Oct.'11* | 0.02 |
| | Sub Total | | 25 | | | | | | | 0.25 | | 0.25 |
| | Grand Total | | 100 | | | | | | | 1.04 | | 1.04 |
| | | | | | | | | | | | | |
| | * Strategic Plan of CMPDI (2009-14) has already been prepared and approved by CMPDIL Board in its 158th Meeting held on 11.08.2010 | | | | | | | | | | | |

Sd/-

Chief General Manager (Finance)

Sd/-

Director

Sd/-

Statutory Auditor

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 2011-12. 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.

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.

For and on behalf of the Board of Directors

Sd/-

(A. K. Singh)

Chairman-cum-Managing Director

Ranchi

Date: 21.05.2012

COMPLIANCE OF CORPORATE GOVERNANCE CERTIFICATE

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 2012 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 : 12.05.2012
Place: Ranchi

To
The Board of Directors
Central Mine Planning & Design Institute Limited

CEO AND CFO CERTIFICATION

We, A. K. Singh , Chairman-cum-Managing Director and K. Chandra Mouli, Chief 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, 2012 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, 2012 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/-
(K. C. Mouli)
Chief General Manager (Finance)

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

AUDITORS' REPORTS & MANagements' REPLY

AUDITORS' REPORT

MANAGEMENTS' REPLY

To
The Members,
Central Mine Planning and Design Institute Limited

- (1) We have audited the attached Balance Sheet of Central Mine Planning and Design Institute Limited as at 31st March 2012, Profit and Loss Statement and Cash Flow Statement of the Company for the year ended on that date annexed thereto, which we have signed under reference to this report. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit.
- (2) We conducted our audit in accordance with the auditing standards generally accepted in India. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement. An audit includes examining, on a test basis, evidence supporting the amount and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by the management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion
- (3) As required by the Companies (Auditor's Report) Order, 2003 as amended by The Companies (Auditors Report) (Amendment Order), 2004 issued by the Central Government of India in terms of sub section (4A) of Section 227 of The Companies Act, 1956, we enclose in the Annexure hereto a statement on the matters specified in paragraphs 4 and 5 of the said Order.
- (4) Further to our comments in the Annexure referred to in paragraph 3 above, we report that:-

(A) Comments on accounts :-

- i. *Balances of Sundry Debtors also include TDS deducted by various Parties. Due to non-reconciliation of Sundry Debtors and also in the absence of Balance confirmation from Sundry Debtors, the amount of TDS included in Sundry Debtors is not quantifiable and the extent of realisability of*

Reconciliation of Sundry Debtors is under progress.

TDS is accounted for on receipt of TDS Certificate from the Clients.

AUDITORS' REPORT

TDS is also not ascertainable.

- ii. *Buildings cost or WDV includes Rs.10.12 crores standing 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).*
- iii. *As indicated in para No.4.1.3 in Note-34, balances in debtors are yet to be confirmed. Balances in loans and advances and sundry creditors are also not confirmed.*
- iv. *Impact of the above comments (i) to (iii) on Profit/Loss or Assets/Liabilities is unascertained.*

(B) Subject to our comments in paragraph (A) above:

- 1. 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.
- 2. In our opinion. Proper books of accounts as required by law have been kept by the Company so far as appears from our examination of those books.
- 3. The Balance Sheet, Profit and Loss Statement and Cash Flow Statement dealt with by this report are in agreement with the books of account.
- 4. In our opinion, Balance Sheet, Profit and Loss Statement and Cash Flow Statement dealt with by this report comply with the requirements of the applicable Accounting Standards referred to in sub section (3C) of Section 211 of The Companies Act, 1956.
- 5. As per the records that could be produced before us and on the basis of representation made by the Chairman –cum- Managing Director and the Company secretary we report that the provisions of clause (g) of sub section (1) of Section 274 of The Companies Act, 1956, regarding disqualifications of directors are not applicable to the company.
- 6. In our opinion, and to the best of our information and according to the explanations given to us, the said accounts with schedules thereto and read with significant accounting policies (Schedule 14) and Notes on accounts (Schedule 15), give the information required by The Companies

MANAGEMENTS' REPLY

No Comments

Letters have already been issued for confirmation of balance in Debtors (other than CIL Subsidiaries). Confirmation of balance with CIL Subsidiaries is under progress.

AUDITORS' REPORT

Act, 1956, in the manner so required and give a true and fair view:

- a. In the case of the Balance Sheet, of the state of affairs of the Company as at 31st March, 2012.
- b. In the case of the Profit and Loss Statement, of the Profit of the Company for the year ended on that date.
- c. In the case of the Cash Flow Statement, of the cash flows for the year ended on that date.

FOR TODI TULSYAN & CO.
CHARTERED ACCOUNTANTS
FRN – 002180C

Sd/-

(CA. SUSHIL KUMAR TULSYAN)

Partner

**(Membership No.
075899)**

Place : Ranchi

Dated : 12.05.2012

ANNEXURE TO THE AUDITOR'S REPORT

(REFERRED TO IN PARAGRAPH 3 OF OUR REPORT OF EVEN DATE ON THE ACCOUNTS OF CENTRAL MINE PLANNING AND DESIGN INSTITUTE LIMITED FOR THE YEAR ENDED 31ST MARCH, 2012)

i) In respect of Fixed Assets:

- a) The Company has generally maintained proper records of fixed assets showing full particulars, including quantitative details and situation of fixed assets. However in case of Assets belonging to S&T Fund, Fixed Asset Register is maintained year wise instead of Asset wise.

Preparation of Asset wise Fixed Asset Register belonging to S&T Fund is under progress.

- b) A major portion of the high value assets have been physically verified by the management in accordance with a phased program of

No Comments

AUDITORS' REPORT**MANAGEMENTS' REPLY**

verification adopted by the Company. As explained to us, no material discrepancies were noticed on such verification.

- 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.

ii) In respect of its inventories:

- | | |
|--|-------------|
| 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. | No Comments |
| 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. | No Comments |
| 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. | No Comments |

iii) In respect of loans, secured or unsecured, granted or taken by the Company to/from companies, firms or other parties covered in the register maintained under Section 301 of The Companies Act, 1956:

- | | |
|--|-------------|
| a) The Company has not granted any loans, secured or unsecured to companies, firms or other parties covered in the register maintained under section 301 of the Act. | No Comments |
| b) In view of our comment in 3(a) above, the clause 3(b) of aforesaid Order is not applicable to this Company. | No Comments |
| c) In view of our comment in 3(a) above, the clause 3(c) of aforesaid Order is not applicable to this Company. | No Comments |
| d) In view of our comment in 3(a) above, the clause 3(d) of aforesaid Order is not applicable to this Company. | No Comments |

AUDITORS' REPORT**MANAGEMENTS' REPLY**

- | | |
|---|-------------|
| e) The Company has not taken loans, secured or unsecured from companies, firms or other parties covered in the register maintained under section 301 of the Act. The Company had taken unsecured loan from its Holding Company, Coal India Limited which was repaid during the year. | No Comments |
| f) In our opinion and according to the information and explanations given to us, the rate of interest and other terms and conditions of the loan taken from its Holding Company, Coal India Limited are, prima facie, not prejudicial to the interest of the Company. | No Comments |
| g) In respect of the loan taken by the Company from Coal India Limited, interest payments are regular and the principal is repayable on demand. | No Comments |
| 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. | No Comments |
| v) In respect of transactions covered under Section 301 of The Companies Act, 1956:- | |
| 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. | No Comments |
| 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. | No Comments |
| 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 |

AUDITORS' REPORT**MANAGEMENTS' REPLY**

- 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 31st March, 2012 for a period of more than six months from the date they became payable. No Comments
- b) The disputed statutory dues aggregating to Rs.2791.04 Lacs 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) | Period 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 |

AUDITORS' REPORT

| | | | | | |
|----|----------------|------------|---------|--|--|
| 4. | Income Tax Act | Income tax | 244.44 | 1992-93, 1994-95, 1995-96, 1996-97, 2005-06, 2006-07 | ITAT, Kolkata |
| 5. | Income Tax Act | Income tax | 1976.33 | 2007-08, 2008-09 | CIT (A), Ranchi, |
| 6. | Income Tax Act | Income tax | 3.53 | 2001-02, 2002-03 | Assessing Officer, Income Tax, Ranchi. |

MANAGEMENTS' REPLY

- x) The Company has no accumulated losses as at 31st March 2012 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.
- 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.
- 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. No Comments
- 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. No Comments
- xiv) In our opinion the Company is not dealing or trading in shares, securities, debentures and other investments, No Comments
- 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. No Comments
- xvi) The Company has not raised any term loans during the year. No Comments
- 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. No Comments
- xviii) During the year, the Company has not made any preferential allotment of shares to parties and No Comments

AUDITORS' REPORT

companies covered in the register maintained under Section 301 of The Companies Act, 1956.

- | | | |
|------|---|-------------|
| xix) | The Company has not issued any debenture during the year. | No Comments |
| xx) | The Company has not raised any money by public issue during the year. | No Comments |
| 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. | No Comments |

MANAGEMENTS' REPLY

**FOR TODI TULSYAN & CO.
CHARTERED ACCOUNTANTS**

Sd/-

**(CA. SUSHIL KUMAR TULSYAN)
Partner
(Membership No. 075899)**

Place : Ranchi
Dated : 12.05.2012

ANNEXURE - 1

**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 2012.**

The preparation of financial statements of Central Mine Planning & Design Institute Limited for the year ended 31st March 2012 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 12.05.2012.

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 31 March 2012. 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 comments 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: 16.05.2012

CENTRAL MINE PLANNING & DESIGN INSTITUTE LIMITED
Balance Sheet as at 31st March,2012

₹ in crore

| | Notes | As at 31-03-12 (Audited) | As at 31-03-11 (Audited) |
|--|-------|--------------------------------|--------------------------------|
| I EQUITY AND LIABILITIES | | | |
| (1) Shareholders' Fund | | | |
| a) Share Capital | 1 | 19.04 | 19.04 |
| b) Reserves & Surplus | 2 | 91.88 | 68.88 |
| | | 110.92 | 87.92 |
| (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 | 170.4 | 141.71 |
| | | 170.40 | 141.71 |
| (3) Minority Interest | | - | - |
| (4) Current Liabilities | | | |
| a) Short Term Borrowing | 6 | - | - |
| b) Trade Payables | 7 | 33.45 | 22.95 |
| c) Other Current Liabilities | 8 | 161.43 | 125.39 |
| d) Short Term Provisions | 9 | 152.84 | 171.32 |
| | | 347.72 | 319.66 |
| Total | | 629.04 | 549.29 |
| II ASSETS | | | |
| (1) Non-Current Assets | | | |
| (a) Fixed Assets | 10A | | |
| i) Tangible Assets - Gross Block | | 177.77 | 165.93 |
| Less : Depreciation, Impairment & Provisions | | 99.71 | 93.98 |
| Net Carrying Value | | 78.06 | 71.95 |
| ii) Intangible Assets - Gross Block | 10A | 5.20 | 4.05 |
| Less : Depreciation, Impairment & Provisions | | 5.20 | 4.05 |
| Net Carrying Value | | - | - |

Balance Sheet Contd.

| | Notes | As at 31-03-12 (Audited) | As at 31-03-11 (Audited) |
|--|-------|--------------------------------|--------------------------------|
| iii) Capital Work-in-Progress | 10B | 11.52 | 5.64 |
| iv) Intangible Assets under Decolopement | 10C | - | - |
| (b) Non-Current Investment | 11 | - | - |
| (c)Deferred Tax Assets (Net) | | 71.67 | 59.91 |
| (d) Long Term Loans & Advances | 12 | 0.84 | 2.10 |
| (e) Other Non-Current Assets | 13 | 0.02 | 0.02 |
| (2) Current Assets | | | |
| (a) Current Investments | 14 | - | - |
| (b) Inventories | 15 | 6.77 | 6.77 |
| (c) Trade Receivables | 16 | 246.92 | 190.46 |
| (d) Cash & Cash equivalents | 17 | 61.21 | 61.04 |
| (e) Short Term Loans & Advances | 18 | 151.98 | 151.35 |
| (f) Other Current Assets | 19 | 0.05 | 0.05 |
| | | <u>466.93</u> | <u>409.67</u> |
| Total | | <u>629.04</u> | <u>549.29</u> |

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/-
(K. Chandra Mouli)
Chief General Manager (Finance)

Sd/-
(B. N. Basu)
Director

Sd/-
(A. K. Singh)
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 : 12th May 2012

Place : Ranchi

CENTRAL MINE PLANNING & DESIGN INSTITUTE LIMITED

Profit & Loss Statement for the year ended 31st March, 2012

₹ in crore

| INCOME | Notes | Figures For the Year ended 31-03-12 (Audited) | Figures For the Year ended 31-03-11 (Audited) |
|---|-------|--|--|
| Sale of Coal | | | |
| Less : - Excise Duty | | | |
| Other Levies | | - | |
| Revenue From Operations | 20 | 524.03 | 429.09 |
| Other Income | 21 | 4.40 | 4.46 |
| Total Revenue | | 528.43 | 433.25 |
| EXPENSES | | | |
| Cost of Material Consumed | 22 | 16.67 | 15.77 |
| Change in inventories of finished goods work in progress and Stock in trade | 23 | - | - |
| Employee benefit expenses | 24 | 334.36 | 269.75 |
| Power & Fuel | | 2.24 | 2.07 |
| Welfare Expenses | 25 | 11.48 | 10.79 |
| Repairs | 26 | 9.61 | 11.11 |
| Contractual Expenses | 27 | 93.00 | 76.55 |
| Finance Costs | 28 | - | 0.03 |
| Depreciation/amortization/Impairment | | 6.74 | 5.48 |
| Provisions | 29 | (0.81) | (3.21) |
| Write off | 30 | 0.08 | 0.43 |
| Overburden Removal Adjustment | | | |
| Other Expenditure | 31 | 25.12 | 23.78 |
| Total Expenses | | 498.49 | 412.55 |
| Profit/Loss before exceptional & extraordinary items & tax | | 29.94 | 21.00 |
| Prior Period Adjustment { charges/ (incomes) } | 32 | (0.85) | (2.69) |
| Exceptional Items | | - | - |
| Profit/ (Loss) before extraordinary items and tax | | 30.79 | 23.69 |
| Extraordinary Items { charges/ (incomes) } | | - | - |
| Profit/ (Loss) before Tax | | 30.79 | 23.69 |
| Less : Tax Expenses | | | |
| - Current year | | 22.97 | 13.22 |
| - Deferred Tax | | (11.76) | (5.40) |
| - Earlier years | | (0.03) | 0.55 |
| Profit/ (Loss) for the period | | 19.61 | 15.32 |
| Earning per equity share (in) | | | |
| (Face Value of 1000/- per share) | | | |
| (1) Basic (in ₹.) | | 1030.00 | 805.00 |
| (2) Diluted (in ₹.) | | 1030.00 | 805.00 |
| 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/-
(K.Chandra Mouli)
Chief General Manager (Finance)

Sd/-
(B. N. Basu)
Director

Sd/-
(A. K. Singh)
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 : 12th May 2012
Place : Ranchi

NOTES TO BALANCE SHEET

NOTE 1

₹ in crore

SHARE CAPITAL

| | As at 31-03-12 (Audited) | As at 31-03-11 (Audited) |
|--|---|---|
| Authorised | | |
| (i) 500000 Equity Shares of ₹ 1000/- each | 50 | 50 |
| | - | - |
| | 50 | 50 |
| Issued, Subscribed and Paid-up | | |
| (Held by Coal India Ltd., the Holding Co. & its nominees) | - | - |
| 8 Equity Shares of ₹ 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

₹ in crore

RESERVES & SURPLUS

| | As at 31-03-12 (Audited) | As at 31-03-11 (Audited) |
|---|---|---|
| RESERVES : | | |
| Capital Reserve | | |
| As per last Balance Sheet | 8.86 | 10.42 |
| Add: Addition during the year | 5.16 | 0.24 |
| Less: Adjustment During the year | 1.77 | 1.80 |
| (Additional Note - 34 Para 1.4 Capital Reserve) | 12.25 | 8.86 |
| 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 | 0.38 | - |
| Add: Addition during the year | 0.76 | 0.38 |
| Less: Transfer to General Reserve | 0.49 | - |
| | 0.65 | 0.38 |
| General Reserve | | |
| As per last Balance Sheet | 2.18 | 2.18 |
| Add: Transfer from CSR Reserve | 0.49 | - |
| Add:/ Less: Adjustment During the year | - | - |
| | 2.67 | 2.18 |
| Surplus in Profit & Loss Account | - | - |
| As per last Balance Sheet | 57.46 | 42.14 |
| Profit/(Loss) after Tax During the Year | 19.61 | 15.32 |
| Profit/(Loss) available for Appropriation | 77.07 | 57.46 |
| APPROPRIATION | | |
| Reserve for Foreign Exchange Transaction | - | - |
| Transfer to General Reserve | - | - |
| Transfer to CSR Reserve | 0.76 | - |
| Interim Dividend | - | - |
| Proposed Dividend on Equity Shares | - | - |
| Corporate Dividend Tax | - | - |
| | 0.76 | - |
| Miscellaneous Expenditure (to the extent not written off) | | |
| Preliminary Expenses | - | - |
| Pre-Operational Expenses | - | - |
| Total : | 91.88 | 68.88 |

NOTES TO BALANCE SHEET (CONTD.)

NOTE - 3**LONG TERM BORROWING**

₹ in crore

| | As at 31-03-12 (Audited) | As at 31-03-11 (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 |

NOTES TO BALANCE SHEET (CONTD.)

NOTE - 4**OTHER LONG TERM LIABILITIES**

₹ in crore

| | As at 31-03-12 (Audited) | As at 31-03-11 (Audited) |
|---|--------------------------------|--------------------------------|
| Dues to Coal India Limited | | |
| Loan | - | - |
| Interest Accrued & Due | - | - |
| 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

₹ in crore

LONG TERM PROVISIONS

| | As at 31-03-12 (Audited) | As at 31-03-11 (Audited) |
|--|---|---|
| For Employee Benefits | | |
| - Gratuity | 98.97 | 89.74 |
| - Leave Encashment | 58.10 | 51.97 |
| - Other Employee Benefits | 13.33 | - |
| For Foreign Exchange Transactions (Marked to Market) | - | - |
| OBR Adjustment Account | - | - |
| Mine Closure | - | - |
| For Others | - | - |
| TOTAL | 170.40 | 141.71 |

NOTE - 6

₹ in crore

SHORT TERM BORROWING

| | As at 31-03-12 (Audited) | As at 31-03-11 (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

₹ in crore

TRADE PAYABLE

| | As at 31-03-12 (Audited) | As at 31-03-11 (Audited) |
|-------------------------------------|---|---|
| Sundry Creditors For Revenue Stores | 33.45 | 22.95 |
| TOTAL | 33.45 | 22.95 |

NOTES TO BALANCE SHEET (CONTD.)

NOTE - 8

₹ in crore

OTHER CURRENT LIABILITIES

| | As at 31-03-12 (Audited) | As at 31-03-11 (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) | 5.96 | 5.96 |
| FOR EXPENSES : | | |
| Salary Wages & Allowances | 48.40 | 22.08 |
| Power & Fuel | 0.61 | 0.66 |
| Others | 36.50 | 30.40 |
| | 91.47 | 59.10 |
| STATUTORY DUES : | | |
| SalesTax | - | - |
| Sales Tax/VAT | - | - |
| Provident Fund & Pension Fund | 11.17 | 8.85 |
| Central Excise Duty | - | - |
| Royalty & Cess on Coal | - | - |
| Stowing Excise Duty | - | - |
| Clean Energy Cess | - | - |
| Other Statutory Levies | 9.93 | 21.96 |
| | 21.10 | 30.81 |
| Income Tax Deducted at Source | 0.69 | 0.32 |
| Security Deposit | 1.73 | 1.95 |
| Earnest Money | 1.68 | 2.00 |
| Advance & Deposit from customers / others | 3.36 | 3.73 |
| 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 | 41.40 | 27.48 |
| TOTAL | 161.43 | 125.39 |

NOTES TO BALANCE SHEET (CONTD.)**NOTE - 9**

₹ in crore

SHORT TERM PROVISIONS

| | As at 31-03-12 (Audited) | As at 31-03-11 (Audited) |
|--|---|---|
| For Employee Benefits | | |
| - Gratuity | 15.27 | 14.27 |
| - Leave Encashment | 8.65 | 8.51 |
| - PPLB | 4.75 | 3.44 |
| - PRP (Additional Note - 34 Para 5.5) | 65.83 | 84.92 |
| - Other Employee Benefits | 0.33 | - |
| For Proposed Dividend | - | - |
| For Corporate Dividend Tax | - | - |
| For Excise Duty on Closing Stock of Coal | - | - |
| For Others | 58.01 | 60.18 |
| TOTAL | 152.84 | 171.32 |

NOTE - 10A
FIXED ASSETS

| (Additional Note - 34 Para 1.3) | | | | | | | | | | | | | ₹ in crore | |
|---|----------------|-------------------------|----------------------|----------------|----------------|-------------------------|----------------------|-----------------|----------------|-------------------------|----------------------|-------------------------------------|----------------|----------------|
| PARTICULARS | GROSS BLOCK | | | | DEPRECIATION | | | IMPAIRMENT LOSS | | | | Total Depreciation/ Impairment Loss | NET BLOCK | |
| | As on 01.04.11 | Addition during 2011-12 | Adj./Sales/ Transfer | As on 31-03-12 | As on 01.04.11 | Addition during 2011-12 | Adj./Sales/ Transfer | As on 31-03-12 | As on 01.04.11 | Addition during 2011-12 | Adj./Sales/ Transfer | | As on 31-03-12 | As on 31-03-11 |
| Tangible Assets | | | | | | | | | | | | | | |
| Land | | | | | | | | | | | | | | |
| (a) Freehold | 1.15 | - | - | 1.15 | - | - | - | - | - | - | - | - | 1.15 | |
| (b) Leasehold | 2.19 | - | - | 2.19 | 0.71 | 0.04 | - | 0.75 | - | - | - | 0.75 | 1.44 | |
| Building/Water Supply/ Road & Culverts | 41.14 | 1.35 | -0.22 | 42.27 | 13.71 | 0.72 | -0.09 | 14.34 | - | - | - | 14.34 | 27.93 | |
| Plant & Machinery | 95.85 | 11.60 | -2.52 | 104.93 | 63.33 | 6.18 | -2.25 | 67.26 | - | - | - | 67.26 | 37.67 | |
| Telecommunication | | | | | | | | | | | | | - | |
| Railway Sidings | | | | | | | | | | | | | - | |
| Furniture & fittings/ Office Tools & Equipments/ Electrical Fittings/ Fire Arms | 13.82 | 0.68 | -0.03 | 14.47 | 10.68 | 0.48 | -0.03 | 11.13 | - | - | - | 11.13 | 3.34 | |
| Vehicle | 11.78 | 1.27 | -0.29 | 12.76 | 5.55 | 0.88 | -0.20 | 6.23 | - | - | - | 6.23 | 6.23 | |
| Aircraft | | | | | | | | | | | | | | |
| Development | | | | | | | | | | | | | | |
| Assets taken on Nationalisation | | | | | | | | | | | | | | |
| TOTAL | 165.93 | 14.90 | -3.06 | 177.77 | 93.98 | 8.30 | -2.57 | 99.71 | - | - | - | 99.71 | 78.06 | |
| Tangible Assets (As on 31.03.11 | 155.31 | 11.56 | -0.94 | 165.93 | 87.75 | 7.08 | -0.85 | 93.98 | - | - | - | 93.98 | 71.95 | |
| Intangible Assets | | | | | | | | | | | | | 67.56 | |
| Computer Software | 4.05 | 1.19 | -0.04 | 5.20 | 4.05 | 1.19 | -0.04 | 5.20 | - | - | - | 5.20 | - | |
| Development | | | | | | | | | | | | | - | |
| Prospecting & Boring | | | | | | | | | | | | | - | |
| Total | 4.05 | 1.19 | -0.04 | 5.20 | 4.05 | 1.19 | -0.04 | 5.20 | - | - | - | 5.20 | - | |
| Intangible Assets (As on 31.03.11 | 4.00 | 0.05 | | 4.05 | 4.00 | 0.05 | - | 4.05 | - | - | - | 4.05 | - | |

NOTE - 10B
CAPITAL WORK-IN-PROGRESS

₹ in crore

| PARTICULARS | COST | | | PROVISION | | | IMPAIRMENT LOSS | | | NET BLOCK | |
|---------------------------------------|----------------|-------------------------|-----------------------------|----------------|----------------|-------------------------|-----------------------------|----------------|----------------|------------------------------------|----------------|
| | As on 01.04.11 | Addition during 2011-12 | Adj./Sales/Transfer 2011-12 | As on 31-03-12 | As on 01.04.11 | Addition during 2011-12 | Adj./Sales/Transfer 2011-12 | As on 31-03-12 | As on 01.04.11 | Total Depreciation/Impairment Loss | As on 31-03-12 |
| Tangible Assets | | | | | | | | | | | |
| Building/Water Supply/Road & Culverts | 1.46 | 3.68 | -1.06 | 4.08 | - | - | - | - | - | - | 4.08 |
| Plant & Machinery | 3.7 | 15.05 | -11.78 | 6.97 | 0.03 | - | - | - | - | 0.03 | 6.94 |
| Railway Sidings | | | | | | | | | | | 3.67 |
| Development | | | | | | | | | | | |
| Others | | | | | | | | | | | |
| TOTAL | 5.16 | 18.73 | -12.84 | 11.05 | 0.03 | - | - | - | - | 0.03 | 11.02 |
| 5.13 | | | | | | | | | | | |
| Tangible Assets (As on 31.03.11) | 2.08 | 5.07 | -1.99 | 5.16 | 0.7 | - | -0.67 | 0.03 | - | 0.03 | 5.13 |
| 1.38 | | | | | | | | | | | |
| Surveyed off Assets | 10.12 | 2.60 | -2.64 | 10.08 | 9.61 | 2.48 | -2.51 | 9.58 | | | 0.50 |
| 0.51 | | | | | | | | | | | |
| Surveyed off Assets (As on 31.03.11) | 10.46 | 0.14 | -0.48 | 10.12 | 9.94 | -0.33 | -0.33 | 9.61 | | | 0.51 |
| 0.52 | | | | | | | | | | | |
| Grand Total | 15.28 | 21.33 | -15.48 | 21.13 | 9.64 | 2.48 | -2.51 | 9.61 | - | 0.03 | 11.52 |
| 5.64 | | | | | | | | | | | |
| Grand Total (As on 31.03.11) | 12.54 | 5.21 | -2.47 | 15.28 | 10.64 | - | -1 | 9.64 | - | 0.03 | 5.64 |
| 1.90 | | | | | | | | | | | |

NOTE - 10C
INTANGIBLE ASSET UNDER DEVELOPMENT

₹ in crore

| PARTICULARS | COST | | | PROVISION | | | IMPAIRMENT LOSS | | | Total Depreciation/ Impairment Loss | NET BLOCK | |
|-------------|-------------------|-------------------------------|--|-------------------|-------------------|-------------------------------|--|-------------------|-------------------|--|-------------------|-------------------|
| | As on 01.04.11 | Addition during 2011-12 | Adj./ Sales/ Transfer 2011-12 | As on 31-03-12 | As on 01.04.11 | Addition during 2011-12 | Adj./ Sales/ Transfer 2011-12 | As on 31-03-12 | As on 01.04.11 | | As on 31-03-12 | As on 31-03-11 |

Intangible Assets

Development

Prospecting & Boring

**For the year ended
31.03.11**

Intangible Assets

NOTES TO BALANCE SHEET (CONTD.)

NOTE - 11

NON - CURRENT INVESTMENTS - Unquoted at Cost

₹ in crore

| | Number of shares/ bonds/securities current year / (previous year) | Face value per shares/bonds/ security current year / (previous year) (r) | As at 31-03-12 (Audited) | As at 31-03-11 (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 | - | - | - | - |
| Tamilnadu | - | - | - | - |
| 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

₹ in crore

LONG TERM LOANS & ADVANCES

| | As at 31-03-12 (Audited) | As at 31-03-11 (Audited) |
|---|--------------------------------|--------------------------------|
| LOANS | | |
| ADVANCES | | |
| For Capital | | |
| - Secured considered goods | - | - |
| - Unsecured considered goods | 0.03 | 1.16 |
| - Doubtful | - | - |
| | 0.03 | 1.16 |
| Less : Provision for Doubtful Loans and Advances | - | - |
| | 0.03 | 1.16 |
| 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 | 0.44 | 0.43 |
| - Unsecured considered goods | - | - |
| - Doubtful | - | - |
| | 0.44 | 0.43 |
| Less : Provision for bad and doubtful Loans trade receivables | - | - |
| | 0.44 | 0.43 |
| LOAN TO EMPLOYEES & OTHERS | | |
| For House Building | | |
| - Secured considered goods | 0.25 | 0.39 |
| - Unsecured considered goods | - | - |
| - Doubtful | - | - |
| | 0.25 | 0.39 |
| 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 | 0.84 | 2.10 |

Note

| | CLOSING BALANCE | | MAXIMUM AMOUNT DUE AT ANY TIME | |
|---|-----------------|----------------|--------------------------------|----------------|
| | As on 31.03.12 | As on 31.03.11 | During 2011-12 | During 2010-11 |
| 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

₹ in crore

OTHER NON-CURRENT ASSETS

| | As at 31-03-12 (Audited) | As at 31-03-11 (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 31.03.12 | As on 31.03.11 | During 2011-12 | During 2010-11 |
| 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 31-03-12 (Audited) | As at 31-03-11 (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) | | | | |
| Major State-wise Break-up | | | | |
| Total : | | | <u>-</u> | <u>-</u> |
| 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

₹ in crore

INVENTORIES

(Valuation as per Accounting Policy No. 5.1)

| | As at 31-03-12 (Audited) | As at 31-03-11 (Audited) |
|--|---|---|
| Stock of Coal | - | - |
| Coal Under Development | - | - |
| Less : Provision | - | - |
| A Stock of Coal (Net) | - | - |
| Stock of Stores & Spare Parts (at cost) | 7.10 | 7.33 |
| Stores -in -transit | - | - |
| Less : Provision (Additional Note Para 3.2) | 0.33 | 0.56 |
| B Net Stock of Stores & Spare Parts (at cost) | 6.77 | 6.77 |
| C Workshop Jobs : | | |
| Work-in-progress and Finished Goods | - | - |
| Less : Provision | - | - |
| Net Stock of Workshop Jobs | - | - |
| D Press : | | |
| 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) | 6.77 | 6.77 |

NOTES TO BALANCE SHEET (CONTD.)

NOTE - 16

₹ in crore

TRADE RECEIVABLE

| | As at 31-03-12 (Audited) | As at 31-03-11 (Audited) |
|---|---|---|
| Debts outstanding for a period exceeding six months from the due date | | |
| - Secured considered goods | - | - |
| - Unsecured considered goods | 81.45 | 68.54 |
| - Doubtful | | |
| | 81.45 | 68.54 |
| Less Provision for bad and doubtful trade receivables | 2.72 | 2.99 |
| | 78.73 | 65.55 |
| Other Debts | | |
| - Secured considered goods | - | - |
| - Unsecured considered goods | 168.19 | 124.91 |
| - Doubtful | - | - |
| | 168.19 | 124.91 |
| Less Provision for bad and doubtful trade receivables | - | - |
| | 168.19 | 124.91 |
| Total | 246.92 | 190.46 |

Note

| | CLOSING BALANCE | | MAXIMUM AMOUNT DUE AT ANY TIME | |
|---|---------------------------|---------------------------|---|---------------------------|
| | As on 31.03.12 | As on 31.03.11 | During 2011-12 | During 2010-11 |
| Due by the Companies under the same management | | | | |
| Eastern Coalfields Limited | 17.77 | 7.71 | 17.77 | 23.17 |
| Bharat Coking Coal Limited | 16.52 | 16.53 | 24.10 | 24.76 |
| Central Coalfields Limited | 66.77 | 27.78 | 66.77 | 27.78 |
| Western Coalfields Limited | 3.80 | 14.43 | 21.97 | 21.72 |
| South Eastern Coalfields Limited | 24.70 | 25.75 | 71.68 | 44.60 |
| Northern Coalfields Limited | 17.72 | 18.48 | 29.62 | 31.79 |
| Mahanadi Coalfields Ltd. | 16.49 | 11.68 | 27.48 | 26.75 |
| North East Coalfields | 0.94 | 3.74 | 4.13 | 3.74 |
| 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 | 30.09 | 18.42 | 30.09 | 18.42 |
| MJSJ Coal Co. Ltd | 0.24 | 0.05 | 0.24 | 0.00 |
| MNH Shakti Ltd. | 0.12 | 0.00 | 0.12 | 0.00 |
| Total | 195.33 | 144.74 | 294.14 | 222.9 |
| 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

₹ in crore

CASH & CASH EQUIVALENTS

| | As at 31-03-12 (Audited) | As at 31-03-11 (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 | 60.13 | 59.41 |
| - 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 | 0.36 |
| Cash on hand | 0.05 | 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 | 1.02 | 1.22 |
| 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 | 61.21 | 61.04 |
| Maximum amount outstanding with Banks other than Scheduled Banks at any time during the year | - | - |
| <u>Note:</u> | | |
| 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. | 0.11 | 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 | | |

NOTES TO BALANCE SHEET (CONTD.)

NOTE - 18

₹ in crore

SHORT TERM LOANS & ADVANCES

| | As at 31-03-12 (Audited) | As at 31-03-11 (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 | 0.45 | 0.62 |
| - Doubtful | - | - |
| | 0.45 | 0.62 |
| Less Provision for bad and doubtful trade receivables | - | 0.13 |
| | 0.45 | 0.49 |
| | 0.45 | 0.49 |
| ADV PAYMENT OF STATUTORY DUES | | |
| SalesTax | | |
| - Secured considered good | - | 1.46 |
| - Unsecured considered good | 0.94 | - |
| - Doubtful | - | - |
| | 0.94 | 1.46 |
| Less Provision for bad and doubtful trade receivables | - | - |
| | 0.94 | 1.46 |
| Advance Income Tax / Tax Deducted at Source (Reference Additional Note34 Para 4.2) | 96.59 | 87.56 |
| Less : Provision for Income Tax | - | - |
| | 96.59 | 87.56 |
| Others | | |
| - Secured considered good | - | 0.08 |
| - Unsecured considered good | 0.07 | - |
| - Doubtful | - | - |
| | 0.07 | 0.08 |
| Less Provision for bad and doubtful trade receivables | - | - |
| | 0.07 | 0.08 |
| | 97.60 | 89.10 |
| Advance to Employees | | |
| - Secured considered good | 0.92 | 0.83 |
| - Unsecured considered good | - | - |
| - Doubtful | - | - |
| | 0.92 | 0.83 |
| Less Provision for bad and doubtful trade receivables | - | - |
| | 0.92 | 0.83 |
| Current Account with Coal India Limited & other Subsidiaries of Coal India Limited | 17.93 | 22.19 |
| Loan Account with Subsidiaries | | |
| - Secured considered good | - | - |
| - Unsecured considered good | - | - |
| - Doubtful | - | - |
| | - | - |
| Less Provision for bad and doubtful trade receivables | - | - |
| | - | - |
| Claims Receivables | | |
| - Secured considered good | 35.02 | 38.57 |
| - Unsecured considered good | - | - |
| - Doubtful | - | - |
| | 35.02 | 38.57 |
| Less Provision for bad and doubtful trade receivables | 0.16 | - |
| | 34.86 | 38.57 |
| Prepaid Expenses | 0.22 | 0.17 |
| | 53.93 | 61.76 |
| TOTAL | 151.98 | 151.35 |

Note

| | CLOSING BALANCE | | MAXIMUM AMOUNT DUE AT ANY TIME | |
|---|-------------------|-------------------|-----------------------------------|-------------------|
| | As on 31.03.12 | As on 31.03.11 | During 2011-12 | During 2010-11 |
| 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 - 19**OTHER CURRENT ASSETS**

| | ₹ in crore | |
|---|--------------------------------|--------------------------------|
| | As at 31-03-12 (Audited) | As at 31-03-11 (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

₹ in crore

| | For the Year ended 31-03-12 (Audited) | For the Year ended 31-03-11 (Audited) |
|--|--|--|
| Revenue From Operations | | |
| GROSS SALES | 524.03 | 429.09 |
| Less : Levies | | |
| Excise Duty | - | - |
| Royalty | - | - |
| Cess on Coal | - | - |
| Stowing Excise Duty | - | - |
| Central Sales Tax | - | - |
| Clean Energy Cess | - | - |
| State Sales Tax/VAT | - | - |
| Other Levies | - | - |
| TOTAL LEVIES | - | - |
| Revenue From Operations (Net Sales) | 524.03 | 429.09 |

NOTES TO PROFIT & LOSS ACCOUNT (CONTD.)

NOTE - 21**OTHER INCOME**

₹ in crore

| | For the Year ended 31-03-12 (Audited) | For the Year ended 31-03-11 (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 | 0.59 | 0.09 |
| From Loans and Advances to Employees | 0.03 | 0.04 |
| From Income Tax Refunds | - | 1.15 |
| From Coal India | - | - |
| Others | 0.03 | - |
| Apex Charges | | |
| Subsidy for Sand Stowing & Protective Works | - | - |
| Profit on Sale of Assets | - | - |
| 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 | 3.75 | 3.18 |
| TOTAL | 4.40 | 4.46 |

NOTES TO PROFIT & LOSS ACCOUNT (CONTD.)

NOTE - 22

₹ in crore

| | For the Year ended 31-03-12 (Audited) | For the Year ended 31-03-11 (Audited) |
|----------------------------------|--|--|
| COST OF MATERIAL CONSUMED | | |
| Explosives | - | - |
| Timber | - | - |
| P O L | 5.19 | 5.05 |
| HEMM Spares | - | - |
| Other Consumable Stores & Spares | 11.48 | 10.72 |
| TOTAL | 16.67 | 15.77 |

NOTES TO PROFIT & LOSS ACCOUNT (CONTD.)

NOTE - 23

₹ in crore

CHANGE IN INVENTORIES OF FINISHED GOODS, WORK IN PROGRESS AND STOCK IN TRADE

| | For the Year ended 31-03-12 (Audited) | For the Year ended 31-03-11 (Audited) |
|---|--|--|
| Closing Stock of Coal / Coke | - | - |
| Less: Deterioration of Coal/Coke | - | - |
| Total (1) | - | - |
| Opening Stock of Coal/Coke | - | - |
| Less: Deterioration of Coal/Coke | - | - |
| Total (2) | - | - |
| A) Change in Inventory of Closing Stock (2-1) | - | - |
| Closing Stock of Workshop made finished goods and WIP | - | - |
| Less: Provision | - | - |
| Total (3) | - | - |
| Opening Stock of Workshop made finished goods and WIP | - | - |
| Less: Provision | - | - |
| Total (4) | - | - |
| B) Change in Inventory of Closing Stock of workshop (4-3) | - | - |
| Press Closing Job | | |
| i) Finished Goods | - | - |
| ii) Work in Progress | - | - |
| Total (5) | - | - |
| Press Opening Job | | |
| i) Finished Goods | - | - |
| ii) Work in Progress | - | - |
| Total (6) | - | - |
| C) Change in Inventory of Closing Stock of Press Job made finished goods and WIP (6-5) | - | - |
| Closing Stock of Medicines (Central Hospital) (7) | - | - |
| Less Opening Stock of Medicines (Central Hospital) (8) | - | - |
| D) Change in Inventory of Stock of Medicines at Central Hospitals (8-7) | - | - |
| Total Change in Inventory of Stock(A+B+C+D) | - | - |

NOTES TO PROFIT & LOSS ACCOUNT (CONTD.)

NOTE - 24

₹ in crore

EMPLOYEE BENEFIT EXPENSES

| | For the Year ended 31-03-12 (Audited) | For the Year ended 31-03-11 (Audited) |
|---|--|--|
| Salary, Wages, Allowances, Bonus & Benefits | 181.37 | 145.53 |
| Exgratia | 5.88 | 4.45 |
| PRP | 24.53 | 29.77 |
| Contribution to P.F. & Other Funds | 22.69 | 22.31 |
| Gratuity | 34.53 | 13.86 |
| Leave Encashment | 20.76 | 15.61 |
| VRS | - | - |
| Workman Compensation | - | - |
| Other Employee Benefits | 44.60 | 38.22 |
| TOTAL | 334.36 | 269.75 |

NOTES TO PROFIT & LOSS ACCOUNT (CONTD.)

NOTE - 25

₹ in crore

WELFARE EXPENSES

| | For the Year ended 31-03-12 (Audited) | For the Year ended 31-03-11 (Audited) |
|--|--|--|
| Medical Expenses | 5.40 | 4.74 |
| Medical Expenses for retired employees | 1.35 | 1.33 |
| Grants to Schools & Institutions | 0.07 | 0.07 |
| Sports & Recreation | 0.33 | 0.27 |
| Canteen & Creche | 0.13 | 0.13 |
| Power - Township | 2.05 | 1.75 |
| Hire Charges of Bus, Ambulance etc. | 0.19 | 0.19 |
| CSR Expenses | 0.48 | 0.57 |
| Community Development | 0.01 | - |
| Environmental Expenses | 0.10 | 0.10 |
| Tree Plantation | - | - |
| Other Expenses | 1.37 | 1.64 |
| TOTAL | 11.48 | 10.79 |

NOTE - 26

₹ in crore

REPAIRS

| | For the Year ended 31-03-12 (Audited) | For the Year ended 31-03-11 (Audited) |
|-------------------|--|--|
| Building | 3.57 | 4.80 |
| Plant & Machinery | 1.07 | 1.09 |
| Others | 4.97 | 5.22 |
| TOTAL | 9.61 | 11.11 |

NOTES TO PROFIT & LOSS ACCOUNT (CONTD.)

NOTE - 27

₹ in crore

CONTRACTUAL EXPENSES

| | For the Year ended 31-03-12 (Audited) | For the Year ended 31-03-11 (Audited) |
|--------------------------|--|--|
| | - | - |
| Transportation Charges : | - | - |
| - Sand | - | - |
| - Coal & Coke | - | - |
| - Stores & Others etc. | - | - |
| Wagon Loading | - | - |
| Hiring of P&M | - | - |
| Other Contractual Work | 93.00 | 76.55 |
| TOTAL | 93.00 | 76.55 |

NOTE - 28

₹ in crore

FINANCE COSTS

| | For the Year ended 31-03-12 (Audited) | For the Year ended 31- 03-11 (Audited) |
|--------------------------------------|--|---|
| INTEREST | | |
| Deferred Payments | - | - |
| Bank Overdraft / Cash Credit | - | - |
| Interest on IBRD & JBIC Loan | - | - |
| CIL Fund Loan Interest | - | - |
| Interest to Subsidiaries | - | - |
| Others | - | 0.03 |
| TOTAL (A) | - | 0.03 |
| OTHER BORROWING COSTS | | |
| Guarantee Fees on (IBRD & JBIC) Loan | - | - |
| Other Expenses / Bank Charges | - | - |
| TOTAL (B) | - | - |
| TOTAL (A+B) | - | 0.03 |

NOTES TO PROFIT & LOSS ACCOUNT (CONTD.)

₹ in crore

NOTE - 29**PROVISIONS**

**For the
Year ended
31-03-12
(Audited)**

**For the
Year ended
31-03-11
(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 | - | - |
| TOTAL (A) | - | - |

(B) PROVISION WRITTEN BACK

| | | |
|--------------------------------------|--------------|-------|
| Doubtful debts | 0.27 | 2.5 |
| Doubtful advances & Claims | - | - |
| Stores & Spares | 0.23 | 0.39 |
| Reclamation of Land | - | - |
| Surveyed of Fixed Assets/Capital WIP | 0.29 | 0.32 |
| Others | 0.02 | - |
| TOTAL (B) | 0.81 | 3.21 |
| TOTAL (A-B) | -0.81 | -3.21 |

NOTES TO PROFIT & LOSS ACCOUNT (CONTD.)

NOTE - 30

₹ in crore

WRITE OFF

| | For the Year ended 31-03-12 (Audited) | For the Year ended 31-03-11 (Audited) |
|-------------------|--|--|
| Doubtful debts | 0.08 | 0.08 |
| Doubtful advances | - | - |
| Others | - | 0.35 |
| TOTAL | 0.08 | 0.43 |

NOTES TO PROFIT & LOSS ACCOUNT (CONTD.)

NOTE - 31

₹ in crore

OTHER EXPENDITURE

| | For the Year ended 31-03-12 (Audited) | For the Year ended 31-03-11 (Audited) |
|---|--|--|
| Travelling expenses | | |
| - Domestic | 9.63 | 9.04 |
| - Foreign | 0.85 | 0.96 |
| Training Expenses | 0.38 | 0.65 |
| Telephone & Postage | 0.62 | 0.62 |
| Advertisement & Publicity | 1.19 | 0.72 |
| Freight Charges | 0.02 | 0.01 |
| Demurrage | - | - |
| Donation/Subscription | - | - |
| Security Expenses | 4.47 | 4.1 |
| Service Charges of CIL | - | - |
| Hire Charges | 1.93 | 1.66 |
| CMPDI Expenses | - | - |
| Legal Expenses | 0.38 | 0.41 |
| Bank Charges | 0.05 | 0.09 |
| Guest House Expenses | 0.05 | 0.04 |
| Consultancy Charges | 0.41 | 0.30 |
| 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 | 0.34 | 0.12 |
| - For Other Services | 0.07 | 0.08 |
| - For Reimbursement of Expenses | | |
| Rehabilitation Charges | - | - |
| Royalty & Cess | - | - |
| Central Excise Duty | - | - |
| Rent | 0.55 | 0.54 |
| Rates & Taxes | 0.34 | 0.54 |
| 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 | - | - |
| Miscellaneous Expenses | 3.79 | 3.85 |
| TOTAL | 25.12 | 23.78 |

NOTES TO PROFIT & LOSS ACCOUNT (CONTD.)

NOTE -32

₹ in crore

EXCEPTIONAL ITEMS**PRIOR PERIOD ADJUSTMENT**

| | For the Year ended 31-03-12 (Audited) | For the Year ended 31-03-11 (Audited) |
|--------------------------------------|--|--|
| (A) Expenditure | | |
| Sale of Coal & Coke | - | - |
| Stock of Coal & Coke | - | - |
| Other Income | - | - |
| Consumption of POL | - | 0.09 |
| Employees Remuneration & Benefits | - | - |
| Power & Fuel | - | - |
| Welfare Expenses | - | - |
| Repairs | - | - |
| Contractual Expenses | - | - |
| Other Expenditure | - | - |
| Interest and other financial charges | - | - |
| Depreciation | - | - |
| OBR Adjustment | - | - |
| TOTAL (A) | - | 0.09 |
| (B) Income | | |
| Sale of Service | 0.48 | 2.64 |
| Stock of Coal & Coke | - | - |
| Other Income | - | - |
| Consumption of Stores & Spares | - | - |
| Employees Remuneration & Benefits | 0.08 | - |
| Power & Fuel | - | - |
| Welfare Expenses | - | - |
| Repairs | - | - |
| Contractual Expenses | 0.08 | - |
| Other Expenditure | 0.21 | - |
| Interest and other financial charges | - | - |
| Depreciation | - | 0.14 |
| TOTAL (B) | 0.85 | 2.78 |
| TOTAL (A-B) | -0.85 | -2.69 |

Cash Flow Statement for the Year Ended 31st March 2012

Amount ₹ in crore

| | Particulars | | 2011-12 | 2010-11 |
|-----|---|--|---------------|---------------|
| | 1 | | 2 | 3 |
| I | CASH INFLOW | | | |
| (1) | From Operating Activities | | | |
| | (a) Profit from Operating Activities | | 30.79 | 23.69 |
| | Adjustments | | | |
| | Depreciation and Amortization | | 6.88 | 8.05 |
| | Amortisation of Stock | | | |
| | Amount transferred to CSR Reserve | | | 0.38 |
| | Compensation | | | |
| | (Gain)/Loss on sale of Fixed Assets | | | |
| | Assets written off | | | |
| | Provision/ (Reversal) for Doubtful Debts & Advances | | | |
| | (b) Working Capital Changes | | | |
| | Decrease in Inventories | | | |
| | Decrease in Trade Receivables | | | 85.41 |
| | Decrease in Short Term Loans & Advances | | | |
| | Decrease in Other Current Assets | | | |
| | Increase in Trade Payables | | 10.50 | |
| | Increase in Current Liabilities | | 36.04 | |
| | Increase In Provisions | | 28.69 | 60.10 |
| | Total of (1) | | 112.90 | 177.63 |
| (2) | From Investing Activities | | | |
| | (a) Proceeds from Sale of Fixed Assets | | | |
| | (b) Proceeds from Sale of Investments | | | |
| | © Realisation of Long Term Loans & Advances from Subliidiaries/Associates/Business Ventures | | | |
| | (d) Decrease in other Long Term Loans & Advances | | 1.26 | 1.22 |
| | (e) Decrease in other Non-Current Assets | | | |
| | (f) Dividend Received | | | |
| | (g) Interest Received | | | |
| | (h) Other Income | | | |
| | Total of (2) | | 1.26 | 1.22 |
| (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 | -1.56 |
| | Total of (3) | | 3.39 | -1.56 |
| | TOTAL CASH INFLOW (1+2+3) | | 117.55 | 177.29 |

Amount ₹ in crore

| | Particulars | | 2011-12 | 2010 - 11 |
|------|--|-------|---------------|---------------|
| | 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 | | | 0.48 |
| | Increase in Trade Receivables | 56.46 | | |
| | Increase in Short Term Loans & Advances | 0.63 | | 84.92 |
| | Increase in Other Current Assets | | | |
| | Decrease in Trade Payables | | | 16.92 |
| | Decrease in Current Liabilities | | | 40.78 |
| | Decrease In Provisions | 18.48 | | 13.12 |
| | (c) Deferred Tax Assets | 11.76 | | 5.40 |
| | (d) Direct Tax Paid (Net of Refunds) | 11.18 | | 8.37 |
| | Total of (1) | | 98.51 | 169.99 |
| (2) | From Investing Activities | | | |
| | (a) Purchase of Tangible Assets / Capital Work -in-progress | 17.72 | | 13.68 |
| | (b) Purchase of intangible Assets / Assets under Development | 1.15 | | 1.82 |
| | (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) | | 18.87 | 15.50 |
| (3) | From Financing Activities | | | |
| | (a) Repayment of Long Term Borrowings | | | |
| | (b) Repayment of Short Term Borrowings | | | |
| | (c) Dividend Paid (including distribution Tax) | | | |
| | (d) Interest and Other Financial Cost | | | |
| | (e) Share Issue Expenses | | | |
| | Total of (3) | | | |
| | TOTAL CASH OUTFLOW (1+2+3) | | 117.38 | 185.49 |
| II I | Net (decrease)/Increase in Cash and Cash equivalent (I - II) | | 0.17 | -8.20 |
| | Add cash and Cash Equivalents at the beginning of the Period | | 61.04 | 69.24 |
| IV | Cash and Cash Equivalents at the end of the Period | | 61.21 | 61.04 |

SIGNIFICANT ACCOUNTING POLICY FOR THE YEAR ENDED 31ST MARCH, 2012**1.0 ACCOUNTING CONVENTION**

Financial statements are prepared consistently on the basis of historical cost and on accrual basis following going concern concept, Accounting Standards and generally accepted accounting principles and practices except otherwise stated elsewhere.

2.0 SUBSIDIES / GRANTS FROM GOVERNMENT

- 2.1 Subsidies / Grants on Capital Account are deducted from cost of respective asset to which they relate. The unspent amount at the year end, if any, is shown as Current Liability.
- 2.2 Subsidies / Grants on Revenue Account are credited to Profit & Loss Account under the head of other Receipts and the expenses are debited to respective heads.
- 2.3 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.
- 2.4 Grant / Funds received as Nodal/Implementing Agency directly or through CIL are accounted for on the basis of receipts and disbursement.

3.0 FIXED ASSETS**3.1 Land**

Land includes cost of acquisition including incidental expenses incurred thereon.

3.2 Buildings

Buildings include cost of electrical fittings, water supply arrangements, sanitary fittings etc. which were part of construction contract and could not be segregated. Expenditures like partition, modification etc. and area development in township are being charged to Revenue as Repairs and Maintenance Expenses.

3.3 Plant & Machinery

3.3.1 Plant & Machinery include cost & expenses incurred for erection / installation and other attributable costs of bringing those assets to working condition for their intended use. Insurance spares supplied along with the machine are capitalized with the machine.

3.3.2 Software are fully amortised in the year of acquisition.

4.0 INVESTMENTS

Long Term Investments, if any, are valued at cost.

5.0 INVENTORIES

- 5.1 Stock of stores & spares at Central Drilling Stores, Barkakana are valued at cost calculated on the basis of weighted average method. Stores issued to Drilling Camps / Sites are charged off. The year end inventory of stores & spare parts lying at camps/sites/sub-stores initially charged off, are valued at issue prices. Consumables are valued at purchase prices.
- 5.2 Stores & spare parts include loose tools.

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

5.4 Stock of Stationery and Medicine are not considered in Inventory.

6.0 DEPRECIATION

6.1 Depreciation on Fixed Asset is provided on straight line method at the rates specified in Schedule-XIV to the Companies Act, 1956 (as amended) except in some special cases. Depreciation on the assets added / disposed of during the year is provided on pro-rata basis with reference to the month of addition / disposal.

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

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

7.0 BALANCE WITH COAL INDIA LTD. (HOLDING COMPANY)

Amount due to Coal India Limited on account of Loan after adjustment for conversion to equity or vice-versa from time to time is shown as Unsecured Loan. Amount due / receivable for revenue nature transaction in Current Account is shown under Current Liability / Current Asset.

8.0 INTEREST TO HOLDING COMPANY

Interest on Loan from Coal India Limited (Holding Company) is accounted for as per advice from them.

9.0 RETIREMENT BENEFITS TO EMPLOYEES

9.1 The liabilities on account of terminal benefits payable on retirement to employees is determined and provided for on the basis of actuarial valuation except as stated in item 9.2 below.

9.2 Provident Fund and Retirement Pension Scheme liabilities are accounted for on accrual basis and transferred to authorities in appropriate cases.

10.0 REVENUE RECOGNITION

10.1 Services rendered to CIL Subsidiaries for P&D and Exploration are billed on Cost Plus Basis except in cases covered in item 10.4 below. Unit of cost for the purpose is taken as :

(i) For Exploration Services - Drilling Meterage

(ii) For Planning & Design Services - Engineering Days

10.2 Effects for errors and omissions up to 0.2% of the expenditure / income for the period detected after the accounts are submitted to the Audit Committee/Board of Directors are accounted for during the period without revising the selling rate.

10.3 Billing on CIL Subsidiaries is done during the Quarter at budgeted rates. Final Bills of differential amounts are raised for that particular period on finalization of annual accounts.

10.4 Other miscellaneous jobs are billed on cost / cost plus basis or on mutually agreed rates as the case may be.

10.5 Sales shown in accounts are exclusive of service tax.

10.6 In the case of consultancy contracts with parties other than CIL Subsidiaries, revenue is recognized at proportionate contract value based on the percentage of work done or amount realizable, whichever is lower.

10.7 Inspection Charges are accounted for on receipt basis.

11.0 TRANSACTIONS IN FOREIGN EXCHANGE

- 11.1 Expenses during the Quarter in foreign currencies are converted/ translated at the prevailing rate and sales are booked at the rate prevailing at the time of billing. Outstanding items at the end of the Quarter are converted at the Quarter end rate.
- 11.2 Current Assets & Liabilities in Foreign Currencies are converted/ translated at Quarter end exchange rates and the loss / gain on conversion/translation, if any, is recognized in the Quarter.

12.0 PRIOR PERIOD ADJUSTMENT

The charges or credits, in excess of ₹ 5,00,000/- in each case, arising in current period as a result of errors and omissions in preparation of the financial statement (s) of earlier period (s) are accounted for under this head.

13.0 CHANGE IN ACCOUNTING POLICIES

Any change in Accounting Policy which has a material effect on financial statements for the current Quarter is disclosed in Additional Notes on Accounts (Note – 34).

ADDITIONAL NOTES ON ACCOUNTS FOR THE YEAR ENDED 31ST MARCH, 2012**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), NCL Township in Singrauli (₹ 4.20 Crores) and CCL Township in Rajrappa (₹ 2.12 Crores) on the land belonging to other subsidiaries of the Holding Company.
- 1.1.3 Testing for impairment of Assets in compliance of Accounting Standard 28 has been done estimating value in use on the basis of estimated future cash flows (budgetary estimates) and taking 7 % discounting rate as per CIL Guidelines and found that there has been no impairment losses.

1.2 Depreciation

Special Rates

- 1.2.1 The Earth Science Museum: 5.15 %.
- 1.2.2 All Plants & Equipment at Drilling sites; Scanner, Equipment and instruments used in the Laboratories for analysis work and all models of photocopiers : 11.31 %
- 1.2.3 High Volume Samplers and Respiratory Dust
- | | |
|------------|---------|
| Samplers : | 33.33 % |
| Telecom : | 15.83 % |
- 1.2.4 Buildings constructed on leasehold land and land belonging to other subsidiaries of CIL : at the rate applicable to buildings on freehold land.
- 1.2.5 Software 100.00%

CENTRAL MINE PLANNING & DESIGN INSTITUTE LIMITED

1.3 Details of Assets as per Note No. 10A

Amount (₹ in crore)

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

| PARTICULARS | GROSS BLOCK | | | DEPRECIATION | | | | NET BLOCK | |
|--|-------------------|----------------------------|---------------------------------|-------------------|-------------------|----------------------------|---------------------------------|-------------------|-------------------|
| | As on 01.04.11 | Addition during 2011-12 | Adj./Sales/ Transfer 2011-12 | As on 31.03.12 | As on 01.04.11 | Addition during 2011-12 | Adj./Sales/ Transfer 2011-12 | As on 31.03.12 | As on 31.03.11 |
| Land | | | | | | | | | |
| (a) Freehold | 1.15 | - | - | 1.15 | - | - | - | 1.15 | 1.15 |
| (b) Leasehold | 2.19 | - | - | 2.19 | 0.71 | 0.04 | - | 0.75 | 1.48 |
| Buildings | 40.83 | 1.35 | -0.22 | 41.96 | 13.67 | 0.72 | -0.09 | 14.30 | 27.66 |
| Plant & Machinery | 61.04 | 10.25 | -0.87 | 70.42 | 36.87 | 4.43 | -0.83 | 40.47 | 29.95 |
| Furniture & fittings/ Office Equipments etc. | 13.35 | 0.68 | -0.03 | 14.00 | 10.46 | 0.46 | -0.02 | 10.9 | 3.10 |
| Vehicle | 11.74 | 1.27 | -0.29 | 12.72 | 5.51 | 0.88 | -0.20 | 6.19 | 6.53 |
| TOTAL (A) - Fixed Assets | 130.3 | 13.55 | -1.41 | 142.44 | 67.22 | 6.53 | -1.14 | 72.61 | 69.83 |
| Software | 2.28 | 0.2 | | 2.48 | 2.28 | 0.2 | | 2.48 | |

(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 | - | - | 0.04 | 0.27 |
| Plant & Machinery | 34.81 | 1.35 | -1.65 | 34.51 | 26.46 | 1.75 | -1.42 | 26.79 | 7.72 |
| Furniture & fittings/ Office Equipments etc. | 0.47 | - | - | 0.47 | 0.22 | 0.02 | -0.01 | 0.23 | 0.24 |
| Vehicle | 0.04 | - | - | 0.04 | 0.04 | - | - | 0.04 | - |
| TOTAL (B) - Fixed Assets | 35.63 | 1.35 | -1.65 | 35.33 | 26.76 | 1.77 | -1.43 | 27.10 | 8.23 |
| Software- | 1.77 | 0.99 | -0.04 | 2.72 | 1.77 | 0.99 | -0.04 | 2.72 | |
| TOTAL (A+B) Fixed Assets | 165.93 | 14.90 | -3.06 | 177.77 | 93.98 | 8.30 | -2.57 | 99.71 | 78.06 |
| TOTAL (A+B) Software | 4.05 | 1.19 | -0.04 | 5.20 | 4.05 | 1.19 | -0.04 | 5.2 | - |

1.4. 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 | GMM/CBM Clearing House Grants | Total |
|----------------------------------|-------------|-------------|-------------|---------------|----------------|--------------|-------------------------------|--------------|
| As per last Account | 6.09 | 0.05 | 0.12 | 0.00 | 1.83 | 0.66 | 0.11 | 8.86 |
| Addition | 0.03 | 0.00 | 0.00 | 0.00 | 5.13 | 0.00 | 0.00 | 5.16 |
| | 6.12 | 0.05 | 0.12 | 0.00 | 6.96 | 0.66 | 0.11 | 14.02 |
| Less : Depreciation & Adjustment | 1.02 | 0.00 | 0.02 | 0.00 | 0.53 | 0.19 | 0.01 | 1.77 |
| TOTAL | 5.10 | 0.05 | 0.10 | 0.00 | 6.43 | 0.47 | 0.10 | 12.25 |
| Figures as on 31.03.2011 | 6.09 | 0.05 | 0.12 | 0.00 | 1.83 | 0.66 | 0.11 | 8.86 |

2.0 CAPITAL WORK-IN-PROGRESS

Provision has been made on Plant & Machinery which have not been put to use for more than three years and on incomplete civil jobs lying for more than four years at the rates of depreciation which would have been otherwise applicable to such items.

3.0 STOCK OF STORES & SPARE PARTS

3.1 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 ASI -10 read with Accounting Standard (AS) 2

3.2 The provision for Non-Moving & Obsolete Stores have decreased from previous year by ₹ 0.23 Crores from ₹ 0.56 Crores to ₹ 0.33 Crores on account of disposal of certain items from obsolete Stores . Reference Note No.15.

4.0 LOANS & ADVANCES / DEBTORS

4.1 Current Accounts and Sundry Debtors Accounts with CIL Subsidiaries

4.1.1 Reconciliation of inter-company transactions in Current Accounts with other Subsidiaries of CIL has been carried out up to 31/03/2012. The agreed Current Account balances with the CIL Subsidiaries as on 31/03/2012 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 up to 31/03/2012 is considered under Subsidiary Suspense Account.

4.1.2 Sundry Debtors of ₹ 249.64 Crores includes ₹ 195.33 Crores due from companies under same management. 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.

4.1.3 Letters have been issued to Debtors including CIL subsidiaries to obtain confirmation of balances reply to which is awaited. Confirmation of balances of Sundry Creditors, various Loan and Advances, Deposit, etc as on 31/03/2012 had not been obtained.

4.2 The Company has provided for dues outstanding for more than three years from outside parties (other than CIL Subsidiaries) and no provision is being made for dues from Subsidiaries of CIL.

4.3 Income Tax:

Income Tax advance of ₹ 96.59 Crores (Reference Note No.18) includes ₹ 11.64 Crores payments under protest against assessments for the years upto Assessment Year 2009-10 Income Tax provision of ₹ 59.87 Crores includes provision relating to assessment for the years up to Assessment Year 2012-13.

4.4 Others

A portion of office building at Ranchi is being used by Government of Jharkhand with effect from 04/12/2000. The claim towards rent receivable as on 31/03/2012 is ₹ 0.07 Crores (Previous year as on 31/03/2011 ₹ 0.04 Crores).

5.0 CURRENT LIABILITIES & PROVISIONS

5.1 Current Accounts with CIL and its Offices

Reconciliation of Current Accounts with CIL and its offices is done regularly, but it is not known if all the items appearing in Reconciliation Statement are accounted for by CIL within the period. Current Account balances as on 31/03/2012 have been reconciled.

5.2. Liabilities under Coal Mines Pension Scheme

5.2.1 Current Liabilities include ₹ 0.35 Crores (Pr. Yr. as on 31/03/11 ₹ 0.33 Crores) includes deductions which could not be remitted due to certain employees being non-CMPF members and deceased CMPF members not yet opted for pension.

5.2.2 There is also a liability for ₹ 0.02 Crores (Pr. Yr. as on 31/03/11 ₹ 0.02 Crores) payable to the Pension Scheme being the additional increments granted by the Company w.e.f. 01/7/1995.

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

5.2.4 As against these liabilities ₹ 0.55 Crores (Pr. Yr. as on 31/03/11 ₹ 0.55 Crores) is held in Fixed Deposits with Bank.

5.3. **Others**

5.3.1 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.

5.3.2 Provision of ₹ 10.24 Crores (Prev Year as on 30/03/11 ₹ 8.00 Crores) and ₹ 23.10 Crores (Prev Year as on 31/03/11 ₹ 18.25 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.

5.3.3 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 readily available, no disclosures have been made in the Accounts.

5.4. **Provision for NCWA IX**

The National Coal Wage Agreement (NCWA-IX) effective from 01.07.2011 has been finalized in 30th January 2012 for Wage Board Employees. Summarized position of financial impact of Pay Revision excluding gratuity impact for employees who retired during the period from 01.7.2011 to 31.3.2012 and the impact of actuarial liability is given below:-

Impact of Pay Revision as on 31.03.12 : ₹ 34.46 Crores

Apart from the above, impact of gratuity for revision of salary and wages to be paid to the employees who retired during the period 01.07.11 to 31.3.12 works out to ₹ 0.29 Crores

Actuarial liability as on 31.3.2012 towards gratuity, earned leave encashment, life cover scheme and settlement allowance for non executives includes the effect of wage revision of wage board employees over pre revised wages, on the above benefits by ₹ 11.70 Crores, ₹ 1.96 Crores, ₹ 0.33 Crores and ₹ 2.23 Crores respectively.

Like earlier year, the year end liability of certain other employee benefits like Gross Personal Accident Insurance Scheme, Leave Travel Concession, Medical

Benefits for Retired Executives, Compensation to dependants in case of mine accidental death are valued on actuarial basis.

5.5 **Performance Related Pay**

The company has made provision for Lumpsum Recoverable Advance against Performance Related Pay (PRP) for Executives for financial years 2007-08, 2008-09, 2009-10, 2010-11 & 2011-12 amounting to ₹ 16.05 crores, 10.90 crores, 28.20 crores, 29.77 crores and 24.53 crores in respective years. As against this payment made during FY 2011-12 amounts to ₹ 43.62 crores and balance outstanding is ₹ 65.83 crores (Reference Note No.-9). The amount recovered from retiring employees will be accounted for in the year of finality of PRP.

6.0. **THEFT & SNATCHING CASES**

Theft cases involving an amount of ₹ 0.02 Crores (Previous Year as on 31/03/11 ₹ 0.01 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.

7.0 DIRECTORS' REMUNERATION

| | | Amount (₹ in Crores) | |
|-------|--|-------------------------|--------------------------|
| | | Current Year 2011-12 | Previous Year 2010-11 |
| (i) | Salary & Allowances including LTC/Leave Encashment | 0.56 | 0.79 |
| (ii) | Provident Fund | 0.07 | 0.09 |
| (iii) | Medical Expenses | 0.01 | 0.01 |
| (iv) | Value of Perquisites | 0.15 | 0.20 |
| (v) | Gratuity Paid | 0.20 | 0.00 |

8.0 EARNINGS, EXPENDITURE ETC. IN FOREIGN CURRENCY**8.1 Expenditure in Foreign Currency**

| | | Amount (₹ in Crores) | |
|--------------|--|-------------------------|--------------------------|
| | | Current Year 2011-12 | Previous Year 2010-11 |
| (i) | Foreign training /tour, books & others | 0.40 | 0.46 |
| (ii) | Consultancy fee | 0.44 | 0.18 |
| TOTAL | | 0.84 | 0.64 |

8.2 Value of Imports Calculated on CIF Basis.

| | | Amount (₹ in Crores) | |
|--------------|---------------------|-------------------------|--------------------------|
| | | Current Year 2011-12 | Previous Year 2010-11 |
| (i) | Capital Goods | 0.78 | 3.51 |
| (ii) | Spares & Components | 0.00 | 0.00 |
| TOTAL | | 0.78 | 3.51 |

8.3 Earnings in Foreign Exchange

Nil Nil

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

| | | Amount (₹ in Crores) | | | |
|--------------|------------|-------------------------|---------------|--------------------------|---------------|
| | | Current Year 2011-12 | | Previous Year 2010-11 | |
| | | Value | Percentage | Value | Percentage |
| (i) | Imported | 0.00 | 0.00 | 0.00 | 0.00 |
| (ii) | Indigenous | 16.67 | 100.00 | 15.77 | 100.00 |
| TOTAL | | 16.67 | 100.00 | 15.77 | 100.00 |

9.0 CONTINGENT LIABILITY**9.1 Claims against the Company not acknowledged as debt**

- 9.1.1 Income Tax: In respect of completed assessment pending in appeal ₹ 22.17 Crores (Previous Year as on 31/03/11 ₹ 6.64 Crores).
- 9.1.2 Entry Tax : In respect of F/Y 2002-03 pending before Commissioner of Commercial Tax ₹ 0.17 Crores (Previous Year as on 31/03/11 ₹ 0.21 Crores).
- 9.1.3 (i) Service Tax : In respect of completed assessment pending in appeal ₹ 5.46 Crores (Previous Year as on 31/03/11 ₹ 0.40 Crores).
- (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
- 9.1.4 Other disputed claims pending in the courts and not provided for amount to ₹ 6.43 Crores (Previous Year as on 31/03/2011 ₹ 12.59 Crores).
- 9.2** LC opened pending maturity during the year Nil (Previous year as on 31/03/2011 ₹ 0.45 Crores) .
- 9.3** Estimated value of contracts remaining to be executed on capital account and not provided for amounts to ₹ 6.65 Crores (previous year as on 31/03/11 ₹ 7.35 Crores).
- 9.4 Other matters :**
- 9.4.1 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.
- 9.4.2 There is a counter guarantee of ₹ 0.20 Crores (Previous Year as on 31/03/11 ₹ 0.11 Crores) issued by the Company in favour of Bank for issuing Bank Guarantee on behalf of the Company.

10.0 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 31.03.2012 has been computed at ₹ 79.42 Crores and ₹ 7.75 Crores respectively. Net Deferred tax as at 31.03.2012 comprises of the following:

| | | Amount (₹ in Crores) | |
|----|--|-----------------------|---------------------|
| | | As on 31/03/2012 | As on 31/03/2011 |
| A) | Deferred Tax Asset | | |
| | VRS | 0.00 | 0.02 |
| | Software | 0.06 | 0.05 |
| | Provision for obsolescence/ Non - moving | 0.10 | 0.19 |
| | Provision for doubtful debts | 0.88 | 0.99 |
| | Provision for Leave Encashment, Gratuity & other terminal benefits | 78.38 | 65.95 |
| | TOTAL (A) | 79.42 | 67.20 |

| | | |
|-----------------------------|-------------|-------------|
| Deferred Tax Liability | | |
| Difference in WDV of assets | 7.75 | 7.29 |
| TOTAL (B) | 7.75 | 7.29 |
| C) Deferred Tax Asset (Net) | 71.67 | 59.91 |

11.0 SEGMENT-WISE PROFIT & LOSS STATEMENT :

Amount (₹ in crore)

| PARTICULARS | P&D | EXPLORATION | ENVIRONMENT | TOTAL |
|--------------------------------|---------------|---------------|--------------|---------------|
| REVENUE | | | | |
| Sales of Services | 194.28 | 307.40 | 22.35 | 524.03 |
| Misc. Income | 3.17 | 1.18 | 0.05 | 4.40 |
| Total Revenue | 197.45 | 308.58 | 22.40 | 528.43 |
| Result | 52.85 | 58.86 | 6.83 | 118.54 |
| Unallocated Corporate Expenses | | | | 87.75 |
| Profit/Loss before Tax | | | | 30.79 |
| Provision for Income Tax | | | | 22.94 |
| Provision Deferred Tax | | | | -11.76 |
| Profit after Tax | | | | 19.61 |

12.0 CORPORATE SOCIAL RESPONSIBILITY (C. S. R.) :

A provision of ₹ 0.76 Crores (being of 5% of retained profit of previous year) has been made towards Corporate Social Responsibility (C. S. R.) funds for the year ended 31st March, 2012. An amount of ₹ 0.49 Crores has been incurred during the period on this account.

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.

14.0 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 Profit & Loss Account and Notes 33 & 34 for Accounting Policy and Additional Notes on Accounts.

Sd/-
(P. Lazar)
Company Secretary

Sd/-
(K. Chandra Mouli)
Chief General Manager (Finance)

Sd/-
(B. N. Basu)
Director

Sd/-
(A. K. Singh)
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

Place : Ranchi

Date : 12th May 2012

**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 |
|---|---|---|---|---|---|

State Code :

| | |
|---|---|
| 0 | 3 |
|---|---|

Balance Sheet

Date

| | |
|---|---|
| 3 | 1 |
|---|---|

Date

| | |
|---|---|
| 0 | 3 |
|---|---|

MONTH

| | | | |
|---|---|---|---|
| 2 | 0 | 1 | 2 |
|---|---|---|---|

Year

II. Capital Raised during the year

(Amount in ₹ '000)

Public Issue

| | | | | | | |
|--|--|--|--|---|---|---|
| | | | | N | I | L |
|--|--|--|--|---|---|---|

Rights Issue

| | | | | | | |
|--|--|--|--|---|---|---|
| | | | | N | I | L |
|--|--|--|--|---|---|---|

Bonus Issue

| | | | | | | |
|--|--|--|--|---|---|---|
| | | | | N | I | L |
|--|--|--|--|---|---|---|

Private Placement

| | | | | | | |
|--|--|--|--|---|---|---|
| | | | | N | I | L |
|--|--|--|--|---|---|---|

III. Position of Mobilisation and Deployment of Funds

(Amount in Rs. '00000)

Total Liabilities

| | | | | | | |
|--|--|---|---|---|---|---|
| | | 6 | 2 | 9 | 0 | 4 |
|--|--|---|---|---|---|---|

Total Assets

| | | | | | | |
|--|--|---|---|---|---|---|
| | | 6 | 2 | 9 | 0 | 4 |
|--|--|---|---|---|---|---|

Sources of Funds : Paid-up Capital

| | | | | | | |
|--|--|--|---|---|---|---|
| | | | 1 | 9 | 0 | 4 |
|--|--|--|---|---|---|---|

Reserve & Surplus

| | | | | | | |
|--|--|--|---|---|---|---|
| | | | 9 | 1 | 8 | 8 |
|--|--|--|---|---|---|---|

Secured Loans

| | | | | | | |
|--|--|--|--|---|---|---|
| | | | | N | I | L |
|--|--|--|--|---|---|---|

Unsecured Loans

| | | | | | | |
|--|--|--|--|---|---|---|
| | | | | N | I | L |
|--|--|--|--|---|---|---|

Application of Funds : Net Fixed Assets

| | | | | | | |
|--|--|--|---|---|---|---|
| | | | 8 | 9 | 5 | 8 |
|--|--|--|---|---|---|---|

Investments

| | | | | | | |
|--|--|--|--|---|---|---|
| | | | | N | I | L |
|--|--|--|--|---|---|---|

Net Current Assets/Non Current Assets

| | | | | | | |
|--|--|-----|---|---|---|---|
| | | (-) | 5 | 0 | 3 | 3 |
|--|--|-----|---|---|---|---|

Misc. Expenditure

| | | | | | | |
|--|--|--|--|---|---|---|
| | | | | N | I | L |
|--|--|--|--|---|---|---|

Accumulated losses

| | | | | | | |
|--|--|--|--|---|---|---|
| | | | | N | I | L |
|--|--|--|--|---|---|---|

Deferred Tax

| | | | | | | |
|--|--|--|---|---|---|---|
| | | | 7 | 1 | 6 | 7 |
|--|--|--|---|---|---|---|

Intangible Assets

| | | | | | | |
|--|--|--|--|---|---|---|
| | | | | N | I | L |
|--|--|--|--|---|---|---|

IV. Performance of Company (Amount in ₹ '00000)

| Turnover | | | | | | | Total Expenditure | | | | | | | | |
|-------------------------------|--|------------------------|---|---|---|---|-------------------|---|-----------------------|---|---|---|---|---|---|
| | | 5 | 2 | 4 | 0 | 3 | | | 4 | 9 | 8 | 4 | 9 | | |
| + / - | | Profit/Loss before Tax | | | | | + / - | | Profit/Loss after Tax | | | | | | |
| + | | | | 3 | 0 | 7 | 9 | + | | | | 1 | 9 | 6 | 1 |
| (+ for Profit , - for Loss) | | | | | | | | | | | | | | | |

| Earning per share in Rs. | Dividend | | | | | | | | | |
|---|----------|---|---|---|---|---|---|---|---|---|
| <table> <tr> <td></td><td></td><td>1</td><td>0</td><td>3</td><td>0</td></tr> </table> | | | 1 | 0 | 3 | 0 | <table> <tr> <td>N</td><td>I</td><td>L</td></tr> </table> | N | I | L |
| | | 1 | 0 | 3 | 0 | | | | | |
| 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 Secretary

Sd/-

(K. Chandra Mouli)

Chief General
Manager (Finance)

Sd/-

(B. N. Basu)

Director

Sd/-

(A. K. Singh)

Chairman - cum -
Managing Director

ANNEXURE FORMING PART OF DIRECTORS' REPORT FOR THE YEAR ENDED 31.03.2012 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 comment | As on 31 st Mar 2012 (Yrs) | Last employment held |
|---------|------|------------------------------|------------------------------------|--|---------------|-------------------|-----------------|---------------------------------------|----------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

(a) 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/-.

----- Nil -----

(b) 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.

----- Nil -----

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.