

Annual Report & Accounts

2016-17



CENTRAL MINE PLANNING & DESIGN INSTITUTE LIMITED

(A SUBSIDIARY OF COAL INDIA LIMITED)

A Mini Ratna Company (Cat-II)

**GONDWANA PLACE, KANKE ROAD
RANCHI - 834 031**

CIN: U14292 JH1975 GOI 001223

Website: www.cmpdi.co.in

Vision

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

Mission

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.

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.

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BOARD OF DIRECTORS AS ON 31.03.2017

EXECUTIVE DIRECTORS



Shri Shekhar Saran



Shri V.K. Sinha



Shri Binay Dayal



Shri A.K. Chakraborty

PART-TIME OFFICIAL DIRECTORS



Shri C.K. Dey



Shri D.N. Prasad

INDEPENDENT DIRECTOR



Dr. Debasish Gupta



Shri Rajender Parshad

PERMANENT INVITEE



Shri Peeyush Kumar

MANAGEMENT DURING 2016-2017

Shri Shekhar Saran : Chairman-cum-Managing Director (From 01.01.2016)

Functional Directors

Shri V.K. Sinha : Director (Technical) (From 08.01.2014)

Shri Binay Dayal : Director (Technical) (From 01.12.2015)

Shri A.K. Chakraborty : Director (Technical) (From 03.08.2016)

Shri B.N. Shukla : Director (Technical) (Upto 16.08.2016)

Part – Time Official Director

Shri Devulapalli Narasimha Prasad : Adviser (Projects), Ministry of Coal, (From 27.01.2010)

Shri Chandan Kumar Dey : Director (Finance), Coal India Ltd. (From 19.12.2016)

Shri Nagendra Kumar : Director (Technical), Coal India Ltd. (Upto 17.10.2016)

Independent Directors / Part -Time Non-Official Director

Shri Rajender Parshad : Director (From 17.11.2015)

Dr. Debasish Gupta : Director (From 17.11.2015)

Shri Rakesh Kumar Mittal : Director (Upto 31.10.2016)

Permanent Invitee

Shri Peeyush Kumar : Director (Technical), Ministry of Coal, New Delhi
(From 06.05.2016 till 08.06.2017)

Company Secretary

Shri Abhishek Mundhra : (From 18.02.2016)



MEMBERS OF THE BOARD AS ON 06.07.2017

Functional Directors

Shri Shekhar Saran	:	Chairman-cum-Managing Director
Shri V.K. Sinha	:	Director (Technical)
Shri Binay Dayal	:	Director (Technical)
Shri A.K.Chakraborty	:	Director (Technical)

Part-time Official Directors

Shri Chandan Kumar Dey	:	Director (Finance), Coal India Ltd.
Shri Peeyush Kumar	:	Director (Technical), Ministry of Coal

Independent Director

Shri Rajender Parshad	:	Independent Director
Dr. Debasish Gupta	:	Independent Director

Company Secretary

Shri Abhishek Mundhra

BANKERS, AUDITORS AND REGISTERED OFFICE

Bankers

State Bank of India,
Canara Bank
Union Bank of India,
IDBI Bank
Axis Bank

Auditors

M/s K.C.Tak & Co.
Chartered Accountants,
1, New Anantpur, Ranchi-834002.

Registered Office

Central Mine Planning & Design Institute Limited,
Gondwana Place, Kanke Road,
Ranchi - 834 031
Jharkhand, India
CIN : U14292JH1975GOI 001223
Website : www.cmpdi.co.in



NOTICE FOR THE 42ND ANNUAL GENERAL MEETING

NOTICE is hereby given to all the members of Central Mine Planning & Design Institute Limited that the 42nd Annual General Meeting of the Company will be held on Thursday, the 6th July '2017 at 11.30 A.M. at the Registered Office of the Company, to transact the following business:

A. ORDINARY BUSINESS:

1. To consider and adopt the Audited Financial Statements for the financial year ended 31st March 2017, together with the Reports of Statutory Auditor and Comptroller & Auditor General of India and Directors' Report.
2. To appoint a Director in place of Shri Binay Dayal (DIN: 07367625), Whole-time Director who retires by rotation in terms of Section 152(6) of the Companies Act, 2013 and being eligible, offers himself for re-appointment.
3. To appoint a Director in place of Shri A.K Chakraborty (DIN: 07601841), Whole-time Director who retires by rotation in terms of Section 152(6) of the Companies Act, 2013 and being eligible, offers himself for re-appointment.

B. SPECIAL BUSINESS:

1. To consider and if thought fit, to pass with or without modification(s), the following resolution as an Ordinary Resolution:
"Resolved that the remuneration approved by the Board in its 197th Board meeting, held on 02.09.2016 to the Cost Auditors, M/s DGM & Associates, Kolkata for the financial year 2016-17 at Rs. 98440/- per annum plus applicable taxes for audit and out of pocket expenses limited to 50% of the cost audit fee be and is hereby ratified "

The Explanatory Statement pursuant to Section 102(1) of the Companies Act, 2013 in respect of the special business set out above is annexed hereto.

2. To consider and if thought fit, to pass with or without modification(s), the following resolution as an Ordinary Resolution:
"Resolved that the remuneration approved by the Board in its 204th Board meeting, held on 24.05.2017 to the Cost Auditors, M/s DGM & Associates, Kolkata for the financial year 2017-18 at Rs. 1,47,650/- per annum plus applicable taxes for audit and out of pocket expenses limited to 50% of the cost audit fee be and is hereby ratified "

The Explanatory Statement pursuant to Section 102(1) of the Companies Act, 2013 in respect of the special business set out above is annexed hereto.

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

(Abhishek Mundhra)
Company Secretary

Date: 23.06.17

N.B.

1. A member entitled to attend and vote, is entitled to appoint a proxy or proxies to attend and vote instead of himself and the proxy need not be a member of the Company. In order to be effective, the proxy form duly completed should be deposited at the registered office of the company not less than forty eight hours before the scheduled time of the Annual General Meeting.
2. Members are also requested to accord their consent for convening the meeting at a shorter notice pursuant to the provisions of the Section 101(1) of the Companies Act, 2013.
3. Pursuant to Section 142 of the Companies Act, 2013 and in accordance with the determination of the members of the company in its 27th Annual General Meeting held on 26th September 2002, authorized the Board of Directors to fix the remuneration of the Statutory Auditors appointed by Comptroller and Auditor General of India, the Board of Directors fixes the remuneration of Statutory Auditors appointed by Comptroller and Auditor General of India under Section 139 of the Companies Act, 2013.

DISTRIBUTION:

All the Shareholders

All the Directors of the company

The Chairman of the Audit Committee.

The Chairman of the Nomination & Remuneration Committee

The Statutory Auditor of the Company

The Secretarial Auditor of the company

The General Manager (Finance)/ CFO

The Explanatory Statements pursuant to section 102 of the Companies Act, 2013**1. Ratification of Remuneration of Cost Auditors for the FY 2016-17.**

The Companies (Cost Audit Report) Rules, 2011 were notified on 3rd June 2011. These were issued by the Ministry of Corporate Affairs (MCA) in exercise of the powers conferred by the Companies Act. MCA had mandated filing of the Compliance Report for the financial year 2011-12 and cost audit report from 2012-13 and onwards.

This Cost Accounting Policy of CMPDIL is being part of the overall Cost Accounting Policy of Coal India Limited.

With the approval of the Board of CMPDIL in its 197th meeting held on 02.09.2016, M/ DGM & Associate, Kolkata was appointed for undertaking the Cost Audit for the financial year 2016-17 to 2018-19 on the recommendation of Audit Committee.

The Board of Directors considered that in view of the background and experience of the M/s DGM & Associate and approved the appointment of M/s DGM & Associates, Kolkata as Cost Auditor for the financial year 2016-17, which is subject to ratification of the appointment in General Meeting, at a remuneration to the Cost Auditors for the year 2016-17 at Rs. 98,440/- per annum plus applicable taxes and out of pocket expenses limited to 50% of the cost audit fee.



As per Section 148 of the Companies Act 2013 read with Rule 14 of Companies (Audit & Auditors) Rule 2014, the above appointment of M/s DGM & Associates, Kolkata as Cost Auditors was approved in the 197th Board Meeting held on 02.09.2016 and is to be ratified by the company in general meeting.

None of the directors and key managerial personnel or their relatives is interested or concerned in the resolution.

The Board recommended the resolution for the approval of the member.

2. Ratification of Remuneration of Cost Auditors for the FY 2017-18.

The Companies (Cost Audit Report) Rules, 2011 were notified on 3rd June 2011. These were issued by the Ministry of Corporate Affairs (MCA) in exercise of the powers conferred by the Companies Act. MCA had mandated filing of the Compliance Report for the financial year 2011-12 and cost audit report from 2012-13 and onwards.

This Cost Accounting Policy of CMPDIL is being part of the overall Cost Accounting Policy of Coal India Limited.

With the approval of the Board of CMPDIL in its 197th meeting held on 02.09.2016, M/ DGM & Associate, Kolkata was appointed for undertaking the Cost Audit for the financial year 2016-17 to 2018-19 on the recommendation of Audit Committee.

M/s DGM & Associate has taken up the cost audit for the financial year 2016-17 and their performance was found satisfactory. The Board of Directors considered that in view of the background, experience and performance of the M/s DGM & Associates and approved the appointment of M/s DGM & Associate, Kolkata as Cost Auditor for the financial year 2017-18, which is subject to ratification of the appointment in General Meeting, at a remuneration to the Cost Auditors for the year 2017-18 at Rs. 1,47,650/- per annum plus applicable taxes and out of pocket expenses limited to 50% of the cost audit fee.

As per Section 148 of the Companies Act 2013 read with Rule 14 of Companies (Audit & Auditors) Rule 2014, the above appointment of M/s DGM & Associates, Kolkata as Cost Auditors was approved in the 204th Board Meeting held on 24.05.2017 and is to be ratified by the company in general meeting.

None of the directors and key managerial personnel or their relatives is interested or concerned in the resolution.

The Board recommended the resolution for the approval of the member.

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

(Abhishek Mundhra)
Company Secretary



Chairman's Statement

Shri Shekhar Saran

Chairman-cum-Managing Director

Dear Shareholders,

I have great pleasure in extending a very warm welcome to all of you to the 42nd Annual General Meeting of CMPDI and present to you the Annual Report of your Company for the financial year 2016-17. The Report of Directors and the Audited Accounts of your Company for the period ended 31st March, 2017 together with the Report of the Statutory Auditors and the report & review of the Comptroller and Auditor General of India have already been provided to all the shareholders of the Company.

1. The Growth Profile:

CMPDI was originally conceived and proposed in 1972 by a joint study group with Polish experts as a comprehensive planning set-up under one roof for entire Indian mining industry. Subsequently, CMPDI was established on 1st November, 1975.

Your company has been rendering 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, Information and communication technology, human resource development, remote sensing, field services, etc. Similar services are also being provided to 'Other than CIL' clients including those from metal mining sectors. Additionally, CMPDI also renders services to Ministry of Coal and MoP&NG 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 enhancing the level of expertise of CMPDI personnel, significant buildup 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 under one roof. 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 over a considerable period. 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 which continued for next 5-6 years. Moreover, computerization to the extent possible, including use of software related to mining industry, addition of some equipment especially related to environmental facilities, coal characterization as well as introduction of ISO Standards carried out, the company is committed 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 FY 04-05 to 2.09 lakh meter in FY 07-08) and sales was also around ₹ 150 to ₹ 200 crores (₹151 crore in 2004-05 and ₹ 196 crore in 2007-08). The contribution in drilling was from departmental resources only. In the beginning of the XI Plan, it was conceived that CMPDI would need substantial expansion in its role, particularly in the field of exploration, in view of need for faster proving of resources. Accordingly, apart from addition in the departmental drilling capacity, enhancement by way of using the drilling capacities of other agencies including MECL was emphasized and a part of the drilling activities was started being outsourced to private agencies. Parallely, expansion in the coal core testing capability of CMPDI was also carried out. Moreover, capacities of other laboratories like Environment, Mining Technology, etc., were also enhanced through upgradation with indigenous and imported equipment. A Coal Bed Methane laboratory was also established at CMPDI HQ, Ranchi. Subsequently, the administrative ministry i.e. MoC also came up with a scheme for enhancing the exploration capacity of CMPDI where the total drilling capacity was to be raised to a level of 15 lakh meter by 2015-16 including the departmental drilling capacity of 4 lakh meter. CMPDI achieved the target of departmental drilling by carrying out 4.08 lakh metre drilling in 2015-16 but could not achieve the overall target of 15 lakh metre. About 5.14 lakh metre of drilling could not be carried out in outsourced blocks during 2015-16 in spite of all the efforts from CMPDI due to lack of permission for drilling in forest areas with adequate no. of borehole density and adverse law & order condition. The MoU target for 2016-17 was kept at 11 lakh metre by MoC against 9.94 lakh metre achieved during 2015-16 with a growth of about 11%.

Your company came true in acceptance of the challenge and the departmental drilling capacity has been raised to a level of 4.41 lakh metre during 2016-17 through various initiatives like deployment of hydrostatic drills, manpower addition, etc., and thus, the set target for departmental drilling was surpassed. The total drilling carried out in 2016-17 was 11.26 lakh metre with a Cumulative Annualized Growth Rate in drilling of 18.5% over the achievement of 2.06 lakh meter in 2006-07 (end of X Plan period). Further, the net sales of the company went up year-wise and has now been raised to a level of ₹ 930.52 crore in 2016-17. Consultancy services in respect of mining for metal mining companies like Tata Steel, SAIL, MOIL Ltd., Hindustan Copper Ltd., Hutti Gold Mine, NMDC, etc. were also rendered.

However, all the endeavors by the company in the past years did not get reflected, appreciably, in the top and the bottom lines of the company and thus, necessitating a relook on the business dynamics of CMPDI. Nonetheless, this also entails a proper study of future market scenario in the coal sector and possible opportunities for CMPDI for foray in other areas in a noticeable way. With this view, the Pricing Mechanism of the company is being revisited and possible strategies for enhancing quantum of outside jobs (non-CIL) in value terms including enhancing the sales through diversification in areas of mining and allied engineering sectors of other than coal sector, development of alternative sources of coal based energy, etc., are being studied. Parallely, with the diversification,

the distinctiveness of the company would be kept preserved for the interest of the coal sector as a whole in foreseeable future.

2. Financial Performance:

During the FY 2016-17, your company has achieved highest turnover of ₹ 930.52 crore, with a profit before tax of ₹ 65.53 crore (PBT post considering other comprehensive loss of ₹ 2.70 crore will be ₹ 62.83 crore). The net worth of your company has risen to ₹ 255.70 crore as on 31.03.2017 from ₹ 215.25 crore as on 31.03.2016. During the financial year, the earning per share has gone up to ₹ 2131.83 from ₹ 480.04 a year back.

3. Drilling Performance:

As stated above, your company carried out 11.26 lakh meter of drilling during FY 2016-17 in comparison to 9.94 lakh meter of drilling carried out during 2015-16 through departmental resources and outsourcing, registering a growth of 13% over previous year. The target for FY 2017-18 has been raised to 12.50 lakh meter by the Ministry of Coal which has necessitated emphasis on outsourcing of substantial number of coal blocks for drilling. CMPDI had entered into a long term MOU with MECL on 6th January, 2009 for offering up to one lakh meter of exploratory drilling per annum to MECL in different coal blocks which has been enhanced to 4.00 lakh meter per annum. Six rounds of National / Global tendering & eleven rounds of e-tendering has been done since 2007-08 (till 2016-17) and work orders had been placed for 81 blocks involving 31.59 lakh meters.

4. Project Reports:

A total of 129 projects were identified for XII Plan resulting in capacity addition of about 517 Mty, against which, project reports for 105 projects, with capacity addition of about 456 Mty have already been formulated. Additionally, 77 Project Reports with capacity addition of about 198 Mty have been formulated till 31st March, 2017 during XII Plan period.

During the year under review, 26 Project Reports have been prepared with capacity addition of about 55 Mty.

5. Upgradation of Laboratories:

Capacities of all the laboratories in CMPDI have been upgraded. Chemical and Petrography laboratories have been upgraded with sophisticated imported equipment and the capacities have been enhanced. The existing Environment Laboratories have been strengthened with state of the art equipment. Environment labs of CMPDI (HQ), RI-IV & RI-V have been re-accredited by National Accreditation Board for Testing & Calibration of Laboratories (NABL). Surveillance assessment by National Accreditation Board for Testing & Calibration of Laboratories (NABL) was done during the year. CPCB recognition of Environment Lab was obtained during the year 2016-17, which is valid for 5 years. Certificate of Registration for OHSAS-18001-2007 was awarded to Environment Laboratory at CMPDI (HQ), RI-IV & RI-V by Certification International (CI). A state of the art CBM Lab is functional at CMPDI to facilitate generation of all parametric data related to CBM/Shale gas related studies, reservoir characteristics and assessment of CBM and Shale gas resources. Further to enhance the capacity and capabilities of CMPDI, S&T funded project is under implementation by CMPDI and CSIRO Australia.

6. Manpower Induction:

Manpower requirement of Exploration, Planning and Design as well as allied engineering services have been addressed. During 2016-17, 73 nos. of Executives have been posted in CMPDI through recruitment and transfer. Similarly, 16 nos. of non-executive manpower have been added by recruitment / compassionate employment / transfer from other subsidiaries and process of addition of manpower is going on.

7. Land Reclamation Monitoring and Land use/Vegetation Cover Mapping:

Since 2008, Satellite surveillance for land reclamation monitoring of all the opencast coal mines of CIL having production more than 5 million m³ (coal+OB) per annum was started annually. Further to this, land reclamation monitoring of the opencast coal mines of CIL having production less than 5 million m³ (coal+OB) per annum was also taken up from the year 2011 at the interval of three years.

Accordingly, land reclamation monitoring of 82 nos. of opencast projects of CIL based on high resolution satellite data has been completed during 2016-17. Vegetation cover mapping of 6 Coalfields viz. Jharia, Talcher, Bishrampur, Wardha, Kamptee and Makum was also carried out.

8. Assistance for Setting up of Coal Washeries:

Technical assistance was provided to the subsidiary companies of CIL in setting up of washeries. Tender document on Build-Operate-Maintain and Build-Own-Operate concepts were customized on e-Reverse Auctioning Process in record time. Technical support for modernizing of coking coal washeries operating under CIL has also been provided. Assistance in construction of new washeries by scrutinizing and approving detail design drawing is being provided. Washability studies of RoM coal samples and bore core coal samples were also carried out.

9. Environmental Services:

During FY 2016-17, 37 nos. of EMPs (Environment Management Plans), including 15 Form-I, were prepared and Environmental Monitoring (air, water and noise) of 433 projects / establishments of CIL were carried out through nine environmental laboratories located at Asansol, Dhanbad, Nagpur, Bilaspur, Kusmunda, Hasdeo, Jayant, Bhubaneswar and Ranchi. In terms of the revised guidelines issued by Ministry of Coal in 2013, CMPDI has prepared 7 nos. of mine closure plans for BCCL mines during the year. Quick comments on 17 nos. of mine closure plans were prepared and sent to MoC during the year. 58 nos. of Mine closure status reports (MCSRs) were prepared during the year. However, considering the future requirement of environmental services and possibility of more stringent stipulations from MOEF, environmental services rendered by us would be required on a continual basis. Further, CMPDI has been re-accredited as Environmental Impact Assessment (EIA) consulting organization by Quality Council of India (QCI) (A ministry of Environment & Forest's designated agency), New Delhi for Mining of Minerals including Opencast/Underground mining sector, Thermal and Coal Washeries sector.

10. Alternative Source of Coal Based Energy:

CMPDI continued its efforts for facilitating commercial development of coal based non-conventional energy resources and is pursuing commercial and R&D projects with national/international organizations.

CMPDI is pursuing envisaged activities on behalf of CIL for development of Coalbed Methane (CBM) in two blocks, namely Jharia CBM Block and Raniganj North CBM Block, allotted to the consortium of ONGC-CIL and extending support to CIL in taking up administrative and other issues viz. Contractual, Operational etc. MoC has made CMPDI the Nodal Agency for development of CMM in India.

Ministry of Coal vide Office Memorandum dated 29th July, 2015 has permitted CIL to explore and exploit CBM from its areas under coal mining lease allotted to Coal India Limited (CIL). To expand the scope of development of CMM in CIL areas, further studies for "Assessment of CMM Potentiality in CIL Command Area" have been undertaken by CMPDI and to begin with two CMM blocks namely Raniganj CMM Block in ECL command area and Jharia CBM/CMM Block in BCCL command area have been delineated. "Reservoir Modeling & Techno-Economic Feasibility Study for Commercial Development of Coal Mine Methane (CMM)/ Coalbed Methane (CBM)" within mining leasehold areas for CMM blocks in (a) Raniganj Coalfield (ECL areas) and (b) Jharia Coalfield (BCCL areas) has been undertaken through an international consultancy organization selected through global bidding.

An International Workshop on "Best Practices in Methane Drainage and Use in Coal Mines" was organized jointly by CIL-CMPDI, GMI-US EPA, and UNECEF under aegis of GoI-MoC in March 2017 at Ranchi.

CMPDI is carrying out studies related to "Assessment of Coalbed Methane Gas-in-Place Resource of Indian Coalfields/Lignite fields" in selected boreholes being drilled in under regionally explored areas.

A project proposal on mitigation/utilization of Ventilation Air Methane (VAM) is under consideration to be taken up at Moonidih (Jharia coalfield) under CIL (R&D) and National Clean Energy Fund (NCEF) of Government of India with CSIRO, Australia and CMPDI as the main implementing agency and BCCL as sub implementing agency. The project has been approved in principal by CIL (R&D) Board and will be taken up on competent approval of the Government.

MoC has constituted Inter Ministerial Committee (IMC) for identification of areas for UCG on the line broadly similar to the existing policy of CBM development in order to identify areas to be offered, deciding about blocks to be put to bidding or awarding to PSUs on nomination basis, proposing the mechanism for bidding process and other related matter. MoC has made CMPDI as Nodal Agency for the purpose. A consultant has been engaged for "Formulation of Bid Document & Model Contract Document for Development of UCG". Draft documents submitted which are under deliberation by IMC.

A Workshop was organized on "Challenges and opportunities for Development of UCG (Deep Seated Coal) in India" at Delhi in March, 2017 which was attended by officials of MoC, DGH, DGMS, ONGC, NLC, CIMFR, IITs and national experts on UCG for deciding the way forward for development of UCG in Indian geo-mining condition.

11. S&T Projects and R&D Projects:

Your company is the Nodal Agency to coordinate research activities funded under S&T Grant of Ministry of Coal (MoC) and R&D Board of CIL. Besides coordination of R&D work by various academic and research institutes, CMPDI with its well established laboratories also undertakes research in key areas like mining, coal exploration, clean coal technologies like Coal Bed Methane (CBM), Coal Mine Methane (CMM), Shale gas assessment, Coal-to-Liquid (CTL), Coal beneficiation & Utilisation and Mine environment related issues.

Over the years, many of these research projects have yielded considerable benefits resulting in operational improvement, safer working conditions, better resource recovery and protection of environment. While some research projects have produced tangible impact on the industry directly, there are others which have strengthened mine planning, design and technical services required by both operating mines and future mining projects. Designed tools developed specifically for Indian geo-mining condition are now available for variety of problems like underground coal pillars design, analysis of roof cavability, prediction of surface subsidence, optimum blast design for various rock conditions, opencast slope stability, instant coal ash & moisture analyser at site from railway wagon/truck, coal dry beneficiation system using Radiometric Technique, etc.

During FY 2016-17, 9 nos. of research projects have been completed. The completed projects were pertaining to (i) development of tele robotics and remote operation technology for underground coal mines, (ii) development of indigenous catalyst through pilot scale studies of Coal-to-Liquid (CTL) conversion technology, (iii) enhancing life of de-watering pipes in coal/lignite mines by prevention of erosion-corrosion with nano-crystalline surface Engineering Treatments, (iv) blast design and fragmentation control, (v) design and development of truck mounted mobile coal sampler for instant coal ash & moisture analyser at site from railway wagon/truck, (vi) optimization of various parameters of lab scale Coal Winnowing System (Phase-II), (vii) find a methodology of safe liquidation in thick seams of Raniganj Coalfields : design & development & show-casing demonstrative trials at Khottadih Colliery, ECL, (viii) demonstration of coal dry beneficiation system using Radiometric Technique and (ix) development of guidelines to predict distance between toe of the shovel-dumper dump and that of dragline dump with consideration of safety and economical design of both shovel-dumper dump and dragline dump. CMPDI is making all out efforts to involve more and more research and academic institutions, coal/lignite producing companies for need-based research work beneficial to coal/lignite industry. As a result, 25 S&T and R&D projects are under execution in association with various organizations.

Under an R&D project, a demonstration plant has been developed for dry de-shaling of coal, based on the modified radiometric detection and pneumatic removal technology. The distinct advantage of radiometric technology is that the desired property clean coal or the threshold value for rejection can be planned and set as per need. This technology is an efficient, dust free and energy friendly also.

Based on the study of 11 dragline operated opencast mines of CIL, a general guideline has been developed for the optimum distance between toe of dragline dumps and shovel-dumper dumps under an R&D project. The guidelines can predict overall height and slope of dragline dump depending on the range of various geo-engineering parameters. From the above study, it had been concluded that the toe of shovel-dumper dump is formed at least 110-180 m away (site dependent) from the toe of the dragline dump so that dragline dump gets adequate time to stabilize before fresh dumping by dumper. However, increase in water table may deteriorate the dump stability.

12. e-Procurement and Contract Management:

The process of reverse auction in all tenders valued at ₹ 1.00 crore and above has been implemented from 15.01.2016 and CMPDI was the first company in CIL to publish the tender related to Hiring of Security guards to finalize through RAP.

The offline process of receipt, refund and reconciliation of EMD was discontinued by CIL vide its order dated 29.07.2016 and the new module of online receipt and refund was implemented. The system envisaged receipt of EMD through Net banking or NEFT/RTGS in the Central pool account is

maintained by CIL and the Subsidiary companies in Axis Bank. Upon rejection of a bid or finalization of any tender, EMD of the rejected/unsuccessful bidders was supposed to get automatically refunded to the accounts of the bidders from where the same was received, and EMD of the successful bidder transferred to the respective designated accounts of CIL/subsidiary companies. In cases, where the destination bank was Axis bank, there was no problem in reconciliation of the transaction as each transaction could be identified through a Remit Reference Number which was reflecting in the statements of pool account as well as the destination account. However, in cases where the destination account was other than Axis Bank, the EMD was being transferred without any identifiable reference because of which it was difficult for Finance Department to reconcile the transacted amount and issue cash receipts. The matter was taken up with CIL and Axis Bank and a solution was suggested by e-P&CM division of CMPDI. The suggestion made by us was adopted and accordingly system generated mail alert is being received by the finance personnel, who in turn are being able to identify the transactions related to EMD of successful bidders and issue cash receipts. Now the said system is being followed in all other Subsidiary companies/ areas where the designated bank is other than Axis Bank.

In tenders like hiring of consultants viz. for strategic business plan for CMPDI, engagement of Indirect Tax consultant, development & model contract document for development of UCG etc., certain credentials are required to be evaluated first before opening of the price bids, which was not possible in the present form of e-procurement portal of CIL. CMPDI discussed the issue with CIL and for such type of tenders, another mode of tendering was adopted under 'Critical Tenders' with different organizational chain. This type of e-procurement on Combined Quality-cum-Cost Based System (CQCCBS) has been done only by CMPDI till now. CMPDI has been able to finalize the tenders for hiring of consultants on CQCCBS and for deployment of UAV in CCL and NCL.

13. Corporate Social Responsibility and Sustainability:

Your company has built strong partnership with the communities around its surrounding and also with the wider society through a well-conceived basket of CSR interventions for the betterment of lives of the people. Under CSR & Sustainability, sustainable development were emphasized and practiced by CMPDI. Major activities carried out during the year 2016-17 include Infrastructure Development in school / villages. Educational support to poor and needy school children, Financial assistance to R.K. Mission, TV Sanitarium, Tupudana, Ranchi for procurement of medical equipment, skill development / women empowerment, installation of LED solar lights in village of Maharashtra, provisioning of drinking water by drilling and installation of bore wells in villages, etc.

14. Consultancy Services in Management System standards:

CMPDI is the nodal agency in implementation of Management System standards in all subsidiaries of Coal India Limited. CMPDI provides its consultancy services for implementation and certification of different Management system Standards, like ISO 9001, ISO 14001, ISO 50001, ISO 27001, OHSAS 18001, etc. We provide guidance and support in establishment, documentation, awareness training, internal auditors training, auditing supports, implementation, certification support as well as post certification support for implementation and certification of these Management System Standards.

Two of CIL's subsidiaries, MCL and NCL are certified for their company-wide Integrated Management System (ISO 9001, ISO 14001 and OHSAS 18001). CMPDI (HQ) and all its seven Regional Institutes have got license for the new ISO 9001:2015 standard from Bureau of Indian

Standards. Under our guidance and support, CIL HQ has been certified for ISO 9001 and ISO 50001. 32 laboratories of different subsidiaries of CIL are NABL accredited. 56 different units across all subsidiaries of CIL are certified for ISO 9001, ISO 14001, and OHSAS 18001 & ISO 27001. Under our guidance and support, Ministry of Coal was also certified for ISO 9001.

We have provided consultancy for implementation of company-wide Integrated Management System in ECL, CCL, WCL, and BCCL. Company-wide certification of ECL for Integrated Management System (ISO 9001, ISO 14001 and OHSAS 18001) is expected shortly. We are providing support and guidance for implementation and certification of ISO 14001:2015 (Environment Management System) to CIL HQ and its certification is expected shortly.

15. Consultancy-Other than CIL

During the FY 2016-17, 35 outside-CIL consultancy jobs were completed by CMPDI for 26 organisations outside CIL. Some of the major clients / organizations are NMDC, MOIL Ltd., MAHAGENCO, Tata Steel, DVC, SAIL, UCIL, West Bengal Power Development Corporation Limited (WBPDC), Chhattisgarh State Power Generation Company Limited (CSPGCL), etc.

Presently, 25 outside-CIL consultancy jobs are being executed by CMPDI for 19 organisations like OCPL, NMDC, NALCO, NTPC Ltd., MAHAGENCO, SAIL, Orissa Mining Corporation (OMC), PFC Consulting Limited (PFCCL), Gujarat State Electricity Corporation Limited (GSECL), etc.

During the year 2016-17, 43 outside-CIL consultancy jobs worth ₹ 141.38 crores from 29 organizations were procured by CMPDI. This is the highest ever value of jobs obtained in a year by CMPDI.

One overseas assignment of "Preparation of Feasibility Study for Benga Coal Project of M/s ICVL in Tete Province of Mozambique" has also been obtained from NMDC.

16. Information and Communication Technology Services

During the FY 2016-17, Steps were taken for improving office efficiency by introducing Video Conferencing facility connecting CMPDI (HQ) with all its Regional Institutes, located in six states across the country, facilitating time saving for various Review meetings and better co-ordination. CMPDI has gone for fully paperless receipt module of e-Office in its HQ and all Regional Institutes which has resulted in saving papers and also improving office efficiency. CMPDI has been assigned the job of implementation of e-Office across CIL and the work is in advanced stage.

Contract Labour Information Portal (CLIP) has been developed and implemented in CMPDI for maintaining transparency in payment of wages to Contract Workers. Portal for capturing of data from all opencast and underground mines of Coal India Ltd. has been developed for timely preparation of Mine Capacity Assessment reports.

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 DPE'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 (between CIL & CMPDI) rating from DPE consistently since 2007-08 (barring 2010-11). CMPDI received the Corporate Award on CSR Expenditure (Special Appreciation Prize) on 42nd Foundation Day of Coal India Limited celebrated on 1st November, 2016 at Kolkata. **CMPDI also got the Excellent MoU rating (provided by DPE) for the year 2015-16.**

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 possible 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.



(Shekhar Saran)

Chairman-cum-Managing Director

Place : Ranchi

Date : 06.07.2017

PERFORMANCE AT A GLANCE

Sl No.	Particulars	Unit	2016-17 (As per IndAS)	2015-16 (Restated as per IndAS)	2015-16 (As per GAAP)	2014-15 (As per GAAP)
1	Sales of Services (Net Sales)	₹ in crore	930.52	759.27	759.27	726.72
2	Profit before Tax	₹ in crore	62.83	38.03	42.54	39.33
3	Profit after Tax	₹ in crore	38.82	23.97	28.48	25.04
4	Retained Profit	₹ in crore	38.82	23.97	28.48	25.04
5	Net Block	₹ in crore	135.19	100.26	99.99	81.58
6	Net Worth	₹ in crore	255.7	215.25	214.98	182.84
7	Current Assets	₹ in crore	820.03	799.38	688.23	791.28
8	Current Liabilities	₹ in crore	602.09	612.45	550.27	575.89
9	Working Capital [(7) - (8)]	₹ in crore	217.94	186.93	137.96	215.39
10	Capital Employed	₹ in crore	353.13	287.19	237.95	296.97
11	Gross Margin	₹ in crore	83.40	50.66	50.66	49.90
12	Return Capital Employed	₹ in crore	17.79	13.24	17.88	13.24
13	Earnings Per Share	₹	2131.83	480.04	1496.00	1315.13

Net Worth = Paidup Capital + Reserve & Surplus - Accumulated loss & deferred revenue expenditure

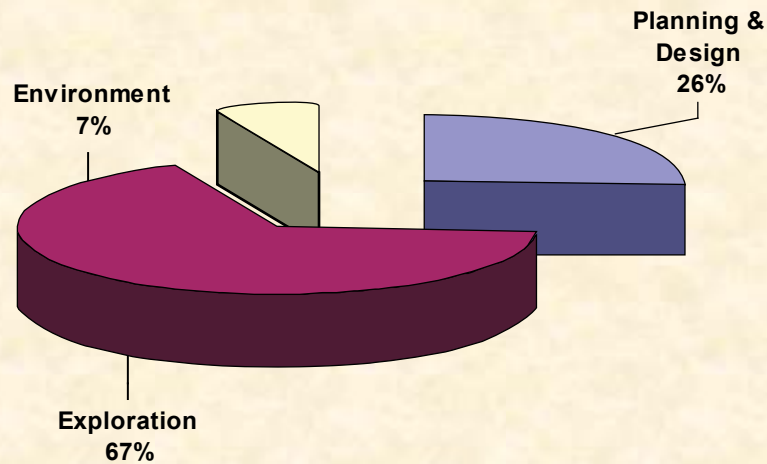
Gross Margin = Net Profit + Depreciation + Interest + PP Adjustment + Tax Expenses

Capital Employed = Net Block + Working Capital

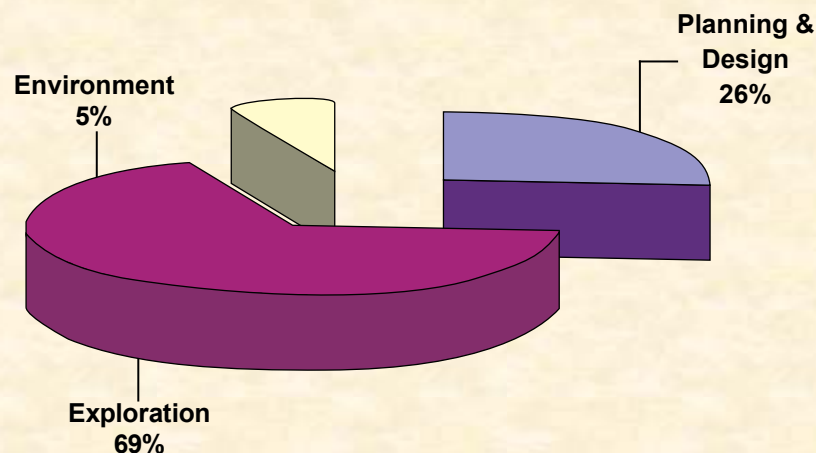
Note : Previous year's figures have been re-arranged/ re-grouped /re-classified wherever necessary to make comparable with those of current period.

FINANCIAL OVERVIEW OF CMPDIL

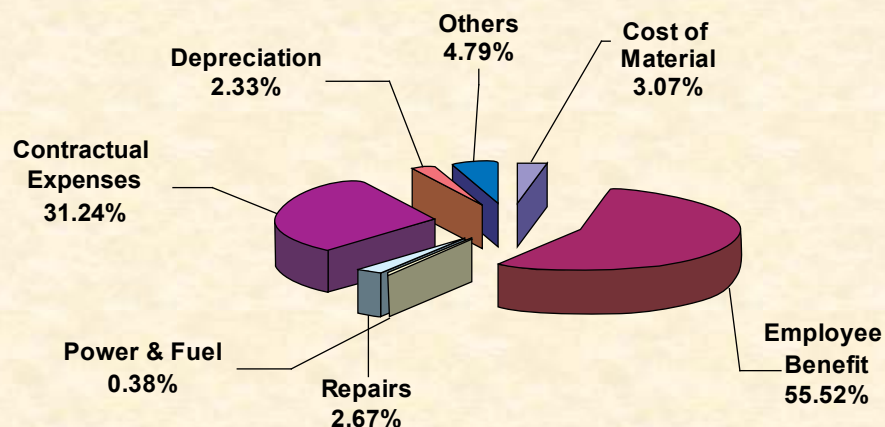
Sales Breakup 2016-17



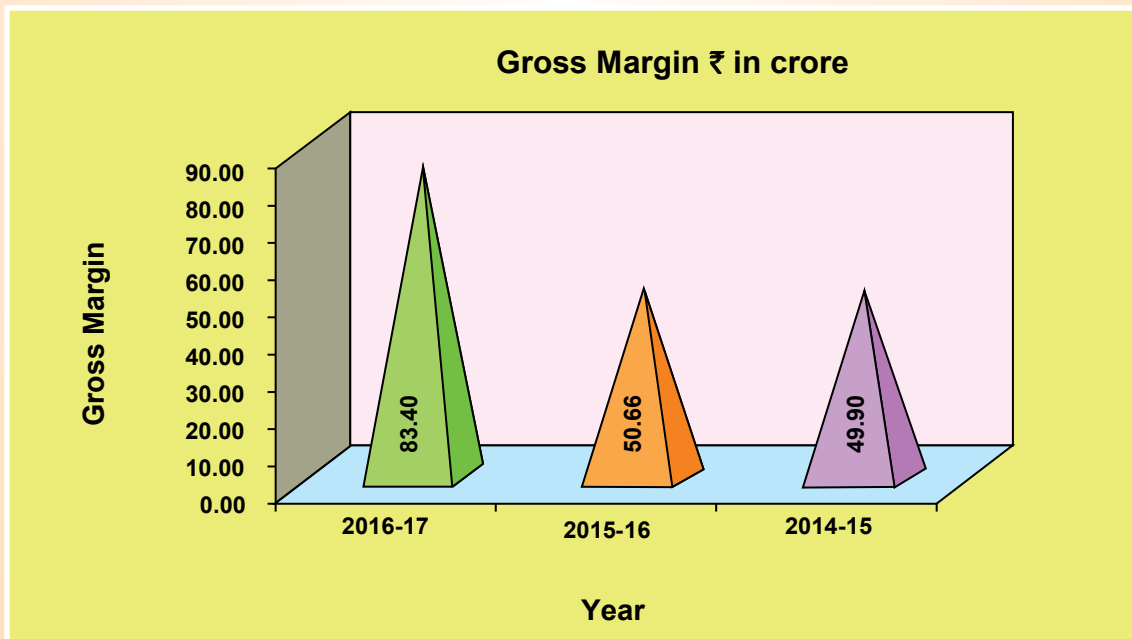
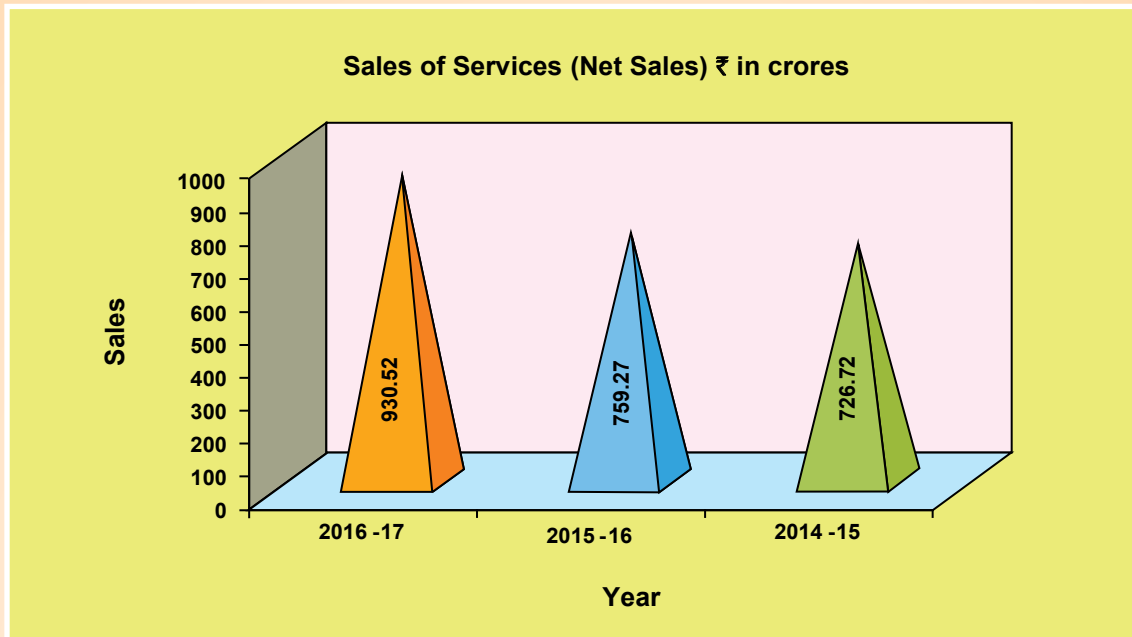
Expenditure Breakup 2016-17 on the basis of segment



Expenditure Breakup 2016-17 on the basis of major heads of expenses



FINANCIAL OVERVIEW OF CMPDIL



DIRECTORS' REPORT

To
The Shareholders
Gentlemen,

On behalf of the Board of Directors, I have great pleasure in presenting the 42nd Annual Report on the working of your Company along with the Accounts for the year ended 31st March, 2017 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 (RIs) located at Asansol, Dhanbad, Ranchi, Nagpur, Bilaspur, Singrauli & Bhubaneswar and its Headquarter at Gondwana Place, Kanke Road, Ranchi. Seven Regional Institutes designated as Regional Institute (RI)-I to RI-VII rendered consultancy services to seven corresponding subsidiaries of CIL viz. ECL (RI-I), BCCL (RI-II), CCL (RI-III), WCL (RI-IV), SECL (RI-V), NCL (RI-VI), & MCL (RI-VII).

Consultancy services to CIL (HQ), NEC & non-CIL clients like Directorate General of Hydrocarbons, Manganese Ore (India) Ltd., National Thermal Power Corporation Ltd., National Aluminium Company Limited, Steel Authority of India Limited, Neyveli Lignite Corporation Limited, Damodar Valley Corporation, Chhattisgarh Mineral Development Corporation, Mahan Coal limited, and Karnataka Power Corporation Limited etc. were provided mainly through CMPDIL Headquarter. Besides these Consultancy services, CMPDI also handled specialized assignments of Ministry of Coal.

Presently, 25 outside consultancy jobs are in hand for 19 organizations like OCPL, NMDC, NALCO, NTPC Ltd., MAHAGENCO, SAIL, Orissa Mining

Corporation (OMC), PFC Consulting Limited (PFCCL), Gujarat State Electricity Corporation Limited (GSECL) etc.

During the year 2016-17, 43 outside consultancy jobs worth ₹ 141.38 crores from 29 organizations were procured by CMPDI. This is the highest ever value of jobs obtained in a year by CMPDI.

1.1 Major Services Offered

• Geological Exploration & Drilling

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

• Project Planning & Design

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

• Engineering Services

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

• Research & Development

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

• Laboratory Services

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

• Environmental Services

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

• Information Technology

• Human Resource Development

• Specialised Services

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

1.2 Financial Working Results

During the year under review your Company earned a Profit after Tax of ₹ 40.59 Crores. The working results of the company are given below:

Particulars	Year ending 31.03.2017	Year ending 31.03.2016 (Restated as per Ind As)	Result 2015-16 (Before Implementation of Ind AS)
Net Sales	930.52	759.27	759.27
Total expenses	880.46	749	726.59
Profit Before Tax	65.53	15.35	42.54
Tax Expenses	24.94	6.21	14.06
Profit After Tax (A)	40.59	9.14	28.48
Other Comprehensive Income (OCI)*	(2.70)	22.68	IND AS NOT IMPLEMENTED
Income Tax	(0.93)	7.85	
Total Other Comprehensive Income (B)	(1.77)	14.83	
Total Comprehensive Income (A) + (B)	38.82	23.97	

1.3 Management Discussion and Analysis Report

The Management of Central Mine Planning & Design Institute Ltd. (CMPDI) presents its discussion and analysis report covering the different matters of importance including performance and outlook of the Company.

1.3.1 Vision of CMPDI:

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

1.3.2 Mission of CMPDI:

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 CMPDI are as follows:

1. To provide consultancy support in coal and mineral exploration including

geological, geophysical, hydrological and environmental data generation.

2. To improve quality of exploration and feasibility reports providing higher level of confidence of geological assessment for optimum mine planning.
3. To optimize generation of internal resources by improving productivity of resources, preventing wastage and to mobilize 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 undertake formulation of Environmental Management Plans (EMPs), Environment Impact Assessment (EIA) and Mine Closure Plans for coal mining and related projects.
7. 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.
8. To provide field and laboratory services to subsidiary coal producing companies of CIL.
9. 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, the following services are offered 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 reclamation monitoring of opencast mines producing more than 5 million cu.m. (Coal+OB) per annum are being carried out by satellite surveillance on yearly basis where that in respect of less than 5 million m³ (coal+OB) per annum are being carried out since 2011 at three years' interval.
 - D. Management system services - under offer since 1997, these cover complete range of consultancy and

support for creation, documentation, implementation and training various management systems standards, e.g. ISO 9001 (Quality Management System), ISO 14001 (Environmental Management System), OHSAS 18001 (Occupational Health and Safety Management), SA 8000 (Social Accountability Management), ISO 50001 (Energy Management System) and ISO 27001 (Information Security Management System).

- 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, OBR Check Measurement, etc.

1.3.5 Industry Structure and Development

The World economic Outlook, released by IMF in April, 2017, forecasted a buoyant financial market and a long-awaited cyclical recovery in manufacturing and trade. As per the Report, world growth is projected to rise from 3.1 % in 2016 to 3.5 % in 2017 and 3.6 % in 2018. It has cautioned that binding structural impediments will continue to hold back a stronger recovery and the balance of risks remains tilted to the downside, especially over the medium term. With persistent structural problems, such as, low productivity growth and high income inequality, pressures for inward-

looking policies are increasing in advanced economies. These threaten global economic integration and the cooperative global economic order that has served the world economy, especially emerging market and developing economies, well. Against this backdrop, economic policies have an important role to play in staving off downside risks and securing the recovery. The Report suggests that on the domestic front, policies should aim to support demand and repair balance sheets where necessary and feasible; boost productivity, labour supply, and investment through structural reforms and supply-friendly fiscal measures; upgrade the public infrastructure; and support those displaced by structural transformations such as technological change and globalization. Adjusting to lower commodity revenues and addressing financial vulnerabilities remain key challenges for many emerging market and developing economies. A renewed multilateral effort is also needed to tackle common challenges in an integrated global economy.

As per Economic Survey FY 2016-17, flagship annual document of the Ministry of Finance, Government of India, the year was marked by two major domestic policy developments, the passage of the Constitutional Amendment, paving the way for implementing the transformational Goods and Services Tax (GST), and the action to demonetize the two highest denomination notes. The GST will create a common Indian market, improve tax compliance and governance, and boost investment and growth; it is also a bold new experiment in the governance of India's cooperative federalism. Demonetization has had short-term costs but holds the potential for long-term benefits. Follow-up actions to minimize the costs and maximize the benefits include fast, demand-driven, remonetisation; further tax reforms, including bringing land and real estate

into the GST, reducing tax rates and stamp duties; and acting to allay anxieties about over-zealous tax administration. These actions would allow growth to return to trend in FY 2017-18, following a temporary decline in FY 2016-17. Looking further ahead, societal shifts in ideas and narratives will be needed to overcome three long-standing meta-challenges: inefficient redistribution, ambivalence about the private sector and property rights, and improving but still-challenged state capacity. On the international front, Brexit and the US elections may herald a tectonic shift, forebodingly laden with darker possibilities for the global, and even the Indian economy.

Mining in India is a major economic activity which contributes significantly to the economy of India. Under the energy sector, power generation companies account for over 70 percent of the country's use of coal. The Working Group on coal and lignite for XII Plan had projected widening of the gap between demand and indigenous availability to the tune of 273 Mt by FY 2021-22. The Govt. has an ambitious programme of round the clock power supply across the country in the next 5 years. Moreover, creating infrastructure is another thrust area of the Government, which would have a positive bearing in the demand of cement and the steel industries. Thus, growth in power, cement and steel sectors is likely to bolster growth in the demand of coal. Consequently, congruent to the growth plan of the Government, Coal India Ltd (CIL) has prepared a roadmap to achieve a coal production target of 908 Million Tonnes (Mt) by FY 2019-20.

For CMPDI, target for detailed drilling for FY 2017-18 has been enhanced and set at a level of 12.50 lakh metre from the achievement level of 11.26 lakh metre during FY 2016-17. The moderately

enhanced target with 11 % growth has been fixed by MoC in view of hindrances in drilling due to law & order and lack of forestry permission. Moreover, CMPDI is on schedule with its preparation for various reports necessitated for 908 Mt of coal production by CIL. Nonetheless, exploration and planning support would be required by CIL on continual basis for enhancement and sustenance of the production in future. This will be true also for the infrastructural facilities including CHPs, washeries, etc. 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. CMPDI has also rendered consultancy services for metal mining companies like Tata Steel, SAIL, MOIL Ltd., Hindustan Copper Ltd., Hutti Gold Mine, NMDC, etc.

Furthermore, endeavors by CIL and other companies towards adopting alternative source of coal based non-renewable energy generation like Coal Bed Methane / Coal Mine Methane, Underground Coal Gasification (UCG), Shale gas, etc., is likely to be the sources of consultancy work for CMPDI. Additionally, emerging area of Information and Communication Technology (ICT) in coal sector is also presenting additional opportunities for CMPDI which will increase further in coming years.

However, all the endeavors by the company over the years did not get reflected in its top and the bottom lines, appreciably, and thus, necessitating a relook on the business dynamics of CMPDI. This also entails a proper study of future market scenario in the coal sector and possible opportunities for foray in other areas in a major way. Moreover, though the coal fuel is expected to retain its primacy in the

country and remain the only realistic option for providing cheap and abundant energy for the local population at least in the next 8 to 10 years' time, some doubts have started being raised over India's reducing appetite for thermal coal and sustenance of the coal demand on a longer time horizon. Drop in the thermal coal import in FY 2016-17 with the enhancement in production from CIL and SCCL has supported this view. Nevertheless, the Government's commitment to exploit the renewable sources of energy in a big way, parallelly, is likely to impact the future expansion programme of the coal sector. India's post-2020 'climate action plan' has promised to reduce emission intensity by 33-35% by 2030 over the 2005 levels apart from boosting the share of clean energy in electricity generation and adding carbon sinks with tree and forest cover to remove carbon dioxide from the atmosphere.

Considering the above and to infuse dynamism in business domain of CMPDI, it will be realistic to ensure enhancement in the exploration capacity through further productivity improvement and particularly through use of 2D Seismic & other geo-physical methods, upgradation and modernization of existing facilities and infrastructure wherever required, rationalizing 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 computerization and networking, establishing technology for development of alternative sources of coal based energy, etc. Allied with this, the Pricing Mechanism of the company is being given a thorough relook to improve the topline and bottom-line of the company.

1.3.6 Strategy adopted to realize above objectives and vision:

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

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

1.3.7 Strength and weakness

Strength

- CMPDI is truly a multi-disciplinary organization, perhaps one of its kind, providing almost all the services prior to mining, during the mining operation and after the mining operations under one roof.

- With strategically located RIs, it is able to provide door-step service to CIL subsidiaries.
- It has coalfield-wise/mine-wise strong data base of CIL subsidiaries.
- It has a base of more than 1400 multi-disciplinary skilled manpower.
- Has rich experience of executing over 1300 integrated coal exploration projects, planning of over 1000 mining Project Reports with individual project capacity up to 70 MTY opencast mine and 3.5 MTY underground mine, large number of infrastructural-facilities, etc.
- It has the largest infrastructure for coal exploration (largest fleet of drill in the country for detailed exploration) having geographical spread in 8 states, laboratory facilities, baseline data generation capacity, etc.

Weakness

- Shortage of skilled and qualified personnel in executive and non-executive cadre.
- High rate of Attrition (New Recruits are leaving the organization after being trained).

1.3.8 Opportunities and Threats

Opportunities

- The demand for coal is likely to continue at least up to 8 to 10 years providing scope for CMPDI services
- Need to enhance the application of IT in coal sector.
- Diversification in non-coal sector
- Expertise in providing specialized services related to CBM / CMM / UCG / Shale Gas, Geomatics, NDT, etc.

Threats

- In absence of commensurate growth in the regional exploration, sustenance

of the present detailed drilling capacity beyond XII plan seems difficult.

- Undue delay in obtaining forestry clearances for drilling operation with required number of borehole density.
- Restrictions in exploration in forest area may pose problem in expansion programme.
- Poor law and order conditions in different states pose hindrance to exploration works.
- Further opening of the coal sector may result in market competition from other domestic or international consultancy service providers.
- Some doubts have started being raised over India's reducing appetite for thermal coal and sustenance of the coal demand over a longer time horizon in future.

1.3.9 Pricing

Pricing of consultancy services for exploration, mine planning/project reports, environmental plans and other Engineering services is based on the category of customers. The services rendered to CIL and its subsidiaries are priced at cost plus service charges of 10% for P&D service and 7.5% for Drilling services. However, to enhance the top and bottom lines of the company and other business dynamics, the Pricing Policy is under review. CMPDI Board, in its 201st Meeting held on 31.01.2017, has already accorded its approval for revising the environmental monitoring rates and the same has been implemented from the last quarter of FY 2016-17. Further, approval for retention of service charge in respect of internal consultancy jobs has been accorded by the Board in its 202nd Meeting held on 10.3.2017 and the same is being implemented from 1st April, 2017.

1.3.10 Marketing Policy

CMPDI is committed to provide consultancy services in all possible areas as and when demanded by Coal India Limited and its subsidiary companies on priority basis. However, CMPDI is also committed to undertake jobs from outside CIL clients with due consideration of the importance and strategic values, wherever such outside consultancy jobs can be undertaken.

1.3.11 Outlook and preparedness

CMPDI's exploration activities had major spurt during the XI and XII Plan periods. Through departmental drills and outsourcing, CMPDI carried out 42.08 lakh meter of drilling during the XII Plan period (2012-17) in comparison to about 19.41 lakh meter of drilling during the XI Plan period (2007-12) and 10 lakh meter of total drilling carried out during the X Plan period (2002-07). Also, during the period of FY 2007-08 to FY 2016-17, the CAGR is over 18% over the achievement of 2.07 lakh meter during FY 2006-07. Modernization of departmental drills, induction of new higher capacity mechanical and hydrostatic drills, introduction of high performance bits resulting in higher productivity, adopting latest mud technology, effective arrangement of drilling accessories and manpower had been the key to augment the drilling capacity of CMPDI.

Government of India has put coal exploration on the fast track. It is envisaged to conclude Regional Exploration of the country in 3 years' time by GSI, CMPDI etc. and Detailed Exploration in 5 years. This could be possible only through adoption of modern technologies which will reduce quantum of drilling and make the Geological Models more reliable. The Seismic Survey widely used in Oil Sector can be extended to

Coal Sector also subject to increased precision in derived results. Apart from it, the aerial geophysical survey would lead to identification of concealed coal bearing sedimentary basin in extension areas of the coal belts. CMPDI envisages to adopt such technologies in exploration and mix them in preparation of Geological Report. This will expedite the preparation of Geological Reports and will provide better confidence in Geological Model of the blocks. In other words, the geophysical work will be extensively used in coal exploration process.

The target for FY 2017-18 has been raised to 12.50 lakh meter by the Ministry of Coal which has necessitated emphasis on outsourcing of substantial number of coal blocks for drilling. CMPDI had entered into a long term MOU with MECL on 6th January, 2009 for offering up to one lakh meter of exploratory drilling per annum to MECL in different coal blocks which has been enhanced to 4.00 lakh meter per annum. Six rounds of National / Global tendering & eleven rounds of e-tendering has been done since FY 2007-08 (till 2016-17) and work orders had been placed for 81 blocks involving 31.59 lakh meters. Moreover, hindrances in drilling due to adverse law & order and non-receipt of clearance for drilling of forest areas are being vigorously followed up with MoEF and concerned states by CMPDI, CIL and MOC.

A total of 129 projects were identified for XII Plan resulting in capacity addition of about 517 Mty, against which, project reports for 105 projects, with capacity addition of about 456 Mty have already been formulated. Additionally, 77 Project Reports with capacity addition of about 198 Mty have been formulated till 31st March, 2017 during XII Plan period. Nonetheless, in respect of CIL's programme of 908 mt coal production by FY 2019-20, CMPDI is

as per schedule for preparation of various reports.

Capacities of all the laboratories in CMPDI have been upgraded. Chemical and Petrography laboratories have been upgraded with sophisticated imported equipment and the capacities have been enhanced. The existing Environment Laboratories have been strengthened with state of the art equipment. Environment labs of CMPDI (HQ), RI-IV & RI-V have been re-accredited by National Accreditation Board for Testing & Calibration of Laboratories (NABL). Surveillance assessment by National Accreditation Board for Testing & Calibration of Laboratories (NABL) was done during the year. CPCB recognition of Environment Lab was obtained during the year FY 2016-17, which is valid for 5 years. Certificate of Registration for OHSAS-18001-2007 was awarded to Environment Laboratory at CMPDI (HQ), RI-IV & RI-V by Certification International (CI). A state of the art CBM Lab is functional at CMPDI to facilitate generation of all parametric data related to CBM/Shale gas related studies, reservoir characteristics and assessment of CBM and Shale gas resources. Further to enhance the capacity and capabilities of CMPDI, S&T funded project is under implementation by CMPDI and CSIRO Australia.

Manpower requirement of Exploration, Planning and Design as well as allied engineering services have been addressed. During FY 2016-17, 73 nos. of Executives have been posted in CMPDI through recruitment and transfer. Similarly, 16 nos. of non-executive manpower have been added by recruitment/compassionate employment/transfer from other subsidiaries and process of addition of manpower is going on.

Since 2008, Satellite surveillance for land reclamation monitoring of all the opencast

coal mines of CIL having production more than 5 million m³ (coal+OB) per annum was started annually. Further to this, land reclamation monitoring of the opencast coal mines of CIL having production less than 5 million m³ (coal+OB) per annum was also taken up from the year 2011 at the interval of three years. CMPDI is also taking up other services like mine Fire mapping, Vegetation cover mapping, etc. and is capable of providing additional services in the field of geomatics.

Technical assistance was provided to the subsidiary companies of CIL in setting up washeries. Tender document on Build-Operate-maintain and Build-Own-Operate concepts were customized on e-Reverse Auctioning Process in record time. Technical support in modernizing coking coal washeries operating under CIL is also provided. A dry Coal Beneficiation plant under CIL R&D scheme has also been implemented. Assistance in construction of new washeries by scrutinizing and approving detail design drawings is provided. Under laboratory activities, Washability studies of RoM Coal samples and Bore core coal samples are carried out for CIL/subsidiary companies as well as for outside clients. Active support will be continued in setting up of coal washeries in future, too.

CMPDI continued its efforts for facilitating commercial development of coal based non-conventional energy resources and is pursuing commercial and R&D projects with national/international organizations. CMPDI is pursuing envisaged activities on behalf of CIL for development of Coalbed Methane (CBM) in two blocks, namely Jharia CBM Block and Raniganj North CBM Block, allotted to the consortium of ONGC-CIL and extending support to CIL in taking up administrative and other issues viz. Contractual, Operational etc. MoC has made CMPDI the Nodal Agency for development of CMM in India.

Ministry of Coal vide Office Memorandum dated 29th July, 2015 has permitted CIL to explore and exploit CBM from its areas under coal mining lease allotted to Coal India Limited (CIL). To expand the scope of development of CMM in CIL areas, further studies for "Assessment of CMM Potentiality in CIL Command Area" have been undertaken by CMPDI, initially two CMM blocks namely Raniganj CMM Block in ECL command area and Jharia CBM/CMM Block in BCCL command area have been delineated. "Reservoir Modeling & Techno-Economic Feasibility Study for Commercial Development of Coal Mine Methane (CMM)/ Coalbed Methane (CBM)" within mining leasehold areas for CMM blocks in (a) Raniganj Coalfield (ECL areas) and (b) Jharia Coalfield (BCCL areas) has been undertaken through an international consultancy organization selected through global bidding. An International Workshop on "Best Practices in Methane Drainage and Use in Coal Mines" was organized jointly by CIL-CMPDI, GMI-US EPA, and UNECEF under aegis of GoI-MoC in March 2017 at Ranchi.

CMPDI is carrying out studies related to "Assessment of Coalbed Methane Gas-in-Place Resource of Indian Coalfields/Lignite fields" in selected boreholes being drilled in regionally explored areas.

MoC has constituted Inter Ministerial Committee (IMC) for identification of areas for UCG on the line broadly similar to the existing policy of CBM development in order to identify areas to be offered, deciding about blocks to be put to bidding or awarding to PSUs on nomination basis, proposing the mechanism for bidding process and other related matter. MoC has made CMPDI as Nodal Agency for the purpose. A consultant has been engaged for "Formulation of Bid Document & Model Contract Document for Development

of UCG". Draft documents submitted which are under deliberation by IMC. A Workshop was organized on "Challenges and opportunities for Development of UCG (Deep Seated Coal) in India" at Delhi in March, 2017 for deciding the way forward for development of UCG in Indian geo-mining condition.

A project on mitigation/utilization of Ventilation Air Methane (VAM) is under consideration to be taken up at Moonidih (Jharia coalfield) under CIL (R&D) and National Clean Energy Fund (NCEF) of Government of India with CSIRO, Australia and CMPDI as the main implementing agency and BCCL as sub implementing agency. The project has been approved in principal by CIL (R&D) Board and will be taken up on competent approval of the Government.

Over the years, many of these research projects have yielded considerable benefits resulting in operational improvement, safer working conditions, better resource recovery and protection of environment. While some research projects have produced tangible impact on the industry directly, there are others which have strengthened mine planning, design and technical services required by both operating mines and future mining projects. Designed tools developed specifically for Indian geo-mining condition are now available for variety of problems like underground coal pillars design, analysis of roof cavability, prediction of surface subsidence, optimum blast design for various rock conditions, opencast slope stability, instant coal ash & moisture analyser at site from railway wagon/truck, coal dry beneficiation system using Radiometric Technique, etc.

During FY 2016-17, 9 nos. of research projects have been completed. The completed projects were pertaining to (i) development of tele robotics and remote

operation technology for underground coal mines, (ii) development of indigenous catalyst through pilot scale studies of Coal-to-Liquid (CTL) conversion technology, (iii) enhancing life of de-watering pipes in coal/lignite mines by prevention of erosion-corrosion with nano-crystalline surface Engineering Treatments, (iv) blast design and fragmentation control, (v) design and development of truck mounted mobile coal sampler for instant coal ash & moisture analyser at site from railway wagon/truck, (vi) optimization of various parameters of lab scale Coal Winnowing System (Phase-II), (vii) find a methodology of safe liquidation in thick seams of Raniganj Coalfields : design & development & show-casing demonstrative trials at Khottadih Colliery, ECL, (viii) demonstration of coal dry beneficiation system using Radiometric Technique and (ix) development of guidelines to predict distance between toe of the shovel-dumper dump and that of dragline dump with consideration of safety and economical design of both shovel-dumper dump and dragline dump. CMPDI is making all out efforts to involve more and more research and academic institutions, coal/lignite producing companies for need-based research work beneficial to coal/lignite industry. As a result, 25 S&T and R&D projects are under execution in association with various organizations. At the same time, CIL is also envisaging on making the R&D activities more effective.

CMPDI is the nodal agency in implementation of Management System standards in all subsidiaries of Coal India Limited. CMPDI provides its consultancy services for implementation and certification of different Management system Standards, like ISO 9001, ISO 14001, ISO 50001, and ISO 27001, OHSAS 18001 etc. We provide guidance and support in establishment,

documentation, awareness training, internal auditors training, auditing supports, implementation, certification support as well as post certification support for implementation and certification of these Management System Standards.

Two of CIL's subsidiaries, MCL and NCL are certified for their company-wide Integrated Management System (ISO 9001, ISO 14001 and OHSAS 18001). CMPDI, HQ and all its seven RIs have got license for the new ISO 9001:2015 standard from Bureau of Indian Standards. Under our guidance and support CIL HQ is certified for ISO 9001 and ISO 50001. 32 laboratories of different subsidiaries of CIL are NABL (National Accreditation Board of Laboratories) accredited. 56 different units across all subsidiaries of CIL are certified for ISO 9001, ISO 14001, and OHSAS 18001 & ISO 27001.

We have provided consultancy in implementation of company-wide Integrated Management System in ECL, CCL, WCL, and BCCL. Company-wide certification of ECL for Integrated Management System (ISO 9001, ISO 14001 and OHSAS 18001) is expected shortly. Documentation under Integrated Management System for CCL, WCL, and BCCL is completed. The IMS manual of WCL was upgraded as per revised Standard.

During the year FY 2016-17, 35 outside-CIL consultancy jobs were completed by CMPDI for 26 organisations outside CIL. Some of the major clients / organizations are NMDC, MOIL Ltd., MAHAGENCO, Tata Steel, DVC, SAIL, UCIL, WBPDC, CSPGCL, etc. During the year 2016-17, 43 outside-CIL consultancy jobs worth ₹141.38 crores from 29 organizations were procured by CMPDI. This is the highest ever value of jobs obtained in a year by CMPDI. One overseas assignment of "Preparation of Feasibility

Study for Benga Coal Project of M/s ICVL in Tete Province of Mozambique” has also been obtained from NMDC. Presently, 25 outside-CIL consultancy jobs are being executed by CMPDI for 19 organisations like OCPL, NMDC, NALCO, NTPC Ltd., MAHAGENCO, SAIL, OMC, PFC Consulting Limited, GSECL, etc.

During the year FY 2016-17, Steps were taken for improving office efficiency by introducing Video Conferencing facility connecting CMPDI (HQ) with all its Regional Institutes, located in six states across the country, facilitating time saving for various Review meetings and better co-ordination. CMPDI has gone for fully paperless receipt module of e-Office in its HQ and all Regional Institutes which has resulted in saving papers and also improving office efficiency. CMPDI has been assigned the job of implementation of e-Office across CIL and the work is in advanced stage.

Contract Labour Information Portal (CLIP) has been developed and implemented in CMPDI for maintaining transparency in payment of wages to Contract Workers. Portal for capturing of data from all opencast and underground mines of Coal India Ltd. has been developed for timely preparation of Mine Capacity Assessment reports.

1.3.12 MOU between CMPDI & CIL

For every financial year CMPDI enters into a MoU with Coal India Limited to set various parameter for physical and financial performances. The achievements were graded on a scale of 1-5; excellent being the grade 1.0 to 1.5 and poor as 4.51 to 5.0 till the FY 2014-15. For the FY 2014-2015, CMPDI was given Excellent (1.002) rating by Department of Public Enterprises which was the third best amongst all CPSEs and best in its syndicate. From the FY 2015-16 onwards, system of grading has

been changed and for the FY 2015-16, CPSEs with composite MoU score from 87.5 to 100 will be given ‘Excellent’ rating whereas CPSEs with score less than 12.5 will get poor rating. CMPDI has been awarded ‘Excellent’ rating with composite score of 89.60 for the FY 2015-16.

1.3.13 Risks and Concerns

- Obtaining approval for drilling in forest areas with enhanced number of borehole density and law and order problems are the major impediments in the way of drilling.
- In absence of commensurate growth in the regional exploration, sustenance of the detailed drilling capacity beyond XII plan seems difficult. Further, restrictions in exploration in forest area may pose problem in expansion programme.
- Further opening of the coal sector may result in market competition from other domestic or international consultancy service providers.
- In compliance of the provisions under the Companies Act and as per the CIL’s guideline in respect of risk management, a Risk Management Committee with a Board level member as its head has been constituted at CMPDI.

1.3.14 Internal Control Systems

- CMPDIL has robust internal control systems and processes in place for smooth and efficient conduct of business and complies with relevant laws and regulations.
- A comprehensive delegation of power exists for smooth decision making.
- Elaborate guidelines for preparation of accounts are followed consistently for uniform compliance.
- Audit committee is formed to keep a watch on compliance with internal control systems.

- Internal audits are conducted by Chartered Accountants/Cost Accountant Firms.
- Internal control framework has been developed identifying key controls and supervision of operational efficiency of designed key control by internal audit.
- Whistle Blower policy has been adopted and is being followed.

1.3.15 Material Development in Human Resources

CMPDI as a public sector undertaking, salaries, wages and benefits of its employees are determined by Government of India and are fixed once in 5 years for coal workers and once in 10 years for executives. CMPDI also provides continuous training and development opportunities to its employees, middle and senior management executives, other level officers and management trainees. In addition, company also arranges external training programs and international training sessions outside India. The detailed report on this matter is included in the relevant portion of the Report.

1.3.16 Discussion on Financial performance with respect to Operational Performance

The total income of the company primarily comprises of income from consultancy services rendered to CIL & its subsidiaries and other companies, other incomes, and interest earned. The total income from fiscal year 2016-17 is 930.52 crores as against ₹ 759.27 crores in the previous year, thus registering an increase of 22.55 %. The total expenditure is ₹ 864.99 crores.

Income tax expense comprises current tax expense and deferred tax expense or credit computed in accordance with the relevant provisions of the I.T Act, as amended. Provision for current taxes is recognized based on the estimated tax liability for allowances and exemptions in accordance with the I.T Act. Deferred tax

assets and liabilities are recognized for the future tax consequences attributable to timing differences. They are measured using tax rates and tax regulations enacted upto the balance sheet date, The effect due to change in the tax rates is recognized in the financial statement of the relevant fiscal year of change of rate. Deferred tax assets in respect of carry forward losses are recognized to the extent that there is virtual certainty that sufficient future taxable income will be available against which such deferred tax asset can be realized.

The profit before tax is ₹ 65.53 crores as against ₹ 15.35 crores (restated as per Ind AS) in the previous year, increased by ₹ 50.18 crores. The profit after tax is ₹ 40.59 crores as against ₹ 9.14 crores for the previous year, increased by ₹ 31.45 crores.

1.4.0 Financial Overview of CMPDIL

During the year the company made a profit after tax of ₹ 40.59 Crore. The summary of the working results for the last three years is as follows:

Eligibility Criteria		Status of CMPDIL		
		F.Y. 2015-16 (Before implemen- tation of Ind As)	F.Y. 2015-16 (Restated as per Ind As)	F.Y. 2016-17
1.	Profit before Taxes (₹ in Crore)	42.54	15.35	65.53
2.	Profit after Taxes (₹ in Crore)	28.48	9.14	40.59
3.	Turnover (₹ in Crore)	759.27	759.27	930.52
4.	Profit before tax to Turnover (%)	5.60	2.02	7.04
5.	Earning per share (₹)	1496	480.04	2131.8

1.4.1 Explanation or Comments on Statutory Auditors Report and Secretarial Audit Report

The report of Statutory Auditor and the explanations or comments by the Board on every qualification, reservation or adverse remark made by the Statutory Auditor is enclosed as Addendum-V to

the report.

The report of Secretarial Auditor and the explanations by the Management on a remark made by the Secretarial Auditor is enclosed as Addendum-VI to the report.

1.4.2 Particulars of loans, guarantees or investments Under Section 186 of the Companies Act, 2013

As per Section 186 of the Companies Act, 2013 the company should disclose to the members in the financial statement the full particulars of the loans given, investment made or guarantee given or security provided and the purpose for which the loan or guarantee or security is proposed to be utilised by the recipient of the loan or guarantee or security.

No loans given, no investment made or guarantee given or security provided to any person, firm or company. The details are reported in the financial statement.

1.4.3 State of Company Affairs

The paid up share capital of the company stands at ₹ 19.04 crores against the authorized capital of ₹ 50 crores. The capital Reserve stands at Rs 19.80 crores, general reserve stands at ₹ 5.77 crores and the surplus in P/L account stands at ₹ 211.09 crores and totally constituting to the shareholders fund ₹ 236.66 crores. Non-current liability ₹ 273.78 crores and current liabilities ₹ 602.09 crores.

The company owns net fixed assets of Rs 132.95 Crores, Deferred tax assets 115.62 crores, Long term loans and advances 0.02 crores, other non –current assets 13.03 crores and current assets 820.03 crores.

The total revenue from operations and other incomes stands at Rs 945.99 crores and after meeting all expenditure and taxes, the net profit stands at Rs 40.59 crores. The earning per share (face value

Rs 1000 per share) works out Rs 2131.83.

1.4.4 Capital Expenditure till 31st March, 2017

	(₹ in Crores)
Building	10.22
Plant & Machine	24.82
Office equipment	0.41
Furniture	0.62
Telecom	0.05
Vehicle	1.37
Software	1.31
Total	38.80

1.4.5 The amounts if any which it proposes to carry to any reserves

Total comprehensive income of ₹ 38.82 crores during the financial year 2016-17 has been transferred to Retained Earnings / Reserves & Surplus.

1.4.6 The amount, if any, which it recommends should be paid by way of dividend

No amount was recommended to be paid by way of dividend to shareholders of the company.

The Companies operations and provision of services are based on cost plus service charges, as in house service provider to Coal India and its subsidiaries. As a policy matter, Coal India Limited i.e. the shareholders have not demanded dividend from the company.

1.4.7 Material changes after 31.03.2017

No material changes and commitments, affecting the financial position of the company have occurred between the end of the financial year of the company to which the financial statements relate and the date of the report.

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 report of Corporate Governance Certificate and the explanations by the Management on a remark made by the Auditor is enclosed as Addendum-IV to the report.

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, sitting fees etc. as determined by the President of India subject to provisions of the

Companies Act, 2013 and terms and condition of appointment order.

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/ Independent Directors.

B Composition of the Board of Directors category wise:

As on 31st March 2017, the Board of Directors of CMPDIL comprises of 8 (Eight) Directors out of which Four are Whole-time Directors including the Chairman-cum-Managing Director, Two part-time official Directors and Two part-time non-official Directors. The Board is headed by an Executive Chairman Shri Shekhar Saran. Only two independent Directors are on the Board of the company. The remaining three independent Director is yet to be appointed by the Ministry of Coal, Govt of India after the cessation of office of the independent Directors appointed earlier. As such the guidelines on Corporate Governance in respect of composition of Board could be followed only on appointment of the independent Directors.

The composition of Board of Directors as on 31st March 2017 is as follows:

I. Whole-Time Directors

a. Chairman-cum-Managing Director

1. Shri Shekhar Saran

b. Functional Directors

2. Shri V.K. Sinha
3. Shri Binay Dayal
4. Shri A.K.Chakraborty

II. Part-Time Official Directors

1. Shri Chandan Kumar Dey
2. Shri Devulapalli Narasimha Prasad

III. Part-Time Non-Official Directors

1. Shri Rajender Parshad
2. Dr. Debasish Gupta

IV. Permanent Invitee

1. Shri Peeyush Kumar

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. Nine Board meetings were held during the financial year 2016-17.

Sl. No.	Number of Meeting	Dates	Day	Place
1.	194 th	25.05.2016	Wednesday	Kolkata
2.	195 th	28.06.2016	Tuesday	New Delhi
3.	196 th	02.08.2016	Tuesday	New Delhi
4.	197 th	02.09.2016	Friday	Hotel Capitol Hill, Ranchi.
5.	198 th	28.10.2016	Friday	New Delhi
6.	199 th	16.11.2016	Wednesday	Kolkata
7.	200 th	29.12.2016	Thursday	CMPDIL, Ranchi
8.	201 st	30.01.2017	Monday	New Delhi
9.	202 nd	10.03.2017	Friday	CMPDIL, Ranchi

D (i) 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
Functional Directors				
1.	Shri Shekhar Saran	9	9	Yes
2.	Shri V.K Sinha	9	9	Yes
3.	Shri Binay Dayal	9	7	-
4.	Shri A.K. Chakraborty	6	6	-
5.	Shri B.N. Shukla	3	3	Yes
Part-time official Directors				
6.	Shri D. N. Prasad	9	8	-
7.	Shri C.K. Dey	3	3	-
8.	Shri N. Kumar	4	3	Yes
Part-time Non-official Directors				
9.	Shri Rakesh Kumar Mittal	5	5	Yes
10.	Shri Rajender Parshad	9	9	Yes
11.	Dr. Debasish Gupta	9	9	-

Sl. No. 4 was appointed as functional director w.e.f. 03.08.2016. S. No. 7 was appointed as nominee director w.e.f. 19.12.2016.

D (ii) Disclosure of interest

Sl. No.	Directors	Company in which interested	Nature of Interest i.e Chairman, Director, Manager & Secretary
Functional Directors			
1.	Shri Shekhar Saran	1. Coal India Limited 2. Bharat Coking Coal Ltd.	Director (Technical)- Additional Charge Director
2.	Shri V.K Sinha	Coal India Africana Limitada	Director
3.	Shri A.K. Chakraborty	NIL	-
4.	Shri Binay Dayal	NIL	-
Part-time official Directors			
5.	Shri D. N. Prasad	Singareni Collieries Company Limited	Govt . Nominee Director
6.	Shri C.K. Dey	1.Coal India Limited 2. Eastern Coalfields Limited 3. South Eastern Coalfields Limited 4. Coal India Africana Limitada 5. Hindustan Urvarak & Rasayan Limited 6. Talcher fertilizers Limited	Director Director Director Member/Shareholder Chairman, Director and Shareholder Member/Shareholder
Part-time Non- official Directors			
7	Shri Rajender Parshad	NIL	-
8	Dr. Debasish Gupta	NIL	-

E. Information placed before the Board meeting

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

- ♦ Capital and Revenue budgets.
- ♦ Quarterly and Annual Financial results of the Company.
- ♦ Periodic Review of the Performance of the Company.
- ♦ Periodic Review of availability & utilization of Heavy Machines.
- ♦ Periodic Report on Compliance of applicable Laws.
- ♦ Annual Report, Directors' Report etc.
- ♦ Minutes of the meeting of Audit Committee, CSR Committee, Nomination and Remuneration Committee and Risk Management Committee.
- ♦ Award of large contracts / Agreements
- ♦ Disclosure of interest by Directors about Directorship and position occupied by them in other companies
- ♦ Declaration of Independence by Independent Director.
- ♦ Manpower Budget.
- ♦ Any Other materially important information.

F. Brief Profile of the Directors:



Shri Shekhar Saran (DIN 06607551) is the Chairman of the Board of Central Mine Planning & Design Institute Limited, one of the largest Coal and Mineral Exploration and Consultancy Company across the country. He has also been entrusted with the additional charge of Director (Technical) of Coal India Limited w.e.f. 31.10.2016 and is a Board member of CIL & BCCL also. Shri Saran is widely recognized for his path breaking and visionary contributions to the industry as Mechanized Mine Developer and transformed the landscape of the Mines by setting new standards in production and productivity.

He joined CMPDIL as Director (Technical) in June, 2013 and looked after Coal Resource Development and then Planning & Design till December, 2015. On 1st January, 2016, he took over as Chairman-cum-Managing Director of CMPDIL.

Shri Saran graduated from 1981 batch from the Deptt. Of Mining Engineering, Institute of technology, Banaras Hindu University (BHU), now IIT (BHU). Being the topper of his batch he is the recipient of BHU Gold Medal as well as Robertson Medal from MGMI. Subsequently, during 2013-15, he has added to his credit Post-Graduate Programme in Management for Executives (PGEXP) from IIM, Ranchi.

Prior to joining CMPDIL, he worked at Sohagpur, Hasdeo and Bistrampur areas of SECL as JET to Sub area Manager, at Kunustoria, Satgram and Sodepur areas of ECL as Agent to CGM and lastly as CGM (P&P) at Eastern Coalfields Limited, Headquarter. He is having a rich experience of managing large opencast & underground Mines in different subsidiary companies. While working at SECL, he converted many manual UG mines into mechanized mines with introduction of roof bolting/ steel support. He presented number of technical papers in different

seminars/ workshops. He had also been a rescue trained member for more than 26 years and had attended a number of rescue and recovery operations in underground mines.

He has visited a number of foreign countries like U.K, Germany, France, Netherlands, USA, Canada & Switzerland etc. He is an NCC Certificate holder & a good sportsman. He is widely credited with conceptualizing a unique and innovative techniques in Coal Mining Production. He has been a firm believer in corporate life and its superiority in the development of human resources. He is interested in Coal India Limited to the extent that he attends the Meeting of the Board of Director of Coal India Limited as a Permanent Invitee.

He is Chairman-cum-Managing Director, CMPDI w.e.f. 1.01.2016.



Shri Vinod Kumar Sinha (DIN 06793778) Director (Technical/ Research, Development & Technology), CMPDI, is a graduate in Mining Engineer (1978) from Indian School of Mines, Dhanbad. He has also obtained First Class Mine Manager's Certificate of Competency from DGMS, Dhanbad.

He joined Central Coalfields Limited as a JET in the year 1978 and worked in different capacities till 2001. He then joined Bharat Coking Coal Limited as Project Officer / Agent and worked as additional General Manager in Kusunda Area. During 2006-2008, he served a General Manager of Western Jharia Area, Mahuda and then from 2008-09 as General Manager of Eastern Jharia Area Sudamdih in BCCL.

He was instrumental in getting the ML4 powered supports re-commissioned at Moonidih and handled challenging assignment of Land Acquisition for expansion of Mines. He has also to his credit the introduction of Side Discharge

Loader SDL in Murlidih 20/21 pit. During the period of his service as Chief General Manager (Sales & Marketing) in BCCL, under the new coal distribution policy he has made several contributions in revamping and regularisation of coal offer and allotment, Fuel Supply Agreement (FSA), corrective steps in end use of coal and refund mechanism in case of non core sector consumers and thereby enhancing the values to the stakeholder including the consumers. He has also travelled countries like China, Turkey & Switzerland in relation to his professional work.

Prior to joining CMPDI, he was working as CGM (Contract Management Cell), BCCL and rendered valuable services by timely finalisation of various contracts. He has also visited foreign countries like Germany and France.

He is Director (Technical / Research Development & Technology), CMPDI w.e.f. 08.01.2014.



Shri Binay Dayal (DIN 07367625) is Director Technical (Planning & Design) of CMPDI. Shri Dayal graduated in Mining Engineering in 1983 from Indian School of Mines (ISM), Dhanbad. He also obtained 1st Class Mine Manager's Certificate of Competency from DGMS, Dhanbad.

He joined as Junior Executive (Trainee) in Coal India and was posted at Central Saunda Colliery, Barkakana Area of Central Coalfields Limited in the year 1983. He worked in various capacities such as Head of Technical Services and Public Relations in CMPDI (HQ), Regional Director, CMPDI, Regional Institute – V, Bilaspur, General Manager (Projects & Planning Services) in South Eastern Coalfields Limited. He took over the charge of Director Technical (Engineering Services), CMPDI on 1.12.2015.

Shri Dayal has vast experience in Corporate Planning and Public Relations

activities. He has to his credit the Planning, Approval and Implementation of Mega Projects of South Eastern Coalfields Limited and enhancement of productivity of hi-tech drills deployed for detailed exploration in Korba and Mand Raigarh coalfields. As General Manager (Project & Planning Services), South Eastern Coalfields Limited, he prepared the road map for coal production in respect of South Eastern Coalfields Limited as a part of 1 Billion tonne coal production exercise carried out by Coal India Limited.

He was nominated as Nodal Officer on behalf of South Eastern Coalfields Limited for Rail Corridors for evacuation of coal from Mand Raigarh, Korba Coalfields and represented South Eastern Coalfields Limited in the Board of Joint Venture Cos. viz. Chattisgarh East Railway Limited and Chattisgarh East-West Railway Limited (comprising of SECL, IRCON and Chattisgarh State Government).

Shri Dayal attended as the member of Indian Contingent in the 5th Meeting of 'India-Australia Joint Working Group on Energy and Minerals' organized in Australia during the year 2007. Visited Chinese Coal Industry as participant of Advanced Management Training Programme in September 2010. He was Administrative Head on behalf of CMPDI for EU Research Project on Green House Gas Recovery from mines of abandoned coal seam to conversion to energy (GHG2E) in 2011 & 2012. He participated in 22nd World Mining Congress & Expo 2011 organised in Istanbul, Turkey in 2011 and contributed technical paper. He has presented numerous technical papers related to coal industry. He is Life Member of MGMI & Computer Society of India (CSI).

He is Director (Technical), (Planning & Design), CMPDI w.e.f. 1.12.2015.



Shri Ashim Kumar Chakraborty (DIN 07601841) took over the charge as Director (Technical) of CMPDI on 3rd August 2016. Shri Chakraborty graduated in Mining Engineering (in 1982) from Indian School of Mines (ISM), Dhanbad. He obtained MBA Degree (in 1992) from BIT, Mesra, Ranchi.

He started his career in the coal industry from North Searsole Colliery, Kunusturia Area of Eastern Coalfields Limited in the year 1982. He served as Regional Director and General Manager (Project Appraisal Division) in CMPDI before taking over the charge as Director (Technical) of CMPDI.

Shri Chakraborty has vast experience in Project Planning activities. He has to his credit the planning of large capacity mine like Searmal OCP of MCL (40 Million tonnes per annum capacity). He, as General Manager (Project Appraisal Division) contributed for the Roadmap in respect of CIL for production of 1 Billion tonne coal by CIL. He also contributed to the Exercise on UNFC for CIL Blocks. He has been responsible for preparation of Project Reports, Environmental Impact Assessment (EIA)/Environmental Management Plan (EMP), Mining Plans, Mine Closure Plans, Operational Plan and other specialized reports for mines of CIL as well as outside clients.

He is Director (Technical), (Engineering Services), CMPDI w.e.f. 03.08.2016.



Shri D.N. Prasad (DIN 00119593) 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, Switzerland 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. He is also holding Directorship in Singareni Collieries Co. Ltd.

He is Official Part-Time Director in CMPDI w.e.f. 27.01.2010



Shri Chandan Kumar Dey (DIN 03204505) Director (Finance), Coal India Limited was born in Kolkata on 10th September, 1958. Prior to joining Coal India Limited on 1st March, 2015, Shri Dey served Eastern Coalfields Limited as Director (Finance) from 01.02.2013 to 28.02.2015.

Shri Dey completed his schooling from Kendriya Vidyalaya in 1975 and graduated from Calcutta University in Commerce with Honours in Accountancy in the year 1978. Shri Dey is a Chartered Accountant and Cost Accountant.

Shri Dey has wide experience of over 34 years and served in different organisations of repute including Lovelock & Lewes, Dunlop India Limited, NICCO Group, Balmer Lawrie & Co. Limited and Oil India Limited.

During his professional career Shri Dey headed the Accounts, Treasury, Taxation and Internal Audit functions and served as Chief Finance Officer. Shri Dey also headed the operations of Balmer Lawrie (UK) Limited for 3 years as Chief Operating officer based in United Kingdom. Shri Dey has travelled extensively within India and Foreign countries like UK, France, Germany, Switzerland, USA, Hong Kong, UAE and the Central Asian Republic on official assignments.

Shri Dey is interested in reading books and loves music.

He is Official Part-Time Director in CMPDI w.e.f. 19.12.2016



Shri Rajender Parshad (DIN 07355787) graduated from Hindu College Sonipat in 1971. After doing LL.B from University of Delhi in year 1974 started his career as an Advocate in August 1975. He practiced in Civil, Criminal, MACT, Revenue and Labor laws & rendered his services to trade and labor unions of various industrial organizations at district and state level such as B.S.T. Ganour, Rang Udhog. He vehemently advocated for poor, depressed & down trodden of the society by making representation for their rights and entitlements before the administration and also provided legal assistance before appropriate legal forums.

In the year 1981, he was selected in Haryana Judicial Service and joined as Sub Judge Cum Judicial Magistrate. In Feb.1998 he was promoted to Haryana Higher Judicial Service and remained posted as Additional District & Sessions Judge till 06.03.2009 after his retirement from the Judicial-Service. He was appointed as President, District Consumer Disputes Redressal Forum Kurukshetra. He remained as such till 05.03.2014. He also officiated as President Distt. Consumer Disputes Redressal Forum, Karnal for some time.

He served the judicial department for more than 35 years by delivering justice, honestly and impartially. During his judicial-career, he had the privilege to serve in various districts throughout Haryana. During his service tenure he got several appreciation letters from Hon'ble Punjab & Haryana High Court. He has also obtained certificates by attending courses in Criminology and forensic Science (1994), Human Rights in Criminal Justice System (2003 and 2006) organized by National Institute of Criminology and Forensic Science, Ministry of Home Affairs, Government of India.

As president of District Consumer Dispute Redressal Forum, he was awarded distinguished/ outstanding services certificate by the State Consumer Disputes Redressal Commission, Haryana, Panchkula in 2011. Again in 2013, he was awarded distinguished services certificate on the eve of Silver Jubilee Celebration of enforcement of Consumer Protection Act. 1986 held on 09-01-2013 at Panchkula by the then Hon'ble Chief Justice A. K. Sikri of Punjab and Haryana High Court. In 2015, he was appointed by Hemwati Nandan Bahuguna Garwal University, Srinagar Garhwal (Uttarakhand) to conduct a judicial inquiry on student election 2015.

He has been appointed as Non-official part time Director on the Board of CMPDIL w.e.f. 17.11.2015.



Dr. Debasish Gupta (DIN 03572010) after completing Ph.D in Chemistry, from Calcutta University, he Joined Indian Administrative Service in 1978. He was allotted Bihar Cadre. He worked in various assignments in erstwhile Bihar and Jharkhand and also with Government of India in Ministry of textiles. He had his corporate experience as CMD National Jute Manufacturers Corporation Ltd and also as CMD Jute Corporation of India. He had worked as CMD and Administrators in several PSU's of Bihar Government. He retired from the post of Development Commissioner, Government of Jharkhand. After his retirement, he was Chairman Jharkhand Public Service Commission during 2013-2015."

He has been appointed as Non-official part time Director on the Board of CMPDIL w.e.f. 17.11.2015.



Shri Peeyush Kumar (DIN 07201444) graduated in Mining Engineering with Silver Medal from Indian School of Mines, Dhanbad in 1993. He obtained 1st Class Mines Managers Certificate of competency in coal from DGMS and also did short term courses in rock mechanics and environment management in mines from IT BHU. At present he is pursuing part time research from ISM, Dhanbad.

He has worked in various open cast and underground coal mines of CCL in different capacities and also at corporate office of CCL. He was part of the CIL delegation to USA to study CBM, CMM, VAM techniques. He has also undergone training on washery technology & longwall mining in Japan and UNFC classification of coal resources at Geneva, Switzerland. He was part of Indian side in various working group meetings with Japan, EU,

Russia, Belarus, US and G20 meeting at Australia.

At present he is Director Technical in the Ministry of Coal responsible for all technical matters of Coal Mining and related policies and also is a member of Board of Mineral Exploration Corporation Limited since 20.12.15.

He was appointed as Permanent Invitee on the Board of CMPDIL from 06.05.2016 to 08.06.2017. He was also appointed as Part time official Director on the Board of BCCL from 05.08.2016 upto 08.06.2017.

He has been appointed as Official Part-time Director on the Board of CMPDIL w.e.f. 09.06.2017 by Ministry of Coal.

G. A statement on declaration given by Independent Directors under sub-section (6) of section 149;

Shri Rajender Parshad and Dr. Debasish Gupta are Independent Directors of the company. Both the Independent Directors discharged their duties and declared that they meet the criteria of independence as provided in sub-section (6) of Section 149 of Companies Act, 2013 for the financial year 2016-17.

1.5.3 A. 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.

B. Terms of Reference:

The terms of reference of the Audit Committee are in accordance with Section 177 of the Companies Act, 2013 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 visà-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.

C. Scope of Audit Committee:

The Scope / Role of Audit Committee is as follows:

1. Overseeing 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. Approval of 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. Matters required to be included in the Directors' Responsibility Statement to be included in Boards report in terms of Section 134(3) and 134(5) of the Companies Act, 2013.
 - b. Changes, if any, in accounting policies and practices and reasons for the same;
 - c. Major accounting entries involving estimates based on the exercise of judgment by management;
 - d. Significant adjustments made in the financial statement arising out of audit findings;
 - e. Compliance with legal requirements (applicable laws, regulation and Company policies) relating to Financial statements;
 - f. Disclosure of any related party transactions; and
 - g. Qualifications in the draft audit report.
5. Reviewing with the management, the quarterly financial statements before submission to the Board for approval.
6. Reviewing with the management, performance of internal auditors and adequacy of the internal control systems.
7. Reviewing the adequacy of internal audit function, if any including the structure of the internal audit department, staffing and seniority of the official heading the department, reporting structure coverage and frequency of internal audit.

8. Discussion with internal auditor and / or auditors any significant findings and follow up thereon.
 9. Reviewing the findings of any internal investigations by the internal auditors / auditors / agencies into matters where there is suspected fraud or irregularity or a failure of internal control system of a material nature and reporting the matter to the Board.
 10. Discussion with statutory auditors before the audit commences, about the nature and scope of audit as well as post-audit discussion to ascertain any area of concern.
 11. Reviewing the functioning of the Whistle Blower Mechanism.
 12. Reviewing the follow up action on the audit observations of the C&AG 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. For this purpose, the Audit Committee may designate a member who shall be responsible for reviewing related party transactions as contained in the Accounting Standard 18 issued by the Institute of Chartered Accountants of India.
 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 with the Independent auditors the adequacy of internal controls including computerized Information System Controls and security, and related findings and recommendations of the independent auditor and internal Auditor, together with the management responses.
 17. Consider and review with the management, Internal Auditor and Independent Auditor, the significant findings during the year including the status of previous audit recommendations and any difficulties encountered during audit work including any restrictions on the scope of activities or access to required information.
 18. To look into the reasons for substantial defaults in the payment to the depositors, debenture holders, shareholders (in case of non- payment of declared dividends) and creditors.
 19. To review the follow up action taken on the recommendations of Committee on Public Undertakings (COPU) of the Parliament.
 20. Carrying, out any other function as mentioned in the terms of reference of the Audit Committee.
- D. 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.
 6. To mitigate conflicts of interest by strengthening Auditors independent.
 7. To ensure the effectiveness of internal controls and risk management.

E. Review of information by Audit Committee:

The Audit Committee shall review the following information:

- i. Management discussion and analysis of financial condition and results of operations;
- ii. Statement of related party transactions submitted by management;
- iii. Management letters / letters of internal control weaknesses issued by the statutory auditors;
- iv. Internal Audit reports relating to internal control weaknesses;
- v. The appointment and removal of the Chief Internal Auditor shall be placed before the Audit Committee; and
- vi. Certification/ declaration of financial statements by the Chief Executive/ Chief Finance Officer.

F. Composition:

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

S.N.	Name of Director	Status	
1	Dr. Debasish Gupta	Chairman (w.e.f 01.11.2016 and was Member From 30.12.2015 upto 31.10.16)	Independent Director
2	Shri R.K Mittal	Chairman (from 27.01.2014 upto 31.10.2016)	Independent Director
3	Shri R. Parshad	Member (w.e.f. 30.12.2015)	Independent Director
4	Shri D. N. Prasad	Member (w.e.f. 28.01.2011)	Govt. nominee Director
5	Shri C.K. Dey	Member (w.e.f. 10.01.2017)	Official part-time Director
6	Shri N.Kumar	Member (from 04.09.2013 upto 17.10.2016)	Official part-time Director
7	Shri V.K. Sinha	Member (w.e.f. 29.10.2015)	Director (Technical)

General Manager Finance, Chief Manager (Internal Audit) and Statutory Auditors are invited to the Audit Committee Meeting. Company Secretary is the secretary to the committee. Senior functional executives are also invited as and when required to provide necessary clarification to the committee. Internal Audit Department provide necessary support for holding and conducting the Audit Committee Meeting.

G. Meeting and Attendance:

Six meetings were held during the financial year 2016-17 on 25.05.2016, 02.09.2016, 28.10.2016, 16.11.2016, 29.12.2016 and 30.01.2017 respectively. The details of the audit committee meetings attended by members are as under:

S.N.	Name of Director	Status	Number of meetings attended
1	Dr. Debasish Gupta	Chairman (w.e.f. 01.11.2016 and was Member till 31.10.16)	6
2	Shri R.K Mittal	Chairman (w.e.f. 27.01.2014 upto 31.10.2016)	3
3	Shri R. Parshad	Member (w.e.f. 30.12.2015)	6
4	Shri D. N. Prasad	Member (w.e.f. 28.01.2011)	3
5	Shri C.K. Dey	Member (w.e.f. 10.01.2017)	1
6	Shri N.Kumar	Member (w.e.f. 04.09.2013 upto 17.10.2016)	2
7	Shri V.K. Sinha	Member (w.e.f. 29.10.2015)	6

1.5.4 Nomination and Remuneration Committee

The Board constituted the Nomination & Remuneration Committee of CMPDIL in its 191st Board Meeting held on 30.12.2015 in order to follow the best practice of Corporate Governance and to comply with the guidelines of Corporate Governance and the listing agreement entered into by Coal India Limited with Stock Exchanges.

A. Composition

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

S.N.	Name of Director	Status	
1	Shri Rajender Parshad	Chairman (w.e.f.30.12.2015)	Independent Director
2	Shri D.N.Prasad	Member (w.e.f. 30.12.2015)	Govt. nominee Director
3	Shri N. Kumar	Member (from 30.12.2015 upto 17.10.2016)	Official part-time Director
4	Shri Rakesh Kumar Mittal	Member (from 30.12.2015 upto 31.10.2016)	Independent Director
5	Dr. Debasish Gupta	Member (w.e.f. 30.12.2015)	Independent Director
6	Shri Binay Dayal	Permanent Invitee (w.e.f. 30.12.2015 upto 28.10.2016)	Director (Technical)
7	Shri A.K. Charkraborty	Permanent Invitee (w.e.f. 28.10.2016)	Director (Technical)

Company Secretary will act as Secretary to this Committee and HoD (P&A) would be the nodal officer of the Committee providing all services to the Committee.

B. Meeting and Attendance:

No meeting was held during the financial year 2016-17.

1.5.5 CSR Committee

Corporate Social Responsibility (CSR) and Sustainability is a company's commitment to its stakeholders to conduct business in an economically, socially and environmentally sustainable manner that is transparent and ethical. Stakeholders include employees, investors, shareholders, customers, business partner, clients, civil society groups, Government and non-governmental organizations, local communities, environment and society at large.

Each CPSEs is required to have a Board level committee headed by either the Chairman and/or Managing Director or an independent Director to oversee the implementation of the CSR and sustainability policies of the company and to assist the Board of Directors to formulate suitable policies and strategies to take these agenda of the company forward in the desired direction as per the guidelines issued by DPE w.e.f 01.04.2013. In terms of the guidelines, CSR & sustainability has been included as a compulsory element under non-financial parameters in MoU.

In line with the guidelines, the Board constituted the CSR Committee in its 172nd meeting held on 10.05.2013.

Composition:

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

S.N.	Name of Director	Status	
1	Shri Rajender Parshad	Chairman (w.e.f 01.11.2016)	Independent Director
2	Shri R.K.Mittal	Chairman (from 27.01.2014 upto 31.10.2016)	Independent Director
3	Shri B.N. Shukla	Member (from 30.12.2015 upto 16.08.2016)	Director (Technical)
4	Shri Binay Dayal	Member (w.e.f. 30.12.2015)	Director (Technical)
5	Shri A.K. Chakraborty	Member (w.e.f. 28.10.2016)	Director (Technical)

General Manager (P/HRD) is the nodal officer of the Committee providing all services to the Committee.

Meeting and Attendance:

Two meetings were held during the financial year 2016-17 on 24.05.2016 and 16.11.2016. The details of the CSR Committee meetings attended by members are as under:

S.N.	Name of Director	Status	Number of meetings attended
1	Shri Rajender Parshad	Chairman (w.e.f. 01.11.2016)	1
2	Shri R.K.Mittal	Chairman (from 27.01.2014 upto 31.10.2016)	1
3	Shri B.N. Shukla	Member (from 30.12.2015 upto 16.08.2016)	0
4	Shri Binay Dayal	Member (w.e.f. 30.12.2015)	2
5	Shri A.K. Chakraborty	Member (w.e.f. 28.10.2016)	1

1.5.6 Remuneration of Directors:

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

(A) Functional Directors

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

Name	Designation	Gross Salary and Allowances Including Leave encashment	Perks	HRA	CMPF Employer's Contribution	PRP Advance	TOTAL	LTC & Medical expenses
Shri Shekhar Saran	CMD	2104336.00	418463.00	0.00	252014.00	1698282.00	4473095.00	224597.00
Shri V.K. Sinha	Director (Tech)	2345340.00	401703.00	0.00	281622.00	1451723.00	4480388.00	339969.00
Shri Binay Dayal	Director (Tech)	2134770.00	409500.00	180000.00	234090.00	1620227.00	4578587.00	73439.00
Shri A.K. Chakraborty	Director (Tech)	1531931.85	237736.00	0.00	183538.00	1573282.00	3526487.85	31807.00
Shri B.N. Shukla	Director (Tech)	803953.00	163540.00	0.00	96254.00	0.00	1063747.00	76929.00

(B) Part-Time Official Directors

No remuneration is being paid to the Part-Time Official Directors by CMPDIL. Shri D.N. Prasad, Adviser (Projects) is the nominee Director from the Ministry of Coal, Govt. of India, New Delhi. His remuneration is being paid by the Ministry of Coal, Govt of India.

Shri C.K. Dey, Director (Technical) is the nominee Director from Coal India Limited, Kolkata

w.e.f 19.12.2016 and Late N.kumar was the nominee Director from Coal India Limited, Kolkata from 29.02.2012 till 17.10.2016 and their remuneration is being paid by the Coal India Limited respectively.

(C) Part-Time Non-Official Directors

No remuneration is being paid to the Part-Time Non-Official Directors of the Company except the sitting fees for attending the Board and Committee meetings at the rate fixed by the Coal India Board within the ceiling fixed under the Companies Act, 2013. 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 (₹)
		Board Meetings (₹)	Committee Meetings (₹)	
1.	Shri R.K.Mittal	95,000.00	1,10,000.00	2,05,000.00
2	Shri Rajender Parshad	1,75,000.00	2,15,000.00	3,90,000.00
3.	Dr. Debasish Gupta	1,75,000.00	1,95,000.00	3,70,000.00

1.5.7 (i) Annual General Meetings:-

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

Details	2013-14 39 th AGM	2014-15 40 th AGM	2015-16 41 st AGM
Date	10.06.2014	22.06.2015	27.06.2016
Time	11:00 A.M.	11:30 A.M.	10:30 A.M.
Venue	At the Registered office of the company, Gondwana Place, Kanke Road, Ranchi, Jharkhand-834031	At the Registered office of the company Gondwana Place, Kanke Road, Ranchi, Jharkhand-834031	At the Registered office of the company Gondwana Place, Kanke Road, Ranchi, Jharkhand-834031
Special Resolution	Nil	Nil	Nil

(ii) Extra Ordinary General Meeting

Details	2014-15	2015-16	2016-17
Date	27.03.2015	NIL	NIL
Time	11:00 A.M		
Venue	At the Registered office of the company Gondwana Place, Kanke Road, Ranchi, Jharkhand - 834031		
Special Resolution	No		

(iii) Independent Directors Meeting :

As per Companies Act, 2013, Independent Directors are required to hold at least one meeting in a year to discuss the following:

- Review the performance of non-independent directors and the Board as a whole.
- Review the performance of the Chairperson of the company taking into account the views of executive directors and non-executive directors.
- Assess the quality, quantity and timeliness of flow of information between the company management and the Board that is necessary for the Board to effectively and reasonably perform their duties.

Two meetings of Independent Directors were held during the financial year 2016-17 on 27.06.2016 and 28.10.2016. The details of the meetings attended by the Independent Directors are as under:

S.N.	Name of Director	Number of meetings attended
1	Shri R.K.Mittal	2
2	Dr. Debasish Gupta	2
3	Shri Rajender Parshad	2

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, 2017 that may have potential conflict of interest of the company at the large.

No agenda was placed before the Board meetings held during the year 2016-17 in respect of any contract or arrangement with a related party.

As per related party transactions policy, any transactions between two government companies and transactions between holding company and subsidiary company are exempted.

Contracts or Arrangements with related parties U/s 188 (1) is enclosed as Addendum-VIII.

- **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 last three financial year is brought to the notice of the Company.

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

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

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

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

The requirements of these guidelines with respect of Board of Directors, Audit Committee, Disclosures, Reports, Code of Conduct etc. are complied with. However, the Guidelines like Subsidiary Companies, Training Policy etc. are uniformly considered by CIL for all its subsidiaries which are followed by CMPDIL also. A certificate from the Company Secretary, who is in whole-time practice with regard to compliance of conditions of Corporate Governance is annexed to this report as Addendum-IV. Three independent directors are yet to be appointed by MOC. CMPDIL has intimated the status of pending appointments of Independent Directors to CIL/MOC.

- **Integrity Pact & IEM**

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-cum-Managing Director and the General Manager (Finance)/CFO of the Company have furnished the "CEO/CFO Certification" for the Financial Year 2016-17 to the Board of Directors of the Company which is placed as Addendum-II to Directors' Report.

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

The Code of Conduct for the Directors and Senior Management Personnel of the company has been laid down by the Board, which has been circulated to all the concerned and the same is also hosted in the website of the Company i.e. www.cmpdi.co.in. The Directors and Senior Management personnel of the Company affirmed compliance with the provisions of the Company's Code of Conduct for the financial year ended 31st March 2017.

- **Details of Expenses incurred:**

No items of expenditure debited in the books of accounts, which are not for the purpose of the Business and no expenses debited which are personal in nature and incurred for the Board of Directors and top management, and the company's auditor had not reported any such occurrences.

- **Presidential Directives :**

No Presidential Directives was issued by the Central Government to CMPDI during the financial year 2016-17.

- **Annual Return**

Annual Return is regularly filed with ROC. Annual Return (Form No. MGT-7) for the F.Y. 2015-16 was filed with ROC on 09.08.2016 and for the current F.Y. 2016-17 will be filed with ROC. An extract of Annual Return in Form No: MGT-9 is placed as Addendum-III to this report.

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 "Gondwana Bharati", 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.

Comments of the Comptroller & Auditor General of India under Companies Act, 2013 on the Accounts of the Company, for the Financial Year ended 31st March, 2017 is enclosed at addendum VII.

1.5.11 Training of Board Members

The Board of Directors were 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 CIL. 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 nonmandatory 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 System

Risk Management Committee was constituted by CMPDIL Board of Directors in its 192nd Board Meeting held on 02.02.2016 and reconstituted by the Board in its 195th Board Meeting held on 28.06.2016.

A. Composition:

The Risk Management committee consists of following members and is headed by a non-official part-time Director:

S.N.	Name of Director	Status	
1	Dr. Debasish Gupta	Chairman (w.e.f. 28.06.2016)	Independent Director
2	Shri Rajender Parshad	Member (w.e.f. 28.06.2016)	Independent Director
3	Shri V.K. Sinha	Member (w.e.f. 02.02.2016)	Director (Technical)
4	Shri Binay Dayal	Member (w.e.f. 28.06.2016)	Director (Technical)

B. Meeting and Attendance:

Two meetings were held during the financial year 2016-17 on 02.09.2016 and 10.03.2017. The details of the Risk Management Committee meetings attended by members are as under:

S.N.	Name of Director	Status	Number of meetings attended
1	Dr. Debasish Gupta	Chairman (w.e.f. 28.06.2016)	2
2	Shri Rajender Parshad	Member (w.e.f. 28.06.2016)	2
3	Shri V.K. Sinha	Member (w.e.f. 02.02.2016)	2
4	Shri Binay Dayal	Member (w.e.f. 28.06.2016)	2

The Risk Management Committee formed Risk Sub-committee and the composition of the Sub-Committee as on 31st March, 2017 is as under:-

1) Chief Risk Officer:

Shri Parag Majumdar, G.M. (E&M).

2) Risk Sub - Committee (RSC) i.e. CRO's team:

- a) Shri B. Bhattacharjee, HOD(MSD),
- b) Shri Anandji Prasad, Chief Manager (Mining / UMD),
- c) Ms Suchandra Sinha, Sr. Manager (E&M),
- d) Shri U. Chatterjee, Sr. Manager (Finance), and
- e) Ms Swati, Sr. Officer (P&A).

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. The Code of Internal procedures and conduct for prevention of Insider Trading is also uploaded in the intranet website of CMPDIL.

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.

1.5.16 Quarterly Reporting System on Compliance of Corporate Governance.

A quarterly reporting system has been developed by Ministry to be reported by the CPSEs to their respective Administrative Ministries. In compliance of this, CMPDIL has been submitting its Quarterly report regularly and timely to MOC.

1.5.17 Key Managerial Personnel

As per the provisions of section 203 of the Companies Act 2013, the Key Managerial Personnel are:

Shri Shekhar Saran	-	CEO
Shri D.K. Rao	-	CFO
Shri Abhishek Mundhra	-	Company Secretary

1.6.0 CSR initiative at CMPDI

Corporate Social Responsibility (CSR) and Sustainability is a company's commitment to its stakeholders to conduct business in an economically, socially and

environmentally sustainable manner that is transparent and ethical. The thrust of CSR and Sustainability is on capacity building, empowerment of communities, inclusive socio-economic growth, environment protection, promotion of green and energy efficient technologies, development of backward regions, and upliftment of the marginalized and under-privileged sections of the society. The company has formulated its own CSR policy as per notification issued by Ministry of Corporate Affairs, Govt. of India on 27.02.2014 as well as DPEs guidelines and section 135 of Companies Act, 2013 and the rules made there under.

CSR & Sustainability, brings not only risks for the Mining industry, but also creates a set of opportunities. CSR & Sustainability can help companies secure their social license to operate, contribute in a meaningful way to sustainable development. CMPDI reiterates its commitment to social responsibility towards CSR & sustainability by integrating social and environmental concerns in day-to-day business operations. Two tier decision making committees have been constituted in CMPDI to implement its policies and programs.

Keeping in view the special nature of its business, CMPDI initiated its CSR & Sustainability activities during 2016-17 which may be found in Part-B of the report.

1.7.0 Extract of Annual Return

The Extract of Annual Return as per Section 92(3), being filed with the Registrar of Companies (ROC) in Form No. MGT-9 with the details therein are enclosed as annexure to this report. (Addendum-III).

1.8.0 Conservation of energy, technology absorption, foreign exchange earnings and outgo.

The details regarding conservation of energy, technology absorption, foreign exchange earnings and outgo, is enclosed as addendum to Directors report. (Addendum-I)

1.9.0 Annual Evaluation of Board Committee and Directors Performance

As per section 134(3) (p) and Rule 8 of Companies (Accounts) Rules, 2014 in case of a listed company and every other public company having such paid-up share capital of ₹ 25 crores or more calculated at the end of the preceding financial year shall include, in the report by its Board of Directors, a statement indicating the manner in which formal annual evaluation has been made by the Board of its own performance and that of its committees and individual Directors.

The paid up share capital of CMPDIL is ₹ 19.04 crores and registered as private limited company and not listed with any stock exchange and accordingly the company is not required to evaluate the performance of its Board, Committee and individual Directors.

Further, annual evaluation by the Board of its own performance and that of committees and individual did not take place, in the absence of appointment of three more independent Directors on the Board of the Company. However, annual evaluation would be done on the basis of the policy which is expected to be formulated by CIL for the holding company and its subsidiary companies.

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

1.0.1 CMPDI continued to carry out coal exploration activities in 2016-17 also, mainly in CIL and Non-CIL/Captive Mining blocks. Exploration in CIL blocks was taken up to cater the needs of project planning/production support of subsidiaries of CIL whereas exploration in Non-CIL/Captive Mining blocks was undertaken to facilitate allotment of coal blocks to prospective entrepreneurs.

1.0.2 CMPDI has substantially improved the capacity of drilling during XI & XII plan period. As against the achievement of 2.09 lakh metre in 2007-08, CMPDI has achieved 4.98 lakh metre in 2011-12, 5.63 lakh meter in 2012-13, 6.97 lakh meter in 2013-14, 8.28 lakh meter in 2014-15, 9.94 lakh meter in 2015-16 and 11.26 lakh meter achieved in 2016-17 (Growth - 13%) through departmental resources and outsourcing. For capacity expansion through modernization of departmental drills, 39 new Mechanical drills & 12 Hi-Tech Hydrostatic drills have been procured since 2008-09, out of which 12 have been deployed as additional drills and 39 as replacement drills. CMPDI has also replaced 57 mud pumps, 74 trucks and 17 Multiutility Crew Cab in last seven years. In addition to this, 7 Hi-Tech Hydrostatic drills have been received & deployed in 2016-17.

To meet the increased work load, recruitment has been taken up through campus interview / open examination. 240 geologists, 34 geo-physicists and 20 Mechanical Engineers for Drilling have joined CMPDI since 2008-09. About 1226 non-executive staffs have also been

inducted for exploration work. Out of it 45 geologists, 7 geo-physicists, 5 Mechanical Engineers and 14 non-executives have resigned.

1.0.3 Under outsourcing, the work of 81 blocks involving 31.59 lakh metre of drilling was awarded through tendering since 2008-09, out of which drilling has been concluded in 35 blocks.

In 2016-17 a total of about 6.84 lakh metre (Growth - 17%) was drilled through outsourcing, out of which 3.27 lakh metre through tendering, 3.56 lakh metre through MoU with MECL and 0.005 lakh metre through State Govts.

1.1 Drilling Performance in 2016-17:

1.1.1 CMPDI deployed its departmental resources for detailed exploration of CIL/ Non-CIL blocks whereas State Govts. of MP and Odisha deployed resources in CIL blocks only. Besides, eight other contractual agencies had also deployed resources for detailed drilling/exploration in CIL/Non-CIL blocks. A total of 140 to 160 drills were deployed in 2016-17 out of which 64 were departmental drills.

CMPDI continued the technical supervision of Promotional Exploration work undertaken by MECL in Coal Sector (CIL Areas) in 7 blocks. Apart from it, DGM (Nagaland) has also undertaken Promotional Exploration in 1 block in Coal Sector on behalf of MoC. Promotional Exploration work undertaken by MECL in Lignite Sector in 13 blocks & GSI in 1 block. A total of 1.046 lakh metre of promotional drilling was carried out in Coal (0.490 lakh metre) & Lignite (0.555 lakh metre) during 2016-17 through CMPDI.

1.1.2 In 2016-17, CMPDI and its contractual agencies took up exploratory drilling in 122 blocks/mines of 22 coalfields situated in 6 States. Out of 122 blocks/mines, 35 were Non-CIL/Captive blocks and 87

CIL blocks/mines. These coalfields are Raniganj (9 blocks/mines), Rajmahal (5), Jharia (1 block), Auranga(1block), E.Bokaro (4 blocks), W.Bokaro (3 blocks), North Karanpura (5 blocks), Wardha Valley(2 blocks), Pench-Kanhan (3 blocks), Sohagpur (13 blocks), Mand Raigarh (18 blocks), Korba (2 blocks), Bistrampur (8 blocks/mines), Sonhat (2 blocks), Tatapani-Ramkola- (5 blocks), Singrauli (7 blocks), Talcher (10 blocks), Ib Valley (4 blocks) & Godavary Valley (3 blocks) . Departmental drills of CMPDI

took up exploratory drilling in 56 blocks/mines whereas contractual agencies drilled in 65 blocks/mines.

- 1.1.3 Under Promotional (Regional) Exploration Programme, MECL has undertaken Promotional drilling in 7 coal blocks (Mand Raigarh = 5, Bander = 1 & Singrauli=1). DGM (Nagaland) has also undertaken 1 block for Promotion drilling in Coal Sector.

The overall performance of exploratory drilling in 2016-17 is given below:

(Figures in Lakh meter)

Agency	Target 2016-17	Performance of Exploratory Drilling in 2016-17			Achieved Prev. Year: 2015-16	Growth %
		Achieved	Achieved (%)	+/-		
A. Detailed Drilling Undertaken by CMPDI :						
I. Departmental	4.000	4.414	110%	0.414	4.081	8%
II. OUTSOURCING						
State Govts.	0.060	0.005	5%	-0.055	0.053	-90%
MECL (MOU)	2.565	3.562	139%	0.997	2.472	44%
Tendering	4.375	3.274	75%	-1.101	3.332	-2%
Total Outsourcing	7.000	6.842	98%	-0.158	5.857	17%
Grand Total A*	11.000	11.256	102%	0.256	9.938	13%
B. Promotional/NMET Drilling by MECL, GSI, DGM(Nagaland) & DGM(Assam):						
I. COAL SECTOR						
GSI	0.250	0.000	0%	-0.250	0.161	-100%
MECL	0.605	0.484	80%	-0.114	0.352	38%
DGM, Nagaland	0.010	0.006	60%	-0.004	0.008	-21%
DGM, Assam	0.005	0.000	0%	-0.005	0.000	0%
CMPDI	0.030	0.000	0%	-0.030	0.000	0%
Total Coal:	0.900	0.490	54%	-0.403	0.521	-6%
II. LIGNITE SECTOR						
GSI	0.150	0.035	23%	-0.115	0.079	-56%
MECL	0.700	0.522	74%	-0.178	0.523	0%
Total Lignite	0.850	0.555	65%	-0.293	0.602	-8%
Grand Total B	1.750	1.054	60%	-0.696	1.123	-7%

* In 2016-17, 8.175 lakh metre has been drilled in CIL blocks and 3.081 lakh metre in Non-CIL blocks.

In 2016-17, CMPDI achieved its departmental and overall drilling targets by 110% and 98% respectively. The performance of departmental drilling is better than previous year with growth of 13% and recording average operational drills productivity of 583 m/drill/month. Non-availability of permission to explore in forest areas & local problems (law & order) has affected the performance of outsourced drilling. MECL could not achieve the targets of Promotional drilling in coal sector due to forest problems & lesser deployment of resources and CMPDI could not take promotional drilling due to priority in detailed drilling.

1.1.4 Drilling in Non-CIL/Captive Mining Blocks:

A programme comprising 20.13 lakh meter (including NER) of detailed drilling in coal was drawn up by "Working Group on Coal & Lignite" for formulation of the Twelve five year plan with fund requirement of ₹ 974.69 crores through department resources and outsourcing. In 2016-17, a total of 3.475 lakh metre of drilling was targeted in Non-CIL blocks (departmental=0.40 lakh metre, outsourcing=3.075 lakh metre). As against this, a total of 3.081 lakh metre has been achieved, out of which the departmental drills of CMPDI have carried out 0.374 lakh metre of exploratory drilling whereas 2.707 lakh metre has been achieved through outsourcing.

Apart from above exploration work, CMPDI has provided preliminary geological information of existing Captive Mining Blocks to MoC for allotment purpose. After the process of allotment is over, original Geological Report is provided by CMPDI to allottee on payment of total cost of exploration.

As per guidelines issued by MoC, CMPDI is certifying the plan submitted by the allocates, that the geological co-

ordinates used in preparation of mining plan is in accordance with vesting order & geological co-ordinates covered by mining plan do not encroach any other adjacent block.

1.2 Hydrogeology

- 1.2.1 Hydro geological studies of a number of mining projects/mines were taken up for preparation of 'Groundwater Clearance Application' for CGWA approval and EMP clearance. Hydro geological studies for 17 mining projects were completed during 2016-17.
- 1.2.2 Total 53 nos. of Hydrogeological studies on GR/PR and others were completed during this period, including 1 outside consultancy job for DVC.
- 1.2.3 Total 8 nos. of Hydrogeological reports on Location and Design of Piezometers were prepared and submitted during this period.
- 1.2.4 Hydrogeological studies in 6 projects were carried out for water supply arrangement to mines, colony and villages.
- 1.2.5 Total 45 nos. of Groundwater Applications have been prepared and submitted online.
- 1.2.6 40 Piezometers (23 of Talcher Coalfields and 17 in IB Valley) were constructed. Long duration pumping test (1000 min cycle) and yield test were conducted during 2016-17.
- 1.2.7 CMPDI is carrying out groundwater monitoring of MOEF cleared projects of CIL including water level monitoring.

1.3 Geological Reports:

- 1.3.1 In 2016-17, 16 Geological Reports were prepared on the basis of detailed exploration conducted in previous years. In addition, 2 Interim Geological Reports/ Geological Notes were also prepared. Through these Geological Reports, about 4.6 Billion Tonnes of additional coal

resources were upgraded to 'Proved' category.

- 1.3.2 Under Promotional Exploration Programme, GSI and MECL have submitted 9 Geological Reports on coal blocks, which established about 1.04 Billion Tonnes of coal resources, in 'Indicated' & Inferred categories, above specified thickness.

1.4 Geophysical Surveys:

- 1.4.1 Geophysical Logging: Boreholes for exploratory drilling were geophysically logged to get the in-situ information of different strata encountered in the boreholes. During 2016-17, a total of 201628 metre of geophysical logging was carried out for this purpose in CIL and Non-CIL projects with multi-parametric geophysical logging equipment. Out of this, 102703 depth metre of logging was done by 6 departmental geophysical logging units and 98925 metre of logging was carried out by contractual agencies.
- 1.4.2 Surface Geophysical Surveys: CMPDI 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 289.65 line km of Resistivity profiling, 214 Vertical Electrical Sounding (VES) and 108 line km of Magnetic survey were carried out in 2016-17 for such purpose. With 48-Channel signal enhancement Seismographs, a total of 105 line km of High Resolution Shallow Seismic (HRSS) survey has been carried out in Makri Barka block, Singrauli Coalfield, Kewai block, Sohagpur Coalfield and Beharaband block, Sohagpur Coalfield.
- 1.4.3 Reports: A total of 31 Geophysical reports have been submitted during the year 2016-17. It includes nine reports on

geophysical logging, thirteen on resistivity survey, six on magnetic survey and three on HRSS survey.

1.5 Geosystem:

Correction/modification exercise related to block boundary issues of major coalfields with DGPS survey on WGS 84 is being carried out on regular basis including updation of coalfield maps to incorporate geological features. Exercise was completed on assessment of PE and RE areas of coalfields for assessment of resource area and areas left for detail/regional exploration.

1.6 Coal Bed Methane (CBM)/ Coal Mine Methane (CMM)

- 1.6.1 Collaborative commercial development of CBM in Jharia & Raniganj coalfields by the consortium of CIL & ONGC

The Govt has allotted two CBM blocks in 2002 namely Raniganj North CBM Block in Raniganj Cf and Jharia CBM Block in Jharia coalfield to the consortium of ONGC-CIL on nomination basis for commercial development of CBM. CMPDI is implementing the projects on behalf of CIL. ONGC is the Operator for both CBM blocks and carrying out the jobs as per contractual agreement with the Govt. of India. On completion of CIL part of work programme by CMPDI and supplemented by appraisal activity by ONGC has resulted in formulation of Field Development Plan (FDP) by the Operator i.e; ONGC.

The FDPs for both the CBM blocks were approved by the Government of India in July, 2013. Petroleum Mining Lease (PML) for Jharia CBM block has been granted by Govt. of Jharkhand in July' 2015, however, Environmental Clearance is still awaited.

Model Co-development Agreement for Simultaneous Coal Mining and Coalbed

Methane (CBM) Operations in the Overlapping Areas has been issued by MoP&NG in February, 2017. Matter of Co-development agreement in regard to Jharia CBM Block in Parbatpur Central Coal Block overlapping for optimum exploitation of coal by SAIL and CBM by ONGC (operator of the CBM block) is under deliberation between SAIL and ONGC. In the Steering Committee meeting held on 30th March, 2017 at DGH it has been agreed that ONGC will submit revised FDP and cost estimate taking in account all constraints accordingly in the Operating committee it will be deliberated for consideration and further perusal for competent approval.

1.6.2 CBM and Shale gas related studies under Promotional Exploration during XII Plan

1.6.2.1 CBM related studies:

CMPDI and GSI are carrying out studies related to "Assessment of Coalbed Methane Gas-in-Place Resource of Indian Coalfields/Lignitefields" in selected boreholes being drilled under Promotional Regional exploration since X Plan period and XI Plan period respectively under Promotional Regional Exploration (PRE) funding. A total of 60 boreholes (40 by CMPDI and 20 by GSI) has been taken up for CBM specific data generation during the XII Plan. Studies have been completed by CMPDI in forty (40) boreholes and in Nineteen (19) boreholes by GSI. During the year 2016-17 studies has been done in eight (8) boreholes by CMPDI. CMPDI & GSI have completed CBM specific studies in 130 boreholes (91 by CMPDI & 39 by GSI) since commencement of the work.

During the year one report based on CBM related studies has been submitted by CMPDI for Gondbahera Ujheni block, Singrauli Coalfield.

1.6.2.2 Shale gas related studies:

CMPDI is carrying out studies related to "Assessment of Shale Gas-in-Place Resource of Indian Coalfields/Lignite fields" through boreholes being drilled under promotional exploration since XII Plan period under PRE funding of Ministry of Coal. This study creates the database for assessment of shale gas potentiality and facilitate delineation of more blocks for Shale Gas development.

CMPDI carried out shale gas specific data generation in 25 boreholes during XII Plan under PRE funding. During the year 2016-17, studies in five boreholes were completed by CMPDI.

1.6.3 Commercial development of Coal Mine Methane (CMM)

Ministry of Coal vide Office Memorandum dated 29th July, 2015 has permitted CIL to explore and exploit CBM from its areas under coal mining lease allotted to Coal India Limited (CIL). Earlier MoC has made CMPDI the Nodal Agency for development of CMM in India. Successful implementation of the Demonstration Project at Moonidih (Jharia Coalfield) of BCCL has already proved the efficacy of the process and to expand the scope of development of CBM in CIL areas. Further studies for "Assessment of CMM Potentiality in CIL Command Area" have been undertaken.

MoP&NG vide notification dated 3rd November, 2015 has issued guidelines for exploration and exploitation of CBM by CIL and its subsidiaries on nomination basis from coal bearing areas for which they poses mining lease. It is under modification by MoP&NG considering applicability of the ORD Act and PNG Rules within coal mining leasehold areas. Assessment exercise for ECL command area and BCCL has been undertaken.

The prospective CMM blocks are:

- 1) Raniganj CMM Block (ECL Area): An area of about 57 Sq. Km under mining leaseholds of Sripur, Satgram and Kunustoria Areas has been delineated for commercial development of CMM for which collateral activities have been initiated. A prognosticated resource of CMM of around 1.17 BCM may be available for extraction. Techno-economic studies have been undertaken by International Expert, based on which detailed project report will be prepared.
- 2) Jharia CMM Block (BCCL Area): A block of about 25 Sq. Km under mining leasehold in Kapuria, Moonidih, Jarma, Singra blocks has been delineated for commercial development. A prognosticated resource of CMM of around 4 BCM may be available for extraction. Techno-economic studies have been undertaken by International Expert, based on which detailed project report will be prepared.

“Reservoir Modeling & Techno-Economic Feasibility Study for Commercial Development of Coal Mine Methane (CMM)/ Coalbed Methane (CBM)” within mining leasehold areas for CMM blocks in Raniganj Coalfield (ECL areas) and Jharia Coalfield (BCCL areas) was awarded to M/s Advance Resources International Inc. USA in January, 2017 and work is in progress.

It is proposed to consider available drilling technologies (vertical drilling, directional, horizontal & its combination on case to case basis) and completion methods in such a way so that the CBM operation can be also simultaneously taken up with the coal mining operation going on within overlying seam.

- 3) Pre-drainage of methane at Moonidih mine (BCCL), Jharia Coalfield

Pre-drainage of methane at Moonidih mine (BCCL) in working Seam XVI has been proposed to recover methane for enhancing production and safety. Recovered gas will also be gainfully utilized. Expression of Interest (EoI) has been invited to identify suitable technology provider consultancy organization having experience in development of CBM & CMM for successful implementation of gas drainage from gassy coal seams from concept to commissioning and its utilization on Turn Key Basis i.e; Built Own Operate model or other applicable model against which 15 EoI were received which are under evaluation.

1.6.4 CMM/CBM Clearinghouse in India

A CMM/ CBM clearinghouse was established at CMPDI, Ranchi under the aegis of Ministry of Coal and USEPA on 17th November, 2008. 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. The website of India Clearinghouse, <http://www.cmmcclearinghouse.cmpdi.co.in>, encompasses all the important information viz. EoI notifications, newsletters in addition to information regarding opportunities existing for development of CMM, VAM, etc.

An International Workshop on “Best Practices in Methane Drainage and Use in Coal Mines” was jointly organized by CIL-CMPDI, GMI-US EPA, UNECE under aegis of Gol-MoC.

1.6.5 Commercial development of Underground Coal Gasification (UCG) within CIL command area.

MoC has constituted Inter Ministerial Committee (IMC) for identification of areas for UCG on the line broadly similar to the existing policy of CBM development. Potential blocks in coal and lignite were identified and considered in the IMC for the commercial development of UCG preferably by PSUs. Identified Coal blocks for UCG development are in Wardha Valley Coalfield (Jogapur–Sirsi), Sohagpur Coalfield (Maiki (North)–Maiki-Merkhi, Pathora, Chainpa), Tatapani-Ramkola Coalfield (Reonti-West), Yellendu Dip, SCCL and Bandha, Singrauli Main basin. A consultant has been engaged for “Formulation of Bid Document & Model Contract Document for Development of UCG”. Draft documents were submitted and discussed in 3rd and 4th IMC meetings. In the 4th IMC meeting held on 16th February, 2017 at MoC under Chairmanship of AS (Coal), the draft Bid Document and Model Contract Documents were further deliberated and further modification were suggested. It was further considered that in view of amendment in MMDR Act 1957, which was under process, several regulatory changes/legal amendments are required in lights of approved UCG policy which has been taken up by Ministry of Coal. Also on receipt of comments from IMC members the modified draft document will be re-drafted for deliberation in the next IMC meeting.

A Workshop was organized on “Challenges and opportunities for Development of

UCG (Deep Seated Coal) in India” at Delhi on 23rd March, 2017.

1.6.6 S&T and R&D Projects

Projects on Coalbed Methane

1.6.6.1 S&T Project on “CBM Reserve Estimation for Indian coalfields”

A S&T project titled ‘CBM Reserve estimation for Indian coalfields’ was approved under EoI of Coal S&T project vide MoC letter no. 34012/1/2014-CRC-I dated 25th Feb, 2014. The project is of 3 years duration with completion schedule as March, 2017 for which time extension has been considered in SSRC meeting held 23rd March, 2017. IEST (BESU), Shibpur is the main implementing agency and NGRI, Hyderabad; TCE, Kolkata and CMPDI are co-implementing agencies. An area in South Karanpura Coalfield has been taken up for 2D/3D Seismic survey by NGRI. 75% of study area has been covered by 2D Seismic survey in South Karanpura Coalfield. Balance work was taken up by NGRI in January, 2017 and 3D is likely to be undertaken in May’2017.

1.6.6.2 S&T Project on “Capacity Building for Extraction of CMM Resource within CIL Command Areas”

A S&T project titled “Capacity Building for Extraction of CMM Resource within CIL Command Areas” to be jointly implemented by CMPDI and CSIRO has been approved under Coal S&T project vide MoC letter no. 34012/4/2016-CRC-I dated 21st March, 2016. The project is of 3 years duration with effect from 23rd March, 2016.

Collaborative Understanding for execution of the Project has been signed between CSIRO and CMPDI on 22nd December, 2016. Thereafter, CSIRO team visited CMPDI on 8th – 13th Feb’2017 and on 15th

– 17th March, 2017. They will be visiting again in June, 2017. Desk study is in progress.

Project on Shale Gas

1.6.6.3 S&T Project titled “Shale Gas Potentiality of Damodar Valley Basins of India”.

An S&T project titled “Shale gas potentiality of Damodar basin of India” is under implementation by NGRI, Hyderabad (the principal implementing agency of the project) and CMPDI, Ranchi & CIMFR, Dhanbad (sub-implementing agencies). with revised completion schedule of May, 2017. The project objective is to evaluate potentiality of Shale gas in Damodar basin through integrated geophysical, geological, geo-chemical and petro-physical investigations.

“Automatic Porosimeter cum Permeameter” instrument supplied by M/s Vincy Technologies Inc. France has been installed and commissioned at CBM Laboratory, CMPDI and training was imparted to two CMPDI personnel during 7th – 11th November, 2016 at Paris (France).

NGRI along with CMPDI & CIMFR selected Rangamati B block (Tumni & Kanchanpur Sector) in Raniganj Coalfield and 3D seismic survey in 2.4 Sq.Km out of 3.2 Sq. Km area has been completed. Interpretation of data captured is in progress and balance 3D Seismic survey work is likely to be taken-up by NGRI in April'2017. On 3D Seismic Survey findings, CMPDI will take up its part of committed activities i.e; drilling of deep boreholes.

1.6.6.4 Project on VAM

A project proposal on mitigation/utilization of Ventilation Air Methane (VAM) at

Moonidih (Jharia coalfield) under CIL (R&D) and National Clean Energy Fund (NCEF) of Government of India is under consideration with CSIRO, Australia and CMPDI as the implementing agencies and BCCL as sub implementing agency. The project has been approved in principle by CIL (R&D) Board and will be taken up upon competent approval of the Government.

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 2016-17 for building additional coal production capacity to the tune of 55 Mty. Revision of Project Reports/Cost Estimates for projects was also taken up along with new PRs.

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

- Master Plan of Coalfields
- Preparation of Conceptual Reports, Feasibility Reports, Modification Reports, Tender Documents, Contract Documents, Evaluation of Bids, etc. for new/existing coal washeries
- Operational plans for OC mines
- Environment Management Plan (EMP)
- Mining Plans and Mine Closure Plans of OC and UG mines
- Mine capacity assessment of underground & opencast mines of CIL.
- Various technical studies relating to operation of opencast & underground mines.
- Performance analysis of HEMM operating in OC mines of CIL.
- Preparation of Global Bid Documents for underground mines of CIL.

- Preparation of Conceptual Reports for setting up of FBC based thermal power plants.
- Detailed design and drawings, NIT, tender scrutiny, etc.

During the year 2016-17, 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, etc.

During the year 2016-17, a total of 249 reports have been prepared for CIL and its subsidiary companies.

The break-up of reports prepared has been given below

REPORTS	Nos.
Geological Reports	16
Project Reports	26
Draft EMPs (including 15 Form-I)	37
Other Studies	170
TOTAL	249

Detail of reports prepared during the period 2016-17 is furnished in Annexure-I.

ANNEXURE - I

LIST OF COMPLETED REPORTS
DURING 2016-17

Regional Institute/HQ		Name of the Reports
Geological Reports		
RI-I	1.	Dhangajore
RI-II	1.	Compendium on Jharia Coalfield
RI-III	1.	Urimari South
	2.	Bermo (DVC)
	3.	Karkatta
RI-IV	1.	Mathra Deep
	2.	Konda-Hardola OC
RI-V	1.	Tulsi Block E (Haripur)
	2.	Shahdol (Non-CIL)
RI-VI	1.	Makri-Barka (East)
RI-VII	1.	Chandrabila (Non CIL)
	2.	Bhubaneswari-Arkhapal-Sakhigopal A (Comb.)
HQ(Contractual)	1.	Sangam
	2.	Bhalumuda (Non-CIL)
	3.	Mahuamilan (Non CIL)
	4.	Patratu ABC
Project Reports		
RI-I	1.	North Searsole OC
	2.	Ghusick UG/OC
	3.	Naba Kajora Madhabpur UG
	4.	Kottadih OC Expn.
	5.	Siduli OC/UG (Recast)
	6.	Sarpi UG Expn.
	7.	Narainkuri OC
RI-II	1.	Chandrapura OCP
	2.	Block VIII OCP
RI-III	1.	Chandragupta OCP (Recast)
	2.	Ashok OC EPR (Recast)
	3.	Hindegir OC
	4.	Kabribad OC
	5.	EPR of Urimari OCP
RI-IV	1.	Gauri Central OC
	2.	Gokul OC RPR
	3.	Bhanegaon OC
	4.	Durgapur OC RPR
	5.	Thesgora UG to OC
	6.	Chinchala- Pisgaon OC
RI-V	1.	Damini UG to OC
RI-VI	1.	EPR of Dudhichua OCP

Regional Institute/HQ		Name of the Reports
RI-VII	1.	Lajkura Orient OC Expn.
HQ	1.	Rajmahal Expn. OCP RCE
	2.	Mahamaya OC
	3.	Lekhapani RCE
Other Reports		
RI-I	1.	Feasibility Report of Chuperbhita UG Mine
	2.	Mine Closure Plan of Gaurandih OC Patch
	3.	UCE of Nakrakonda-Kumardih B OCP
	4.	UCE of Mohanpur OCP
	5.	Vibration study of Kalipahari OCP
	6.	RCE for Bonbahal OC Patch
	7.	Vibration study at Bonbahal OCP
	8.	Scheme for Gourandih Begunia OC Patch
	9.	Scheme for Egara OC Patch
	10.	Gourandih OCP vibration study
	11.	Scheme for Lakhimata OC Patch
	12.	Revised Mining Plans for Cluster No.8 and 9
	13.	Revised Mine Closure Plans for Parasea, Nimcha and Kapasara Colliery
RI-II	1.	Mining Plan of Bastacolla Mine
	2.	Mining Plan of Gopalichak Mine
	3.	Mine Closure Plan of Gopalichak Mine
	4.	Mininig Plans of AKWMC, AARC UG, Katras Choitudih Mine and Gastlitand Colliery (all recast)
	5.	Mine Closure Plans of AKWMC, AARC UG, Katras Choitudih Mine and Gastlitand Colliery (all recast)
	6.	Mining Plan of Amalgamated Dhansar-Industry OC
	7.	Mining Plans of Kankanee and Sendra Bansjora Mines
	8.	Mining Plan for Sand Mining at Sudamdih Sand Ghat
	9.	Mine Closure Plan of Kankanee Mine
	10.	Mine Closure Plan of Sudamdih Shaft, Bansdeopur, Kenduadih, Begunia and Madhuband (all closed mines)
	11.	Energy Audit and benchmarking of Vishwakarma OC
RI-III	1.	Mine Closure Plan of Ray Bachra UG
	2.	Mining Plan and Mine Closure Plan of Tapin South OCP
	3.	Scheme for Gidi 'C'
	4.	Mining Plan of Konar OCP with reduced area of 542.84 hectare
	5.	Scheme for Saunda 'D'
	6.	UCE of Sanghmitra and Kalyani
	7.	Mining Plan of Urimari

Regional Institute/HQ		Name of the Reports
	8.	UCE of Topa
	9.	UCE of North Urimari and Amrapali OCP
RI-IV	1.	GR to PR for Inder UG to OC Expansion, Kamptee CF
	2.	RPR for Inder UG to OC Expn.
	3.	UCE of Niljai Expn. OC, Dhankasa UG and Tawa-III UG (LHD Option)
	4.	UCE of Shivani UG
	5.	UCE of Kolar Pimpri Expansion OC and Durgapur Extn. OC
	6.	UCE of Gandhigram UG
	7.	Operational Plan of Sasti OC
	8.	Global Bid for Tawa – II UG mine with C.M. Technology
	9.	Geological Model in MINEX for Vishnupuri UG to OC
	10.	UCE of HLOC Expn. Mine
	11.	UCE of RPR of New Majri UG
	12.	UCE of Tawa-III UG & Waghoda UG
	13.	Geological Model in MINEX for Konda Hardola I & II OC
	14.	Energy Audit Report –'Electrical' with Bench Marking for New Majri OC
	15.	Energy Audit Report –'Electrical' with Bench Marking for Mathani UG
	16.	Energy Audit Report-'Diesel' with Bench Marking for Gauri Expn. OCP
	17.	Energy Audit Report-'Diesel' with Bench Marking for Pauni OCP
	18.	Geological Model in MINEX for Vishnupuri UG to OC
RI-V	1.	Saraipali RCE
	2.	PR/Scheme for Sangma Siding, Sohagpur Area
	3.	Scheme for Shivani Continuous Miner
	4.	PR for Regional Workshop, Baikunthpur Area, SECL
	5.	PR/Scheme for Baikunthpur Regional Store
	6.	RPR of Central Workshop, Korba
	7.	Manriding scheme of Bijuri UG
	8.	Scheme for Gayatri UG second set Continuous Miner
	9.	Updatation of PR of Vijay West
	10.	Controlled blasting Study for Dipka OCP
	11.	Controlled blasting Study for Amgaon OC
	12.	Controlled blasting Study for Amadand OC
	13.	Scheme for stowing of Umaria UG
	14.	Controlled blasting Study for Dhelwadhi UG
	15.	Controlled blasting Study for Gare Palma IV/2&3 OC

Regional Institute/HQ		Name of the Reports
	16.	Updation of PR of Batura West
	17.	Updation of PR of Jhiria West OC
	18.	Mining Plan for NCPH R-6 UG Mine
RI-VI	1.	UCE of Jayant and Block-B OCPs
	2.	Operational Plan of Amlohri OCP
	3.	UCE of Dudhichua Expn. OCP
	4.	Diesel auditing and benchmarking of Amlohri OCP
RI-VII	1.	RCE and Completion Report of Belpahar OC Expn.
	2.	Mine Closure Plan of Garjanbahal OCP
	3.	UCE of Bharatpur Re-organisation OC
	4.	Conceptual note on Subhadra (W) Block
	5.	MP/MCP of Lingraj OCP (20 Mty)
	6.	Combined MP/MCP of Kaniha OCP (14 Mty)
	7.	Combined MP/MCP of Kulda OCP (15 Mty)
	8.	Combined MP/MCP of Jagannath Reorganisation (7.5 Mty)
	9.	Combined MP/MCP of Basundhara OCP Expn. (8.75 Mty)
	10.	RCE of Kaniha OC
	11.	Conceptual Note on Baitarni East Coal Block
	12.	RCE of Bhubaneswari OCP
	13.	Perspective plan for expansion of coal profuction from Ib Valley Coalfield
	14.	IGR of Madhupur
	15.	Operational Plan of Hingula-II OCP
	16.	Infrastructure Master Plan of BG Area, MCL
HQ	1.	Slope stability study of Kakri OCP, NCL
	2.	Slope stability study of Balram & Garjanbahal OCPs, MCL
	3.	Detailed Diesel audit of Dudhichua OCP
	4.	Assessment of capacity of opencast mines of CIL - projections as on 01.04.2016
	5.	Scientific study of vibration caused by blasting at Purnadih OCP, CCL
	6.	Land use/cover mapping of buffer zone of Adasa UG to OC of WCL and Jagannathpur OC of SECL
	7.	Report on RMR studies of Shankarpur Colliery, R-VIIA Seam; Pandaveswar Colliery, R-VI Seam; Satgram Project, Dishergarh (R-IV) Seam and Kargali Colliery, Bermo Seam; ECL
	8.	Slope stability study of Siarmal OCP, MCL
	9.	Land use/cover mapping of buffer zone for Padmapur Deep OCP Extn. and Parsoda OCP of WCL
	10.	Slope stability study of Hingula OCP, MCL
	11.	Preparation of Conceptual Report for Kusmunda Washery on BOM basis, SECL

Regional Institute/HQ		Name of the Reports
	12.	Land use/cover mapping of buffer zone for Sayal D OCP of CCL
	13.	Gas survey in R-X seam of Narsamunda Colliery
	14.	Scientific study to devise suitable method of mining for coal seam V (Top and Bottom) for both development & depillaring for the entire existing working areas of Behraband UG mine, SECL
	15.	Report on RMR studies of Shankarpur Colliery (R-VIIA Seam) and Moira Colliery (Jambad Seam), ECL
	16.	Land use/cover mapping of buffer zone for Rohini OCP, CCL & Ambika OCP, SECL
	17.	Assessment of capacity & capacity utilisation of opencast mines of CIL during 2015-16
	18.	Gas survey at Bagdeva Colliery, SECL
	19.	Gas survey at Dhelwadhi Colliery, SECL
	20.	Mine Capacity Assessment for 2016-17 and Mine Capacity Utilisation for 2015-16
	21.	Pressure Survey at Sarpi Project, ECL
	22.	Standard Price list for Mining Equipment
	23.	Controlled blasting and vibration study at Rohini and Karma OCP, CCL
	24.	Mine Closure Plan of Mahamaya OCP, SECL
	25.	Subsidence prediction study of Naheria UG Mine, WCL
	26.	Land use/cover mapping of buffer zone for Dipka OCP, SECL
	27.	Performanmce analysis of HEMM of opencast mines of CIL during 2015-16
	28.	Soil erosion study of Birsa OCP, CCL
	29.	Preparation of Conceptual Report for Baroud Washery
	30.	Land use/cover mapping of buffer zone for Gokul OCP, WCL
	31.	Specific consumption of diesel, explosives and power
	32.	Scheme for Krishnashila ETP of NCL
	33.	Pre-Feasibility Report of Piparwar washery
	34.	Land use/cover mapping of buffer zone for Cluster 8, 9 and 12, ECL
	35.	Report on RMR studies of Churi Colliery (Upper Bachra Seam), CCL
	36.	Annual benchmarking of 12 OCPs of CCL
	37.	Stability study of underground pillar of Hathidari and Bansgarha seams of Bhurkunda Mine, CCL
	38.	Report on RMR studies of Dhemomain Pit Colliery (Sripur Seam), Dhemomain Incline Colliery (Barachak Seam) & Belbaid Colliery (Dobrana Seam) of ECL and Waghoda UG Mine (Incline Drivage) of WCL

Regional Institute/HQ		Name of the Reports
	39.	Land use/cover mapping of buffer zone for Cluster 10 Mine, ECL
	40.	Vegetation Cover Mapping of Bishrampur Coalfield, SECL
	41.	Controlled blasting and vibration study at Kakri Project, NCL
	42.	Detailed auditing and benchmarking of AKK OCP, CCL
	43.	Land use/cover mapping of buffer zone for Cluster 2, 3 and 7 Mines, ECL
	44.	Vegetation Cover Mapping of Wardha Valley Coalfield, WCL
	45.	Scientific study for assessment of support design of Waghoda Incline, WCL
	46.	Vegetation Cover Mapping of Jharia Coalfield, SECL and Kamptee Coalfield, WCL
	47.	Controlled blasting and vibration study at Damagoria OCP, BCCL
	48.	Mining Plan of Amalgamated Dhansar-Industry OC
	49.	Mining Plan of Kankanee and Sendra Bansjora Mines
	50.	Mining Plan for Sand Mining at Sudamdih Sand Ghat
	51.	Mine Closure Plan of Gastlitand Mine
	52.	Diesel Audit and annual benchmarking of 3 OCPs of SECL
	53.	Diesel Audit and annual benchmarking of 8 OCPs of NCL
	54.	Diesel Audit and annual benchmarking of 12 OCPs of MCL
	55.	Diesel Audit and annual benchmarking of 14 OCPs of BCCL
	56.	Diesel Audit and annual benchmarking of 8 OCPs of ECL
	57.	Diesel Audit and annual benchmarking of 14 OCPs of WCL
	58.	Detailed auditing and benchmarking of Dhorl OCP, CCL
	59.	Detailed auditing and benchmarking of Kakri OCP, NCL
	60.	Detailed auditing and benchmarking of Niljai South OCP, WCL
	61.	Electrical Energy Audit and Benchmarking of Dudhichua OCP, NCL
	62.	Electrical Energy Audit and Benchmarking of Bina OCP, NCL
	63.	Electrical Energy Audit and Benchmarking of Tapin North, CCL
	64.	Electrical Energy Audit and Benchmarking of Govindpur, Ph-II, CCL
	65.	Electrical Energy Audit and Benchmarking of Jagannath OCP, MCL

Regional Institute/HQ		Name of the Reports
	66.	Electrical Energy Audit and Benchmarking of Nandira UG, MCL
	67.	Preparation of Conceptual Report for FBC based TPP for Topa
	68.	Illumination survey of Kakri OCP
	69.	Assessment of capacity of opencast mines of CIL - projections as on 01.04.2017
	70.	Controlled blasting and vibration study at Kulda OCP, CCL
	71.	Controlled blasting and vibration study at Makardhokra-I OCP, WCL
	72.	Vegetation cover mapping of Talcher coalfield of MCL and Makum coalfield, NEC
	73.	Fire mapping of Jharia, Raniganj, West Bokaro and Karanpura coalfields
	74.	Land use/cover mapping of buffer zone for Cluster 1, 4, 5, and 6 Mines, ECL
	75.	Report on diversion of Bangaru Nalla of MCL
	76.	Slope stability study of Dudhichua OCP, NCL
	77.	Slope stability study of Hindegir OCP, CCL
	78.	Soil erosion study of Tarmi OCP, CCL
	79.	Preparation of Mining Plan for sand ghat of Damodar river in Sudamdih, Sutukdih and Sawardih Mauza
	80.	Report on RMR studies of Saunda 'D' Project, CCL
	81.	Final Scheme of AMD of Gorbi Mine, NCL
Environment Management Plan		
Form-I		
RI-II	1.	Sand Mining at Sudamdih Sand Ghat
RI-III	1.	Kuju OC
	2.	Balkudra OC
RI-IV	1.	Mugoli Nirguda OC
	2.	Pauni II OC Expn.
	3.	Saoner-I UG to OC
	4.	Gandhigram UG
RI-V	1.	Gevra OC Expn. (70 Mty)
	2.	Dipka OC Expn. (35 Mty)
	3.	Batura OC
	4.	Malachua OC
RI-VI	1.	Dudhichua OCP
RI-VII	1.	Jagannath Reorganisation (7.5 Mty)
	2.	Kulda OCP
	3.	Basundhara West Extn. OCP
Draft EMP		
RI-I	1.	Form-I and Addendum EMP for Mohanpur OCP
	2.	Form-I and Addendum EMP for Cluster-9 Mines

Regional Institute/HQ		Name of the Reports
	3.	Form-I and Addendum EMP for Cluster-3 Mines
RI-II	1.	Mahuda Washery (Revised)
RI-III	1.	Selected Dhoori Group of Mines
	2.	Jharkhand OC
	3.	Sayal D OCP
	4.	Form-I and Addendum EMP of Rohini OC
	5.	Form-I and Addendum EMP of Karo Expn. OC
	6.	Kedla OC
	7.	Urimari UG
	8.	Balkudra OC
RI-IV	1.	Adasa UG to OC
	2.	Ghonsa OC Expn.
	3.	Padmapur Extn Deep OC
	4.	Form-I and Addendum EMP of Gokul Expn. OC
	5.	New Majri UG to OC Expn.
	6.	Amalgamated Yekona-I & II OC
	7.	Nandan-II UG Expn. Dhau North Block
RI-V	1.	Jagannathpur OC
	2.	Gevra OCP
	3.	Dipka OCP

2.1 Coal & Mineral Preparation

CMPDI offers technology services for Coal washeries, Mineral beneficiation Plant and Modification/Modernization of existing plants. These services encompass exhaustive Laboratory studies, Techno Economics Feasibility Report, Conceptual Report, Project Planning, Construction management and wide range of R&D activities. CMPDI is equipped with ISO certified modern laboratory with latest and sophisticated equipment for carrying out laboratory scale studies. CMPDI has already handled many prestigious assignments in the field of Beneficiation of coal and other minerals against stiff competition in open market which includes World Bank aided project "Report on Techno-economic study of coal washeries for Cement Industry" and ADB funded project "Implementation

of clean coal technology through coal beneficiation in India."

Following major works have been completed during the year 2016-17:

- 11 Nos. of technical reports were prepared which includes three nos. Conceptual Reports and two nos. Feasibility Reports for Washerries.
- 8 Nos. of tender documents (on reverse e-tendering mode) including three nos. on BOM concept and five nos. on BOO concept were prepared for various washeries of CIL.
- Bids evaluated for 4 nos. of washeries
- Contract Documents prepared/modified for two nos. of washeries.
- 260 Nos. of Construction drawings approved for Madhuband and Dahibari washeries of BCCL.
- Commissioning of "Dry Beneficiation of Coal using Radiometric Technique (Ardee-Sort)" under CIL R&D scheme at Madhuband washery, BCCL.
- S&T Project on 'Optimization of various parameters of Lab scale Coal winnowing system'.
- Report for Ministry of Coal on 'Study for Augmentation of Coking Coal production and washing of LVMC Coal in CIL mines' was prepared.
- Report for 'ascertaining Optimum Grade mix of Raw coal feed to BCCL washeries' was prepared.
- Reports for modernization of 4 nos. of existing washeries in BCCL was prepared.

2.2 Project Appraisal

- Appraisal of 16 nos. of conceptual notes for finalizing the main technical parameters before preparation of the draft PR/RPR/EPR.

- Appraisal of 24 nos. of draft PRs/ RPRs/EPRs before finalization of the reports.
- Updation of status of implementation of ongoing projects costing more than ₹ 500 crores for Secretary (Coal)'s Quarterly Review Meetings.
- Updation of status of formulation of PRs for projects identified for production in 2019-20 for Secretary (Coal)'s Quarterly Review Meetings.
- Preparation of year-wise perspective plan for CMPDI up to 2030-31 for exploration, GR preparation and PR formulation.
- Collection of block-wise data on balance reserves as on 01.04.16 for UNFC classification of CIL Blocks.
- Assessment of impact of enhanced NPV of forest land on the economics of representative opencast and underground projects of CIL.
- Compilation of coalfield wise maps from RIs showing block boundaries and projectized boundaries.

3.0 UNDERGROUND AND OPEN-CAST MINING

3.1 Underground Mining

A. OUTSIDE CONSULTANCY JOBS

- Stability analysis of permanent headframe for Narwapahar mines of M/s Uranium Corporation of India Limited was completed during the year.
- Other jobs in progress include:
 - Preparation of DPR & Mining Plan for Indikatta-Ramnagore block for M/s SAIL
 - Updating TEFR, cost estimate, Tender Document and assistance in evaluation of bids for Balaghat Mine for M/s MOIL

- Preparation of Mining Plan & Project Report (PR) for Gondbahera Ujheni Coal Block for M/s M P Power Generating Company Ltd.
- Mining Plan for Gare Pelma Sector-1 coal block for M/s GSECL
- Assessment of Normative Cost of sand stowing for Kalyani Khani no.1 incline, Mandamani area for M/s SCCL

B. CIL JOBS

Following jobs were completed during the year:

- Design of incline mouth for incline no.6 of Churi u/g mine, CCL
- Stability test of Headgear structure of winding engine of Kankanee Colliery, BCCL
- Gas survey in R-X seam of Narsamunda Colliery, ECL; Bagdeva colliery, SECL; Dhelwadih colliery, SECL and Katkona 1 & 2, SECL.
- Scientific study to devise suitable method of mining for coal seam V (Top & Bottom) for both development and depillaring for the entire existing working area of Behraband u/g mine, SECL
- Detailed design, drawing & BOQ for Jhanjra 'F' shaft, ECL
- Mine capacity assessment for 2016-17 & Mine capacity utilization for 2015-16
- Preparation of Standard Price List for mining equipment
- Ventilation System Design for Sarpi Project, Shyamsunderpur colliery, ECL
- Stability of u/g pillar of Hathidari & Bangara seams of Bhurkunda mine, CCL

- Scientific study for assessment of support design of Waghoda incline, WCL
- Preparation of Mining Plan for Sand Ghat of Damodar River in Sudamdih, Sutukdih and Sawardih Mauza.

C. CIL JOBS (IN PROGRESS):

Following jobs were undertaken during the year:

- Preparation of mine dossier & calculation of NPV as per the direction of MOC.
- RPR of Piparwar-Phase-I, CCL.
- Detailed study of Tech-Economic parameters and Time bound Action programme for phasing out worst of uneconomic mines with deployment of labour force elsewhere gainfully for CCL U/G mine.
- Scientific study for accessing requirement of higher capacity main mechanical ventilator at Beherabandh U/G mine, SECL.
- Mine Capacity Assessment for the year 2017-18.
- Standard Price List for Mining Equipment – 2017.
- Preparation of RPR for Parej East UG Project, CCL.
- Scientific study to access the danger of inundation to Naigaon OCM Wardha Valley CF from UG galleries below the Wardha River, WCL

3.2 Opencast Mining

Major Outside Consultancy jobs completed are:

- Mining Plan and Draft Project Report for Gond Bahera Ujheni Coal Block of M/s MPPGCL
- Mining Plan for West Bokaro Leasehold of M/s Tata Steel

- Mining Plan and Draft Project Report for Gare-Pelma Sector-I of M/s GSECL
- Mining Plan and Mine Closure Plan of Meenakshi Coal Block of PFCCL (Draft Report)
- Preliminary Assessment Report for Benga Coal Project of M/s ICVL (Mozambique)
- Review of performance of Major HEMM, NMDC.

Major CIL jobs completed are:

- UCE of Recast of Tirap OCP, NEC.
- RCE for Lekhapani OC - 0.25 Mty, NEC.
- PR of Mahamaya OCP, SECL.
- RCE for Rajmahal Expansion OCP.
- Assessment of capacity and capacity utilization for opencast mines of CIL during 2015-16.
- Performance analysis of HEMM during 2015-16 for all subsidiaries of CIL.
- Performance analysis of Excavators and Dumpers and summary of CIL during 2015-16.
- Analysis of specific consumption of explosives, diesel and electric power of opencast mine of CIL during 2015-16.
- Assessment of capacity of opencast mines of CIL – Projections as on 01.04.2017.
- Review of existing survey-off norms and norms for newly inducted HEMM.
- Optimized dragline scheme for Mungoli – Nirguda Ext. (Deep) OC.
- Format preparation for mine capacity assessment during 2015-16 of OC mines

Quick Comments on Mining Plan and other jobs of MoC/CAG Auditors include:

- Mining Plan for SRP OC II Project (SRP OC II Expansion Project)
- Revised Mining Plan Revision) of Belgaon Coal Mine (May, 2016) of M/s Sunflag Iron & Steel Cor. Ltd.
- Mining Plan for Parsa Coal Block, Hasdeo Area submitted by M/s RRVUNL for MoC.
- MP and MCP of Parsa East & Kanta Basan.
- Mining Plan of Gare-Palma Sector-II Coal Block of M/s MSPGCL.
- Mining Plan of Rajbar E&D coal block of TVNL.

4.0 ENGINEERING SERVICES

4.1 Civil Engineering Services

Following major services were completed during the year under review:

CIVIL & ARCHITECTURAL DETAILED DESIGN JOBS:

- a. Architectural and structural consultancy of township for Kusmunda Area, SECL.
- b. Preparation of architectural and structural drawings for Standard Quarters for MCL and Town planning for Basundhara, Garjanbahal and Hingula Areas of MCL.
- c. Shed for gallery and stage area of Anand Vihar Stadium, 500 seater auditorium at Jagriti Vihar and entry gate at Jagriti Vihar, MCL.
- d. Preparation of architectural and structural drawings for Blind Girls Hostel, Ranchi under CMPDI CSR.
- e. Preparation of architectural and structural drawings for C-Type (G+5) quarters at RI-V, Bilaspur & D-Type (G+4) quarters at RI-VI, Singrauli.

- f. Structural design and drawing of type quarters -B, C & D, office building etc. for township under master plan in Western Jharia area.
- g. Planning, designing, and technical scrutiny and comprehensive renovation cum modernization of Belpahar Training Institute, MCL.
- h. Detailed design of stadium, staff hostel, shopping complex & Kalyan Mandap for Bashundhra Garjanbahal Area, MCL.
- i. Architectural layout & structural drawings for a 150 bedded girl's hostel at Dhanbad under BCCL CSR.
- j. Vetting of architectural/structural drawings for the work 'planning, designing, detailed engineering and comprehensive renovation of BTI, MCL.
- k. Architectural design for C & D type Qtrs. (G+10 storied) & health center, 7 - storied at new Coal India Complex, Rajarhat, Kolkata.
- l. Architectural planning for service and welfare buildings (GM's Office, composite building for non-executives, Bank, Post Office & Shopping Centre) of Kusmunda Project.
- m. Architectural planning for 15000 seating capacity football stadium at Sirka ground of Argada Project
- n. Proposed Coal Museum at Kolkata.

PREPARATION OF TENDER DOCUMENT:

- a. Turnkey tender document for Jayant Incremental CHP (15MTY), Dudhichua CHP, Jhanjhra CHP and Bina-Kakri Amalgamation CHP, NCL.
- b. Turnkey tender document for Tapin & Purnadih Workshops, CCL.
- c. System design, preparation of tender

document and drawing scrutiny of Kusmunda Workshop (50 MTY), SECL.

- d. Preparation of e-tender document for execution of the balance portion of work of Ananta CHP with silo loading arrangement at Ananta OCP, MCL
- e. System Drawing and tender document of Amlohri and Khadia Workshop and store, NCL.
- f. NIT for 2X5 MVA, 33/6.6kV Block B Sub-station, NCL.
- g. NIT for 33/11kV substation at Jagriti Vihar, MCL.
- h. Turnkey tender document for Magadh, Konar & Amprapali Substation, CCL.
- i. Preparation of tender document for Sonapur Bazari CHP, ECL
- j. e – NIT for CHP with pipe conveyor and Silo at Bhubaneswari OCP, CHP and Silo at Basundhara OCP

PREPARATION OF SCHEME/REPORT:

- a. Advance planning of integrated township for Vijay West UG Mines, SECL.
- b. Comprehensive scheme for setting up of GM Complex and Colony of Raigarh Area, MCL.
- c. Preparation of revised scheme for integrated effluent treatment plant for Krishnashilla project of NCL
- d. Preparation of scheme for treatment of acid mine drainage of Gorbi Mine, NCL.
- e. Scheme for road, embankment, road over-bridge and allied works in Nigahi Project, NCL
- f. Preparation of scheme/report for construction of permanent quarters

and office for CMPDI Exploration Camps at Talcher and Gopalpur and construction of A, B and D Type quarters at CMPDI Colony, Bhubaneswar

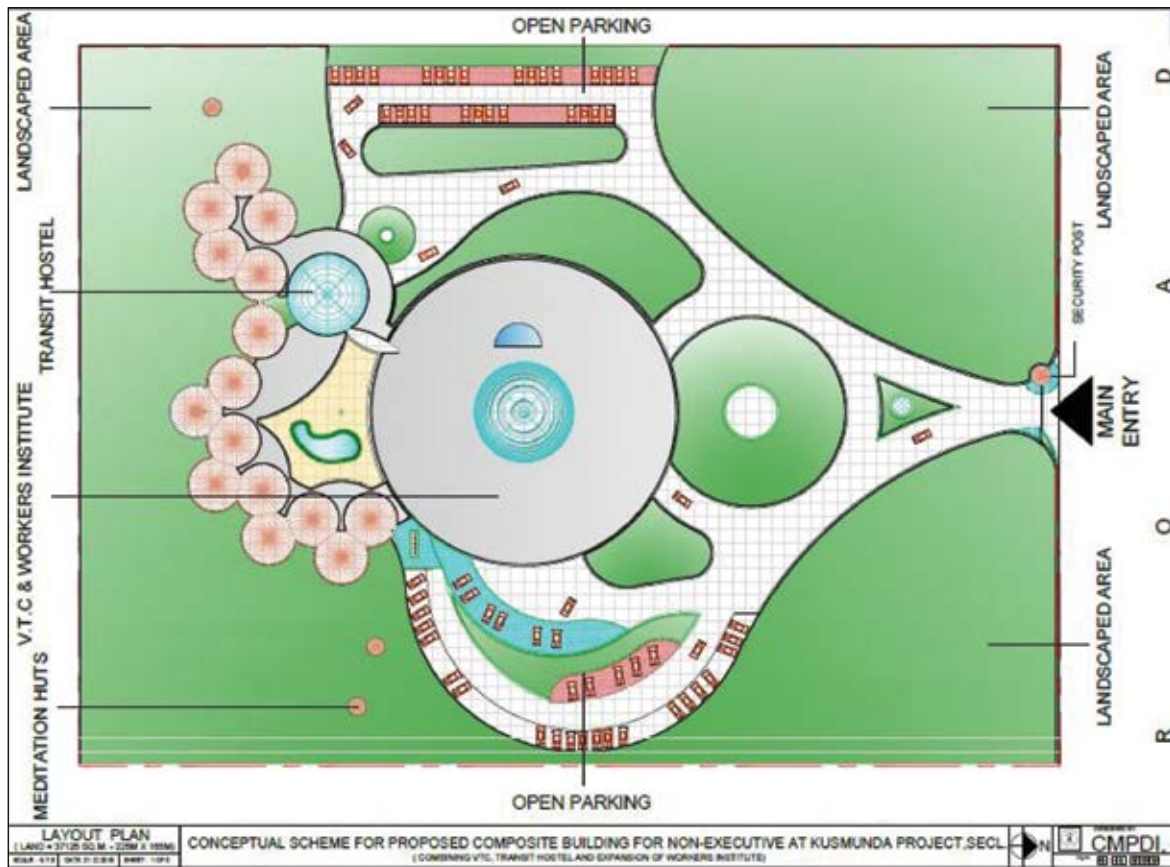
STRUCTURAL ADEQUACY STUDY:

- a. Structural adequacy study of various CHPs, SECL (12 nos. of CHPs)
- b. Structural adequacy study of CHPs of Amlohri, Kakri, Nigahi, Jhingurda & Khadia, NCL.
- c. Structural adequacy study of Neeljai South CHP, Ghuhus Loading Hopper & Bunker, Neeljai CHP & Steel Structure, Mungoli CHP and Makardhokra CHP, Umrer Area, WCL.
- d. Stability & suggestion for strengthening of gantry under Kathara washery, CCL.
- e. Structural design and drawing for HEMM workshop at Garjanbahal OCP

DESIGN/ DRAWING SCRUTINY:

- a. Technical vetting of detail design & drawing of workshop & regional store of Khadia, NCL.
- b. Technical vetting of detail design & drawing of workshop and regional store of Krishnashilla, NCL.
- c. Planning, design, construction, testing & commissioning of sewage treatment plant (STP) for Block-B opencast project, NCL on Turnkey basis.
- d. Design, drawing and scrutiny of Nigahi CHP (Phase-III) & Khadia (Phase II) CHP, NCL.
- e. Scrutiny of drawings of Madhuband Rapid Loading system at BCCL

Conceptual Scheme for Kusmunda Colony, SECL



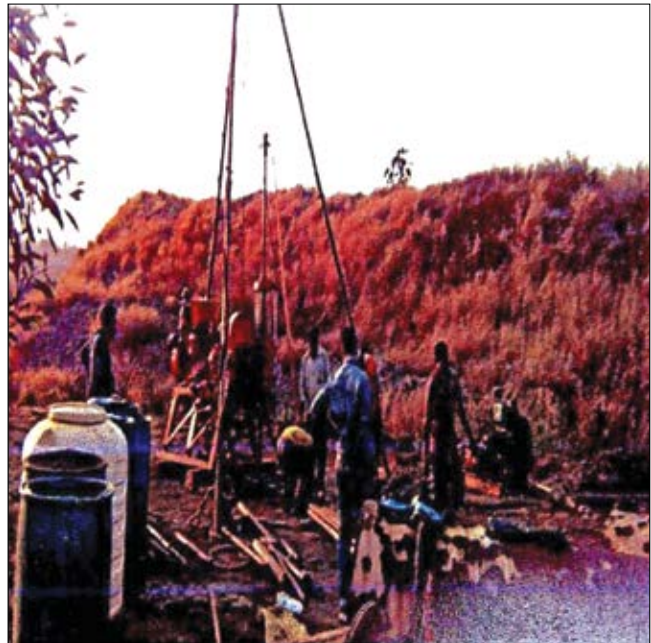


Figure 1 : Site Photo for Truck Receiving Hopper at Mungoli CHP, WCL.

4.2 Electrical and Mechanical Engineering Services

4.2.1 Mine Planning (Infrastructure) support for Project Reports

4.2.2 Coal handling Plant

➤ Preparation of e-tender/ tender documents:

- Jayant incremental CHP (10 Mtpa), Bina- Kakri Amalgamation CHP and Dudhichua Incremental Ph – III CHP of NCL
- Ananta CHP and SILO loading arrangement (15 Mtpa), MCL
- Inpit conveying system of Manikpur OCP, BCCL
- CHP with pipe & conventional conveyors and silo loading arrangements linked with Ib-Valley washery of Lakhanpur OCP.
- CHP with pipe & conventional conveyors and Silo loading arrangements by-passing Jagannath

washery at Bhubaneswari OCP.

- CHP with conventional conveyors and silo loading arrangements linked with Basundara washery at Kulda OCP.
- CHP and RLS with surge bin at Kaniha OCP, Kaniha area.
- Despatch system of 1.6 MTPA Dahibari Washery as per NIC portal.
- NIT for construction of Kusmunda Silos (4 nos.) with truck receiving station (Kusmunda CHP Phase-II).

➤ Preparation of Schemes/System design

- Revised scheme for CHP at Kumardih 'B' UG Mine
- Draft scheme for CHP with RLS for Sonepur-Bazari OCP (12.0 MTY)
- Final scheme for CHP with RLS for Sonepur-Bazari OCP (12.0 MTY)
- Scheme for Sonepur-Bazari CHP (12.0 MTY)

- Draft Scheme of Karo CHP (3.5 MTY)
- System design for 3 nos CHP

➤ **Scrutiny/Approval of Drawings of CHP's / Workshop**

4.2.3 Workshop & Store: Preparation of e-tender documents for 5 nos. Workshops

4.2.4 FBC based Power Plant

- Conceptual Report on FBC based 2X50 MW Thermal Power Plant at Topa OCP, CCL
- NIT/Bid Document for leasing of 3 x 10 MW Chinakuri Thermal Power Plant (TPP), ECL

4.2.5 Energy Audit and Benchmarking

- Annual Diesel Benchmarking for seventy (70) nos. Opencast mines of CIL
- Detailed Diesel Benchmarking and Equipment wise fixation of diesel consumption Norms for ten (10) nos. Opencast mines of CIL
- Electrical Energy Audit & Benchmarking for seven (7) nos. Opencast mines and two (2) nos. underground mines of CIL

4.2.6 Power Supply and Distribution & Control Systems

- Recasting of tender document in present module of CIL, e tendering / reverse auctioning process of 33/6.6 kV, Jhanjra Substation, ECL
- 2x10 MVA, 33kV/ 6.6kV sub-station for Magadh OCP; 2x16 MVA, 33kV/ 6.6kV sub-station for Amrapali OCP and 2x6.3 MVA, 33kV/6.6kV Sub-station for Konar OCP (under progress)
- 33 kV OHTL for providing power to the project sub-stations of Amrapali OCP and Magadh OCP from the proposed sub-station of DVC (under progress)

- NIT, TPS & BOQ for Turnkey Execution of 3 Nos. 33/6.6 kV substations at Kusmunda OCP.
- NIT, TPS & BOQ for Turnkey Execution of balance work of 3 Nos. 33 kV substations of Dipka OCP and balance work of 3 Nos. 33 kV substations of Gevra OCP, SECL
- Shifting of OH Line of Block B OCP, NCL
- 2 X 10 MVA, 33/6.6 kV OB Substation of Khadia OCP, NCL.
- Substation for Bina Kakri Amalgamation
- Shifting and augmentation of 132/33 kV Madhauri Substation, MCL.

4.2.7 Solar Initiatives

- Preparation of tender documents for installation of Solar Panel and Microgrid system for CMPDI, Office Buildings at RI-I, Asansol; RI-II, Dhanbad; RI-VI, Singrauli and RI-VII, Bhubaneswar.
- Floating & finalisation of tender and supply, Installation and commissioning of 30 kWp solar power plant on rooftop of RI-II office building and 50 kWp capacity on rooftop of new office building at RI VI.
- Energy Efficient 150 Watt LED flood lights installed in Play Ground of CMPDI Colony, Bilaspur.
- Supply and Installation of 25 Nos. Solar Street Lighting for CMPDI, RI-I Colony.
- "Supplying, installation, testing and commissioning of Solar based LED lights of 28/30 watts at various camps of CMPDI, RI-5 (under Sustainable Development Program)"
- Installation of Solar based Street lights with LED lamps in drilling camps

of RI-I, Asansol, RI-III, Ranchi, RI-IV, Nagpur, RI-V, Bilaspur, RI-VI, Singrauli and RI-VII, Bhubaneswar.

4.2.8 Other Reports

- Scheme for detection and firefighting system for Substations at BG Area, MCL
- Cost updation of Fire Fighting System for Kalinagar substations, MCL
- Illumination survey of Kakri and Khadia OCP, NCL
- Electrification work of Korba exploration camp (under construction) is in progress.
- Electrification work of new office building of CMPDI, RI-V, Bilaspur and Korba exploration camp (under construction) is in progress.

4.2.9 Inspection Services

CMPDI continued third party inspection services for pre-despatch inspection of equipment purchased by various subsidiaries of CIL. Total revenue earned from this services was ₹ 3.61 crores.

4.2.10 NDT (Non-destructive Testing) Jobs

- Underground mines: winders, head gear pulley shafts, cage, skip
- Opencast mines: draglines, shovels, excavators, dumpers, EOT cranes & drill machines
- CHP: Structures of conveyor gantry, feeder breakers, transfer points, drive house & crusher house

4.2.11 MoU 2016-17

As per MoU 2016-17, under the head 'Technology Upgradation', Roof Top Solar Power Plant was to be installed and commissioned at one Regional Institutes (RI) of CMPDI by 28th Feb.'17 for 'Excellent' Rating. Against this, 50 kWp

Roof-Top Solar Power Plant was installed and commissioned at RI-VI, CMPDI, Singrauli on 20.12.2016. Additionally, 30 KW Roof-Top Solar Power Plant was also installed and commissioned at RI-II, CMPDI, Dhanbad on 22.03.2017.

4.3 Town Engineering Services

The services provided during the year includes:

- Maintenance of the buildings, viz. office buildings and residential staff quarters. Maintenance of cleanliness, clean and green environment with necessary horticulture works and maintaining the same.
- Maintenance of all electrical, electronic and mechanical equipment pertaining to the office and maintaining the inventory of the same.
- Water supply management and Power management to conserve and save electricity.
- Liaison works with local statutory bodies like Municipal Corporation.
- Operation of waste paper recycling plant.

5.0 RESEARCH & DEVELOPMENT PROJECTS:

5.1 S&T Projects Funded by Ministry of Coal

- 5.1.1** The Research & Development (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 Central Mine Planning & Design Institute Limited (CMPDI), Singareni Collieries Company Limited (SCCL) and NLC India Limited (NLCIL), Director General (DG) of

Directorate General of Mines Safety (DGMS), Directors of concerned Council of Scientific & Industrial Research (CSIR) Laboratories, representatives of Department of S&T, NITI Aayog and educational institutions, amongst others. The main functions of SSRC are to plan, program, and budget and oversee the implementations of research projects and seek application of the findings of the R&D work done.

5.1.2 The SSRC is assisted by a technical sub-committee headed by CMD, CMPDI. The committee deals with research proposals related to production, productivity and safety in coal mines, coal beneficiation and utilization, clean coal technologies, protection of environment and ecology etc.

5.1.3 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, scrutiny and 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 31.03.2017)	-	390 nos.
Total no. of S&T projects completed (till 31.03.2017)	-	320 nos.

5.1.4 Physical and financial performance during 2016-17

A. Physical performance

The status of Coal S&T projects during 2016 -17 is as follows:

Projects on-going as on 01.04.2016	-	18
Projects approved by SSRC	-	Nil*
Projects completed	-	06
Projects on-going as on 01.04.2017	-	12

* In the 52nd meeting of SSRC held on 15.03.2017, one S&T project has been approved and two projects have been approved "in-principle". Sanction letter awaited.

S&T Projects funded by Ministry of Coal approved during 2016-17*

1. Indigenous development of early warning radar system for predicting failures/slope instabilities in open cast mines - SAMEER, Mumbai; ARDE, Pune; CSRE; IIT, Mumbai; CMPDI, Ranchi and NCL, Singrauli
2. Design of water network to optimize water consumption in coal washeries for removal of impurities from coal - IIT, Roorkee; CMPDI, Ranchi & CCL, Ranchi
3. Electronification of ground water control and conveyor systems in mines - NLC India Ltd., Neyveli and NITT, Tamil Nadu

*Note: In the 52nd meeting of SSRC held on 15.03.2017, one project (Sl. No. 1) has been approved and two projects (Sl. No. 2 & 3) have been approved "in-principle". Sanction letter awaited.

S&T Projects funded by Ministry of Coal (MoC) completed during 2016-17

1. Development of tele robotics and remote operation technology for underground coal mines - CIMFR, Durgapur; CIMFR, Dhanbad and CMPDI, Ranchi.
2. Development of indigenous catalyst through pilot scale studies of Coal-to-Liquid (CTL), conversion technology - CIMFR, Dhanbad and CMPDI, Ranchi.
3. Enhancing life of de-watering pipes in in coal/lignite mines by prevention of erosion-corrosion with nano-crystalline surface engineering treatments
4. Blast design and fragmentation control-key to productivity - CIMFR, Dhanbad
5. Design and development of truck mounted mobile coal sampler for

instant coal ash & moisture analyser at site from railway mechanics - CIMFR, Dhanbad; SCCL, Kothgudem and M/s Pranay Enterprises Pvt. Ltd., Hyderabad

6. Optimization of various parameters of lab scale coal winnowing system (Phase-II) - CIMFR, Nagpur Unit-I, Nagpur and CMPDI, Ranchi.

B. Financial status

Budget provisions and actual expenditure are shown below:

(₹ in Crore)

2015 -16		2016 -17	
RE	Actual	BE	Actual
18.0 (Ex NER - 2.25)	17.59	9.0 (Ex NER - 1.0)	10.38

5.2 R&D Projects funded by Coal India Limited (CIL)

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 24th March 2008 has delegated substantial powers to CIL R&D Board and also to the Apex Committee of the R&D Board. The Apex Committee is empowered to sanction individual R&D project up to ₹ 5.0 Crore value with a limit of ₹ 25.0 Crore per annum considering all the projects together and CIL R&D Board is empowered to sanction individual R&D project up to ₹ 50.0 Crore.

So far, 79 projects have been taken up under the fund of CIL R&D Board out of

which 61 projects have been completed till March 2017.

The status of CIL R&D Projects during 2016-17 are as follows:

Projects on-going as on 01.04.2016	-	10
Projects approved by R&D Board of CIL	-	06
Projects completed	-	03
Projects on-going as on 01.04.2017	-	13

R&D Projects funded by Coal India Limited (CIL) approved during 2016-17

1. Development of guideline for prevention & mitigation of explosion hazard by risk assessment and determination of explosibility of Indian coal incorporating risk based mine emergency evacuation and re-entry protocol - IIT-ISM, Dhanbad; CIMFR, Dhanbad; S&R Division, CIL(HQ), Kolkata and SIMTARS, Australia
2. Multiple layer trial blasting for better recovery with less diluted coal - IIT-ISM, Dhanbad and CMPDI, Ranchi. Technical participation - University of Queensland, Brisbane, Australia
3. Studies on the Use of Coal and Petcoke as fuel in the cement industry in India - IIT-ISM, Dhanbad and CMPDI, Ranchi
4. Indigenous development of through-The-Earth (TTE) two-way voice communication system for underground mines - IIT, Bombay and CMPDI, Ranchi
5. Requirement of air in mine for mass production technology - CMPDI, Ranchi
6. Development of a methodology for regional air quality monitoring in coalfield area using satellite data and ground observations - CMPDI, Ranchi and National Remote Sensing Centre (NRSC), ISRO, Hyderabad

R&D Projects funded by Coal India Limited (CIL) completed during 2016-17

1. Demonstration of coal dry beneficiation system using Radiometric Technique - CMPDI, Ranchi and Ardee Hi-Tech Pvt. Ltd., Vishakhapatnam.
2. To find a methodology of safe liquidation in thick seams of Raniganj Coalfields: Design & Development & show-casing demonstrative trials at Khottadih colliery, ECL - CIMFR, Dhanbad & ECL, Sanctoria.
3. Development of guidelines to predict distance between toe of the Shovel-Dumper dump and that of Dragline dump with consideration of safety and economical design of both Shovel-Dumper dump and Dragline dump - BIT, Mesra, Ranchi.

Financial status:

The disbursement of fund for CIL R&D projects during 2016-17 is ₹ 13.66 Crore.

5.3 MoU 2016-17

As per MoU of 2016-17 of CMPDI, under the head 'Research & Development' a Feasibility Report (Phase-I) was to be submitted for 'Identification of Mines in CIL for implementation of R&D Project - Indigenous development of Integrated Dumper Collision Avoidance System for Opencast Mines' by 28th Feb.'17 for 'Excellent' rating. Accordingly, a Technical Report (Feasibility Report) on 'Identification of Mines in CIL for replication of Dumper Collision Avoidance System (DCAS) has been submitted vide Note No.CMPDI/R&D/011(R&D)/240/E-19176 dated 22.02.2017.

6.0 LABORATORY SERVICES

6.1 Chemical Laboratory

During the year 2016-17, characterization of coal was carried out on borehole coal

cores from 40 nos. of exploration blocks from 20 coalfields. A total of 11745m coal core were processed and 31075 samples were analysed upto March 2017. This includes Chemical analysis on coal samples from Northern Khar block, Mokokchung district, Nagaland (DGM, Nagaland). Chemical analysis for 34 numbers GR was monitored and the results were submitted.

6.2 Coal Petrography Laboratory

During the year 2016-17, characterization of coal was carried out for borehole coal cores from 35 nos. of exploration blocks from 20 coalfields. A total of 710 nos. of samples were analysed for Maceral determination and Reflectance study. This includes Petrographic study on coal samples from Washery Department BCCL.

A total of 30 nos. of coal samples were analyzed for micro-cleat study through recently installed Scanning Electron Microscope.

6.3 Coal Preparation Laboratory

CMP Laboratory is engaged in washability analysis (including Proximate Analysis, GCV, HGI, Caking Properties etc.) for both coking and non-coking coal samples of different coalfields as per job requirement. These analysis are carried out for bore core coal samples as well as RoM coal samples. The analysis carried out during the year is given below:

- | | | |
|---|---|----|
| a) Bore Core Coal Samples | - | 51 |
| (washability analysis only) | | |
| b) RoM Coal Samples | - | 8 |
| (washability analysis including Proximate Analysis, GCV, HGI, Caking Properties etc.) | | |

6.4 Coalbed Methane (CBM) Laboratory

CBM Laboratory established at CMPDI has enhanced its capacity and added additional facility of Automatic Porosimeter cum Permeameter (Make

Vinci Technologies, France) to generate producibility data on CBM recovery.

CBM Lab has carried out generation of CBM specific data generation in 8 boreholes & Shale gas specific data generation in 5 boreholes during 2016-17.

Relevant studies like Adsorption Isotherm (AI) studies for 51 numbers of coal samples, Total Organic Carbon (ToC) analysis for 66 number of Shale samples have been completed. Further, Analysis of 1232 mine air samples received from different collieries of CCL and 39 mine survey sample analysis of SECL have been completed and results submitted.

6.5 Mining Laboratory Services

ROCK MECHANICS/ROCK TESTING

1. Tests have been conducted for physico-mechanical properties on drill core samples of 3610m.
2. Report on results of physico-mechanical properties of thirteen (13) boreholes of different block of CIL/ Non-CIL.

STRATA CONTROL STUDIES

1. Report on study of Rock Mass Rating (RMR)/specific gravity/capability study submitted for 12 mines/seams.
2. Rock tests on roof rock samples (21 Nos.) for determination of strength properties, slake durability index and density for RMR study.
3. Subsidence prediction completed for one mine of CIL.

7.0 ENVIRONMENTAL SERVICES

7.1 EIA / EMPs

CIL PROJECTS

During the year 2016-17 Environment Department prepared a total of 15 nos. of Form-1 and 22 nos. of Draft EMPs.

OUTSIDE PROJECTS

During the year 2016-17 Environment Department prepared a total of 2 nos. of 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 2016-17, environmental monitoring of 443 projects/establishments of CIL (ECL-95, BCCL-69, CCL-72, WCL-86, SECL-83, NCL-13 and MCL-25) were carried out through Nine environmental laboratories located at Asansol, Dhanbad, Nagpur, Bilaspur, Bhubaneswar, Kusmunda, Hasdeo, Jayant, and Ranchi.



Analysis of Water Samples at Environment Lab



A view of Environment Lab at CMPDI, HQ

7.3 Accreditation to CMPDI as EIA Consulting Organisation

CMPDI has been re-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, thermal and coal washeries sector.

7.4 Accreditation of CMPDI Environmental Laboratory

Environmental Laboratories of CMPDI (HQ), RI-IV & RI-V have been re-accredited by National Accreditation Board for Testing & Calibration of Laboratories. (NABL) .Surveillance assessment by National Accreditation Board for Testing & Calibration of Laboratories. (NABL) done during the year.

CPCB recognition of Env. Lab, CMPDI (HQ) is obtained during the year for 5years validity.

7.5 Registration for OHSAS-18001-2007 of CMPDI Environmental Laboratory

Certificate of Registration for OHSAS - 18001 - 2007 awarded to Env. Laboratory, CMPDI(HQ), RI-IV & RI-V by Certification International (CI)

7.6 ETP/STP/AMD Scheme prepared for Coal Projects

7.7 Quick Comments on 17 nos. of Mine Closure Plan for Coal Blocks sent by MOC were prepared during the year

7.8 7nos. of mine closure plans for BCCL were prepared during the year.

7.9 28 nos. of Mine Closure Status reports were prepared during the year

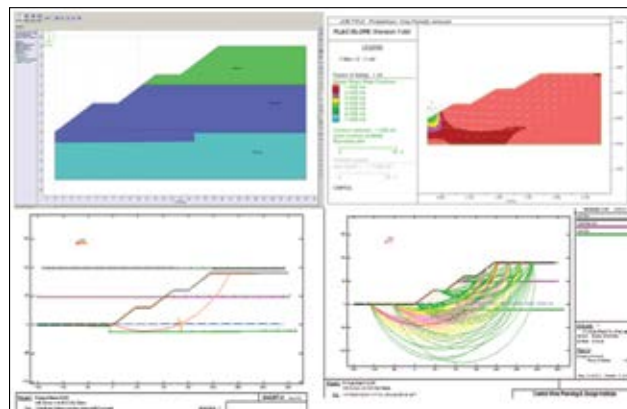
7.10 Monitoring of Mine Closure Activities

Monitoring of Mine Closure activities has been done for 10 nos. of mines for reimbursement from Escrow account.

7.11 Slope Stability / Soil Erosion Control Studies/Nallah Diversion

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, 8 nos. slope stability study and determination of ultimate slope angle of high wall were completed.

Besides, 2 nos. of soil erosion control studies of Coal projects and 2nos. of Nallah Diversion Scheme were also completed.



Typical Slope Stability analysis of OB Dump using FLAC & GALENA

7.12 Sensitization programme

- Workshop on 'Slope Stability Analysis, Prevention and Monitoring in OC Projects' were conducted at all subsidiaries of CIL in 2016-17 within a short period to sensitize the issue among the projects, Areas and subsidiaries (HQ) officials.
- Workshop on E-waste management and Design of ETP and STP conducted successfully in 2016-17.

7.13 Mobile Apps

Environment Division was associated in development of Mobile apps, particularly for collection of data from subsidiaries for Green CIL and Coal Jal.

7.14 S&T/Special Studies

- Suitable livelihood activities on reclaimed Opencast mines - a technology enabled integrated approach for possible replication in Indian Coal sector- by CMPDI(HQ), MCL & TERI, New Delhi.
- Assessment of mine water environment and development of suitable and cost effective mine void aqua ecosystem for promoting fish culture in abandoned coal quarry of CIL- by CMPDI(HQ) & BAU, Ranchi.
- Study to analyse the extent of reduction in pollution load every year by reducing coal transportation by road for BCCL mines.
- Investigation pertaining to geotechnical & hydrogeological aspects to stabilize the noncohesive granular soil/sand in the opencast mines adjacent to the major perennial river- by CMPDI, RI-IV & IIT, Mumbai.

7.15 Automation of Environmental Laboratory

Automation work for direct transfer of analysis data generated by various laboratory equipment of laboratory has been started. It will results in reduction of time required in preparation of environmental monitoring report.

7.16 Online Water Monitoring Equipment Procurement & Installation

Specification, procurement and installation of 11 nos. online water monitoring equipment for SECL and MCL made during the year by Environment Division.

7.17 Celebration of World Environment Day

The World Environment Day was celebrated on 5th June, 2016 at HQ & RIs.

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.



Drawing Competition for children held on World Environment Day

8.0 INFORMATION & COMMUNICATION TECHNOLOGY

Some of the major jobs done during Financial Year 2016-17 are:

1. Video Conferencing facility between CMPDI (HQ) and Regional Institutes has been established and the same connectivity is being used as Secondary MPLS for data communication thereby improving the reliability of Wide Area Network.
2. The existing ILL of BSNL has been upgraded from 34 Mbps to 100 Mbps. The existing BSNL MPLS has been upgraded from 10 Mbps to 25 Mbps at HQ, and from 4 Mbps to 6 Mbps at Regional Institutes.

3. 4 Mbps Internet Lease Line (ILL) from RailTel Corporation India Ltd has been installed as secondary ILL.
4. As a part of Mission Mode Program of GOI, e-office has been successfully implemented at HQ and all Regional Institutes. This has substantially improved office efficiency by speedy communication and brought down the paper requirement.
5. CMPDI has also been entrusted the task of co-ordinating the implementation of e-office for entire Coal India Limited. The centralized infrastructure has been processed by CMPDI and work orders have been issued.
6. Mobile applications have been developed on behalf of Coal India for MoC. They are in launching stage.
7. Following centralized software are developed and maintained by CMPDI for entire CIL:
 - a. Portal for Contract Labor Information Portal (CLIP): registering contract labours working in various subsidiaries.
 - b. Web enabled on-line PMS (Performance Management System) – PRIDE for Executives upto E7 and PAR for Executives above E7.
 - c. Development and implementation of Human Resource Information System (HRIS) for all executives of Coal India Limited.
 - d. Vigilance Clearance System/ Vigilance Monitoring System for CIL and subsidiaries has been developed and implemented.
 - e. Development and implementation of on-line web enabled Annual Property Return system for all

executives of Coal India Limited for the year 2016. This is extended to non-executives under Lokpal and Lokayukta Act.

- f. Bank card rate system for CIL has been developed to enable CIL: to invite deposit rate offer from the bankers for depositing the funds by CIL.
- g. On-line feedback portal for Corporate Social Responsibility (CSR) for Eastern Coalfields Limited.

MoU 2016-17:

As per MoU 2016-17, under the head 'Technology Upgradation', Video-conferencing arrangement was to be made between CMPDI HQ and two of its Regional Institutes (RIs) for 'Excellent' Rating. Against this, Video Conferencing arrangement between CMPDI (HQ) and its six (6) Regional Institutes has been established.

8.1 Information Management System

The important activities/jobs carried out during the year 2016-17 are as follows:

1. Change of name of CMPDI's in house Hindi magazine from 'Deshkal Sampada' to 'Gondwana Bharti'

CMPDI's Hindi Magazine was earlier published in the name of Deshkal Sampada. With a view to have some relevance with coal industry, it was agreed by the management to give a new name as 'Gondwana Bharti'. Gondwana coal seam are generally found in this region of country and HQ of CMPDI is also called Gondwana Palace, hence the name of the magazine was changed as "Gondwana Bharti" and the same has been implemented from April-June 2016 issue of the magazine.

2. Publication of Minetech and Deshkal Sampada/ Gondwana Bharti.

Six issues of above said magazines have been published during the year 2016-17.

3. Dispatch of magazines

Apart from in-house distribution, approximately 15000 copies of both the magazines were dispatched during the year 2016-17 to MOC, CIL and its different subsidiaries (HQ, Area and colliery unit), different institutes and other known organizations.

4. Publication of Book

A new book titled 'A hand book on coal petrology' was published during the year 16-17. This book was released on 29/11/2016 by the Chairman, CIL.

5. Sale of Book

Continuous follow up actions were taken for sale of technical books in different subsidiaries of CIL by sending letters. ECL had purchased books worth ₹ 40,000/- (approx.) apart from other buyers.

To facilitate purchase of book by different coalfields & HQs of subsidiary companies, technical books have been made available at different Regional Institutes as per decision taken in the FDs meeting. RIs are now contacting different area/ collieries in this regard. These technical books will be helpful in updating technical knowledge related to coal mining of middle level and young executives.

6. Social media activities

HoD (IMS) has also been nominated as Nodal Officer of social media, since Aug'2016. Official Facebook page and Twitter handle as detailed below were opened and regular uploading

of important activities of CMPDI and CIL are done. Apart from in-house activities, important information/ achievement of Govt. of India, Ministry of Power, Coal, New & Renewable Energy and Mines are also being shared. Social media activities are being also monitored from the Ministry. CMPDI's Facebook (<https://www.facebook.com/CMPDIL>) and Twitter handle (<https://twitter.com/cmpdil>) activities comes under most active accounts as communicated time to time by Social media monitoring group by Ministry of Power, Coal, New & Renewable Energy and Mines.

8.2 Vigilance

Vigilance activities and achievements during financial year 2016-17 is placed below:

1. Vigilance Awareness Week

It was observed in CMPDIL, Ranchi at its headquarters at Ranchi and all its seven Regional Institutes from 31.10.2016 to 5.11.2016. At CMPDIL (HQ) at Ranchi, the vigilance pledge was administered by Mr. Shekhar Sharan, CMD, CMPDIL, CVO, CMPDIL welcomed the gathering and threw light on the theme of this year i.e. "Public Participation in Promoting Integrity & Eradicating Corruption".

Programmes conducted during Vigilance Awareness Week – 2016 at CMPDIL, Ranchi included a Slogan writing competition for employees and their family members, essay writing competition for non-executives and a quiz competition for executives. Also speech competition was held among the students of Ranchi College, Ranchi, debate competition among the students of National University

of Study & Research in Law, Ranchi, Extempore Speech Competition for students of Birsa Uchh Vidyalay, Ranchi and Debate Competition for students of St. Francis School, Ranchi. A Workshop/Interaction by CVO & HODs of Finance, Material Management and e-procurement etc. was also organized with Vendors/Stakeholders of CMPDIL, Ranchi. A guest lecture was also organized on 4th November, 2016 taken by Smt. Vismita Tej, IRS & Ex-CVO, CCL which was attended by more than 150 officers of CMPDIL wherein she spoke on the topic of "Public Participation in Promoting Integrity & Eradicating Corruption".

2. Preventive Vigilance

Vigilance department of CMPDIL has been oriented to take preventive measures in the area of contractual jobs/material procurement so that neither procedural lapses nor financial loss to the company. Preventive measures are being suggested by the Vigilance department based on surprise check/investigation conducted by it to contain corruption. System improvement has been undertaken in respect of (a) implementation of e-office in entire CMPDI (b) implementation of online vigilance clearance module (c) implementation of online reporting of Annual Property Returns (d) implementation of online reporting of logging data for outsourced drilling (e) implementation of online bill tracking system to ensure the principle of 'First come First serve' (f) development of mobile app, vigCIL for Coal India Limited and its subsidiaries.

Surprise checks at various Regional Institutes of CMPDIL were conducted on various aspects like payment to

contractors, verification of cash vis-à-vis book balance, verification of POL stocks, verification of actual meterage drilled by different caps of RIs and also of the meterage outsourced to other agencies etc. The need for due diligence in proper preparation for project like CHPs, Silo etc. was discussed with all the HODs in presence of RD as preventive measures and the concerned HODs were advised to follow strictly the standard norms/procedures of the company as well as the guidelines laid down in this regard. Identification of sensitive departments and transfer personnel occupying the sensitive post for long has been suggested by Vigilance Department which has been implemented.

3. In CMPDI 10 Surprise Checks, 3 CTE & 40 APR scrutiny have been conducted.

4. Monetary gain to company due to vigilance activities in 2016-17

The following changes were undertaken during the year 2016-17 which will increase transparency and help in long term monetary gain to the Company:

- (i) Implementation of e-office in CMPDI (HQ) as well as at its seven RIs.
- (ii) Implementation of online vigilance clearance module.
- (iii) Implementation of online reporting of Annual Property Return.
- (iv) Implementation of online of logging data for outsourced drilling
- (v) Implementation of online bill tracking system to ensure the principle of First come First serve.

9.0 SPECIALISED SERVICES

9.1 Geomatics

CMPDI provides services in the field of Remote Sensing and Surveying for land reclamation monitoring, OB measurement, vegetation cover mapping, DGPS survey, land use mapping, coal mine fire mapping, topographical survey, underground correlation survey etc.

9.1.1 Monitoring of OC mines through Remote Sensing

CMPDI has introduced satellite surveillance for land reclamation monitoring of all the opencast mines from the year 2008-09. Land reclamation monitoring of 50 numbers of opencast projects having more than 5 million cu.m. capacity (coal+OB) and 32 OC projects producing less than 5 million cu.m. (coal+OB) have been completed based on high resolution satellite data during the year 2016-17. Monitoring of land reclamation status in larger capacity mines (>5 mcm) are carried out regularly on annual basis and smaller mines (<5 mcm) at three years interval.

9.1.2 Vegetation cover mapping

During 2016-17, six coalfields viz. Jharia, Bishrampur, Wardha Valley, Kamptee, Talcher and Makum coalfields were studied for assessing the regional impact of coal mining on land use/vegetation cover.

9.1.3 Land use/cover mapping of projects

During 2016-17, land use/cover mapping of core and buffer zone of 9 projects of CCL, MCL and WCL have been completed for generating baseline information for Environmental Management Plan.

9.1.4 Land use/cover mapping of clusters.

During 2016-17, land use/cover mapping of core and buffer zone of 12 clusters of

ECL have been completed for monitoring of land use pattern.

9.1.5 Monitoring of Coal Mine Fire

During 2016-17, monitoring of coal mine fire in Jharia, Raniganj, Karanpura and Bokaro coalfield based on Thermal Remote Sensing data for the year of 2015-16 & 2016-17 have been done.

9.1.6 OBR measurement

CMPDI has been entrusted with OBR check measurement in all the outsourced patches of CIL as third party agency. Departmental OBR measurement of 43 OCPs in all the subsidiaries as well as outsourced OBR measurement in 184 patches and one mine at Pakri-Barwadih, of M/s NTPC, have been done during the year.

9.1.7 DGPS Survey of forest boundary

As per the latest guidelines of MoEF, forest land to be acquired for mining/ other purposes is to be surveyed using DGPS and shape file has to be submitted along with the application submitted for stage-I forest clearance. DGPS survey of forest land in 26 (1 in BCCL, 8 in CCL, 3 in ECL, 13 in SECL, 1 in NCL) coal projects have been completed during the year for forestry clearance.

9.1.8 Geo-referencing of leasehold boundary & overlaying on cadastral map & satellite data

State Govt. of Chhattisgarh & Madhya Pradesh directed SECL for geo-referencing of coal mine lease boundary of all the leases and overlaying the same on cadastral map and satellite data as per the IBM guidelines. Geo-referencing of mine leasehold boundaries and overlaying of the same on digital cadastral map and LISS-IV + CARTOSAT-II satellite data have been carried out for 3 (three) mining leases of SECL during the year.

9.1.9 DGPS survey

Following DGPS surveys were carried out during the year 2016-17:

- i) Power Plant, Ash Dyke, Staff Colony and CCPC of M/s JPL at Gare Palma Sector- I & II.
- ii) Demarcation of Gare Palma Sector-II Coal boundary of M/s Mahagenco.
- iii) Ascertaining structures in the area of Gare Palma Sector-II Coal mine of M/s Mahagenco.
- iv) Structures identified by M/s GSECL in Gare Palma Sector-I.
- v) Geo-referencing of 7 (Seven) Geological blocks of ECL.
- vi) Demarcation of block boundary of Banai Coal Block of M/s NTPC.

9.1.10 OB dump survey

OB dump survey for all the OC mines of Northern Coalfield Ltd. have been taken up by CMPDI during the year 2016-17 for assessment of dump slope and overall height to assure stability of the dumps.

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. In addition, R&D/S&T projects related to blasting domain and funded by CIL R&D Board are also under implementation for improvement of production, productivity & safety in coal mines.

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

Technical services rendered during 2016-17 are:

A. JOBS WITHIN CIL SUBSIDIARIES.

- ❖ Random sampling and testing of Explosives (Bulk Explosives, Non-Permitted Large Diameter (NPLD) & Permitted Small Diameter Explosives (PSD) & Accessories (Nonel, Detonating Fuse, MS connector, Cord Relay, PETN Cast Booster, Emulsion Cast Booster, Electronic Detonator & CDD/CED Detonator) throughout the year.
- ❖ Determination of Bench Mark Powder Factor (BMPF) for 41 mines.
- ❖ Scientific study for controlled blasting & Vibration study for 14 mines.
- ❖ Scientific study for Introduction of SME/SMS (Site Mixed Emulsion/ Slurry) for 16 mines.

B. OUTSIDE CONSULTENCY JOBS

- ❖ Performance evaluation of explosives & accessories supplied by various manufacturers to the mines of Nayveli lignite Corporation India Limited.
- ❖ Performance evaluation of new explosives EMULCOAL100 (P1 permitted explosives) of M/s IDL Explosives Ltd.
- ❖ Performance evaluation of new explosives Electronic Detonator

“C-DET ACCURA” & MS Connector “C-DET OPTRA” of M/s CDET Expl. Ltd.

- ❖ Performance evaluation of new detonating fuse product “APEX D-CORD-II” & Non-Electric detonator “APEXDET” of M/s A.P. Explosives Pvt. Ltd.
- ❖ Performance evaluation of new permitted explosives “SHAKTI COALE-5” (P5 permitted explosive) of M/s special blast limited.
- ❖ Performance evaluation of new explosives EMULCOAL500 (P5 permitted explosives) of M/s IDL Explosives Ltd.
- ❖ Performance evaluation of new explosives EMULCOAL300 (P3 permitted explosives) of M/s IDL Explosives Ltd.
- ❖ Performance evaluation of new Electronic Detonator “SOLAR E – DET” of M/s Solar Industries India Limited.
- ❖ Performance evaluation of new Non Electric Detonator “INDRA EXCEL” of M/s Regenesi Industries Pvt. Limited.

C. SPECIAL JOBS

- Preparation of the technical Specification for NIT required for procurement of explosives & accessories for all the subsidiaries of CIL (2017-19).
- Determination of confined VOD using Data Trap-II, delay in successive shots and throw of fly rocks using high speed camera and scientific study for deep hole controlled blasting at Makardhokra – I OCM, Umrer Area, WCL
- Conducted training session (BCCL: 1 no & NCL: 2 no.) &

field workshops (BCCL: 1 no & CCL: 1 no.) for the officials of CIL Subsidiaries companies in order to keep a regular monitoring of the quality of explosives supplied in the mines of CIL.

- Technical support to CIL for joint Venture between Indian Oil Corporation Limited & Coal India Limited for manufacturing Bulk Explosives.
- Testing and quality check for new explosive products were carried out in order to ascertain the product quality to be used in the mines of Coal India Limited.
- Working as Sub-Implementing agency in an R&D Project titled “ Multiple layer trial blasting for better recovery with less diluted coal”.

9.3 Mining Electronics

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

9.3.1 R&D/S&T Projects

- 1) S&T Project on “On-line coal dust suppression for Open cast Mine”- Ashoka opencast mine, CCL. –Sensor finalization and procurement is in Progress.

- 2) S&T Project on “Indigenous development of Early Warning Radar System for Predicting Failure/Slope Instabilities in O/C Mines” has been approved for Dudhichua OCP of NCL.
- 3) S&T Project on “Development of Tele-Robotics and Remote Operation Technology for U/G Mines”-Completed the project successfully.
- 4) CIL R&D Project on “Indigenous development of Through the Earth (TTE) two-way Communication system for Underground mines” has been approved for Argada U/G mine of CCL. Initial System Design is in progress.

9.3.2 P&D / NIT / other jobs

- 1) NIT for Environmental Tele monitoring System for Mine No.4 of Orient Area of MCL has been submitted
- 2) Chapters on Electronics & Telecommunication for 24 Nos. of Project Reports of different subsidiaries of CIL and outside agencies have been prepared.

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

- 1) Repairing of HEMM cards – 217 Nos.
- 2) Repairing & Calibration of Methanometers – 34 Nos.

9.4 Coal Technology

The Chemical and Petrography labs are engaged in carrying out Systematic and detailed characterization of coal at exploration stage on routine basis for incorporation in Geological Reports. Systematic characterization of raw & clean coal samples (washery products) is being carried out for ascertaining the clean coal properties.

The Chemical Lab is carrying out tests such as proximate analysis, ultimate analysis, and gross calorific value determination. For coking coal specials tests such as free swelling index, LTGK coke type and Plastometric Test are carried out. Ash fusion temperature range determination, HGI tests for non-coking coals are also done.

The Chemical Lab is equipped with conventional and sophisticated equipments like Microprocessor based Automatic Proximate Analyser for proximate analysis of coal/ coke/ lignite, Microprocessor based Automatic Bomb Calorimeter for determination of gross calorific value of coal & lignite, CHNS apparatus for determination of Carbon, Hydrogen, Nitrogen & Sulphur, AFTR instrument for Ash fusion temperature range (IDT, ST, HT & FT) of coal, Plastometer for determination of plasticity of coal and HGI apparatus for HGI determination.

Progress of Coal Technology

- Identification of Potential Coalfields/ Coal Blocks for Surface Coal Gasification (SCG) and generation of databank for Indian Coal for its suitability to Surface Coal Gasification for poly generation through coal characterization and developing kinetics. This work is being carried out by CMPDI & Engineers India Limited (EIL) jointly.
- Studies on use of Coal & Pet coke as fuel in Cement Industries in India are being done as R&D Project jointly by CMPDI and IIT (ISM) Dhanbad.
- Task Force Report on Revival of Dankuni Coal Complex, SECL submitted to CIL.
- Scrutiny of 9 numbers of coal utilization research project proposals have been done.

- Coal Technology department is working as Task Force Coordinator for Coal as an alternative feedstock to Petrochemical in Indian context to reduce import of Petrochemicals. Task Force constituted by Ministry of Chemicals & Petrochemicals, GoI. Draft Report formulation is in advance stage and shall be finalized shortly.
- Coal Technology department is working as a group member of Technical Committee on Surface Coal Gasification (SCG) of Coal constituted by NITI AAYOG, GoI. Work is in progress. Sub-committee have been formed by NITI AAYOG including EIL, CMPDIL, BHEL, CIMFR & Adani for development of technology on SCG.

NABL Accreditation status

Chemical Laboratory has been awarded NABL Accreditation for its testing parameters which is valid upto 14-12-2018.

Special Achievements.

- A book titled 'Handbook of Coal Petrography' has been published and inaugurated by Chairman, CIL.
- Three Petrographers of this laboratory have been accredited by International Committee for Coal and Organic Petrology (ICCOP). This certification qualifies the CMPDI's petrographers to undertake any kind of petrographic analysis at an international level. In all Four petrographers of this lab have been accredited by ICCOP.

9.5 Management System Consultancy

Over the years, CMPDI has substantially expanded its capabilities in the field of consultancy service for implementation of the various management systems, like

ISO 9001 - Quality management systems (QMS), ISO 14001 - Environmental management systems (EMS), OHSAS 18001 – Occupational health & safety management system (OHSMS), ISO 27001 – Information security management system (ISMS), ISO 50001- Energy management systems (EnMS), SA 8000 – Social Accountability Management systems, ISO 17025 - Requirements for the competence of testing and calibration laboratories.

CMPDI provides such consultancies through the design and implementation of either the individual management system or Integrated management systems (IMS) conforming simultaneously to different management systems standards, facilitating the creation and documentation of management systems, providing trainings, initial implementation, support during certification audits and post certification support/assessments, etc.

As on date, MCL & NCL are certified for their companywide Integrated Management System. CMPDI is certified for the new ISO 9001:2015 standard. CIL is certified for ISO 9001 & ISO 50001. 32 laboratories of different subsidiaries of Coal India Ltd are NABL accredited. Rest about 56 different unit across all subsidiaries of CIL are certified for ISO 9001, ISO 14001, OHSAS 18001 & ISO 27001.

DURING FINANCIAL YEAR 2016-17:

As a consultant, CMPDI was instrumental in the achievement of ISO 9001 & ISO 50001 certification of Coal India Ltd. HQ, Kolkata through Bureau of Indian Standards. All the necessary support and guidance, as mentioned above, were provided for the successful certification against the above two standards.

During the year, CMPDI along with all its seven RIs got a licence for implementation of the new ISO 9001:2015 standard from Bureau of Indian Standards for all its product and services.

During the year, CMPDI also facilitated all subsidiaries in implementing a companywide Integrated Management System (IMS) conforming simultaneously to ISO 9001, ISO 14001 and OHSAS 18001 standards. The IMS manual for WCL was upgraded as per the revised standards. Special guidance was provided to ECL for selection of the certification body for the company wide certification of their Integrated Management System. Training programs on general awareness of standards and Internal Auditing Skills were arranged and conducted at CIL HQ, MCL, NCL and ECL besides the various programs at STC, CMPDI.

PLANS FOR FINANCIAL YEAR 2017-18:

- Implementation of two other standards, ISO 14001 & ISO 50001 for CMPDI HQ will be initiated and certification is expected by March 2018.
- The consultancy work for implementation of ISO 14001(EMS)) at CIL HQ, Rajarhat, Kolkata will be completed by December 2017.
- Documentation & implementation of Integrated Management System as per revised standard in our subsidiaries at MCL and NCL have been taken up and likely to be concluded in 2017-18.
- The certification of ECL (Integrated Management System, ISO 9001, ISO 14001 & OHSAS 18001) is expected in the first quarter of 2017-18, The transition from old version to latest version of the standards will be taken up thereafter.

10.0 MATERIAL MANAGEMENT

A. Performance with respect to Material Management is summarized as under:

Sl. No.	Description	Total value (in ₹ Lakhs) 2015-16	Total value (in ₹ lakhs) 2016-17
1	Total value of supply orders placed	5397.52	2885.38
2	Supply order value for Capital Goods	4062.49	1439.39
3	Utilization of Capital Budget	3621.00	4071.71
4	Disposal	109.76	53.40

B. Special Activities/Achievements:

- i) Tendering process: Procurement of goods is being done through on-line bidding on CIL-NIC portal strictly as per the e-procurement guidelines issued by CIL. Tenders valuing ₹ 1.00 Crore and above are being issued with provision for reverse bidding, which has resulted into reduction of the initial quoted lowest price against e-tender, due to competitive bidding during reverse auction process.
- ii) Procurement of high-tech equipment to augment exploration and geophysical survey:
 - a) During the period under reference, a contract has been finalized for the procurement of high-tech Seismic Vibrators costing around ₹ 600 lakhs on CIP (i.e. Delivery at site) basis, which are expected to be supplied by Aug. 2017. Deployment of this machine is expected to augment the HRSS survey to deeper horizons (up to depths of 1,000 mtrs.) as well as it shall lead to availability of the geo-physical profile of a coal block in advance, which shall help in precise localization of drilling points for exploration and minimize

uncertainty in drilling operations and savings in the total cost of exploration.

- b) CMPDI is expanding in 2D-HRSS survey and is planning to venture into 3D-Seismic survey. Requirement was received for the latest Seismic data processing & interpretation software with an option for adding some modules of software & hardware (if required), so that the same software can also be used for 3D-Seismic data processing & interpretation. A contract has since been finalized, against a Global e-Tender with provision for reverse bidding, for the supply of 02 licenses of 2D-Seismic Data Processing and Interpretation Software along with updates & support services contract at an estimated cost of ₹1,33,52,572.75. The software is expected to be supplied by May 2017. Use of the software is expected to increase for meaningful utilization of the latest 2D Seismograph (Make: DMT) procured recently as well as the Seismic Vibrators, expected to be supplied by Aug. 2017.
- c) Procurement of Lab equipment to enhance testing capabilities: 06 Nos. of Digital Timer/Delay Timer and 04 Nos. of VOD Meter as well as VOD Measuring Device worth ₹ 22 lakhs were procured for S&T Department so that revenue through testing can be increased substantially. The equipment, required to modernize the coal technology & lab, were procured, which facilitated in getting NABL Accreditation to Chemical Lab of CMPDI. Other equipment for Environment Department have

also been procured to strengthen the functioning of the Department.

10.1 E - Procurement & Contract Management

ACHIEVEMENTS DURING FINANCIAL YEAR 2016-17

1. CIL vide its order dated 08.01.2016 had directed that the process of reverse auction should be implemented in all tenders valued at ₹ 1.00 crore and above. CMPDI was the first company in CIL to publish the tender related to Hiring of Security guards on 05.02.2016. Simultaneously, training on the process of reverse auction was provided to all the Tender Inviting Authorities and CMPDI has since been successfully using Reverse auction in all the tenders valued at ₹ 1.00 crore and above. During the FY 2016-17, 412 numbers of tenders have been published on e-procurement portal out of which reverse Auction process have been adopted in 32 tenders.
2. The offline process of receipt, refund and reconciliation of EMD was discontinued by CIL vide its order dated 29.07.2016 and it was directed that EMD should be received only through online mode. The system envisaged receipt of EMD through Net banking or NEFT/RTGS in the Central pool account maintained by the CIL and the Subsidiary companies in Axis Bank. Upon rejection of a bid or finalization of any tender, EMD of the rejected/ unsuccessful bidders automatically gets refunded to the accounts of the bidders from where the same was received, and EMD of the successful bidder is transferred to the respective designated accounts of CIL/subsidiary companies. In cases, where the designated account was the Axis bank, there was no problem in

reconciliation of the transaction as each transaction could be identified through a Remit Reference Number which was reflecting in the statements of pool account as well as the destination account. However, in cases where the destination account was other than Axis Bank, the EMD was being transferred without any identifiable reference because of which it was difficult for Finance department to reconcile the transacted amount and issue cash receipts. The matter was taken up with CIL and Axis Bank and a solution was suggested by e-P&CM division. The suggestion made by us was adopted and accordingly system generated mail alert is being received by the finance personnel, who in turn are being able to recognize the transactions related to EMD of successful bidders and issue cash receipts. Now the said system is being followed in all other subsidiary companies/ areas where the designated bank is other than Axis Bank.

3. In some of the tenders like Hiring of consultants viz. for strategic business plan for CMPDI, Indirect Taxes, development & model contract document for development of UCG etc., certain credentials are required to be evaluated first before opening of the price bids, which was not possible in the present form of e-procurement portal of CIL. This was discussed with CIL and for such type of tenders another mode of tendering was adopted under 'Critical Tenders' with different organizational chain. This type of e-procurement on Combined Quality-cum-Cost Based System (CQCCBS) has been done only by CMPDI till now.
4. The existing technical template and BOQ for procurement of various types of machines, equipment like

PC and its peripherals, Software, passenger lifts, DG sets, Electronic Total Stations, Plotters and Scanners etc. have been customized as per new version (Version-3) of BOQ to suit the specific requirement of the company. The customization were essential to enable the system to evaluate the prices which include comprehensive annual maintenance contract, buy back and calculation of NPV through discounted cash flow method. This facilitated preparation of system generated comprehensive statements along with the status of the firms based on their quote.

Additionally, TPS and BOQ have been prepared for hiring of consultants on CQCCBS and deployment of UAV in CCL and NCL.

11.0 HUMAN RESOURCE DEVELOPMENT

During the year 2016-17, CMPDI employees were given exposures in the following areas:-

Major Areas	Total no. of Employees
Foreign Training	2
External Training	432
In-House Technical Training	1346
Technology Skill Development Program of MT's of CIL	380
Training to Unskilled & Semiskilled employees of 5days or more duration	116
IICM Training	207
Conference/Seminar/Workshop	205
BOPT under Apprentice Act1961	23
Internship Training	235
TOTAL	2946

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

Foreign training

During the year 2016-17, total 2 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 432 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.

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. During the year 2016-17 total 207 executives have gone under training.

Training at Staff Training College (STC)

- a) Training & Development is an integral part of employees' growth. Therefore in CMPDI an attempt has already been made to ensure that their holistic development continues throughout the years. In this regard during 2016-17 total all to gather 1346 against the target of 700 employees have been trained in different technical subjects which are need based and also customized.
- b) Technology Skill Development Program for 380 MT's of CIL for various discipline has been conducted for the year 2016-17.

CMPDI has also taken massive lead in conducting conferences, seminars

and workshops on different subjects during the year 2016-17 like on Digital payment, Swachh Bharat Abhiyaan, Productivity Enhancement and Stress management etc.

Internship Training at CMPDI for students of different Institutions

As a Corporate Social Responsibility, training of the students of various institutions are being imparted by HRD Division at different regional institutes of CMPDI and HQ. Total 235 numbers of students have been trained at CMPDI during 2016-17. The students have undergone these Trainings/ Project works for 1- 2 months. After completion of training/ Project, HRD Division issues certificates for successful completion of Training / Project.

Board of Practical Training (BOPT)

BOPT under Apprentice Act 1961 of Eastern Region has from time to time allotted candidates to go under one year apprenticeship training at CMPDI. During the year 2016-17 CMPDI was allotted total 29 candidates out of which 23 have been deputed for apprentice training under Apprentice Act 1961 and subsequent provisions there under of skill development mission India scheme. All 23 candidates allotted from BOPT have been deputed in different drilling camps of RI's.

Skill Development

Under skill development mission scheme CMPDI has identified 1136 unskilled & semi-skilled employees of Cat-I, II, III posted at HQ and different RI's. The total number as above have been distributed during 4 years period commencing from 2016-17 to 2019-20 in accordance with Vision 2020 document of CIL. Under this head during 2016-17 the total target for

skilling unskilled & semiskilled employees was 120 against which 116 have been trained. However the remaining employees who are unskilled or semiskilled are also to be trained during the remaining years from 2017-18 onwards.

HR Vision 2020

Mentor & Mentee Scheme	Total Mentors 22 Total Mentees 53
Quality Circle	Action has been taken QC's formed.
Employees Suggestion Scheme	Regular employee's suggestions & feedback are taken from employees through suggestion boxes installed.
Knowledge Management System	Workshop / seminars conducted on various subject to enhance production & productivity on contemporary topics.

Right to Information (RTI)

Total No. of applications received	Total No. of applications disposed off	Remaining Applications	Total No. of 1 st Appeal application received	1 st application disposed off	CIC (2 nd appeal) application received	CIC (2 nd appeal) application disposed off
197	185	12	12	11	3	3

Grievance Redressal Under CPGRAM

Total 54 grievances under CPGRAM was received during the year 2016-17 and all have been redressed with due diligence and care. The Grievance Redressed Committee (GRC) has made special initiative in holding regular meetings in which grievances of special nature referred there under have been examined, analyzed and dealt with human face from time to time to ensure satisfaction to the applicants. In this connection even personal hearings have also been ensured to redress the grievances.

12.0 OUTSIDE CIL CONSULTANCY

During the year 2016-17, 35 consultancy jobs were completed for 26 organizations outside CIL. Some of the major clients/ organizations to whom jobs were provided/completed are National Mineral Development Corporation (NMDC), MOIL

Ltd., Maharashtra State Power Generation Co. Ltd. (MAHAGENCO), Tata Steel, Damodar Valley Corporation (DVC), Steel Authority of India Ltd (SAIL), West Bengal Power Development Corporation Limited (WBPDC), Chhattisgarh State Power Generation Company Limited (CSPGCL), Uranium Corporation of India Ltd (UCIL) etc.

Presently, 25 outside consultancy jobs are in hand for 19 organizations like OCPL, NMDC, NALCO, NTPC Ltd., MAHAGENCO, SAIL, Orissa Mining Corporation (OMC), PFC Consulting Limited (PFCCL), Gujarat State Electricity Corporation Limited (GSECL) etc.

During the year 2016-17, 43 outside consultancy jobs worth ₹ 141.38 crores from 29 organizations were procured by CMPDI. This is the highest ever value of jobs obtained in a year by CMPDI.

One overseas assignment namely "Consultancy Services for preparation of Feasibility Study for Benga Coal Project of M/s ICVL in Tete Province of Mozambique" has also been obtained from NMDC.

MoU 2016-17:

As per MoU 2016-17, a growth of at least 5% in sales from business outside Coal India over 2015-16 was to be achieved for 'Excellent' Rating. Against this, a growth of 129% has been achieved during 2016-17 over 2015-16.

13.0 MANPOWER AND WELFARE ACTIVITIES

13.1 Status of Manpower:

Particulars	As on March 31, 2016	As on March 31, 2017
Executive	913	917
Non-Executive	Monthly Rated	1276
	Daily Rated	1433
Grand Total	3622	3498

13.2 Welfare Activities:

1. CMPDI has 1962 nos. of quarters at its Headquarters and Regional Institutes.
2. Adequate supply of drinking water has been made available to employees of CMPDI.
3. All the employees and their dependents are provided medical facilities through its dispensaries and the hospitals owned by subsidiary companies of CIL. Patients are also referred to CIL empaneled hospitals.
4. CMPDI has provided financial assistance/grant of ₹ 1.00 lakh to DAV Public School, Gandhi Nagar, Ranchi.
5. There are 31 nos. of school buses including hired small vehicles for school going children of employees.
6. Cash Award was given to the wards of the employees who secured 90% and above marks in the Xth & XIIth Board Examination held in the year 2016.
7. Gratuity Cheque is being given to the employees on the day of their superannuation.
8. All the employees of CMPDI are getting their salary through Bank
9. A Grant of ₹ 27,500/- (Rupees twenty seven thousand five hundred) only was given to Kasturi Mahila Sabha for organizing Sawan Milan.
10. The 125th Ambedkar Jayanti was celebrated in CMPDI on 14.04.2016.
11. A Grant of ₹ 33,000/- (Rupees thirty three thousand) only was given to Recreation and Gondwana Club each for celebrating New Year.
12. Four Carrom boards as well as a Table Tennis board was provided to Recreation club.
13. CIL Merit Scholarship amounting to ₹ 23,400/- (Rupees twenty three thousand four hundred) only was given to 08 wards of employees and CIL General Scholarship amounting to ₹ 1,07,520/- (Rupees one lakh seven thousand five hundred twenty) only was given to 96 wards of the employees as per the guidelines of the Company.
14. An amount of ₹ 7, 83,449.00 (Rupees Seven lakhs eighty-three thousand four hundred forty-nine) only was given to wards of the employees studying in NIT/IIT/Medical/Govt. colleges as per existing guidelines.
15. CMPDI conducted summer coaching camp for the ward of its employees.
16. National Unity Week was observed in CMPDI from 31.10.2016 to 05.11.2016.
17. Swachta Pakhwada was observed w.e.f. 1st May to 15th May, 2016 and 1st November to 15th November, 2016 in CMPDI (HQ) as well as all the Regional Institutes of CMPDI.
18. The Cleanliness Drive was also taken up in Gondwana Primary School and Birsa High School, Hathiagonda from 1st - 15th September, 2016 and 1st - 15th November, 2016
19. Communal Harmony was observed in CMPDI on 25.11.2016.

13.3 Sports Activities:

1. CMPDI hosted Coal India Inter-Company Carrom Tournament 2016-17 w.e.f. 22.12.2016 to 24.12.2016.

2. CMPDI conducted Inter-Regional Institute Tournament for Badminton, TT, Carrom, Chess, Athletic Meet, Foot Ball, Volley Ball, Bridge and Lawn Tennis.
3. CMPDI (HQ) conducted friendly Football Tournament between CMD- XI and Director- XI on 15th August, 2016.
4. CMPDI (HQ) conducted friendly Canvas Ball Cricket Tournament between CMD- XI and Director- XI on 26th Jan., 2017.

Photographs of different activities like Republic Day, Summer Camp, Independence Day, Inter Coal Carrom Tournament, Inter RIs Lawn Tennis Tournament and Ambedkar Jayanti during the year 2016-17.



13.4 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 "Gondwana Bharti (Desh Kaal Sampada)", a Renowned & National Level In-House Magazine of your company also continued to promote the creative writing in Hindi.

In the month of September, 2016, "Rajbhasha Month" was organized. On this occasion, several Hindi competitions were organized in order to promote and make Hindi popular among the employees of the company. A large number of employees participated in all the competitions held during the month and the Competitors' securing 1st to 5th position in the competitions were awarded cash prize of ₹ 3000, ₹ 2600, ₹ 2400, ₹ 2200, ₹ 2000, respectively.

In addition, two departments who have done most of their official work in Hindi were awarded Chairman's Winner and Runner Shield respectively and one RI was also awarded Chairman's Winner Shield.

A grand Hasya Kavi Sammelan was also organized in the month of September to propagate Hindi among the employees of your company. Committees have also been constituted to review the work being done in Rajbhasha Hindi at HQ level and RI's level.

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 to use of Rajbhasha 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 and RI's of your company as per the Directive and Annual Programmed issued by the Ministry of Home Affairs, Department of Official Language, and New Delhi. Your company continued to participate in the meeting of Town Official Implementation Committee organized by CCL.

13.5 Disclosure and Information Under-sexual Harassment to Women:

No compliant or no case of sexual harassment to women at working place in CMPDIL has been reported during the year 2016-17 under the disclosure and information under sexual harassment to women at work place (prevention, prohibition and redressal) Act, 2013.

- a. Number of sexual harassment complaints received in a year - Nil
- b. Number of complaints disposed of in a year - Nil
- c. Number of cases pending for more than 90 days - Nil
- d. Number of awareness programs or workshops against sexual harassment conducted in a year - Nil
- e. Nature of action taken by the employer or District Officer with respect to the case - Nil

14.0 CSR & SUSTAINABILITY ACTIVITIES OF CMPDI (2016-17):

CSR initiative at CMPDI

Corporate Social Responsibility (CSR) and Sustainability is a company's commitment to its stakeholders to conduct business in an economically, socially and environmentally sustainable manner that is transparent and ethical. The thrust of CSR and Sustainability is on capacity building, empowerment of communities, inclusive socio-economic growth, environment protection, promotion of green and energy efficient technologies, development of backward regions, and upliftment of the marginalized and underprivileged sections of the society. The company follows the CSR policy as formulated by Coal India Limited for all its subsidiaries inline of section 135 of Companies Act, 2013 and the rules made there under.

Based on the above broad policy, CMPDI has adopted its own CSR policy which has brought set of opportunities under CSR & SD initiative in the areas of capacity building, empowerment of stakeholders, inclusive socio-economic growth, environmental protection etc. in remote areas where drilling and allied activities under different Regional Institutes are going on. CMPDI reiterates its commitment to social responsibility towards CSR & sustainability by integrating social and environmental concerns in a day to-day business operations. Two tier decision making committees have been constituted in CMPDI to implement its policies and programs.

14.1 CSR & Sustainability Activities of CMPDI (2016-17):

Corporate Social Responsibility (CSR) is widely recognized as an important means to promote sustainable development and inclusive growth. Corporates are

now widely judged by the stakeholders and the society at large by the initiatives taken to address sustainability issues. Public sector Enterprises (PSEs) have played a vital role in socio economic development of the country. Corporate Social Responsibility facilitates integration of Social, Environmental and Ethical responsibilities into the governance for a long lasting profitability and sustainability. Today, it is imperative for the corporate to move faster towards CSR and develop the communities in which they operate, grow and flourish to stay afloat. The thrust of CSR and Sustainability is on capacity building, empowerment of communities, inclusive socio-economic growth, environment protection, promotion of green and energy efficient technologies, development of backward regions, and upliftment of the marginalized and underprivileged sections of the society. CMPDI CSR projects are undertaken in and around the areas of operations which includes drilling camps spread across 7 states of the country to cater to the needs of the affected community for their development and wellbeing.

14.2 CSR Policy:

Policy on Corporate Social Responsibility of CMPDI has been framed after incorporating the features of the Companies Act 2013 and as per notification issued by Ministry of Corporate Affairs, Govt. of India on 27.02.2014 as well as DPE's guidelines which broadly covers the following: -

- a) Welfare measures for the community at large, so as to ensure the poorer section of the Society derives the maximum benefits.
- b) Contribution to the society at large by way of social and cultural development, imparting education, training and social awareness specially with regard

to the economically backward class for their development and generation of income to avoid any liability of employment.

- c) Protection and safeguard of environment and maintaining ecological balance.

14.3 Objective

The main objective of CSR policy is to lay down guidelines for CMPDI to make CSR a key business process for sustainable development for the Society. It aims at supplementing the role of the Govt. in enhancing welfare measures of the society based on the immediate and long term social and environmental consequences of their activities. CMPDI will act as a good Corporate institution, subscribing to the principles of Global Compact for implementation.

14.4 Areas to be covered

The poor and needy Section of the Society living in different parts of India would normally be covered. The CSR Program will also cover the existing components of Special Corporate Plan (SCP) and Tribal Sub Plan (TSP) for development of the SC and ST population besides development components for the entire population.

- For carrying out CSR activities of CMPDI, 80% of the budgeted amount is being spent within the radius of 25 Km of the Project Site/ Company HQ and 20% of the budget be spent within the State/States in which the Regional Institutes are operating.
- In case CSR budget of CMPDI (HQ), or any Regional Institutes is exhausted, the CMD of CMPDI may refer the particular CSR activity/ project/ program to CIL which are considered to be emergent/important by the CMD.

14.5 Allocation of Fund

- i) The fund for the CSR is being allocated based on 2% of the average net profit of the Company for the three immediate preceding financial years.
- ii) The Unspent amount in CSR budget in a particular year will not lapse and shall be added with CSR budget of subsequent year of CMPDI.

14.6 Scope

As per Schedule VII of New Companies Act 2013 the following are the scope of activities under Corporate Social Activities:

- i) Eradicating hunger, poverty and malnutrition, promoting preventive health care and sanitation and making available safe drinking water.
- ii) Promoting education, including special education and employment enhancing vocation skills especially among children, women, elderly and differently abled and livelihood enhancement projects;
- iii) Promoting gender equality, empowering women, setting up homes and hostels for women and orphans, setting up old age homes, day care centers and such other facilities for senior citizens and measures for reducing inequalities faced by socially and economically backward groups;
- iv) Ensuring environmental sustainability, ecological balance, protection of flora and fauna, animal welfare, agro-forestry, conservation of natural resources and maintaining quality of soil, air and water;
- v) Protection of national heritage, art and culture including restoration of buildings and sites of historical importance and works of art: setting

up public libraries, promotion and development of traditional arts and handicrafts;

- vi) Measures for the benefit of armed forces veterans, war widows and their dependents;
- vii) Training to promote rural sports, nationally recognized sports, Paralympics sports and Olympic sports;
- vii) Contribution to the Prime Ministers National Relief Fund or any other fund set up by the central government for socio-economic development and relief and welfare of scheduled castes, the scheduled tribes, other backward classes, minorities and women;
- ix) Contribution or funds provided to technology incubators located within academic institution which are approved by central government;
- x) Rural development projects;

14.7 Implementation

- a) The investment of CSR fund is project based and for every project time framed periodic mile stones is finalized at the outset.
- b) Project activities identified under CSR are to be implemented by Department or specialized agencies. Specialized agencies could be made to work singly or in tandem with other agencies. Specialized agencies would include:
 - I. Community based organization whether formal or informal.
 - II. Elected local bodies such as Panchayats.
 - III. Voluntary Agencies (NGOs).
 - IV. Institutes/ Academic Organizations.
 - V. Trusts, Mission etc.

VI. Self-help groups.

VII. Government, Semi-Government and Autonomous Organizations.

VIII. Standing Conference of Public Enterprises (SCOPE)

IX. Mahila Mondals / Samitis and the like.

X. Contracted agencies for civil works.

XI. Professional Consultancy Organization etc.

- c) Activities related to Sustainable Development will form a significant element of the total initiatives of CSR. Such activities should come under the 3 UN Global Compact Principle pertaining to the Business Environment and asked to
 - i. Support a precautionary approach to environment challenges.
 - ii. Undertake initiatives to promote greater environmental responsibility and
 - iii. Encourage the development and diffusion of environment friendly technologies.

14.8 Institutional Arrangement

- a) All proposals under CSR activity would be examined by the CSR committee keeping in view of the Companies Act, 2013 latest DPE's guidelines together with cost benefit analysis.
- b) CMPDI having a net profit of ₹ 5 crores or more during any financial year shall constitute a Board Level Committee on CSR consisting of three or more Directors, out of which at least one Director shall be an Independent Director.
- c) The activities of the CSR committee will also involve the following:

- i) Interact with the concerned State officials/ Govt. officials, if required to confirm the areas for undertaking activities under CSR and ensure to avoid duplicity of the job.
 - ii) To decide the priority of the activities to be undertaken under CSR.
 - iii) To interact with the CSR implementing agencies for determining the activities to be undertaken.
 - iv) The committee will monitor and review the progress of activities undertaken/completed from time to time.
- d) Delegation of Power (DOP) for according approval of any CSR project proposal would be as under:
- CSR projects/ programmes/ activities upto ₹ 25.00 lakhs (Rupees Twenty Five Lakhs) shall be approved by the CMD of CMPDI and proposals beyond ₹ 25.00 lakhs shall be approved by respective Boards.
- c) Meticulous documentation relating to CSR approaches policies, programs, expenditures, procurement etc. should be prepared and put in the Public Domain, (particularly through the internet) and made available to CMPDI Website.

14.10 Monitoring

- a) The CSR committee of CMPDI or their representatives shall monitor the progress of work of ongoing projects from time to time and case to case basis or/ the monitoring may be carried out by External Reputed Agency.
 - b) The CSR Cell constituted at CMPDI should be headed by an E-8 level officer and will prepare the Annual Report on CSR activities for placing the same before CSR & Sustainable Development Committee.
 - c) Board Level Committee on CSR and Sustainable Development of CMPDI shall review the implementation of CSR activities in every six months and recommend the amount of expenditure to be incurred on CSR activities.
 - d) The CSR committee shall monitor the Corporate Social Responsibility policy from time to time.
 - e) If the company fails to spend the allocated budget in a particular year, the company shall specify the reasons for not spending the amount in the Directors Report.
 - f) CMPDI shall include a separate/ chapter in the Annual Report on the implementation of CSR activities/ project including the fact relating to physical and financial progress.
 - g) Utilization Certificate with statement of expenditure duly certified by a
- ## 14.9 Base line survey & documentation
- a) Keeping in view the DPEs guidelines baseline survey is not insisted upon in every case and flexibility would be granted to opt other method including use of in house expertise and resources for need assessment studies.
 - b) The CSR activities for providing infrastructure facilities like medical college, institution, where social benefit is involved, baseline survey is not required, The cost benefit and justification for any project has to be ascertained.

practicing Chartered Accountant/ Authorized Auditor will be submitted by the Organization/ Institution to whom CSR fund is allocated.

14.11 Upkeep and maintenance of assets created

Maintenance of Assets created under CSR would be the responsibility of the concerned State Government, Local Representative of the Society and concerned Non-Government Organization (NGO) through which the CSR activities are implemented and an undertaking/ consent would also be taken.

14.12 Reflection of csr activities

Annual audit of all activities undertaken by the company would be done by local authorized auditor. The CSR activities will be reflected in the Annual Report and account of CMPDI under Social Overhead (CSR).

The committee constituted in the Regional Institute will inspect all sites and reflect the same to CSR Cell for their information, record and further action.

14.13 Conclusion

The above guidelines would form the framework around which the CSR activities would be undertaken. CMPDI, HQ & its all Regional Institutes should have specific activities to adopt mostly in their vicinity of the projects extendable up to the affairs of the State to which it is belonging.

Activities and achievements under CSR in CMPDI during the year 2016 -2017

As per DPE's guidelines for CSR funding under company's Act amended in 2013

and the subsequent adoption of the same by Coal India Ltd and of CMPDI of CSR policy, at least 2% of the average net profit of the Company for the three immediate preceding financial years has to be allocated under CSR project. As such 2% of average net profit of CMPDI has been ₹47.74 lakhs during the year 2016-17 against which total of Rs1.35Cr including spillover activities of 2015-16 have been spent which is provisional and approximately 5% of the average net profit of the company.

Keeping in view the special nature of its business, CMPDI (HQ) has executed its CSR & Sustainability activities in following areas during 2016-17:

A. Education:

Educational support like supply of Desk-Benches, School Dress, financial support/ assistance in the form of scholarship are being provided by CMPDI to many schools in and around areas of drilling camps and office premises. Financial Assistance is also provided for celebration of Annual day, Sports Day, Independence Day & Republic Day in different Schools of Ranchi, Jharkhand.



Distribution of 30 Nos of desk bench to Utkramit Prathamik Vidyalaya, Mahevtoli, Chutiya , Ranchi



Distribution of 30 Nos of desk bench to Nav Dhumsatoli, Chutiya, Ranchi



Financial Assistance for celebration of Independence day, Annual day & Republic Day to gondwana Primary School, CMPDI HQ, Ranchi.



Financial Assistance for celebration of Independence day, Annual day & Republic Day to Birsa High School, Kanke Road, Ranchi.

B. Infrastructural Support

Several infrastructural projects in the form of School Class Room, Community Hall, Shed, and Toilets etc. have been constructed by CMPDI in various locations:

1. Construction of a hall at Karuna N.M.O Bariatu Road, Ranchi.

2. Prayers floor & ground flooring at Zilla Parishad Uchh Prathmik Shala, Nandori Chandrapur Maharashtra
3. Prayers floor & ground flooring Zilla Parishad Uchh Prathmik Shala, Marda Warora Chandrapur Maharashtra
4. Construction of Cultural hall with Hand Pump at Balitora village, Madhukunda. Block, Purulia, West Bengal under CSR.
5. Construction of Kitchen shed near Kalyan Mandap at Kosala village, Odisha.
6. Construction of Hostel-cum Computer Centre for blind girls students of Braj Kishore Netraheen Balika Vidyayalaya, Ranchi.
7. Constuction of Toilet for Girl students with bore well at Pramathanath MadhyaVidyalaya, Hinoo, Ranchi.
8. Construction of 2 nos. toilet blocks in Government School at Lingadih Under CSR programme at Bilaspur (CG).
9. Replacement of Five old windows and two doors at Shradda Organisation, Near Mahanadi, Naraj, Cuttack, Odisha.

C. Healthcare:

1. Financial Assistance of ₹ 10 Lakh to R.K Mission Tuberculosis Sanatorium, Tupudana, Ranchi for Procurement of Medical Appliances.



A Cheque of Rs 10 Lakhs handed over to Secretary R.K.Mission, Tuberculosis Sanatorium, Tupudana, Ranchi, Jharkhand by Mrs Mita Saran wife of CMD, CMPDI.



Medical equipments handed over to R.K.Mission Tuberculosis Sanatorium, Tuppadana, Ranchi, Jharkhand by Mrs Mita Saran wife of CMD, CMPDI



A free medical health checkup camp for students of Gondwana Primary School, CMPDI Campus, Kanke Road, Ranchi.



Mrs Poonam Kumar wife Hon'ble Secretary (Coal) donated blood during blood donation camp organized in CMPDI dispensary, Ranchi.

D. Sports & Cultural Program

1. Financial Assistance for organizing Cricket tournament for physically challenged people Ranchi, Jharkhand.
2. Financial Assistance for Organising Sports day at Birsa High school, Kanke Road, Ranchi, Jharkhand.
3. Financial Assistance for Organizing Sports day at Gondwana Primary School, Kanke Road, Ranchi, Jharkhand.



Sports Day Celebration in Birsa High School, Kanke Road, Ranchi.



Inaugration of Cultural Program by Mrs Poonam Kumar wife of Hon'ble Secretary (Coal) organized in Gondwana Primary School, Ranchi.

E. Social Development:

1. Distribution of Uniform, Shoes, Blankets, Bed sheet, Bed with Mattress, Washing machine, Fridge, Bookshelf, Books & Sports Items etc. to Sri Sri Maa Anand Ashram Near, Kalupada Ghata, Damana, Chandrasekharapur, Bhubansewar Central Mine Planning & Design Institute Limited.



Distribution of bags by Mrs Poonam Kumar wife of Hon'ble Secretary (Coal) to children of Gondwana School and of Hatma Basti under CSR.

F. Skill Development / Women Empowerment:

CMPDI started women empowerment initiative by providing the skill development programs to the women, keeping in view protecting the downtrodden and neglected women in the society.

1. Women empowerment proposal of Hatma Mahila Sangharsh Sansthan.
2. Annual education expenses for 10 blind girl students @ ₹ 1500/- per month to Braj Kishore Netraheen Balika Vidyalaya ,Bariatu, Ranchi

3. Sponsorship of 10 nos. of blind girls of Braj Kishore Netraheen Balika Vidyalaya, Ranchi for skill development training programme for a period of 1 year.



A tailoring training program organized for Mahila Samiti of Hatma Village, Ranchi.



Sponsorship of 10 blind girl students of Braj Kishore Netraheen Balika Vidyalaya, Ranchi for their skill development training.

G. Drinking Water:

1. Water Filter at Zilla Parishad Uchh Prathmik Shala Marda Warora Chandrapur Maharashtra
2. Digging of bore wells at Singhpur area adjacent to Singhpur Camp, Chattisgarh under CSR.
3. Digging of bore well and construction of toilets at Govt. New School, Murum Khadan, Khamtarai, Bilaspur, Chattisgarh under CSR.
4. Development of Pond at Santarabandha Village under CSR by CMPDI RI-VII.

H. Sustainability:

1. Provision of Solar Lights at Gram Panchayat, Marda, Warora, at CMPDI RI-IV, Chandrapur, Maharashtra.



Energy Conserving LED Lights being installed by CMPDI, RI-IV in Nagpur, Maharastra

I. Swachh Bharat Mission at CMPDI



Cleanliness Drive organized at Misirgonda Village, Kanke Road, Ranchi.



Cleanliness Drive organized in Birsa High School, Kanke Road, Ranchi.

J. Release of Annual Report of CSR 2015-16 at New Delhi



15.0 PERFORMANCE OF MEMORANDUM OF UNDERSTANDING OF CMPDI.

For every financial year CMPDI enters into a MoU with Coal India Limited to set various parameter for physical and financial performances. The achievements were graded on a scale of 1-5; excellent being the grade 1.0 to 1.5 and poor as 4.51 to 5.0 till the FY 2014-15. For the FY 2014-2015, CMPDI was given Excellent (1.002) rating by Department of Public Enterprises which was the third best amongst all CPSEs and best in its syndicate. From the FY 2015-16 onwards, system of grading has been changed and for the FY 2015-16, CPSEs with composite MoU score from 87.5 to 100 will be given 'Excellent' rating whereas CPSEs with score less than 12.5 will get poor rating. CMPDI has been awarded 'Excellent' rating with composite score of 89.60 for the FY 2015-16.

16.0 COAL INDIA FOUNDATION DAY CELEBRATED IN CMPDI.

CMPDI, a Mini-Ratna Company, celebrated the Coal India Foundation day with full fervor on 1st and 19th November, 2016. The Chief Guest of this occasion, Shri Ashok Kumar Singh, Ex-CMD, CMPDI and Rajiv Gandhi Chair Professor & HoD (Environmental Science & Engineering), IIT(ISM), Dhanbad in his speech stressed on achieving high performance keeping with the tradition. He stated that productivity has to be improved further by implementing latest technologies in its diversified field of operation. He also stressed on entering into non-coal sector and make most use of the NMET fund available. Sri Singh expressed the need to come out of comfort zone of working in coal sector only and enter into other renewable energy sector also to remain leading organization in the country.

On this occasion, Shri Shekhar Saran, CMD, CMPDI stated that about 6.5 Billion Tonne of coal added in the proved category during last year of which CMPDI's share was 6.1 Billion Tonne which is the highest in near past. He stated that CMPDI was the first company to implement e-Office in CIL. CMPDI has been at the forefront of developing Web Portal for CIL for various uses like Contract Labour Management System. CMPDI is also implementing e-Office and developing 'Green CIL' Application for CIL. CMPDI needs to diversify in mineral sector also to achieve the enormous target of increasing turnover manifold.

On this occasion, Shri V.K. Sinha, Director (T/RD&T); Shri B. Dayal, Director (T/P&D); Shri A. K. Chakraborty, Director (T/ES); Shri Sandeep Raj, CVO-CMPDI, Ex-CMDs and Directors of Coal India family, members of JCC, representatives of CMOAI, Smt. Meeta Saran, President of Kasturi Mahila Sabha and other reputed persons were also present. The celebration started with lighting of lamp and Corporate Song of Coal India Limited



16.1 Activities of Forum of Women in Public Sector (WIPS) CMPDI in 2016-17.

WIPS, CMPDI (under the aegis of SCOPE) registered as a corporate member of this Forum in 2010 and the new Management Committee came into effect from June 2012 under the leadership entrusted upon Ms. Suchandra Sinha, Senior Manager (E&M) functioning as Co-ordinator, WIPS, CMPDI. The Forum has achieved new heights in contributing to the organizational goals of the company. 2016-17 was a landmark year that won “Best Enterprise” Awards for WIPS CMPDI at the Regional and National level and “Best Woman Employee” Award for CMPDI out of 89 PSUs all over India, a prestigious national recognition

Achievement of WIPS, CMPDI in the year 2016-17

- 1) Out of all PSUs in Eastern Region, Coordinator WIPS, CMPDI was elected as Secretary, WIPS ER.
- 2) Four (4) WIPS members from CMPDI attended workshop on “POSH” (Prevention of Sexual Harassment at Workplace), conducted by CII (Confederation of Indian Industries), Kolkata on 30.05.16.
- 3) Five (5) WIPS members from CMPDI attended workshop on “Soft Skill Development” at IOC, Kolkata organised by WIPS ER.
- 4) Eight (8) WIPS members of CMPDI pledged for organ donation.
- 5) Coordinator WIPS, CMPDI attended the Annual CIL WIPS Seminar & Coordinators’ Meet held at CIL HQ, Kolkata on the theme “The Changing World of Women”. The Meet raised some important issues about CIL facilities for women employees that need to be taken up.
- 6) CMPDI WIPS Team participated in Inter Coal Company Cultural Meet organized by Eastern Coalfields Limited (ECL) from 21.10.16 to 23.10.16. Out of 337 participants in 25 events, 24 were women (all WIPS members) and they were specially felicitated by ECL Management.
- 7) CMPDI won the “Best Enterprise Award” (3rd position) in the Mini Ratna category at the Regional Meet for WIPS ER, 2016, conducted at Durgapur by ECL and attended by WIPS delegates from 22 PSUs.

Activities of Forum of Women in Public Sector (WIPS), CMPDI in the year 2016-17



On 12.11.16, CMPDI won the “Best Enterprise Award” (3rd position) in the Mini Ratna category at the Regional Meet for WIPS ER, 2016



On 19.11.16, during the CIL Foundation Day celebrations held at CMPDI HQ



"Best Woman Executive" National SCOPE Award won by Ms. Suchandra Sinha SM(E&M), CMPDI HQ



WIPS Team CMPDI won "Recognition Award for WIPS Activities in CMPDI"



On 09.03.17, celebrating International Womens' Day, Smt. Punam Kumar, wife of Honourable Secretary Coal, MoC and Smt. Mita Sharan visited WIPS, CMPDI skill development initiative, CSR funded "Project Swawalambi"

- 8) Smt. Mita Sharan, President Kasturi Mahila Sabha, CMPDI inaugurated M/s Usha certified sewing and stitching session on 15.12.16 for four (4) women in CMPDI office campus for skill development & employment generation and school uniforms to be stitched by the already trained women, to be distributed to Gondwana School and Birsa school children in future, thus providing a market to the already empowered women under CSR funded and WIPS facilitated "Project Swawalambi" for employment generation of self-help group for women, adult literacy and child development in Hatma Basti, Kanke Road, Ranchi.
- 9) At the 27th National Meet of Forum of Women in Public Sector (WIPS) held at Nagpur on 11th and 12th February, 2016, Ms. Suchandra Sinha, Senior Manager (E&M) won the prestigious National SCOPE Award "Best Woman Executive Award for 2016". WIPS Team CMPDI also received "Recognition Award for WIPS Activities in CMPDI" in the same ceremony amongst 10 award winning PSUs in India in Mini Ratna category.
- 10) WIPS, CMPDI in its skill development initiative, CSR approved and funded Project titled "Project Swawalambi", show-cased their efforts before Smt. Punam Kumar, wife of Secretary (Coal), MoC and Smt. Mita Sharan on 9.3.17. The beneficiaries, 7 nos. of underprivileged girls from the vicinity of CMPDI displayed their stitched products, shared their reactions, presented mementoes stitched by them and the children were distributed school bags and food packets.
- 11) WIPS, CMPDI organised a workshop on "Healthy and Cashless Saving Habits for Working Women" conducted by Reliance Face to Face, a Reliance group company, in joint venture with a Japanese company M/s Nippon Life, solely managed by married women, over thirty years of age on 17.03.17.

17.0 DIRECTOR'S RESPONSIBILITY STATEMENT:

- a. In the preparation of the annual accounts, the applicable accounting standards had been followed along with proper explanation relating to material departures.
- b. 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.
- c. 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.
- d. The Directors had prepared the Annual Accounts on a going concern basis.
- e. The Directors confirmed that they had devised proper system to ensure compliance with the provisions of all applicable laws and that such systems were adequate and operating effectively.

AUDITORS :

On the advice of the comptroller and Auditor General of India M/s K.C. Tak & Co., Chartered Accountants, Ranchi were appointed as Auditors of the Company for the financial year 2016-17. They were also appointed Tax-Auditors for the year U/S 44 (AB) of the Income- Tax Act, 1961. They were also appointed Jharkhand VAT Auditors for the year 2016-17.

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 for the confidence reposed in us and the patronage extended to us and to the dedicated employees of the company.

ADDENDUM :

Information as required to be given in the Directors' Report under Section 134(3) (m) of the Companies Act, 2013 on conservation of energy, technology absorption and foreign exchange earnings and outgo, Research and Development, CEO and CFO certification, Extract of Annual Return under section 92 of the Companies Act, 2013, Auditor reports on compliance on Corporate Governance, the reports of Statutory Auditor and Management replies, Secretarial Auditor's Report and replies of management Comments of the Comptroller & Auditor General of India under section 143 of the Companies Act, 2013, reports on MoU 2016-17 and Information on details of remuneration etc. of Managerial Personnel are also annexed to this report.

For and on behalf of the Board of Directors



(Shekhar Saran)

Chairman-cum-Managing Director

Place : Ranchi

Date : 06.07.2017

Addendum - I

ANNEXURE TO DIRECTORS' REPORT

Information as required to be given in the Directors' Report under Section 134(3) (m) of the Companies Act, 2013 read with the – matters to be included in Board's Report, Rule- 8 regarding conservation of energy, technology absorption and foreign exchange earning and outgo.

A. CONSERVATION OF ENERGY

CMPDI has undertaken energy conservation studies in 2016-17 and conducted Diesel Audit & Benchmarking of specific diesel consumption as well as Electrical Energy Audit and Benchmarking of specific electrical energy consumption in various opencast and underground mines situated in different subsidiaries of Coal India Limited by BEE accredited Energy Auditors.

In Diesel Benchmarking studies conducted in various coalfields of CIL, following broad heads are adopted for diesel conservation:

- i) Identification & Minimization of leakage and adopting preventive maintenance measures for HEMM deployed
- ii) Speed optimization of HEMM considering haul road conditions
- iii) Time study to minimize idle hours and preventing unnecessary movement of HEMM
- iv) Comparison with CMPDI planning & design norms, 0.1 ltr/bhp-hr for track mounted, 0.06 ltr/bhp-hr for wheel mounted and 0.054 ltr/bhp-hr for electric wheel mounted HEMM

In Electrical Energy Audit & Benchmarking studies conducted in various coalfields of CIL, trend analysis based on last three (3) years historical data and electrical measurements carried out during field visit to underground and opencast mines, following energy conservation methods are adopted:

- i) Demand side management
- ii) Reduction of transmission & distribution losses
- iii) Power factor improvement
- iv) Efficient illumination system
- v) Reduction of transformation losses by reorganization of transformers
- vi) Installation of energy meters for energy monitoring
- vii) Energy conservation measures in pumping system

Energy Audit and Energy Benchmarking studies conducted by BEE accredited Energy Auditors, please refer table as given below:

Energy Conservation initiatives taken up by CMPDI for the year 2016-17

SI No.	JOB Description	Proposed Investment (in lakh)	Proposed Saving Potential
Energy Audit and Benchmarking studies carried out by CMPDI (HQ) in 2016-17			
A	Diesel Audit and Benchmarking		
1.	Annual benchmarking of 12 OCPs identified by CCL	-	1879 K Litre/yr
2.	Annual benchmarking of 03 OCPs identified by SECL	-	2385 K Litre/yr
3.	Annual benchmarking of 08 OCPs identified by NCL	-	4348 K Litre/yr
4.	Annual benchmarking of 12 OCPs identified by MCL	-	2058 K Litre/yr
5.	Annual benchmarking of 14 OCPs identified by BCCL	-	1748 K Litre/yr
6.	Annual benchmarking of 08 OCPs identified by ECL	-	1427 K Litre/yr
7.	Annual benchmarking of 14 OCPs identified by WCL	-	2932 K Litre/yr
8.	Diesel Audit & Benchmarking of AKK OCP, CCL	-	143.28 K Litre/yr
9.	Diesel Audit & Benchmarking of Parej East OCP, CCL	-	Work in progress
10.	Diesel Audit & Benchmarking of Dhori OCP, CCL	-	Work in progress
11.	Diesel Audit & Benchmarking of Kakri OCP, NCL	-	174.6 K Litre/yr
12.	Diesel Audit & Benchmarking of Niljai South OCP, WCL	-	262.09 K Litre/yr
13.	Diesel Audit & Benchmarking of Naigaon OCP, WCL	-	81.303 K Litre/yr
14.	Diesel Audit & Benchmarking of Khadia and Amlohri OCPS, NCL carried out by RI-VI		Work in progress
15.	Diesel Audit & Benchmarking of Pauni and Gauri Expansion OCPS, WCL carried out by RI-IV		152.94 & 28.96 K Litre/yr resp.
B	Electrical Energy Audit and Benchmarking		
1.	Electrical Energy Audit and Benchmarking of Dudhicha OCP, NCL	352.96	404.08 lakh/yr
2.	Electrical Energy Audit and Benchmarking of Bina OCP, NCL	213.62	425.45 lakh/yr
3.	Electrical Energy Audit and Benchmarking of Tapin North OCP, CCL	65.46	39.36 lakh/yr
4.	Electrical Energy Audit and Benchmarking of Govindpur, Ph-II OCP, CCL	51.19	75.94 lakh/yr
5.	Electrical Energy Audit and Benchmarking of Jagannath OCP, MCL	75.32	33.97 lakh/yr
6.	Electrical Energy Audit and Benchmarking of Nandira U/G, MCL	94.30	42.20 lakh/yr

B. FOREIGN EXCHANGE EARNING AND OUTGO

SI No.	Particulars	2016-17
1.	Activities relating to export, initiatives to increase export; development of new export markets for products and services and export plans	Company is not engaged in exports
2.	Total foreign exchange used and earned	
	(a) Total foreign exchange earned (₹ in Crore)	Nil
	(b) Total foreign exchange used (₹ in Crore)	₹ 3.48 Crores
	(Travelling Expenses ₹ 0.11 Crore + Others ₹ 3.37 Crores)	

C. RESEARCH AND DEVELOPMENT AND TECHNOLOGY ABSORPTION

- An R&D project titled "Design, develop and demonstrate a Micro-Grid system for optimization and control of multiple source of power supply" has been completed by CMPDI, Ranchi and Gujarat Energy Research and Management Institute (GERMI), Gujarat. Total approved cost of the project is ₹ 351.30 lakh (CMPDI, Ranchi - ₹ 33.80 lakh and GERMI, Gujarat - ₹ 317.50 lakh).

The solar photovoltaic plant has been commissioned on the roof tops of CMPDI office buildings. The total installed capacity of the plant is around 190 kW, which is at present generating 30% of total installed capacity. Two types of technologies, one with string inverter and another with micro inverter have been adopted in installing the plant. Under this project, conventional grid (utility supply) clubbed with solar PV system and DG sets through grid interactive inverters to feed to internal grid (CMPDI) whenever utility grid (JSEB) supply is not available.

The diesel consumption for running the generators can also be reduced substantially. Further, CO₂ emissions into the atmosphere will also be reduced by generating this clean energy. The total life of the plant is about 25 years and required a very little maintenance.

- (ii) An S&T project titled **“Development of Indigenous catalyst through pilot scale studies of Coal-to-Liquid (CTL) conversion technology”** has been completed by CIMFR, Dhanbad and CMPDI, Ranchi. Total approved cost of the project is ₹ 860.44 lakh (CMPDI, Ranchi - ₹ 116.90 lakh and CIMFR, Dhanbad - ₹ 743.54 lakh).

Under this project, design, development, installation and commissioning of a fully integrated Coal – to – Liquid Pilot Plant consisting of coal gasification, gas cleaning, shift reaction, CO₂ scrubbing, liquefaction and liquid collection have been successfully completed at the CIMFR, Digwadih Campus, Dhanbad. The coal from Dabor OCP, Salanpur Area, ECL with ash content of ~33% has been used for syngas production in a fixed bed updraft air blown gasifier (Coal Feed rate Capacity: 50 – 100 kg/h). Four on-stream experimental runs (continuous) of total 857 hour have been conducted and three experimental runs have produced hydrocarbon liquid. Two Co-based catalyst have successfully been tested in the CTL pilot plant for liquefaction reaction and one of them is a potential catalyst for further scale up studies which has produced 47.0 litre of CTL crude per ton of coal. The CTL crude is diesel equivalent with the calorific value of 10900 kcal/kg.

D. TECHNOLOGY ABSORPTION:

The R&D in coal sector is mainly for improvement of efficiency parameters in mining operations including mine safety and related activities like coal beneficiation/utilization and also on control of mine environment. While some research projects have produced tangible impact on the industry directly, there are others, which have strengthened mine planning, design and technical services required by both operating mines and future mining projects.

During the year 2016-17, in this direction, seven research projects have been completed and few are under implementation. Details of the projects are as follows:

i **Demonstration of Coal Beneficiation System using Radiometric Technique.**

This project is under implementation by CMPDI, Ranchi, Ardee Hi-Tech Pvt. Ltd., Visakhapatnam and BCCL, Dhanbad. The project aims at developing a demonstration plant for dry de-shaling of coal based on modified radiometric detection and pneumatic removal technology.

The proposed dry beneficiation technology is based on radiometric detection and removal of stones and shale from coal streams and works on the differential gamma ray absorption properties of coal and ash forming minerals. The mass absorption coefficient of coal is dependent on the chemical composition of coal and shale. The distinct advantage of radiometric technology is that the target for clean coal or the threshold value for rejection can be planned and set as per need. This technology is an efficient, dust free and energy friendly also.

Under this project, it was proposed to take up this technology at demonstration scale. This project has been executed at Madhuband Washery by installing two modules of ArdeeSort for de-shaling coals in the size fraction of 13mm-50mm (in two stages i.e. 13-25mm & 25-50mm). Project completed and data generated under the project are being analysed for making final conclusion on the project.

Total approved cost of the project is ₹ 2565.70 lakh.

(ii) To find a methodology of safe liquidation in thick seams of Raniganj Coalfield: Design & Development & show-casing demonstrative trials at Khottadih Colliery, ECL.

This project has been executed by CIMFR, Dhanbad in association with ECL. The prime objective of the project is to design a feasible and optimal method for safe liquidation of coal in thick seams out of existing methods for extraction of seam and to validate the same at the selected mine site at Khottadih Colliery, Raniganj Coalfield, ECL. While designing and showcasing-demonstrative trials, the two important aspects i.e. ground control and fire-propensity aspects have been taken into consideration in a way to increase the number of coal pillars extraction.

The above study was conducted in the trial panels of Semi-Mechanized Mine (with SDL or LHD) and also with a Continuous Miner (CM) deployment in Khottadih Colliery. Project has been completed and report is under preparation. Under this project, following activities were carried out:

- a) Approval to extract two sub-panels; panel B2A and B2B in Khottadih, ECL was given by DGMS with the condition that strata monitoring with a suit of geo-technical and environmental monitoring to be undertaken by CIMFR.
- b) A number of geotechnical instruments like remote convergence indicators, stress meters, load cell and instrumented rock bolts were installed in the panel B-2 (Sub-panel-A) during depillaring and observations were taken. The analysis shows 'no significant' change of 'stress' and 'deformation' that may be detrimental to safe depillaring operations except the temporary hassles related to the 'main fall'. Smooth and regular caving has been achieved in B2B panel after gaining experience and its implementation from the workings of B2A panel.
- c) The tandem approach of extracting the panel including two pronged assessment:
 - i. Ground control aspects of a safe liquidation method with proper rib stability, controlled caving, strata monitoring & management and
 - ii. The aspect related to detecting early symptom of spontaneous heating/fire, followed by pro-active application of remedial measures in order to prevent it.
- d) Fire ladder have been developed for the seam which aids in early detection of fire.

Total approved cost of the project is ₹ 41.066 lakh

(iii) Development of guidelines to predict distance between toe of the Shovel-Dumper dump and that of Dragline dump with consideration of safety and economical design of both Shovel-Dumper dump and Dragline dump.

This project has been executed by BIT, Mesra, Ranchi. The prime objective of the project is to develop a general model which would be applicable for other OC mines of CIL where shovel and dragline dumps exists with due consideration of safety and to reduce the land requirement to a certain extent for external dumping in opencast excavation.

Under the project, study has been conducted in twelve opencast mines of CIL i.e. (i) Sasti OCP, WCL, (ii) Dudhichua OCP, NCL, (iii) Khadia OCP, NCL, (iv) Jayant OCP, NCL, (v) Bina OCP, NCL, (vi) Nigahi OCP, NCL, (vii) Amlohri OCP, NCL, (viii) Sonapur Bazari OCP, ECL, (ix) Samleshwari OCP, MCL, (x) Dhanpur OCP, SECL, (xi) Ghughus OCP, WCL, and (xii) Block-II OCP, BCCL for determination of geo-engineering parameters for development of guidelines to determine the optimum distance between toe of dragline dumps and shovel-dumper dumps.

Based on the study of individual dragline operated opencast mines of CIL, a general guideline has been developed under this project. The guidelines can predict overall height and slope of dragline dump depending on the range of various geo-engineering parameters. From the above study, it had been concluded that the toe of shovel-dumper dump is formed at least 110-180m away (site dependent) from the toe of the dragline dump so that dragline dump gets adequate time to stabilize before fresh dumping by dumper. However, increase in water table may deteriorate the dump stability.

Total approved cost of the project is ₹ 26.58 lakh.

(iv) Development of tele robotics and remote operation technology for underground coal mines

The project was implemented by CMERI, Durgapur in association with CIMFR, Dhanbad and CMPDI, Ranchi. The project aims to develop tele-robot on-line continuous monitoring system for various mine parameters related to underground mine environment and roof strata.

Under the project a robot has been developed for continuous on-line monitoring system for various mine parameters related to underground mine environment and roof strata by CMERI, Durgapur and lab-scale trials have been conducted. Field trial conducted at Khottadih mine of ECL after necessary modifications in the robot design. The robot has been developed by CMERI, Durgapur and lab-scale trials have been conducted. Field trial conducted at Khottadih mine of ECL after necessary modifications in the robot design.

Total approved cost of the project is ₹ 440.12 lakh.

(v) Design and development of truck mounted mobile coal sampler for instant coal ash & moisture analyser at site from railway wagon/truck.

The project was implemented by CIMFR, Dhanbad & M/s Pranay Enterprises Pvt. Ltd., Hyderabad. The prime objective of the project is to establish the feasibility of nuclear technique method with dual gamma ray transmission for analysis of coal for ash and moisture content and design and development of Truck Mounted Mobile Coal Sampler for instant coal ash and moisture analysis.

Under the phase-I of the project, it was established the feasibility of nuclear technique method with dual gamma-ray transmission for analysis of coal for ash and moisture contents. In phase-II, Prototype of Mobile coal sampler has been developed. Field trail has been carried out in the mines of SCCL with newly developed truck mounted coal sampler machine and the results are satisfactory.

Total approved cost of the project is ₹ 167.60 lakh.

(vi) Optimization of various parameters of lab scale Coal Wining System (Phase-II)

The project was implemented by CIMFR, Nagpur in association with CMPDI, Ranchi. The project aims to optimize various parameters of lab scale 'Coal winnowing system' for consistency in product yield and ash of various coals from different coalfields

Under the project, various parameters of lab scale 'Coal winnowing system' were optimized for consistency in product yield and ash of various coal samples with size fraction of 100-75 mm, 100-50 mm and 75-50 mm collected from different mines of WCL. Also, ash, moisture and GCV of product & rejects of each sample were determined and segregation of coal products and rejects done based on the Gross Calorific Value (GCV).

Total approved cost of the project is ₹ 18.55 lakh.

(vii) Techno-economic Evaluation and performance behavior of Self Advancing (mobile) Goaf Edge Supports (SAGES)

The project is under implementation by IIT-ISM, Dhanbad and M/s Jaya Bharat Equipment Pvt. Ltd. (JBEPL), Hyderabad. The project aims at modifications and refurbishment of 6 nos. of SAGESs, which were designed and fabricated under earlier S&T project and to study their performance behaviour in underground coalmines of SCCL for their techno-feasibility study.

Under this project, the support units after making necessary modifications would be subjected to field trial at RK-NT Mine/ RK-5 Mine of SRP Area, SCCL, where the immediate roof is shale/sandstone to study the performance behaviour and its influence on the ground movement and also to study the techno-economic feasibility. Field trial has been started in deploying the SAGES in the depillaring panel of RK-7 Mine of SCCL.

Total approved cost of the project is ₹ 73.27 lakh.

(viii) Requirement of air in mine for Mass Production Technology.

This project is under implementation by CMPDI, Ranchi. The aims of this project are the optimization of ventilation requirement and assessment of minimum infrastructure required for mass production technologies in Indian underground coal mines in order to attain comfortable environment at the working faces considering temperature, heat, humidity and toxic gases etc. to boost the coal production from underground mines.

Norms prescribed under Coal Mines Regulation CMR-1957 (Regulation 130) are being followed for maintaining ventilation in all underground coal mines, where ventilation system designs are being done on the basis of production or largest manpower in a shift. For mass production mines, if air requirement is calculated on the basis of production it will be too high or if on the basis of highest manpower air requirement is calculated it will be too less as manpower requirement is less in mass production.

Under the proposed study a guideline will be framed for the planning of ventilation requirement for all underground mines, where mass production technologies are either deployed or to be deployed in the future. In addition to the above, assessment will also be done regarding minimum infrastructure required in terms of inclines, shafts, fan drifts, fan capacity etc. for a mine where mass production technology will be introduced.

Total approved cost of the project is ₹ 491.27 lakh.

(ix) Multiple layer trial blasting for better recovery with less diluted coal.

This project is under implementation by IIT-ISM, Dhanbad & CMPDI, Ranchi. IIT-ISM, Dhanbad has technical participation with University of Queensland, Brisbane, Australia on this new research subject.

The prime objective of this project is to develop safe and efficient multi-seam and thru-seam blast design to produce clean coal with better recovery using advanced blasting technology.

Under this project, multiple overburden and coal strata can be drilled, loaded with explosives, initiated and blasted in a single cycle. Each layer can be blasted with a unique design and achieve its targeted blast result, which is different from that of the other layers. The blast design in each layer will differ in explosive type and powder factor, inter-hole and inter-row delays, direction of initiation and initiation time, position, which makes this method distinct from conventional blasting. Using this proposed blasting technology, no throw will be achieved in the overburden along with reduction of coal losses and pulverisation lead to increase coal seam recoveries. A significant improvement in coal quality by reducing dilution and coal loss will be achieved through this proposed blasting technique.

Under this project, at least 10 (Ten) trial blasts will be conducted in Jayant West of NCL where multiple seams (viz. Purba top, bottom and inter-burden) are available. Holes will be drilled up to 50 m and blasting will be done in a single shot. The method will allow for full exploitation of the benefits of multiple layer blasting economically, limiting coal damage, dilution and loss. Productivity will be enhanced by reducing the drill-blast cycle time through the proposed study. Blasting near habitation will be possible without much of botheration of the neighbourhood.

Total approved cost of the project is ₹ 496.24 lakh.

(x) Studies on the Use of Coal and Petcoke as Fuel in the Cement Industry in India

This project is under implementation by IIT-ISM, Dhanbad in association with CMPDI, Ranchi.

Under this project, an in-depth study will be conducted on use of coal and petcoke as fuel in the cement industry, the energy requirement and environmental aspects and the economic evaluation of the cement plants operating with coal, petcoke and their blends and to provide a status report on the use of indigenous coal in the cement plants in India.

The project work envisages survey of energy & environmental issues pertaining to cement manufacturing, which includes consumption of energy during milling operations of fuel (coal, petcoke, blends and other alternative fuels), clinker mills, pre-calciners and kilns, total particulate matter (PM) emissions both in ambient atmosphere as well as in the kilns and mills emission, contribution of coal & petcoke to CO₂ / NO_x emissions and other organic pollutant emissions.

Under this project, overall assessment of benefits of using coal, petcoke, or their blends as fuel in cement industry will also be studied. A comparative assessment of coal vis-a-vis petcoke, and the economic analysis & its environmental impacts in cement industry will be done and a road map will be prepared for possible enhancement in the share of coal as a fuel in the cement industry.

Total approved cost of the project is ₹ 471.95 lakh.

(xi) Through-the-Earth (TTE) two-way communication system for underground mines.

This project is under implementation by IIT, Bombay in association with CMPDI, Ranchi and CCL, Ranchi.

The prime objective of the proposed study is to achieve both “portable” and “two-way voice communication”. Currently available TTE systems, which are capable to transmit both way voice is either bulky or of limited range only.

Under proposed study portable wireless intrinsically safe transmitter-receiver units for through the earth to support two-way voice communication up to a penetration range of 150m-200m in underground coal mines would be developed. Effect of various earthy materials present in

different underground mine on developed TTE communication system would be studied in details. Effect of galleries dimension and the roughness of wall on meta-material based antenna radiation pattern will also be studied. The proposed antenna will show very high radiation efficiency and bandwidth at a lower frequency bands with a very smaller size compared to the conventional antennae.

Total approved cost of the project is ₹ 139.8816 lakh.

(xii) Development of guideline for prevention & mitigation of explosion hazard by risk assessment and determination of explosibility of Indian coal incorporating risk based mine emergency evacuation and re-entry protocol.

The above project has been taken up by CIMFR, Dhanbad, IIT-ISM, Dhanbad and CIL (HQ), Kolkata with prime objective to develop an in-house analytical capabilities in the areas of explosion prevention strategy & technology and to introduce the concept of risk assessment based safety management system in Indian coal mine to eliminate or reduce the risk from explosion hazards.

(xiii) Development of a methodology for regional air quality monitoring in coalfield area using satellite data and ground observations.

The above project is being implemented by CMPDI (HQ), Ranchi and National Remote Sensing Centre (NRSC), ISRO, Hyderabad.

The prime objective of the above project is conduct air quality assessment and prediction to take appropriate mitigative measures to prevent/minimize the deterioration of air quality due to various coal mining activities, which may further help in segregating the source of pollutants at later stage.

The proposed work would be undertaken in three phases. The present study is limited to Phase-I only, where efforts will be made for development of a methodology for assessment of regional air quality with focus on PM10 and PM2.5, NO_x, SO_x monitoring by using satellite data and modelling. On successful completion of Phase-I, the study would be taken up under Phase-II and Phase-III, where airborne campaigns and segregation of sources of pollutants from nearby industries based on aerosol chemistry characterization will be dealt with.

Total approved cost of the project is ₹ 709.82 lakh.

(xiv) Capacity building for extraction of Coal Mine Methane (CMM) resource within CIL command areas

The above project is being implemented by CMPDI, Ranchi & Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australia.¹⁰

The prime objective of the project is to develop efficient and cost-effective methane capture technologies at a pre-selected field or mine site under Indian resource and mining conditions. Project also aims at developing advanced gas testing laboratory services and capabilities within CMPDI which may be replicated in at respective Regional Institutes of CMPDI associated with CIL subsidiaries.

Under this project, US\$ 2,70,000 (US Dollar Two lakh seventy thousand only) has been disbursed to Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australia.

Total approved cost of the project is Rs.2392.79 lakh.

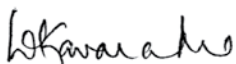
Addendum - II

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

CEO AND CFO CERTIFICATION

We, Shekhar Saran, Chairman-cum-Managing Director and D. K. Rao, General Manager (Finance)/CFO, responsible for the finance function certify that :

- a. We have reviewed financial statements and the cash flow statement for the year ended 31st March, 2017 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, 2017 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 FY 2016-17;
 - 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.



(D. K. Rao)
General Manager (F)



(Shekhar Saran)
Chairman-cum-Managing Director



Addendum - III

Form No. MGT-9
EXTRACT OF ANNUAL RETURN
as on the financial year ended on 31.03.2017

[Pursuant to section 92(3) **of the Companies Act, 2013** and rule 12(1) of the Companies (Management and Administration) Rules, 2014]

I. REGISTRATION & OTHER DETAILS:

- 1 CIN : U14292JH1975GOI 001223
- 2 Registration Date : 01.11.1975
- 3 Name of the Company : CENTRAL MINE PLANNING & DESIGN INSTITUTE LIMITED
- 4 Category/Sub-category of the Company
- 5 Address of the Registered office & contact details : GONDWANA PLACE, KANKE ROAD, RANCHI, JHARKHAND- 834031
- 6 Whether listed company : No
- 7 Name, Address & contact details of the Registrar & Transfer Agent, if any. : NOT APPLICABLE

II. PRINCIPAL BUSINESS ACTIVITIES OF THE COMPANY

(All the business activities contributing 10 % or more of the total turnover of the company shall be stated)

Sl. No.	Name and Description of main products / services	NIC Code of the Product/service	% to total turnover of the company
1	MINE PLANNING & DESIGN	NOT APPLICABLE	26
2	GEOLOGY & DRILLING	NOT APPLICABLE	67

III. PARTICULARS OF HOLDING, SUBSIDIARY AND ASSOCIATE COMPANIES

Sl. No.	Name and address of the Company	CIN/GLN	Holding/ Subsidiary/ Associate	% of shares held	Applicable Section
1	COAL INDIA LIMITED	L23109WB1973GOI028844	HOLDING	100%	92(1)(a) of the Companies Act, 2013.

IV. SHARE HOLDING PATTERN (Equity share capital breakup as percentage of total equity)

(i) Category-wise Share Holding

Category of Shareholders	No. of Shares held at the beginning of the year [As on 31-March-2016]			No. of Shares held at the end of the year [As on 31-March-2017]				% Change during the year
	Demat	Physical	Total	Demat	Physical	Total	% of Total Shares	
A. Promoters								
(1) Indian								
a) Individual/ HUF	-		-			-	-	-
b) Central Govt			-			-	-	-
c) State Govt(s)			-			-	-	-
d) Bodies Corp.	Nil	190,400	190,400	Nil	190,400	190,400	100.00%	NIL
e) Banks / FI			-			-	-	-
f) Any other			-			-	-	-
Sub Total (A) (1)	-	190,400	190,400	-	190,400	190,400	100.00%	NIL
(2) Foreign								
a) NRI Individuals			-			-	-	-
b) Other Individuals			-			-	-	-
c) Bodies Corp.			-			-	-	-
d) Any other			-			-	-	-
Sub Total (A) (2)	-	-	-	-	-	-	-	-
TOTAL (A)	-	190,400	190,400	-	190,400	190,400	100.00%	NIL
B. Public Shareholding								
1. Institutions								
a) Mutual Funds			-			-	-	-
b) Banks / FI			-			-	-	-
c) Central Govt			-			-	-	-
d) State Govt(s)			-			-	-	-
e) Venture Capital Funds			-			-	-	-
f) Insurance Companies			-			-	-	-
g) FIs			-			-	-	-
h) Foreign Venture Capital Funds			-			-	-	-
i) Others (specify)			-			-	-	-
Sub-total (B)(1):-	-	-	-	-	-	-	-	-
2. Non-Institutions								
a) Bodies Corp.								
i) Indian			-			-	-	-
ii) Overseas			-			-	-	-
b) Individuals								
i) Individual shareholders holding nominal share capital upto Rs. 1 lakh			-			-	-	-
ii) Individual shareholders holding nominal share capital in excess of Rs. 1 lakh			-			-	-	-

c) Others (specify)								
Non Resident Indians			-			-	-	-
Overseas Corporate Bodies			-			-	-	-
Foreign Nationals			-			-	-	-
Clearing Members			-			-	-	-
Trusts			-			-	-	-
Foreign Bodies - D R			-			-	-	-
Sub-total (B)(2):-	-	-	-	-	-	-	-	-
Total Public (B)	-	-	-	-	-	-	-	-
C. Shares held by Custodian for GDRs & ADRs			-				-	-
Grand Total (A+B+C)	-	190,400	190,400	-	190,400	190,400	100.00%	NIL

(ii) Shareholding of Promoter

SN	Shareholder's Name	Shareholding at the beginning of the year		Shareholding at the end of the year			% change in shareholding during the year
		No. of Shares	% of Shares Pledged/ numbered to total shares	No. of Shares	% of total Shares of the company	% of Shares Pledged / encumbered to total shares	
1		190,400	0	190,400	100.00%		0.00%

(iii) Change in Promoters' Shareholding (please specify, if there is no change)

SN	Particulars	Shareholding at the beginning of the year		Cumulative Shareholding during the year	
		No. of shares	% of total shares	No. of shares	% of total shares
	At the beginning of the year	190,400	100.00%	190,400	100.00%
	Changes during the year	No change	0.00%	No change	0.00%
	At the end of the year	190,400	100.00%	190,400	100.00%

(iv) Shareholding Pattern of top ten Shareholders (Other than Directors, Promoters and Holders of GDRs and ADRs):

SN	For each of the Top 10 shareholders	Shareholding at the beginning of the year		Cumulative Shareholding during the year	
		No. of shares	% of total shares	No. of shares	% of total shares
	At the beginning of the year	-	0.00%	-	0.00%
	Changes during the year	-	0.00%	-	0.00%
	At the end of the year	-	0.00%	-	0.00%

(v) Shareholding of Directors and Key Managerial Personnel:

SN	Shareholding of each Directors and each Key Managerial Personnel	Shareholding at the beginning of the year		Cumulative Shareholding during the year	
		No. of shares	% of total shares	No. of shares	% of total shares
1	Name				
	At the beginning of the year	1	0.00%	1	0.00%
	Changes during the year	-	0.00%	-	0.00%
	At the end of the year	1	0.00%	1	0.00%

V. INDEBTEDNESS

Indebtedness of the Company including interest outstanding/accrued but not due for payment.

(Amt. Rs./Lacs)

Particulars	Secured Loans excluding deposits	Unsecured Loans	Deposits	Total Indebtedness
Indebtedness at the beginning of the financial year				
i) Principal Amount	NIL	NIL	NIL	NIL
ii) Interest due but not paid	NIL	NIL	NIL	NIL
iii) Interest accrued but not due	NIL	NIL	NIL	NIL
Total (i+ii+iii)	NIL	NIL	NIL	NIL
Change in Indebtedness during the financial year				
* Addition	NIL	NIL	NIL	NIL
* Reduction	NIL	NIL	NIL	NIL
Net Change	NIL	NIL	NIL	NIL
Indebtedness at the end of the financial year				
i) Principal Amount	NIL	NIL	NIL	NIL
ii) Interest due but not paid	NIL	NIL	NIL	NIL
iii) Interest accrued but not due	NIL	NIL	NIL	NIL
Total (i+ii+iii)	NIL	NIL	NIL	NIL

VI. REMUNERATION OF DIRECTORS AND KEY MANAGERIAL PERSONNEL**A. Remuneration to Managing Director, Whole-time Directors and/or Manager:**

SN.	Particulars of Remuneration	Name of MD/WTD/ Manager					Total Amount (in Rs.)
		Shri Shekhar Saran	Shri V.K. Sinha	Shri B.N. Shukla	Shri Binay Dayal	Shri A.K. Chakraborty	
1	Gross salary						
	(a) Salary as per provisions contained in section 17(1) of the Income-tax Act, 1961	3802618	3797063	803953	3934997	3105213.85	12338631
	(b) Value of perquisites u/s 17(2) Income-tax Act, 1961	8418463	401703	163540	409500	237736	1393206
	(c) Profits in lieu of salary under section 17(3) Income- tax Act, 1961	0	0	0	0	0	0
2	Stock Option	0	0	0	0	0	0
3	Sweat Equity	0	0	0	0	0	0
4	Commission						0
	- as % of profit	0	0	0	0	0	0
	- others, specify (CMPF Emp Share)	252014	281622	96254	234090	183538	863980
5	Others, please specify	0	0	0	0	0	0
	Total (A)	4473095	4480388	1063747	4578587	3526487.85	14595817



B. Remuneration to other Directors

SN.	Particulars of Remuneration	Name of Directors			Total Amount (in Rs.)
		Shri Rakesh Kumar Mittal	Shri Rajender Parshad	Dr. Debasish Gupta	
1	Independent Directors				
	Fee for attending Board Meetings and committee meetings	205000	390000	370000	965000
	Commission				0
	Others, please specify				0
	Total (1)	205000	390000	370000	965000
2	Other Non-Executive Directors				0
	Fee for attending Board and committee meetings				0
	Commission				0
	Others, please specify				0
	Total (2)	0	0	0	0
	Total (B)=(1+2)	205000	390000	370000	965000
	Total Managerial Remuneration				15560817

C. Remuneration to Key Managerial Personnel other than MD/Manager/WTD

SN.	Particulars of Remuneration	Name of Key Managerial Personnel		Total Amount (in Rs.)
		Shri D.K Rao	Shri Abhishek Mundhra	
	Name			
	Designation	CFO	CS	
1	Gross salary			
	(a) Salary as per provisions contained in section 17(1) of the Income-tax Act, 1961	3098427.95	1015833	4114260.95
	(b) Value of perquisites u/s 17(2) Income-tax Act, 1961	398580	163692	562272
	(c) Profits in lieu of salary under section 17(3) Income- tax Act, 1961			0
2	Stock Option			0
3	Sweat Equity			0
4	Commission			
	- as % of profit			0
	- others, specify (CMPF Emp Share)	225654	93576	319230
5	Others, please specify			0
	Total	3722661.95	1273101	4995762.95

VII. PENALTIES / PUNISHMENT/ COMPOUNDING OF OFFENCES:

Type	Section of the Companies Act	Brief Description	Authority [RD / NCLT/ COURT]	Appeal made, if any (give Details)
A. COMPANY				
Penalty		NONE		
Punishment				
Compounding				
B. DIRECTORS				
Penalty		NONE		
Punishment				
Compounding				
C. OTHER OFFICERS IN DEFAULT				
Penalty		NONE		
Punishment				
Compounding				



Addendum - IV



SATISH KUMAR & ASSOCIATES
(COMPANY SECRETARIES)

CORPORATE GOVERNANCE COMPLIANCE CERTIFICATE

CIN of the Company: U14292JH1975GOI001223

Nominal Capital: Rs. 500,000,000 (Rupees Fifty Crores only)

Paid up Capital: Rs. 190,400,000 (Rupees Nineteen Crores Four Lakhs only)

To,
The Members,
Central Mine Planning & Design Institute Limited
Gondwana Place, Kanke Road
Ranchi – 834008

We have examined the compliance conditions of Corporate Governance by **Central Mine Planning & Design Institute Limited** (the “Company”) for the year ended on **31st March, 2017**, as stipulated in the Department of Public Enterprises (DPE) Guidelines 2010 on Corporate Governance for Central Public Sector Enterprises.

Our examination has been summarized as follows:-

1. The Compliance with the conditions of Corporate Governance is the responsibility for management. Our examination, carried out, is in accordance with the Corporate Governance (Modules of Best Practices) issued by the Institute of Company Secretaries of India and Corporate Governance guidelines referred under Department of Public Enterprises Guidelines 2010 and was limited to

procedures and implementation thereof, adopted by the Company for ensuring the compliance of the conditions of Corporate Governance. It is neither an audit nor an expression of opinion on the Financial Statements of the Company. We have obtained all the information and explanations, which to the best of our knowledge and belief, were necessary for the purpose of certification and have been provided with such records, documents, certificates, etc. as had been required by us.

2. In our opinion and to the best of our information and according to the explanations given to us and the representations made by the Directors and the Management, we certify that the Company has taken steps for reviewing the Compliance of laws and the standards



URMILA APARTMENT, FLAT NO. 201, 2ND FLOOR, UDDHAV BABU LANE
NEAR ST. ANNE'S GIRLS HIGH SCHOOL, THARPAKHNA, RANCHI, JHARKHAND
Contact No: 0651 – 2212943, 09334606570. Email id: cssatish26@gmail.com, csservices26@gmail.com



SATISH KUMAR & ASSOCIATES

(COMPANY SECRETARIES)

issued for ensuring good governance practices, in line with the provisions of the Companies Act, 2013 and the various modules and standards issued by The Institute of Company Secretaries of India in this regard.

3. We further state that such compliance is neither an 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 **Satish Kumar & Associates**

Place: **Ranchi**
Date: **15.05.2017**

Satish Kumar
Company Secretary
FCS No.: 8423
C.P. No.: 9788



URMILA APARTMENT, FLAT NO. 201, 2ND FLOOR, UDDHAV BABU LANE
NEAR ST. ANNE'S GIRLS HIGH SCHOOL, THARPAKHNA, RANCHI, JHARKHAND
Contact No: 0651 – 2212943, 09334606570. Email id: cssatish26@gmail.com, csservices26@gmail.com



K C TAK & Co

CHARTERED ACCOUNTANTS

Shop – 2, Eastern Block Side, 1st Floor, Gel Church Complex, Main Road, Ranchi

INDEPENDENT AUDITOR'S REPORT

To the Members of Central Mine Planning and Design Institute Limited

Report on the Ind AS Financial Statements

We have audited the accompanying Ind AS financial statement of Central Mine Planning and Design Institute Limited 'the Company', which comprise the Balance Sheet as at 31st March 2017, the Statement of Profit and Loss (including Other Comprehensive Income), the statement of Cash Flows and the Statement of Changes in Equity for the year then ended and a summary of the significant accounting policies and other explanatory information herein after referred to as "Ind AS financial statements.

Management's Responsibility for the Financial Statements

Company's Board of Directors is responsible for the matters stated in Section 134(5) of the Companies Act, 2013 ("the Act") with respect to the preparation of these Ind AS financial statements that give a true and fair view of the financial position, financial performance including other comprehensive income), cash flows and changes in equity of the Company in accordance with the accounting principles generally accepted in India, including the Indian Accounting Standards (Ind AS) prescribed under section 133 of the Act read with relevant rules issued thereunder.

This responsibility also includes maintenance of adequate accounting records in accordance with the provisions of the Act for safeguarding the assets of the Company and for preventing and detecting frauds and other irregularities; selection and application of appropriate accounting policies; making judgments and estimates that are reasonable and prudent; and design, implementation and maintenance of adequate internal financial controls, that were operating effectively for ensuring the accuracy and completeness of the accounting records, relevant to the preparation and presentation of the Ind AS financial statements that give a true and fair view and are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these Ind AS financial statements based on our audit.

We have taken into account the provisions of the Act, the accounting and auditing standards and matters which are required to be included in the audit report under the provisions of the Act and the Rules made thereunder.

We conducted our audit in accordance with the Standards on Auditing specified under Section 143(10) of the Act. Those Standards require that we comply with ethical requirements and plan



and perform the audit to obtain reasonable assurance about whether the Ind AS financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and the disclosures in the Ind AS financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the Ind AS financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal financial control relevant to the Company's preparation of the Ind AS financial statements that give a true and fair view in order to design audit procedures that are appropriate in the circumstances. An audit also includes evaluating the appropriateness of the accounting policies used and the reasonableness of the accounting estimates made by the Company's Directors, as well as evaluating the overall presentation of the Ind AS financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the Ind AS financial statements.

Opinion

In our opinion and to the best of our information and according to the explanations given to us, the aforesaid Ind AS financial statements give the information required by the Act in the manner so required and give a true and fair view in conformity with the accounting principles generally accepted in India including the Ind AS, of financial position of the Company as at 31st March 2017, and its financial performance including other comprehensive income, its cash flows and the changes in equity for the year ended on that date.

Report on Other Legal and Regulatory Requirements

1. As required under section 143(5) of the Companies Act 2013, we give in the **"Annexure 1"**, a statement on the Directions/Additional Directions issued by the Comptroller and Auditor General of India after complying the suggested methodology of Audit, the action taken thereon and its impact on the accounts and the financial statements of the Company.
2. As required by the Companies (Auditor's Report) Order, 2016 ("the Order") issued by the Central Government of India in terms of Section 143(11) of the Act, we give in **"Annexure 2"** a statement on the matters specified in paragraphs 3 and 4 of the Order.
3. **Subject to our observation as per "Annexure A" attached herewith**, as required by Section 143(3) of the Act, we report that:
 - a. we have sought and obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purposes of our audit.
 - b. in our opinion, proper books of account as required by law have been kept by the Company so far as it appears from our examination of those books.

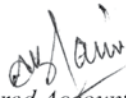




- c. the balance sheet, the statement of profit and loss, the Cash Flow Statement and Statement of Changes in Equity dealt with by this Report are in agreement with the books of account.
- d. In our opinion, the aforesaid Ind AS financial statements comply with the Accounting Standards specified under section 133 of the Act read with relevant rule 7 of the Companies (Accounts) Rules, 2014;
- e. On the basis of the written representations received from the directors as on 31st March, 2017 taken on record by the Board of Directors, none of the directors is disqualified as on 31st March, 2017 from being appointed as a director in terms of Section 164(2) of the Act.
- f. With respect to the adequacy of the internal financial controls over financial reporting of the Company and the operating effectiveness of such controls, refer to our separate Report in “**Annexure 3**” and
- g. with respect to the other matters to be included in the Auditor’s Report in accordance with Rule 11 of the Companies (Audit and Auditors) Rules, 2014, in our opinion and to the best of our information and according to the explanations given to us:
 - i. the Company has disclosed the impact of pending litigations on its financial position in its Ind AS financial statements;
 - ii. the Company has made provision, as required under the applicable law or accounting standards, for material foreseeable losses, if any, on long-term contracts including derivative contracts; [or the Company did not have any long-term contracts including derivative contracts for which there were any material foreseeable losses.
 - iii. There has been no delay in transferring amounts, required to be transferred, to the Investor Education and Protection Fund by the Company [or, following are the instances of delay in transferring amounts, required to be transferred, to the Investor Education and Protection Fund by the Company or there were no amounts which were required to be transferred to the Investor Education and Protection Fund by the Company.
 - iv. The Company has provided requisite disclosures in its Ind AS financial statements as to holdings as well as dealings with Specified Bank Notes during the period from 08th November, 2016 to 30th December, 2016 and these are in accordance with the Books of Accounts maintained by the Company. Refer Note 12 to the Ind As Financial Statements.

for K C Tak & Co.





Chartered Accountants

Firm's registration number: 000216C

CA Anil Jain

Partner

Membership number: 079005

New Delhi

Date: 24/05/2017





Annexure – ‘1’ to the Auditors’ Report

The Annexure referred to in Independent Auditors’ Report to the members of the ‘**Central Mine Planning and Design Institute Limited**’ on the Ind AS financial statements for the year ended 31 March 2017, we report that:

Annexure – A

Revised Directions under section 143 (5) of the Companies Act, 2013 applicable from the year 2016-17 accounts

1. Whether the company has clear title/lease deeds for freehold and leasehold respectively? If not, please state the area of freehold and leasehold land for which title/lease deeds are not available ?

Yes

2. Whether there are any cases of waiver/write off of debts/loans/interest etc. If yes, the reasons there for and amount involved.

During the course of our audit it was observed that there were no case of waiver/write off of debts/loans/interest etc.

3. Whether proper records are maintained for inventories lying with third parties & assets received as gift/grant(s) from the Govt. or others authorities.

As per the information and explanations received from the management, there are no inventories lying with the third parties. As explained to us, the company is maintaining proper records in respect of funds received from time to time, from Ministry \Govt., or other authorities for carrying out specific project/works. Out of this fund, assets required for carrying out the project activity is purchased and separate records of such assets are being maintained.



Annexure – BAdditional directions under section 143(5) of the Companies Act, 2013 to Statutory Auditors appointed for audit of Coal India Limited and its subsidiaries for the year 2016-17

1. Whether coal stock measurement was done keeping in view the contour map. Whether physical stock measurement reports are accompanied by contour map in all cases? Whether new heap, if any, created during the year has got the approval of the competent authority?

Not Applicable.

2. Whether the company conducted physical verification exercise of assets and properties at the time of merger/split/re-structure of an Area. If so, whether the concerned subsidiary followed the requisite procedure ?

As per information and explanation given to us, there is no such case of Split & merger/re-structure of an area during the year or any period of time, hence not applicable.

3. Whether uniform treatment of land acquisition entries as well as interest on delayed payment of land compensation to the project affected persons (PAPs) across the subsidiaries have been considered during the preparation of Annual Accounts for the year 2016-17.

No such case, hence not Applicable.

4. Whether disputes, if any, as to GCV ranges as a result of sampling have been duly examined.

Not Applicable

for K C Tak & Co.

Chartered Accountants

Firm's registration number: 000216C



CA Anil Jain

Partner

Membership number: 079005

New Delhi

Date: 24/05/2017

Annexure – 2 to the Auditors’ Report The Annexure referred to in Independent Auditors’ Report to the members of the ‘Central Mine Planning and Design Institute Limited on the financial statements for the year ended 31 March 2017, we report that:

- i. In respect of Fixed Assets:
 - a) During the course of our audit, It was observed that the Company has generally maintained proper records showing full particulars, including quantitative details and situation of fixed assets.
 - b) As informed to us, the major portion of the high value of fixed assets are physically verified by the management according to a phased programme of verification adopted by the Company. It was observed that the company has deputed its duly constituted team to verify the fixed assets valuing more than Rs. 1.00 lakh. As per information and explanation given to us and as examined by us, there was no discrepancy noticed during such verification.
 - c) During the course of our audit, it was observed that the company has clear title/lease deeds for freehold/leasehold lands.
- ii. In respect of inventories:
 - a) It was observed that the company has deputed outside agency to verify the stores and spare parts etc. for the period ending on 31st December 2016. As per information and explanations given to us, the discrepancies noted on such verification were not material, has been properly dealt with in the accounts at the year end. In our opinion, the frequency of verification is reasonable.
- iii. According to the information and explanation given to us, the company has not granted any loans, secured or unsecured to companies, firms, Limited Liability Partnerships or other parties covered in the register maintained under section 189 of the Companies Act, 2013.
- iv. In our opinion and according to the information and explanations given to us, the Company has complied with the provisions of section 185 and 186 of the Act, with respect to the loans and investments made, wherever applicable.
- v. As per information, and explanations given to us and as examined by us, the company has not accepted any such deposits. Accordingly, paragraph 3(v) of the Order is not applicable.
- vi. As per information and explanations given to us, the Central Government has not prescribed the maintenance of cost records under section 148(1) of the Act, for any of the product being dealt/services rendered by the Company.

vii. In respect of statutory dues:

- a. According to the information and explanations given to us and on the basis of our examination of the records of the Company, amounts deducted/ accrued in the books of account in respect of undisputed statutory dues including provident fund, income-tax, sales tax, value added tax, duty of customs, service tax, cess and other material statutory dues have been generally regularly deposited during the year by the Company with the appropriate authorities.

According to the information and explanations given to us, no undisputed amounts payable in respect of provident fund, income tax, sales tax, value added tax, duty of customs, service tax, cess and other material statutory dues were in arrears as at 31 March 2017 for a period of more than six months from the date they became payable.

- b. *The disputed statutory dues, which the company has not been deposited on accounts of matters pending before appropriate authorities are as under:*

SL No	Particulars	As on 31.03.2017 (₹ in Crs)	As on 31.03.2016 (₹ in Crs)
1	Income Tax – appeals filed by the Income Tax Deptt. before the ITAT for the assessment years from 2008-09 to 2012-13 (After decision in CIT(A), case filled in ITAT)	17.70	0.00
2	Income Tax – appeals filed before the CIT(Appeals) for the assessment years from 2013-14 to 2014-15	0.01	0.00
3	Service Tax- Writ petition filed by the Company before the Jharkhand High Court	11.56	11.56
4	Service Tax – In respect of FY 2003-04, Department has appealed against order of CIT.	3.81	3.81
5	Service Tax- In respect of Service Tax Department Bhubaneswar	0.21	0.80
6	Service Tax- In respect of Service Tax Department Nagpur	0.12	0



7	Entry Tax,- Appeal before Commissioner of Commercial Tax in respect of F Y 2002-3	0.17	0.17
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- viii. The Company does not have any loans or borrowings from any financial institution, banks, government or debenture holders during the year. Accordingly, paragraph 3(viii) of the Order is not applicable.
- ix. The Company did not raise any money by way of initial public offer or further public offer (including debt instruments) and term loans during the year. Accordingly, paragraph 3 (ix) of the Order is not applicable.
- x. As represented by the management and according to the information and explanations given to us, no material fraud by the Company or on the Company by its officers or employees has been noticed or reported during the course of our audit.
- xi. According to the information and explanations give to us and based on our examination of the records of the Company, managerial remuneration has been paid or provided in accordance with the requisite approvals mandated by the provisions of section 197 read with Schedule V to the Companies Act.
- xii. In our opinion and according to the information and explanations given to us, the Company is not a nidhi company. Accordingly, paragraph 3(xii) of the Order is not applicable.
- xiii. According to the information and explanations given to us, exemption is granted to the company being state controlled enterprises as regards related party relationship with other state controlled enterprises. Transactions with the related parties are in compliance with sections 177 and 188 of Companies Act, 2013 and the details have been disclosed in the Financial Statements etc., as required by the applicable accounting standards, where applicable.
- xiv. According to the information and explanations give to us and based on our examination of the records of the Company, the Company has not made any preferential allotment or private placement of shares or fully or partly convertible debentures during the year.
- xv. According to the information and explanations given to us and based on our examination of the records of the Company, the Company has not entered into non-cash transactions with directors or persons connected with him. Accordingly, paragraph 3(xv) of the Order is not applicable.
- xvi. The Company is not required to be registered under section 45-IA of the Reserve Bank of India Act 1934.

for K C Tak & Co.

Chartered Accountants

Firm's registration number: 000216C




CA Anil Jain

Partner

Membership number: 079005



New Delhi

Date: 24/05/2017



Annexure – 3 to the Auditors' Report (The Annexure referred to in Independent Auditors' Report on the Internal Financial Controls under Clause (i) of Sub-section 3 of Section 143 of the Companies Act, 2013 ("the Act")

To the members of the '**Central Mine Planning and Design Institute Limited** on the financial statements for the year ended 31 March 2017, we report that:

We have audited the internal financial controls over financial reporting of '**Central Mine Planning and Design Institute Limited** ("the Company") as of 31 March 2017 in conjunction with our audit of the financial statements of the Company for the year ended on that date.

Management's Responsibility for Internal Financial Controls

The Company's management is responsible for establishing and maintaining internal financial controls based on the internal control over financial reporting criteria established by the Company considering the essential components of internal control stated in the Guidance Note on Audit of Internal Financial Controls over Financial Reporting issued by the Institute of Chartered Accountants of India ('ICAI'). These responsibilities include the design, implementation and maintenance of adequate internal financial controls that were operating effectively for ensuring the orderly and efficient conduct of its business, including adherence to company's policies, the safeguarding of its assets, the prevention and detection of frauds and errors, the accuracy and completeness of the accounting records, and the timely preparation of reliable financial information, as required under the Companies Act, 2013.

Auditors' Responsibility

Our responsibility is to express an opinion on the Company's internal financial controls over financial reporting based on our audit. We conducted our audit in accordance with the Guidance Note on Audit of Internal Financial Controls over Financial Reporting (the "Guidance Note") and the Standards on Auditing, issued by ICAI and deemed to be prescribed under section 143(10) of the Companies Act, 2013, to the extent applicable to an audit of internal financial controls, both applicable to an audit of Internal Financial Controls and, both issued by the Institute of Chartered Accountants of India. Those Standards and the Guidance Note require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether adequate internal financial controls over financial reporting was established and maintained and if such controls operated effectively in all material respects.

Our audit involves performing procedures to obtain audit evidence about the adequacy of the internal financial controls system over financial reporting and their operating effectiveness. Our audit of internal financial controls over financial reporting included obtaining an understanding of internal financial controls over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the Company's internal financial controls system over financial reporting.



Meaning of Internal Financial Controls over Financial Reporting

A company's internal financial control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal financial control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorisations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorised acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Inherent Limitations of Internal Financial Controls Over Financial Reporting

Because of the inherent limitations of internal financial controls over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may occur and not be detected. Also, projections of any evaluation of the internal financial controls over financial reporting to future periods are subject to the risk that the internal financial control over financial reporting may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Opinion

In our opinion, the Company has, in all material respects, an adequate internal financial controls system over financial reporting and such internal financial controls over financial reporting were operating effectively as at 31 March 2017, based on the internal control over financial reporting criteria established by the Company considering the essential components of internal control stated in the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting issued by the Institute of Chartered Accountants of India.

for **K C Tak & Co.**

Chartered Accountants

Firm's registration number: 000216C

CA Anil Jain

Partner

Membership number: 079005



New Delhi

Date: 24/05/2017



SATISH KUMAR & ASSOCIATES

(COMPANY SECRETARIES)

SECRETARIAL AUDIT REPORT

For The Financial Year Ended March 31, 2017

[Pursuant to Section 204(1) of the Companies Act, 2013 and Rule No. 9 of the Companies Appointment and Remuneration of Managerial Personnel) Rules, 2014]

Satish Kumar & Associates

Company Secretaries

Flat No. 201, 2nd Floor, Urmila Apartment,
Uddhav Babu Lane, Tharpakhna,
Ranchi- 834001

Ph:- 09334606570/ 09135009905/ 0651-2212943

E-Mail:-

cssatish26@gmail.com/cssservices26@gmail.com

PAN:- ADGFS8830H

ST:- ADGFS8830HSD001

To,
The Members,
M/s Central Mine Planning & Design Institute Limited
Gondwana Place, Kanke Road,
Ranchi, Jharkhand – 834008

We have examined the registers, records, books and papers of M/s **Central Mine Planning & Design Institute Limited** ("the Company") for the Financial Year ended on 31st March, 2017 according to the provisions of:

1. The Companies Act, 2013 and the Rules made there under.
2. Secretarial Standards issued by the Institute of Company Secretaries of India.
3. Guidelines on Corporate Governance for Central Public Sector Enterprises, issued by Department of Public Enterprises vide their OM No. 18(8)/2005-GM dated 14th May, 2010.
4. Other Acts and Laws as applicable on the Company.

Secretarial Audit was conducted in a manner that provided us a reasonable basis for evaluating the Corporate Conducts/ Statutory Compliances of the Company and expressing our opinion thereon.

I. In our opinion, based on the examination carried out by us, verification of records produced to us and according to the information furnished to us by the Company and Officers, the Company has complied with the provisions of the Companies Act, 2013 ("the Act") and Rules made under the Act, the Memorandum and Articles of association of the Company, subject to the provisions as stated specifically herein; and also that the Company has proper board-processes and compliance-mechanism in place to the extent, in the manner and subject to the reporting made hereinafter:

1. Maintenance of various statutory registers and documents and making necessary entries therein.
2. Form of Balance Sheet as prescribed under Part I, form of Statement of Profit and Loss as prescribed under Part II and general instructions for preparation of the same as prescribed in Schedule III to the Act.



URMILA APARTMENT, FLAT NO. 201, 2ND FLOOR, UDDHAV BABU LANE
NEAR ST. ANNE'S GIRLS HIGH SCHOOL, THARPAKHNA, RANCHI, JHARKHAND
Contact No: 0651 – 2212943, 09334606570. Email id: cssatish26@gmail.com, cssservices26@gmail.com



SATISH KUMAR & ASSOCIATES

(COMPANY SECRETARIES)

3. Composition of the Board of Directors with an adequate balance of Executive and Non-Executive, Independent Directors during the period under review.
4. Registered Office and publication of the name of the Company.
5. Filing of requisite forms and returns with the Registrar of Companies, Jharkhand within the time prescribed under the Act and the rules framed there under.
6. Notice of Board Meetings and other Committee Meetings.
7. Convening and holding of the Meetings of Board of Directors and Committees thereof.
8. Notice and convening of 41st Annual General Meeting of the Members on Monday, 27th June, 2016.
9. Maintenance of Minutes of the proceedings of the Annual General Meeting, Extra-ordinary General Meeting, Board Meetings and Meetings of Committees of the Board, properly recorded in loose leaf form, which are being bound in a book form at regular intervals.
10. Payment of Remuneration to Directors.
11. Appointment and Remuneration of Statutory Auditors, Internal Auditors and Cost Auditors.
12. Composition and terms of reference of the Audit Committee and Nomination & Remuneration Committee.
13. Service of Documents by the Company on its Members and Auditors.

II. We further report that

1. The Directors have disclosed their Shareholdings and Directorships in other companies and interests in other entities as and when required and their interests have been noted and recorded by the Board.
2. The Directors have complied with the disclosure requirements in respect of their eligibility of appointments, their being independent and compliance with the Code of Conduct of Directors and Senior Management Personnel.
3. There are adequate systems and processes in the Company commensurate with the size and operations of the Company to monitor and ensure compliance with applicable laws, rules, regulations and guidelines.
4. There was no prosecution initiated and no fines or penalties were imposed on the Company, its Directors and Officers, during the period under review.

MANAGEMENT'S RESPONSIBILITY

1. Maintenance of Secretarial Records and devising of proper, adequate and effective systems to ensure compliance with the provisions of all applicable laws and regulations is the responsibility of the management of the Company. Our responsibility is to express an opinion on the secretarial records of the Company based on our Audit.
2. The compliance of the provisions of Corporate Governance and other applicable laws, rules, regulations, standards is the responsibility of management. Our examination was limited to the verification of procedure on test basis.



URMILA APARTMENT, FLAT NO. 201, 2ND FLOOR, UDDHAV BABU LANE
NEAR ST. ANNE'S GIRLS HIGH SCHOOL, THARPAKHNA, RANCHI, JHARKHAND
 Contact No: 0651 – 2212943, 09334606570. Email id: cssatish26@gmail.com, csservices26@gmail.com



SATISH KUMAR & ASSOCIATES

(COMPANY SECRETARIES)

AUDITOR'S RESPONSIBILITY


1. We have followed the audit practices and the processes as were appropriate to obtain reasonable assurance about the correctness of the contents of the secretarial records. The verification was done on test basis to ensure that correct facts are reflected in secretarial records. We believe that the processes and practices followed by us provide a reasonable basis to form our opinion.
2. We have examined the financial records in line of the compliances of the Companies Act and have not verified the correctness and appropriateness of Books of Accounts of the Company.
3. Wherever required, we have obtained the Management Representation about the compliance of laws, rules and regulations, happening of events, etc.
4. The Secretarial Audit report is neither an assurance as to the future viability of the Company nor of the efficacy or effectiveness with which the management has conducted the affairs of the Company.

During the Audit Period, the Company has complied with the provisions of the Act, Rules, Regulations, Guidelines, etc. mentioned above subject to the observations as detailed in the Annexure that follows:

For Satish Kumar & Associates

Place: Ranchi

Date: 15th May, 2017


Satish Kumar
Company Secretary
FCS No.: 8423
C.P. No.: 9788



ANNEXURE

REMARKS OF SECRETARIAL AUDITOR AND EXPLANATION BY MANAGEMENT

SL. NO.	OBSERVATIONS	EXPLANATION
1.	The Company needs to have Five (5) Independent Directors including a woman director, but as on the date of report, the company has only two independent directors in its board and no woman director has been appointed.	The Company has made communications with the Ministry of Coal, who is the appointing authority, for appointment of the required number of Independent directors and Woman Director, to comply with the provisions of the Companies Act, 2013 and DPE Guidelines.





Addendum - VII



74/
No. CA/LA-II/AC-6/CMPSIL/2016-17

कार्यालय प्रधान निदेशक वाणिज्यिक लेखापरीक्षा तथा पदेन सदस्य लेखापरीक्षा

बोर्ड - II कोलकाता

पुराना निजाम महल, आचार्य जगदीश चन्द्र बोस रोड,

कोलकाता - 700 020

OFFICE OF THE PRINCIPAL DIRECTOR OF
COMMERCIAL AUDIT & EX-OFFICIO MEMBER

AUDIT BOARD - II, KOLKATA

Old Nizam Palace, 234/4, Acharya Jagadish Chandra Bose Road,
Kolkata-700 020

Date 13/06/2017

To
The Chairman-cum-Managing Director,
Central Mine Planning & Design Institute Limited,
Ranchi

Sub: Comments of the Comptroller and Auditor General of India under Section 143(6) (b) of the Companies Act, 2013 on the financial statements of Central Mine Planning & Design Institute Limited for the year ended 31 March 2017.

Sir,

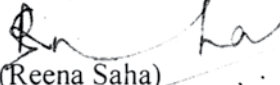
I forward herewith the Comments of the Comptroller and Auditor General of India under Section 143 (6) (b) of the Companies Act, 2013 on the financial statements of Central Mine Planning & Design Institute Limited for the year ended 31 March 2017.

The receipt of this letter may please be acknowledged.

Yours faithfully,

Encl: As stated.

Place: Kolkata
Dated: 13 June 2017


(Reena Saha)

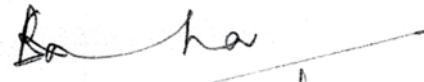
Principal Director of Commercial Audit
& Ex-Officio Member, Audit Board-II
Kolkata

COMMENTS OF THE COMPTROLLER AND AUDITOR GENERAL OF INDIA
UNDER SECTION 143 (6) (b) OF THE COMPANIES ACT, 2013 ON THE
FINANCIAL STATEMENTS OF CENTRAL MINE PLANNING & DESIGN
INSTITUTE LIMITED FOR THE YEAR ENDED 31 MARCH 2017.

The preparation of financial statements of Central Mine Planning & Design Institute Limited for the year ended 31 March 2017 in accordance with the financial reporting framework prescribed under the Companies Act, 2013 (Act) is the responsibility of the management of the company. The statutory auditors appointed by the Comptroller and Auditor General of India under Section 139(5) of the Act is responsible for expressing opinion on the financial statements under section 143 of the Act based on independent audit in accordance with the standards on auditing prescribed under section 143 (10) of the Act. This is stated to have been done by them vide their Audit Report dated 24.05.2017.

I, on behalf of the Comptroller and Auditor General of India, have conducted a supplementary audit under section 143(6) (a) of the Act of the financial statements of Central Mine Planning & Design Institute Limited for the year ended 31 March 2017. This supplementary audit has been carried out independently without access to the working papers of the statutory auditors and is limited primarily to inquiries of the statutory auditors and company personnel and a selective examination of some of the accounting records. On the basis of my audit nothing significant has come to my knowledge which would give rise to any comment upon or supplement to statutory auditors' report.

For and on behalf of the
Comptroller and Auditor General of India


(Reena Saha)
Principal Director of Commercial Audit
& Ex-Officio Member, Audit Board-II
Kolkata

Place: Kolkata
Dated: 13 June 2017

Addendum - VIII

Contracts or Arrangements with related parties U/s 188 (1).

Form No. AOC-2

(Pursuant to clause (h) of sub-section (3) of section 134 of the Act and Rule 8(2) of the Companies (Accounts) Rules, 2014)

Form for disclosure of particulars of contracts/arrangements entered into by the company with related parties referred to in sub-section (1) of section 188 of the Companies Act, 2013 including certain arm's length transactions under third proviso thereto.

S.No	Particulars	Details
1.	Details of contracts or arrangement or transactions not at arm's length basis	NIL
a	Name(s) of the related party and nature of relationship	
b	Nature of contracts/arrangements/transactions	
c	Duration of the contracts/arrangements/transactions	
d	Salient terms of the contracts or arrangements or transactions including the value, if any	
e	Justification for entering into such contracts or arrangements or transactions	
f	Date(s) of approval by the Board	
g	Amount paid as advances, if any:	
h	Date on which the special resolution was passed in general meeting as required under first proviso to section 188	
2.	Details of material contracts or arrangement or transactions at arm's length basis	As per Annexure -A
a	Name (s) of the related party and nature of relationship	
b	Nature of contracts/arrangements/transactions	
c	Duration of the contracts/arrangements/transactions	
d	Salient terms of the contracts or arrangements or transactions including the value, if any:	
e	Date(s) of approval by the Board if any:	
f	Amount paid as advances, if any	



(Shekhar Saran)

Chairman-cum- Managing Director

Place : Ranchi
Date : 06.07.2017

Annexure - A**Related Party Transactions within Group**

The Company being a Government related entity is exempt from the general disclosure requirements in relation to related party transactions and outstanding balances with the controlling Governments and another entity under same Government.

As per Ind AS 24, following are the disclosures regarding nature and amount of significant transactions.

(₹ in Crore)

Name of the Company	Nature of relationship	Amount of transactions during the year	Nature of Transactions
Eastern Coalfields Limited	Under Same Management	110.74	Employees related, Sales & TDS
Bharat Coking Coal Limited	Under Same Management	43.43	Employees related, Sales & TDS
Central Coalfields Limited	Under Same Management	103.80	Employees Related, Sales & TDS
Western Coalfields Limited	Under Same Management	115.47	Employees Related, Sales & TDS
Northern Coalfields Limited	Under Same Management	82.95	Employees Related, Sales & TDS
South Eastern Coalfields Limited	Under Same Management	369.15	Employees Related, Sales & TDS
Mahanadi Coalfields Limited	Under Same Management	60.24	Employees Related, Sales & TDS
CIL	100% Holding	919.59	Employees Related, Sales, Funds & TDS

Addendum - X

ANNEXURE FORMING PART OF DIRECTORS' REPORT FOR THE YEAR ENDED 31.03.2017- INFORMATION AS PER RULES 5(2) OF THE COMPANIES ACT, 2013 READ WITH COMPANIES (Appointment and Remuneration of Managerial Personnel), Rules 2014.

Sl. No.	Name	Designation/nature of work	Remuneration During the year (Rs.)	Nature of employment Permanent / temporary	Qualification	Experience (yrs.)	Date of commencement	Age on 31 st Mar 2017 (Yrs)	Last employment held	% of eq Shares held	Whether related to Dir./ Manager
1	2	3	4	5	6	7	8	9	10	11	12
(a)	Employed throughout the financial year under review and were in receipt of remuneration for that financial year in the aggregate of not less than Rs.1, 02, 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. 8,50,000/- per month.										
-----Nil-----											
(c)	Employed throughout the year or part and was in receipt of remuneration in excess of that drawn by MD/ WTD/Manager and holds not less than two percent of equity shares of the company.										
-----Nil-----											

Addendum - XI**Annexure to CSR Report****Expenditure incurred on CSR & Sustainability account (2016-17):**

The expenditure incurred on CSR & sustainability account during 2016-17 was Rs.135.07 Lakhs against the total budget of Rs. 120 Lakhs. The CSR Budget & Expenditure for the year 2016-17 against 2% of average net profit of the company was Rs 77.64 Lakhs only and after obtaining the approval of CMPDI Board, the allotted fund of Rs.77.64 lakh has been increased to Rs 120 lakhs for the year 2016-17.

CSR BUDGETS EXPENDITURE FOR THE YEAR 2016-17			
UNIT	Budget (in Lakh)	Expenditure on CSR & Sustainability (in Lakhs)	Expenditure on CSR (in Lakhs)
HQ	73.25	75.72	75.72
RI-I	8.00	6.20	6.20
RI-II	4.10	3.53	3.53
RI-III	6.10	5.94	5.94
RI-IV	16.42	15.69	9.34
RI-V	21.20	17.94	17.94
RI-VI	8.00	7.02	7.02
RI-VII	4.55	3.03	3.03
TOTAL	141.62	135.07	128.72

'CSR Budget limited to 120.00 Lakhs only.

CSR ACTIVITIES WISE EXPENDITURE FOR THE YEAR 2016-17

SL. No	Activities	Expenditure on CSR & Sustainability (in Lakhs)	Expenditure on CSR (in Lakhs)
1	Education	33.16	33.16
2	Infrastructure	72.97	72.97
3	Water Supply	5.99	5.99
4	Healthcare	10.00	10.00
5	Sustainability	6.35	—
6	Skill Development/Women Empowerment	3.19	3.19
7	Social development	0.33	0.33
8	Sports	0.25	0.25
9	Others	2.83	2.83
10	Total	135.07	128.72

The implementation and monitoring of CSR policy, is in compliance with CSR objective and policy of the Company.



Chairman, CSR Committee



Chairman-cum-Managing Director



ANNUAL ACCOUNTS 2016-17

Central Mine Planning and Design Institute Limited

Balance Sheet As at 31st March, 2017

(₹ in Crore)

		Figures as at the end of		
	Note No.	31.03.2017 (Audited)	31.03.2016 (Audited) (Restated)	01.04.2015 (Opening) (Restated)
ASSETS				
Non-Current Assets				
(a) Property, Plant & Equipments	3	132.95	97.41	77.05
(b) Capital Work in Progress	4	46.53	61.44	33.1
(c) Exploration and Evaluation Assets	5			
(d) Other Intangible Assets	6	2.24	2.85	4.53
(e) Intangible Assets under Development				
(f) Investment Property				
(g) Financial Assets				
(i) Investments	7			
(ii) Loans	8	0.02	0.03	0.06
(iii) Other Financial Assets	9	1.15	1.32	1.6
(h) Deferred Tax Assets (net)		115.62	100.47	106.43
(i) Other non-current assets	10	13.03	10.29	3.32
Total Non-Current Assets (A)		311.54	273.81	226.09
Current Assets				
(a) Inventories	12	9.38	7.41	6.1
(b) Financial Assets				
(i) Investments	7			
(ii) Trade Receivables	13	327.65	248.24	236.06
(iii) Cash & Cash equivalents	14	77.18	124.3	85.92
(iv) Other Bank Balances	15			
(v) Loans	8			
(vi) Other Financial Assets	9	150.29	135.89	211.670
(c) Current Tax Assets (Net)				
(d) Other Current Assets	11	255.53	283.54	251.53
Total Current Assets (B)		820.03	799.38	791.28
Total Assets (A+B)		1131.57	1073.19	1017.37
EQUITY AND LIABILITIES				
Equity				
(a) Equity Share Capital	16	19.04	19.04	19.04
(b) Other Equity	17	236.66	196.21	163.8
Equity attributable to equity holders of the company		255.7	215.25	182.84
Non-Controlling Interests		-	-	
Total Equity (A)		255.7	215.25	182.84



Balance Sheet As at 31st March, 2017

(₹ in Crore)

	Note No.	Figures as at the end of		
		31.03.2017 (Audited)	31.03.2016 (Audited) (Restated)	01.04.2015 (Opening) (Restated)
Liabilities				
Non-Current Liabilities				
(a) Financial Liabilities				
(i) Borrowings	18			
(ii) Trade Payables (if any)				
(iii) Other Financial Liabilities	20	49.62	42.43	32.86
(b) Provisions	21	224.16	203.06	225.78
(c) Deferred Tax Liabilities (net)				
(d) Other Non-Current Liabilities	22			
Total Non-Current Liabilities (B)		273.78	245.49	258.64
Current Liabilities				
(a) Financial Liabilities				
(i) Borrowings	18			
(ii) Trade payables	19	1.13	0.99	0.77
(iii) Other Financial Liabilities	20	10.51	6.37	5.44
(b) Other Current Liabilities	23	175.84	187.95	156.68
(c) Provisions	21	263.74	305.43	309.39
(d) Current Tax Liabilities (net)		150.87	111.71	103.61
Total Current Liabilities (C)		602.09	612.45	575.89
Total Equity and Liabilities (A+B+C)		1131.57	1073.19	1,017.37

The Accompanying Notes & Note 1, 2 & 38 form an integral part of Financial Statements.

(A. Mundhra)
Company Secretary

(D. K. Rao)
General Manager (F)

(V. K. Sinha)
Director
DIN-06793778

(Shekhar Sharan)
Chairman-Cum-
Managing Director
DIN-06607551

In terms of our report of even date attached

For K C TAK & CO.
Chartered Accountants
Firm Registration No.000216C

(CA ANIL JAIN)

Partner
Membership No. 079005

Date: 24th May, 2017

Place: Delhi

Central Mine Planning and Design Institute Limited

STATEMENT OF PROFIT & LOSS For the Period Ended 31st March, 2017

(₹ in Crore)

	Note No.	For the Year ended 31.03.2017 (Audited)	For the Year ended 31.03.2016 (Audited)
<u>Revenue from Operations</u>			
A Sales (Net)	24	930.52	759.27
B Other Operating Revenue (Net)			
(I) Revenue from Operations (A+B)		930.52	759.27
(II) Other Income	25	15.47	5.08
(III) Total Income (I+II)		945.99	764.35
(IV) <u>EXPENSES</u>			
Cost of Materials Consumed	26	26.65	21.92
Purchases of Stock-in-Trade			
Changes in inventories of finished goods/work in progress and Stock in trade	27		
Excise Duty			
Employee Benefits Expense	28	481.75	435.08
Power & Fuel		3.30	3.55
Corporate Social Responsibility Expense	29	1.02	2.01
Repairs	30	23.18	19.90
Contractual Expense	31	271.07	205.09
Finance Costs	32	0.31	0.24
Depreciation/Amortization/ Impairment expense		20.26	12.39
Provisions	33	0.13	(0.11)
Write off	34		
Other Expenses	35	52.79	48.93
Total Expenses (IV)		880.46	749.00
(V) Profit before exceptional items and Tax (III-IV)		65.53	15.35
(VI) Exceptional Items		-	-
(VII) Profit before Tax (V-VI)		65.53	15.35
(VIII) Tax expense	36	24.94	6.21
(IX) Profit for the period from continuing operations (VII-VIII)		40.59	9.14
(X) Profit/(Loss) from discontinued operations		-	-
(XI) Tax exp of discontinued operations		-	-
(XII) Profit/(Loss) from discontinued operations (after Tax) (X-XI)		-	-
(XIII) Share in JV's/Associate's profit/(loss)		-	-
(XIV) Profit for the Period (IX+XII+XIII)		40.59	9.14
<u>Other Comprehensive Income</u>	37		
A (i) Items that will not be reclassified to profit or loss		(2.70)	22.68
(ii) Income tax relating to items that will not be reclassified to profit or loss			

STATEMENT OF PROFIT & LOSS For the Period Ended 31st March, 2017

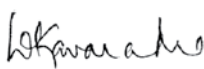
(₹ in Crore)

	Note No.	For the Year ended 31.03.2017 (Audited)	For the Year ended 31.03.2016 (Audited)
B (i) Items that will be reclassified to profit or loss			
(ii) Income tax relating to items that will be reclassified to profit or loss		(0.93)	7.85
(XV) Total Other Comprehensive Income		(1.77)	14.83
(XVI) Total Comprehensive Income for the period (XIV+XV) (Comprising Profit (Loss) and Other Comprehensive Income for the period)		38.82	23.97
Profit attributable to:			
Owners of the company		40.59	9.14
Non-controlling interest		40.59	9.14
Total Comprehensive Income attributable to:			
Owners of the company		38.82	23.97
Non-controlling interest		38.82	23.97
(XVII) Earnings per equity share (for continuing operation):			
(1) Basic		2,131.83	480.04
(2) Diluted		2,131.83	480.04
(XVIII) Earnings per equity share (for discontinued operation):			
(1) Basic		-	-
(2) Diluted		-	-
(XIX) Earnings per equity share (for discontinued & continuing operation):			
(1) Basic		2,131.83	480.04
(2) Diluted		2,131.83	480.04

The Accompanying Notes & Note 1, 2 & 38 form an integral part of Financial Statements.



(A. Mundhra)
Company Secretary



(D. K. Rao)
General Manager (F)



(V. K. Sinha)
Director
DIN-06793778



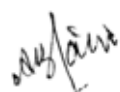
(Shekhar Sharan)
Chairman-Cum-
Managing Director
DIN-06607551

In terms of our report of even date attached

For K C TAK & CO.

Chartered Accountants

Firm Registration No.000216C



(CA ANIL JAIN)

Partner

Membership No. 079005

Date: 24th May, 2017

Place: Delhi

Central Mine Planning and Design Institute Limited

CASH FLOW STATEMENT (INDIRECT METHOD) For the Period Ended 31st March, 2017

(₹ in Crore)

	For the Year ended 31.03.2017	For the Year ended 31.03.2016
A. CASH FLOWS FROM OPERATING ACTIVITIES:		
Total Comprehensive Income before tax	62.83	38.03
Adjustment for:		
Depreciation & Impairment of Fixed Assets	20.00	10.15
Interest from Bank Deposits	(11.25)	(0.88)
Finance cost	0.31	0.24
Interest / Dividend from investments	0.00	0.00
Profit / Loss on sale of Fixed Assets	(0.14)	(0.35)
Other non-operating Income	(4.08)	(3.85)
Liability write back during the period	0.00	0.00
Advance Stripping Activity Adjustment	0.00	0.00
Operating profit before Current / Non Current Assets and Liabilities Adjustments for :	67.67	43.34
Trade Receivable	(79.41)	(11.88)
Inventories	(1.97)	(1.31)
Short/Long term Loans/Advances & Other Current Assets	(4.10)	43.07
Short/Long term Liabilities and Provisions	17.93	22.74
Cash generated from operations	0.12	95.96
Income Tax paid / refund	(24.01)	(14.06)
Interest paid	(0.31)	(0.24)
Net Cash Flow from Operating Activities (A)	(24.20)	81.66
B. CASH FLOWS FROM INVESTING ACTIVITIES		
Purchase of Fixed Assets	(40.05)	(61.71)
Proceeds from sale of Assets	0.17	0.47
Other Long Term Loans & Advances (Capital Advances)	0.00	0.00
Interest received on Fixed Deposit / Loan to Subsidiary	11.25	0.88
Other non-operating Income	4.08	3.85
Investment in Bank Deposit	0.00	0.00
Change in investments	0.00	0.00
Investment in joint venture	0.00	0.00
Interest pertaining to Investing Activities	0.00	0.00
Interest / Dividend from investments	0.00	0.00
Net cash flow from Investing Activities (B)	(24.55)	(56.51)

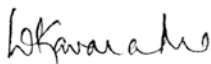
C. CASH FLOWS FROM FINANCING ACTIVITIES

Proceed from short term Borrowings/Govt. Grant	1.63	13.22
Repayment of Borrowings	0.00	0.00
Interest & Finance cost pertaining to Financing Activities	0.00	0.00
Receipt of Shifting & Rehabilitation Fund	0.00	0.00
Dividend & Dividend Tax	0.00	0.00
Buyback of Equity Share Capital	0.00	0.00
Net cash used in Financing Activities (C)	1.63	13.22
Net increase/ decrease in Cash & Bank Balances (A+B+C)	(47.12)	38.38
Cash and cash equivalent (Opening Balance)	124.30	85.92
Cash and cash equivalent (Closing Balance)	77.18	124.30

(All figures in bracket represent outflow)



(A. Mundhra)
Company Secretary



(D. K. Rao)
General Manager (F)



(V. K. Sinha)
Director
DIN-06793778



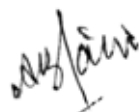
(Shekhar Sharan)
Chairman-Cum-
Managing Director
DIN-06607551

In terms of our report of even date attached

For K C TAK & CO.

Chartered Accountants

Firm Registration No.000216C



(CA ANIL JAIN)

Partner

Membership No. 079005

Date: 24th May, 2017

Place: Delhi

Central Mine Planning and Design Institute Limited

STATEMENT OF CHANGES IN EQUITY FOR THE YEAR ENDED 31.03.2017

A. EQUITY SHARE CAPITAL

(₹ in Crore)

Particulars	Balance as at 01.04.2015	Changes In Equity Share Capital During The Year	Balance as at 31.03.2016	Balance as at 01.04.2016	Changes In Equity Share Capital During The Year	Balance as at 31.03.2017
1,90,400 Equity Shares of ₹1000/- each	19.04	-	19.04	19.04	-	19.04

OTHER EQUITY

	Equity portion of Preference Share Capital	Other Reserves				General Reserve	Retained Earnings	Non-Controlling Interest	Equity
		Capital Redemption reserve	Capital reserve	CSR Reserve	Sustainable Development Reserve				
Balance as at 01.04.2015	-	-	9.73	-	-	5.77	143.52	-	159.02
Changes in accounting policy	-	-	-	-	-	-	4.78	-	-
Prior period errors	-	-	-	-	-	-	-	-	-
Restated balance as at 01.04.2015	-	-	9.73	-	-	5.77	148.30	-	163.80
Additions during the year	-	-	10.04	-	-	-	-	-	10.04
Adjustments during the year	-	-	(1.60)	-	-	-	-	-	(1.60)
Total comprehensive income during the year	-	-	-	-	-	-	23.97	-	23.97
<u>Appropriations</u>	-	-	-	-	-	-	-	-	-
Transfer to / from General reserve	-	-	-	-	-	-	-	-	-
Transfer to / from Other reserves	-	-	-	-	-	-	-	-	-
Interim Dividend	-	-	-	-	-	-	-	-	-



- 2) The comparative figures of the corresponding period in the previous year i.e. for the year ended 31st March, 2016, are compiled after making the necessary adjustments in accordance with Ind AS and have not been subjected to limited review by the Statutory auditors of the company.

Central Mine Planning and Design Institute Limited

NOTES TO THE FINANCIAL STATEMENTS

NOTE - 3 : PROPERTY, PLANT AND EQUIPMENTS

(₹ in Crore)

	Freehold Land	Other Land	Land Reclamation/ Site Restoration Costs	Building (including water supply, roads and culverts)	Plant and Equipments	Telecommunication	Railway Sidings	Furniture and Fixtures	Office Equipments	Vehicles	Aircraft	Other Mining Infra- structure	Surveyed Off Assets	Others (Specify in note)	Total
Net Carrying Amount:															
As at 1 April 2015	1.15	1.34	-	25.83	35.78	0.15	-	4.53	0.62	6.97	-	-	0.68	-	77.05
Additions	-	-	-	3.81	22.92	-	-	4.00	-	1.94	-	-	0.16	-	32.83
Deletions/Adjustments	-	-	-	(0.01)	(2.18)	-	-	(0.37)	-	(0.85)	-	-	(0.13)	-	(3.54)
As at 31 March 2016	1.15	1.34	-	29.63	56.52	0.15	-	8.16	0.62	8.06	-	-	0.71	-	106.34
As at 1 April 2016	1.15	1.34	-	29.63	56.52	0.15	-	8.16	0.62	8.06	-	-	0.71	-	106.34
Additions	-	-	-	17.65	34.62	0.05	-	0.62	0.41	1.37	-	-	0.23	-	54.95
Deletions/Adjustments	-	-	-	0.17	(0.91)	-	-	(0.11)	0.01	(0.25)	-	-	(0.24)	-	(1.33)
As at 31 March 2017	1.15	1.34	-	47.45	90.23	0.20	-	8.67	1.04	9.18	-	-	0.70	-	159.96
Accumulated Depreciation and Impairment															
As at 1 April 2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Charge for the year	-	0.03	-	1.04	7.93	-	-	2.25	-	1.51	-	-	-	-	12.76
Impairment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Deletions/Adjustments	-	-	-	-	(2.04)	-	-	(1.02)	-	(0.77)	-	-	-	-	(3.83)
As at 31 March 2016	-	0.03	-	1.04	5.89	-	-	1.23	-	0.74	-	-	-	-	8.93
As at 1 April 2016	-	0.03	-	1.04	5.89	-	-	1.23	-	0.74	-	-	-	-	8.93

	Freehold Land	Other Land	Land Reclamation/ Site Restoration Costs	Building (including water supply, roads and culverts)	Plant and Equipments	Telecommunication	Railway Sidings	Furniture and Fixtures	Office Equipments	Vehicles	Aircraft	Other Mining Infra- structure	Surveyed Off Assets	Others (Specify in note)	Total
Charge for the year	-	0.02	-	1.63	14.20	0.02	-	1.13	0.30	1.73					19.03
Impairment															
Deletions/Adjustments	-	(0.01)	-	-	(0.60)	-	-	(0.27)	0.01	(0.08)					(0.95)
As at 31 March 2017	-	0.04	-	2.67	19.49	0.02	-	2.09	0.31	2.39	-	-	-	-	27.01
Net Carrying Amount															-
As at 31 March 2017	1.15	1.30	-	44.78	70.74	0.18	-	6.58	0.73	6.79	-	-	0.70	-	132.95
As at 31 March 2016	1.15	1.31	-	28.59	50.63	0.15	-	6.93	0.62	7.32	-	-	0.71	-	97.41
As at 1 April 2015	1.15	1.34	-	25.83	35.78	0.15	-	4.53	0.62	6.97	-	-	0.68	-	77.05
Reconciliation of Carrying value as per Ind AS and Previous GAAP as on 01.04.2015															
Gross Carrying Amount:															
As at 1 April 2015	1.15	2.19		42.71	118.67	1.87		10.85	2.90	14.90			0.68		195.92
Accumulated Depreciation and Impairment															
As at 1 April 2015		0.85		16.88	82.89	1.72		6.32	2.28	7.93					118.87
Net carrying amount	1.15	1.34	-	25.83	35.78	0.15	-	4.53	0.62	6.97	-	-	0.68	-	77.05

Note:

- Depreciation has been provided as per Schedule II of the Companies Act, 2013.
- Other land includes the lease hold land of Rs. 1.30 (Net Carrying Amount) of RI-7. Lease period for the same is for 90 Years w.e.f from 8.07.1990 & 4.01.2011 with renewal option.

Central Mine Planning and Design Institute Limited

NOTES TO THE FINANCIAL STATEMENTS

NOTE - 4 : CAPITAL WIP

(₹ in Crore)

	Building (including water supply, roads and culverts)	Plant and Equipments	Railway Sidings	Other Mining infrastructure/ Development	Others (to be specified in note)	Total
Net Carrying Amount:						
As at 1 April 2015	16.37	16.73				33.10
Additions	11.73	29.27				41.00
Capitalisation/ Deletions	(6.38)	(6.28)				(12.66)
As at 31 March 2016	21.72	39.72	-	-	-	61.44
As at 1 April 2016		9.72				61.44
Additions	10.31	25.32				35.63
Capitalisation/ Deletions	(17.74)	(32.80)				(50.54)
As at 31 March 2017	14.29	32.24	-	-	-	46.53
Provision and Impairment						
As at 1 April 2015						-
Charge for the year						-
Impairment						-
Deletions/Adjustments						-
As at 31 March 2016	-	-	-	-	-	-
As at 1 April 2016						-
Charge for the year						-
Impairment						-
Deletions/Adjustments						-
As at 31 March 2017	-	-	-	-	-	-
Net Carrying Amount						-
As at 31 March 2017	14.29	32.24	-	-	-	46.53
As at 31 March 2016	21.72	39.72	-	-	-	61.44
As at 1 April 2015	16.37	16.73	-	-	-	33.10
Reconciliation of Carrying value as per Ind AS and Previous GAAP as on 01.04.2015						
Gross Carrying Amount:						
As at 1 April 2015	16.37	16.73				33.10
Provision and Impairment						
As at 1 April 2015						-
Net Carrying amount	16.37	16.73	-	-	-	33.10



Central Mine Planning and Design Institute Limited

NOTES TO THE FINANCIAL STATEMENTS

NOTE - 5 : Exploration and Evaluation Assets

(₹ in Crore)

	Exploration and Evaluation Costs
Net Carrying Amount:	
As at 1 April 2015	
Additions	
Deletions/Adjustments	
As at 31 March 2016	-
As at 1 April 2016	
Additions	
Deletions/Adjustments	
As at 31 March 2017	-
Provision and Impairment	
As at 1 April 2015	
Charge for the year	
Impairment	
Deletions/Adjustments	
As at 31 March 2016	-
As at 1 April 2016	
Charge for the year	
Impairment	
Deletions/Adjustments	
As at 31 March 2017	-
Net Carrying Amount	
As at 31 March 2017	-
As at 31 March 2016	-
As at 1 April 2015	-

Reconciliation of Carrying value as per Ind AS and Previous GAAP as on 01.04.2015

Gross Carrying Amount:	
As at 1 April 2015	-
Provision and Impairment	
As at 1 April 2015	-
Net Carrying amount	-

Central Mine Planning and Design Institute Limited

NOTES TO THE FINANCIAL STATEMENTS

NOTE - 6 : OTHER INTANGIBLE ASSETS

(₹ in Crore)

	Computer Software	Others (specify in note)	Total
Net Carrying Amount:			
As at 1 April 2015	4.53	-	4.53
Additions	0.29		0.29
Deletions/Adjustments	-		-
As at 31 March 2016	4.82	-	4.82
As at 1 April 2016	4.82		4.82
Additions	1.31		1.31
Deletions/Adjustments			-
As at 31 March 2017	6.13	-	6.13
Amortisation and Impairment			
As at 1 April 2015			
Charge for the year	1.97		1.97
Impairment			-
Deletions/Adjustments			-
As at 31 March 2016	1.97	-	1.97
As at 1 April 2016	1.97		1.97
Charge for the year	1.92		1.92
Impairment			-
Deletions/Adjustments			-
As at 31 March 2017	3.89	-	3.89
Net Carrying Amount			
As at 31 March 2017	2.24	-	2.24
As at 31 March 2016	2.85	-	2.85
As at 1 April 2015	4.53	-	4.53

Reconciliation of Carrying value as per Ind AS and Previous GAAP as on 01.04.2015

Gross Carrying Amount:			
As at 1 April 2015	7.55		7.55
Provision and Impairment			
As at 1 April 2015	3.02		3.02
Net Carrying amount	4.53	-	4.53

Central Mine Planning and Design Institute Limited

NOTES TO THE FINANCIAL STATEMENTS

Details of Assets as per Note No. 3, 4, 5 & 6

(₹ 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 01/04/16	Addition during Period ended 31/03/17	Adj./Sales/ during Period ended 31/03/17	As on 31/03/17	As on 01/04/16	Addition during Period ended 31/03/17	Adj./Sales/ during Period ended 31/03/17	As on 31/03/17	As on 31/03/16
I-CMPDI - Fixed Assets									
<u>Land</u>									
(a) Freehold	1.15	-	-	1.15	-	-	-	1.15	1.15
(b) Leasehold	2.19	-	-	2.19	0.88	0.02	(0.01)	1.30	1.31
Buildings	46.20	17.65	0.17	64.02	17.86	1.62	(0.01)	44.55	28.34
Plant & Machinery	101.97	34.35	(0.91)	135.41	57.18	13.69	(0.61)	65.15	44.79
Office Equipments	2.90	0.41	-	3.31	2.28	0.30	0.01	0.72	0.62
Furniture & Fittings	13.54	0.62	(0.10)	14.06	6.89	1.07	(0.26)	6.36	6.65
Telecom	1.87	0.05	-	1.92	1.72	0.02	-	0.18	0.15
Vehicle	15.94	1.37	(0.25)	17.06	8.63	1.73	(0.08)	6.78	7.31
TOTAL (I) - Fixed Assets	185.76	54.45	(1.09)	239.12	95.44	18.45	(0.96)	126.19	90.32

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

<u>Land</u>									
(a) Freehold	-	-	-	-	-	-	-	-	-
(b) Leasehold	-	-	-	-	-	-	-	-	-
Buildings	0.31	-	-	0.31	0.06	0.01	0.01	0.23	0.25
Plant & Machinery	37.44	0.27	-	37.71	31.60	0.51	0.01	5.59	5.84
Office Equipments	-	-	0.01	0.01	-	-	-	0.01	-

Furniture & Fittings	0.94	-	(0.01)	0.93	0.66	0.06	(0.01)	0.71	0.22	0.28
Telecom	-	-	-	-	-	-	-	-	-	-
Vehicle	0.05	-	-	0.05	0.04	-	-	0.04	0.01	0.01
TOTAL (II) Fixed Assets	38.74	0.27	-	39.01	32.36	0.58	0.01	32.95	6.06	6.38
TOTAL (I +II) - Fixed Assets	224.50	54.72	(1.09)	278.13	127.80	19.03	(0.95)	145.88	132.25	96.70

(B) WIP - (Excluding Assets - S&T CCDA,EMSC,UNDP,PRE,CIL R&D etc.)

(I) WIP - CMPDIL Assets

Buildings	21.72	10.31	(17.74)	14.29					14.29	21.72
Plant & Machinery	28.45	23.05	(32.58)	18.92					18.92	28.45
TOTAL (I) - WIP	50.17	33.36	(50.32)	33.21	-	-	-	-	33.21	50.17

(II) WIP (S&T CCDA,EMSC,UNDP,PRE,CIL R&D etc.)

Plant & Machinery	11.27	2.27	(0.22)	13.32					13.32	11.27
TOTAL (II) - WIP	11.27	2.27	(0.22)	13.32	-	-	-	-	13.32	11.27
TOTAL (I +II) - WIP	61.44	35.63	(50.54)	46.53	-	-	-	-	46.53	61.44

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

(I) Software - CMPDI

	5.67	1.31		6.98	2.92	1.81		4.73	2.25	2.75
TOTAL (I) - Software	5.67	1.31	-	6.98	2.92	1.81	-	4.73	2.25	2.75

(II) Software (S&T CCDA,EMSC,UNDP,PRE,CIL R&D etc.)

	2.17			2.17	2.07	0.11		2.18	(0.01)	0.10
TOTAL (II) - Software	2.17	-	-	2.17	2.07	0.11	-	2.18	(0.01)	0.10
TOTAL (I +II) - Software	7.84	1.31	-	9.15	4.99	1.92	-	6.91	2.24	2.85

(D) Surveyed Off Assets	0.71	0.23	(0.24)	0.70					0.70	0.71
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Central Mine Planning and Design Institute Limited

NOTES TO THE FINANCIAL STATEMENTS

NOTE - 7 : INVESTMENTS

(₹ in Crore)

	Figures as at the end of		
	31.03.2017 (Audited)	31.03.2016 (Audited) (Restated)	01.04.2015 (Opening) (Restated)
Non Current			
Investment in Shares			
Equity Shares in Joint Venture Companies			
Other Investments			
In Secured Bonds			
In Co-operative Shares			
Total	-	-	-
Aggregate amount of unquoted investments:	-	-	-
Aggregate amount of quoted investments:	-	-	-
Market value of quoted investments:	-	-	-
Aggregate amount of impairment in value of investments:	-	-	-

NOTES TO THE FINANCIAL STATEMENTS

NOTE - 7 : INVESTMENTS (Contd...)

(₹ in Crore)

	Figures as at the end of		
	31.03.2017 (Audited)	31.03.2016 (Audited) (Restated)	01.04.2015 (Opening) (Restated)
Current			
Mutual Fund Investment			
UTI Mutual Fund			
UTI Liquid Cash Plan			
LIC Mutual Fund			
SBI Mutual Fund			
Canara Robeco Mutual Fund			
Union KBC Mutual Fund			
BOI AXA Mutual Fund			
Total	-	-	-
Aggregate of Quoted Investment:	-	-	-
Aggregate of unquoted investments:	-	-	-
Market value of Quoted Investment:	-	-	-
Aggregate amount of impairment in value of investments:	-	-	-

Central Mine Planning and Design Institute Limited

NOTES TO THE FINANCIAL STATEMENTS

NOTE - 8 : LOANS

(₹ in Crore)

	Figures as at the end of		
	31.03.2017 (Audited)	31.03.2016 (Audited) (Restated)	01.04.2015 (Opening) (Restated)
Non-Current			
Loans to Related parties			
- Secured, considered good			
- Unsecured, considered good			
- Doubtful			
Less: Provision for doubtful loans			
Loans to Employees			
- Secured, considered good	0.02	0.03	0.06
- Unsecured, considered good			
- Doubtful			
Less: Provision for doubtful loans			
Other Loans (to be specified in note)			
- Secured, considered good			
- Unsecured, considered good			
- Doubtful			
Less: Provision for doubtful loans			
Total	0.02	0.03	0.06
CLASSIFICATION			
Secured, considered good			
Unsecured, Considered good			
Doubtful			



Current

Loans to Related parties

- Secured, considered good
- Unsecured, considered good
- Doubtful

--	--	--

Less: Provision for doubtful loans

--	--	--

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Loans to Employees

- Secured, considered good
- Unsecured, considered good
- Doubtful

--	--	--

Less: Provision for doubtful loans

--	--	--

--	--	--

Other Loans

- Secured, considered good
- Unsecured, considered good
- Doubtful

--	--	--

Less: Provision for doubtful loans

--	--	--

--	--	--

--	--	--

Total

-	-	-
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--	--	--

CLASSIFICATION

Secured, considered good

Unsecured, Considered good

Doubtful

Central Mine Planning and Design Institute Limited

NOTES TO THE FINANCIAL STATEMENTS

NOTE - 9 : OTHER FINANCIAL ASSETS

(₹ in Crore)

Figures as at the end of

Non Current

Bank deposits

Deposits with bank under

- Mine Closure Plan

- Shifting & Rehabilitation Fund scheme

Receivable from Escrow Account for Mine Closure Expenses

Other deposits *

Less : Provision for doubtful deposits

Other receivables

Less: Provision

TOTAL

Current

Surplus Fund with CIL

Receivable from Escrow Account for Mine Closure Expenses

Current Account with

- CIL

- Subsidiaries

- IICM

Interest accrued on

- Investments

- Bank Deposits

- Others (specify in note)

Other deposits *

Less : Provision for doubtful deposits

Claims receivables

Less : Provision for doubtful claims

Other receivables

Less : Provision for doubtful claims

TOTAL

Note: Other deposits* includes-

	31.03.2017	31.03.2016	01.04.2015
Deposit to Gas Company & Others	0.03	0.02	0.02
Deposit to Electricity Company	0.56	0.53	0.53
Deposit P & T	0.07	0.07	0.07
Security Deposit Paid	0.09	0.13	0.13
Total	0.76	0.75	0.75



Central Mine Planning and Design Institute Limited

NOTES TO THE FINANCIAL STATEMENTS

NOTE - 10 : OTHER NON-CURRENT ASSETS

(₹ in Crore)

	Figures as at the end of		
	31.03.2017 (Audited)	31.03.2016 (Audited) (Restated)	01.04.2015 (Opening) (Restated)
(i) Capital Advances	13.00	10.26	3.28
Less : Provision for doubtful advances			
	13.00	10.26	3.28
(ii) Advances other than capital advances			
(a) Security Deposit for utilities			
Less :Provision for doubtful deposits			
(b) Other Deposits			
Less :Provision for doubtful deposits			
(c) Advances to related parties			
(d) Advance for Revenue	0.03	0.03	0.04
Less :Provision for doubtful advances			
	0.03	0.03	0.04
(e) Exploratory drilling work (for Eastern Coalfields Ltd)			
Less: Provision			
(f) Prepaid Expenses			
(g) Others			
Total	13.03	10.29	3.32

Central Mine Planning and Design Institute Limited

NOTES TO THE FINANCIAL STATEMENTS

NOTE - 11 : OTHER CURRENT ASSETS

(₹ in Crore)

Figures as at the end of			
	31.03.2017 (Audited)	31.03.2016 (Audited) (Restated)	01.04.2015 (Opening) (Restated)
(a) Advance for Capital			
Less : Provision for doubtful advances	-	-	-
(b) Advance for Revenue	0.85	0.72	0.63
Less : Provision for doubtful advances	0.03	0.03	0.03
	0.82	0.69	0.60
(c) Advance payment of statutory dues	243.92	256.67	207.53
Less : Provision for doubtful advances	243.92	256.67	207.53
(d) Advance to Related Parties			
(e) Advance to Employees			
Less : Provision for doubtful advances	-	-	-
(f) Advance- Others *	4.83	25.80	39.13
Less : Provision for doubtful claims	4.83	25.80	39.13
(g) Deposit for utilities			
Less: Provision	-	-	-
(h) Deposits- Others **	0.07	0.07	0.07
Less: Provision	0.05	0.05	0.05
	0.02	0.02	0.02
(i) CENVAT CREDIT receivable	5.49	0.36	3.65
(j) MAT CREDIT ENTITLEMENT			
(k) Prepaid Expenses	0.45		0.60
Total	255.53	283.54	251.53

Note: Advance & Deposits Others Includes-

1-(f) Advance- Others*

	31.03.2017	31.03.2016	01.04.2015
ADVANCE (XA)	0.18	0.37	0.10
PERMANENT IMPREST	-	-	-
PAY ADVANCE	-	23.23	37.72
PERMANENT ADVANCE	-	-	-
L.T.C. ADVANCE	0.09	0.30	0.11
T.A.(OFFICERS)	0.26	0.38	0.42
T.A.(STAFF)	0.40	0.48	0.35
T.A. ADVANCE (OUTSIDE COUNTRY)	0.02		
MEDICAL ADVANCE	0.68	0.61	0.29
CIL DELHI	0.21	0.40	0.10
CIL HYDERABAD & OTHERS	0.02	0.03	0.04
OTHER	2.97		
Total	4.83	25.80	39.13

2-(h) Deposit- Others**

EX-COAL BOARD & OTHERS	0.07	0.07	0.07
Total	0.07	0.07	0.07

NOTES TO THE FINANCIAL STATEMENTS

NOTE - 12 : INVENTORIES

(₹ in Crore)

Figures as at the end of

	31.03.2017 (Audited)	31.03.2016 (Audited) (Restated)	01.04.2015 (Opening) (Restated)
(a) Stock of Coal			
Coal under Development			
Less : Provision			
Stock of Coal (Net)	-	-	-
(b) Stock of Stores & Spares (at cost)	9.42	7.57	6.42
Add: Stores-in-transit	0.56	0.41	0.09
Less : Provision	0.60	0.57	0.41
Net Stock of Stores & Spares (at cost)	9.38	7.41	6.10
(c) Stock of Medicine at Central Hospital			
(d) Workshop Jobs:			
Work-in-progress and Finished Goods			
Less: Provision			
Net Stock of Workshop Jobs	-	-	-
(e) Press Jobs:			
Work-in-progress and Finished Goods	9.38	7.41	6.10

Central Mine Planning and Design Institute Limited

NOTES TO THE FINANCIAL STATEMENTS

NOTE - 13 : TRADE RECEIVABLES

(₹ in Crore)

	31.03.2017 (Audited)	Figures as at the end of 31.03.2016 (Audited) (Restated)	01.04.2015 (Opening) (Restated)
Current			
Trade receivables			
- Secured, considered good			
- Unsecured, considered good	327.65	248.24	236.06
- Doubtful	2.5	2.39	2.78
	<u>330.15</u>	<u>250.63</u>	<u>238.84</u>
Less : Provision for bad & doubtful debts	2.50	2.39	2.78
Total	<u>327.65</u>	<u>248.24</u>	<u>236.06</u>

Note: 1

	CLOSING BALANCE			MAXIMUM AMOUNT DUE AT ANY TIME DURING		
	As on 31-03-2017	As on 31-03-2016	As on 31-03-2015	During 2016-17	During 2015-16	During 2014-15
Due by the Companies under the same management						
Eastern Coalfields Limited	11.12	4.06	13.42	34.56	23.72	48.72
Bharat Coking Coal Limited	12.08	40.27	42.93	74.11	51.92	71.44
Central Coalfields Limited	29.64	14.97	20.89	48.35	66.23	82.19
Western Coalfields Limited	15.67	3.07	4.50	32.11	17.75	23.37
South Eastern Coalfields Limited	77.99	61.02	32.82	82.16	91.19	44.86
Northern Coalfields Limited	33.10	31.09	23.27	41.45	41.25	42.35
Mahanadi Coalfields Ltd.	34.31	22.31	20.50	41.43	30.02	32.96
North East Coalfields	0.56	0.54	0.59	0.60	0.88	0.74
Kakri CHP (NCL)	0.14	0.14	0.14	0.14	0.14	0.14
Dankuni Coal Complex (CIL)			0.02			0.02
Bharatpur CHP (MCL)			0.01			0.01
Coal India Africana Limitada	0.30	0.29	0.97	0.36	1.12	0.97
CIL, Kolkata	25.87	24.93	37.44	25.91	37.44	37.44
MJSJ Coal Co. Ltd	0.24	0.24	0.24	0.24	0.24	0.24
MNH Shakti Ltd.		0.12	0.29	0.12	0.29	0.40
Total	241.02	203.05	198.03	381.54	362.19	385.85
Due by the parties in which the Director(s) of company is /are interested	NIL	NIL	NIL	NIL	NIL	NIL



Central Mine Planning and Design Institute Limited

NOTES TO THE FINANCIAL STATEMENTS

NOTE - 14 : CASH AND CASH EQUIVALENTS

(₹ in Crore)

Figures as at the end of			
	31.03.2017 (Audited)	31.03.2016 (Audited) (Restated)	01.04.2015 (Opening) (Restated)
(a) Balances with Banks			
- in Deposit Accounts	1.37	0.46	3.21
- in Current Accounts	75.55	123.66	82.61
- in Cash Credit Accounts			
(b) Bank Balances outside India			
(c) Cheques, Drafts and Stamps in hand	0.19	0.09	0.01
(d) Cash on hand	0.07	0.09	0.09
(e) Cash on hand outside India			
(f) Others			
Total Cash and Cash Equivalents	77.18	124.30	85.92
(g) Bank Overdraft			
Total Cash and Cash Equivalents(net of Bank Overdraft)	77.18	124.30	85.92

1. Disclosure and the details of Specified Bank Notes (SBN) held and transacted during the period from 8th November, 2016 to 30th December, 2016.

	SBNs	Other Denomination notes	Total
Closing cash in hand as on 08.11.2016	0.03	0.02	0.05
(+) Permitted receipts	0.01	1.26	1.27
(-) Permitted Payments		1.11	1.11
(-) Amount Deposited in Banks	0.04	0.13	0.17
Closing cash in hand as on 30.12.2016	-	0.04	0.04

NOTES TO THE FINANCIAL STATEMENTS

NOTE - 15 : OTHER BANK BALANCES

(₹ in Crore)

Figures as at the end of			
	31.03.2017 (Audited)	31.03.2016 (Audited) (Restated)	01.04.2015 (Opening) (Restated)
Balances with Banks			
- Deposit accounts			
- Mine Closure Plan			
- Shifting and Rehabilitation Fund scheme			
- Escrow Account for Buyback of Shares			
- Unpaid dividend accounts			
- Dividend accounts			
Total	-	-	-

Central Mine Planning and Design Institute Limited

NOTES TO THE FINANCIAL STATEMENTS

NOTE - 16 : EQUITY SHARE CAPITAL

(₹ in Crore)

	Figures as at the end of		
	31.03.2017 (Audited)	31.03.2016 (Audited) (Restated)	01.04.2015 (Opening) (Restated)
Authorised			
5,00,000 Equity Shares of ₹1000/- each	50.00	50.00	50.00
	50.00	50.00	50.00
Issued, Subscribed and Paid-up			
(Held by Coal India Ltd. , the Holding Co. & its nominees)	-	-	
8 Equity Shares of ₹ 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	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	10.50
Total	19.04	19.04	19.04

1 Shares in the company held by each shareholder holding more than 5% Shares

Name of Shareholder	No. of Shares held (Face value of ₹ 1000 each)	% of Total Shares
Coal India Limited	190400	100%

2 During the period, the company has not issued or bought back any shares.

Central Mine Planning and Design Institute Limited

NOTES TO THE FINANCIAL STATEMENTS

NOTE - 17 : OTHER EQUITY

(₹ in Crore)

	Equity portion of Preference Share Capital	Other Reserves				General Reserve	Retained Earnings	Non-Controlling Interest	Equity
		Capital Redemption reserve	Capital reserve	CSR Reserve	Sustainable Development Reserve				
Balance as at 01.04.2015	-	-	9.73	-	-	5.77	143.52	-	159.02
Changes in accounting policy	-	-	-	-	-	-	4.78	-	-
Prior period errors	-	-	-	-	-	-	-	-	-
Restated balance as at 01.04.2015	-	-	9.73	-	-	5.77	148.30	-	163.80
Additions during the year	-	-	10.04	-	-	-	-	-	10.04
Adjustments during the year	-	-	(1.60)	-	-	-	-	-	(1.60)
Total comprehensive income during the year	-	-	-	-	-	-	23.97	-	23.97
<u>Appropriations</u>	-	-	-	-	-	-	-	-	-
Transfer to / from General reserve	-	-	-	-	-	-	-	-	-
Transfer to / from Other reserves	-	-	-	-	-	-	-	-	-
Interim Dividend	-	-	-	-	-	-	-	-	-
Final Dividend	-	-	-	-	-	-	-	-	-
Corporate Dividend tax	-	-	-	-	-	-	-	-	-
Pre-operative expenses	-	-	-	-	-	-	-	-	-
Balance as at 31.03.2016	-	-	18.17	-	-	5.77	172.27	-	196.21

NOTES TO THE FINANCIAL STATEMENTS

NOTE - 17 : OTHER EQUITY (Contd.)

('₹ in Crore)

	Prefer- ence Share Capital	Other Reserves				General Re- serve	Retained Earnings	Non-Con- trolling Interest	Equity
		Capital Redemption reserve	Capital reserve	CSR Reserve	Sustainable Development Reserve				
Balance as at 01.04.2016	-	-	18.17	-	-	5.77	172.27		196.21
Additions during the year	-	-	2.32	-	-	-	-		2.32
Adjustments during the year	-	-	(0.69)	-	-	-	-		(0.69)
Changes in accounting policy or prior period errors									
Total comprehensive income during the year	-	-	-	-	-	-	38.82		38.82
<u>Appropriations</u>	-	-	-	-	-	-	-		-
Transfer to / from General reserve	-	-	-	-	-	-	-		-
Interim Dividend	-	-	-	-	-	-	-		-
Final Dividend	-	-	-	-	-	-	-		-
Corporate Dividend tax	-	-	-	-	-	-	-		-
Pre-operative expenses	-	-	-	-	-	-	-		-
Balance as at 31.03.2017	-	-	19.80	-	-	5.77	211.09		236.66

NOTE - 17 (Contd.)

RESERVES & SURPLUS

CAPITAL RESERVE: 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 :

('₹ in Crore)

PARTICULARS	S&T Grants	UNDP Grants	CCDA Grants	EMSC Grants	CIL R&D Grants	P.R.E Grants	CMM/CBM Clearing House Grants	Total
As per last Account	3.52	0.05	0.06	-	13.98	0.51	0.05	18.17
Addition	-	-	-	-	2.27	0.05	-	2.32
Less : Depreciation & Adjustment	3.52	0.05	0.06	-	16.25	0.56	0.05	20.49
	0.07	-	-	-	0.45	0.15	0.02	0.69
TOTAL AS ON 31-03-2017	3.45	0.05	0.06	-	15.80	0.41	0.03	19.80
TOTAL AS ON 31.03.2016	3.52	0.05	0.06	-	13.98	0.51	0.05	18.17



Central Mine Planning and Design Institute Limited

NOTES TO THE FINANCIAL STATEMENTS

NOTE - 18 : BORROWINGS

(₹ in Crore)

	Figures as at the end of		
	31.03.2017 (Audited)	31.03.2016 (Audited) (Restated)	01.04.2015 (Opening) (Restated)
Non-Current			
Term Loans			
- From Banks	-	-	-
- From Other Parties	-	-	-
Loans from Related Parties			
Other Loans			
Total	-	-	-
CLASSIFICATION			
Secured	-	-	-
Unsecured	-	-	-
Current			
Loans repayable on demand			
- From Banks	-	-	-
- From Other Parties	-	-	-
Loans from Related Parties			
Other Loans			
Total	-	-	-
CLASSIFICATION			
Secured	-	-	-
Unsecured	-	-	-

Central Mine Planning and Design Institute Limited

NOTES TO THE FINANCIAL STATEMENTS

NOTE - 19 : TRADE PAYABLES

(₹ in Crore)

	Figures as at the end of		
	31.03.2017 (Audited)	31.03.2016 (Audited) (Restated)	01.04.2015 (Opening) (Restated)
Current			
Trade Payables for Micro, Small and Medium Enterprises	0.30	0.20	0.34
Other Trade Payables for			
- Stores and Spares	0.83	0.79	0.43
- Power and Fuel			
- Others			
Total	1.13	0.99	0.77

	31.03.2017	31.03.2016
Ageing of Micro, Small and Medium Enterprises		
Less than three months	0.3	0.2



Central Mine Planning and Design Institute Limited

NOTES TO THE FINANCIAL STATEMENTS

NOTE - 20 : OTHER FINANCIAL LIABILITIES

(₹ in Crore)

Figures as at the end of

	31.03.2017 (Audited)	31.03.2016 (Audited) (Restated)	01.04.2015 (Opening) (Restated)
Non Current			
Security Deposits	2.68	2.87	2.12
Earnest Money	0.13	0.74	0.60
Others *	46.81	38.82	30.14
Total	49.62	42.43	32.86
Current			
Surplus fund from Subsidiaries			
Current Account with			
- Subsidiaries			
- IICM			
Current maturities of long-term debt			
Unpaid dividends			
Security Deposits	3.45	1.74	1.92
Earnest Money	3.43	2.01	1.78
Others *	3.63	2.62	1.74
Total	10.51	6.37	5.44

Note: Others* Includes-

	31.03.2017	31.03.2016	01.04.2015
CONTRACTORS KEEP BACK	1.37	1.25	1.16
EXPLORATION KEEP BACK	43.60	34.93	26.47
ADV & DEPOSITS FROM EMPLOYEES	5.47	5.26	4.25
Total	50.44	41.44	31.88

Central Mine Planning and Design Institute Limited

NOTES TO THE FINANCIAL STATEMENTS

NOTE - 21 : PROVISIONS

(₹ in Crore)

	Figures as at the end of		
	31.03.2017 (Audited)	31.03.2016 (Audited) (Restated)	01.04.2015 (Opening) (Restated)
Non Current			
Employee Benefits			
- Gratuity	58.80	72.77	98.22
- Leave Encashment	93.68	71.38	70.15
- Other Employee Benefits	71.66	58.89	57.39
Mine Closure			
Overburden Removal			
Others *	0.02	0.02	0.02
Total	224.16	203.06	225.78
Current			
Employee Benefits			
- Gratuity	28.69	18.04	23.84
- Leave Encashment	14.74	14.08	15.58
- Ex- Gratia	13.93	13.39	9.33
- Performance Related Pay	88.12	181.14	192.50
- Provision for National Coal Wages Agreement (NCWA)	19.04		
- Executive Pay Revision	5.03		
- Other Employee Benefits**	94.19	78.78	68.14
	263.74	305.43	309.39
Mine Closure			
Excise Duty on Closing Stock of Coal			
Others			
Total	263.74	305.43	309.39

Note 1: Others* includes-

	31.03.2017	31.03.2016	01.04.2015
PROVISION FOR WEALTH TAX	0.02	0.02	0.02
Total	0.02	0.02	0.02

Note 2: **Other Employee Benefits includes Employees Benefits ₹ 81.69 Crores Provided for superannuation benefits @ 9.84% as on 31.03.2017.

Note 3: Pending finalization of PSUs' pay revision for executives, an estimated lump sum provision @ ₹18000/- per employees(executive) per month, considering total impact of increase in all elements of executive salary (including the employer's PF contribution), other employee benefits and all superannuation benefits like Gratuity etc. has been made for the period 01.01.2017 to 31.03.2017 amounting to ₹ 5.03 Crores and shown as "Executive Pay Revision" above.



Central Mine Planning and Design Institute Limited

NOTES TO THE FINANCIAL STATEMENTS

NOTE - 22 : OTHER NON CURRENT LIABILITIES

(₹ in Crore)

	Figures as at the end of		
	31.03.2017 (Audited)	31.03.2016 (Audited) (Restated)	01.04.2015 (Opening) (Restated)
Shifting & Rehabilitation Fund			
Opening balance			
Add: Interest from investment of the fund (Net of TDS)			
Add: Contribution received			
Less: Amount released to subsidiaries during the year			
	-	-	-
Deferred Income			
	-	-	-
Total	-	-	-

NOTES TO THE FINANCIAL STATEMENTS

NOTE - 23 : OTHER CURRENT LIABILITIES

(₹ in Crore)

	Figures as at the end of		
	31.03.2017 (Audited)	31.03.2016 (Audited) (Restated)	01.04.2015 (Opening) (Restated)
Capital Expenditure			
Liability for Salary, Wages and Allowances	28.62	28.62	28.96
Statutory Dues:			
Sales Tax/Vat	0.12	0.04	0.02
Provident Fund & Others	0.37	0.35	0.68
Central Excise Duty			
Royalty & Cess on Coal			
Stowing Excise Duty			
Clean Energy Cess			
National Mineral Exploration Trust			
District Mineral Foundation			
Other Statutory Levies	2.54	1.95	1.56
Income Tax deducted/collected at Source	1.56	0.40	0.42
Advance for Coal Import			
Advance from customers / others	3.27	3.15	5.31
Cess Equalization Account			
Others liabilities*	139.36	153.44	119.73
Total	175.84	187.95	156.68

Note-Others liabilities *

	31.03.2017	31.03.2016	01.04.2015
C B M CELL	2.35	1.71	-
LIC RECOVERY FROM EMPLOYEES	0.01	0.01	0.01
CLUB SUBSCRIPTION	-	-	-
CO-OPERATIVE CR.SOCIETY	0.09	0.09	0.09
RELIEF FUND	0.01	0.01	0.01
EVWF	-	-	-
OTHER DEDUCTION	0.02	0.09	0.10
CREDIT FOR STALE CHEQUES	0.24	0.17	0.23
O/S LIABILITY FOR MEC	31.22	30.32	27.99
O/S LIABILITY FOR GSI & OTHER	28.63	14.02	20.61
UNPAID FROM IMPREST	0.31	0.31	0.13
O/S LIABILITY FOR POWER	1.11	1.24	0.84
O/S LIABILITY CONTRACTUAL	2.03	1.78	1.10
O/S LIABILITIES FOR REV.	24.66	20.19	14.49
O/S LIABILITIES CAPITAL	7.47	11.35	2.97
MINING ELECTRONIC GRANT	0.01	0.01	0.01
TESTING LABORATORY	0.28	0.28	0.28
UNDP FUND	0.27	0.27	0.27
CIL CIMFR FUND	0.21	0.21	0.21
SUNDRY CREDITOR - CAPITAL	0.33	0.13	0.77
PROVISION ON LOSS OF ASSETS	0.01	0.06	0.06
FUNDS	40.10	71.19	49.56
Total	139.36	153.44	119.73

NOTES TO THE FINANCIAL STATEMENTS (CONTD...)

NOTE - 23 : OTHER CURRENT LIABILITIES (Contd.)

Grants/Funds received under S&T, PRE, Detailed Drilling, R&D and disbursement thereof during the period are as below :

(₹ in Crore)

PARTICULARS	S&T GRANTS	PRE GRANTS	CCDA GRANTS	DETAILED EXPLORATION FOR NON-CIL	MINISTRY OF STEEL	CIL R&D FUNDS
Opening Balance as on 01-04-2016	4.36	2.41	0.23	56.44	0.26	7.59
Addition						
1. MINISTRY OF COAL	8.50	46.55	0.00	80.55	0.00	0.00
2. MINISTRY OF STEEL	0.00	0.00	0.00	0.00	0.00	0.00
3. CIL KOLKATA	0.00	0.00	0.00	0.00	0.00	26.40
4. ADJUSTMENT	0.00	0.00	0.00	0.00	0.00	0.00
5. BANK INTEREST ON FUND	0.31	0.55	0.01	1.81	0.00	1.50
	13.17	49.51	0.24	138.80	0.26	35.49
Less : Disbursement / Utilisation	10.38	48.04	0.00	125.20	0.00	13.66
Closing Balance as on 31-03-2017	2.79	1.47	0.24	13.60	0.26	21.83

**Central Mine Planning and Design Institute Limited****NOTES TO THE FINANCIAL STATEMENTS****NOTE - 24 : REVENUE FROM OPERATIONS**

(₹ in Crore)

	For the Year ended (Audited) 31.03.2017	For the Year ended (Audited) 31.03.2016
A. Sales of Services	1,072.46	877.13
Less :Other Statutory Levies		
Royalty		
Cess on Coal		
Stowing Excise Duty		
Central Sales Tax		
Clean Energy Cess		
State Sales Tax/VAT		
Additional Royalty		
Other Levies	141.94	117.86
Total Levies	141.94	117.86
Net Sales (A)	930.52	759.27
B. Other Operating Revenue		
Facilitation charges for coal import	-	-
Subsidy for Sand Stowing & Protective Works	-	-
Loading and additional transportation charges	-	-
Less: Excise Duty	-	-
Less : Other Statutory Levies	-	-
	-	-
Other Operating Revenue (B)	-	-
Revenue From Operations (A+B)	930.52	759.27

Central Mine Planning and Design Institute Limited

NOTES TO THE FINANCIAL STATEMENTS

NOTE - 25 : OTHER INCOME

(₹ in Crore)

	For the Year ended (Audited) 31.03.2017	For the Year ended (Audited) 31.03.2016
<u>Interest Income</u>		
Deposit with Banks	1.03	0.87
Loans and Advances to Employees	-	0.01
Investments	-	-
Loans		
Funds parked within Group		
Others (From Income Tax)	10.22	-
<u>Dividend Income</u>		
Investments in Subsidiaries		
Investments in Mutual Funds		
Investments in Govt Securities (8.5% Tax free Special Bonds)		
<u>Other Non-Operating Income</u>		
Apex charges		
Profit on Sale of Assets	0.14	0.35
Gain on Foreign exchange Transactions		
Exchange Rate Variance		
Lease Rent		
Liability / Provision Write Backs		
Excise Duty on Decrease in Stock		
Misc. Income	4.08	3.85
Total	15.47	5.08



Central Mine Planning and Design Institute Limited

NOTES TO THE FINANCIAL STATEMENTS

NOTE - 26 : COST OF MATERIALS CONSUMED

	(₹ in Crore)	
	For the Year ended (Audited) 31.03.2017	For the Year ended (Audited) 31.03.2016
Explosives		
Timber		
Oil & Lubricants	8.94	7.42
HEMM Spares		
Other Consumable Stores & Spares	17.71	14.50
Total	26.65	21.92

NOTE 27 : CHANGES IN INVENTORIES OF FINISHED GOODS, WORK IN PROGRESS AND STOCK IN TRADE

	(₹ in Crore)	
	For the Year ended (Audited) 31.03.2017	For the Year ended (Audited) 31.03.2016
Opening Stock of Coal		
Add: Adjustment of opening stock	-	-
Less: Deterioration of Coal	-	-
	-	-
Closing Stock of Coal	-	-
Less: Deterioration of Coal	-	-
	-	-
A Change in Inventory of Coal	-	-
Opening Stock of Workshop made finished goods and WIP	-	-
Add: Adjustment of Opening Stock	-	-
Less: Provision	-	-
	-	-
Closing Stock of Workshop made finished goods and WIP	-	-
Less: Provision	-	-
	-	-
B Change in Inventory of workshop	-	-
Press Opening Job		
i) Finished Goods	-	-
ii) Work in Progress	-	-
	-	-
Less: Press Closing Job		
i) Finished Goods	-	-
ii) Work in Progress	-	-
	-	-
C Change in Inventory of Closing Stock of Press Job	-	-
Change in Inventory of Stock in trade (A+B+C) {Discretion/(Accretion)}	-	-

Central Mine Planning and Design Institute Limited

NOTES TO THE FINANCIAL STATEMENTS

NOTE - 28 : EMPLOYEE BENEFITS EXPENSES

(₹ in Crore)

	For the Year ended (Audited) 31.03.2017	For the Year ended (Audited) 31.03.2016
Salary, Wages, Allowances ,Bonus etc.	262.08	257.39
Provision for National Coal Wages Agreement (NCWA)	19.04	
Executive Pay Revision	5.03	
Ex-Gratia	14.83	14.98
Performance Related Pay	12.01	12.43
Contribution to P.F. & Other Funds	32.66	32.30
Gratuity	20.00	34.64
Leave Encashment	38.85	19.66
VRS		
Workman Compensation	-	0.14
Medical Expenses for existing employees	9.23	8.36
Medical Expenses for retired employees	13.17	2.01
Grants to Schools & Institutions	0.06	0.09
Sports & Recreation	0.78	0.76
Canteen & Creche	0.23	0.23
Power - Township	2.78	2.68
Hire Charges of Bus, Ambulance etc.	0.56	0.51
Other Employee Benefits	50.44	48.90
Total	481.75	435.08



Central Mine Planning and Design Institute Limited

NOTES TO THE FINANCIAL STATEMENTS

NOTE - 29 : CORPORATE SOCIAL RESPONSIBILITY EXPENSE

(₹ in Crore)

	For the Year ended (Audited) 31.03.2017	For the Year ended (Audited) 31.03.2016
CSR Expenses	1.02	2.01
Total	1.02	2.01

Note: As per Companies act ₹ 0.78 crore was required to be spent towards CSR expenses.

NOTES TO THE FINANCIAL STATEMENTS

NOTE 30 : REPAIRS

(₹ in Crore)

	For the Year ended (Audited) 31.03.2017	For the Year ended (Audited) 31.03.2016
Building	7.31	7.26
Plant & Machinery	5.30	4.30
Others	10.57	8.34
Total	23.18	19.90

Central Mine Planning and Design Institute Limited

NOTES TO THE FINANCIAL STATEMENTS

NOTE - 31 : CONTRACTUAL EXPENSES

(₹ in Crore)

	For the Year ended (Audited) 31.03.2017	For the Year ended (Audited) 31.03.2016
Transportation Charges :		
- Sand		
- Coal		
- Stores & Others		
Wagon Loading		
Hiring of P&M		
Other Contractual Work	271.07	205.09
Total	271.07	205.09

NOTES TO THE FINANCIAL STATEMENTS

NOTE - 32 : FINANCE COSTS

(₹ in Crore)

	For the Year ended (Audited) 31.03.2017	For the Year ended (Audited) 31.03.2016
Interest Expenses		
Borrowings		
Reclamation of Land/Mine Closure Expenses		
Interest on Escrow Account		
Unwinding of discounts		
Funds parked within Group		
Others	0.31	0.24
Other Borrowing Cost		
Guarantee Fees on (IBRD & JBIC) Loan	-	-
Total	0.31	0.24



Central Mine Planning and Design Institute Limited

NOTES TO THE FINANCIAL STATEMENTS

NOTE - 33 : PROVISIONS (NET OF REVERSAL)

(₹ in Crore)

	For the Year ended (Audited) 31.03.2017	For the Year ended (Audited) 31.03.2016
(A) PROVISION MADE FOR		
Doubtful debts	0.11	-
Doubtful Advances & Claims	0.02	0.20
Stores & Spares		
Others		
Total (A)	0.13	0.20
(B) PROVISION REVERSAL		
Doubtful debts	-	0.31
Doubtful Advances & Claims		
Stores & Spares		
Others		
Total(B)	-	0.31
Total (A-B)	0.13	0.11

NOTE - 34 : WRITE OFF (Net of past provisions)

(₹ in Crore)

	For the Year ended (Audited) 31.03.2017	For the Year ended (Audited) 31.03.2016
Doubtful debts	-	-
Less :- Provided earlier	-	-
Doubtful advances	-	-
Less :- Provided earlier	-	-
Stock of Coal	-	-
Less :- Provided earlier	-	-
Others	-	-
Less :- Provided earlier	-	-
Total	-	-

Central Mine Planning and Design Institute Limited

NOTES TO THE FINANCIAL STATEMENTS

NOTE - 35 : PROVISIONS (NET OF REVERSAL)

(₹ in Crore)

	For the Year ended (Audited) 31.03.2017	For the Year ended (Audited) 31.03.2016
Travelling expenses		
- Domestic	16.65	17.50
- Foreign	0.54	0.61
Training Expenses	1.28	0.60
Telephone & Postage	1.07	2.21
Advertisement & Publicity	2.44	2.19
Freight Charges	0.07	-
Demurrage	-	-
Donation/Subscription	-	-
Security Expenses	9.47	8.29
Service Charges of CIL		
Hire Charges	5.67	4.55
CMPDI Expenses		
Legal Expenses	0.21	0.18
Bank Charges	0.05	0.06
Guest House Expenses	0.51	0.63
Consultancy Charges	3.39	1.41
Under Loading Charges	-	-
Loss on Sale/Discard/Surveyed of Assets	0.01	-
Auditor's Remuneration & Expenses	-	-
- For Audit Fees	0.04	0.02
- For Taxation Matters	0.04	0.01
- For Other Services	0.01	0.05
- For Reimbursement of Exps.	0.11	0.20
Internal & Other Audit Expenses	0.53	0.47
Rehabilitation Charges	-	-
Royalty & Cess	-	-
Central Excise Duty	-	-
Rent	0.49	0.82
Rates & Taxes	0.77	0.79
Wealth Tax		
Insurance	0.03	-
Loss on Foreign Exchange Transactions		
Loss on Exchange Rate Variance	-	-
Lease Rent	-	-
Rescue/Safety Expenses	-	-
Dead Rent/Surface Rent	-	-
Siding Maintenance Charges	-	-
Land/Crops Compensation	0.01	0.01
R & D expenses	-	-
Environmental & Tree Plantation Expenses	0.24	0.44
Miscellaneous expenses	9.16	7.89
Total	52.79	48.93



Central Mine Planning and Design Institute Limited

NOTES TO THE FINANCIAL STATEMENTS

NOTE - 36 : TAX EXPENSE

(₹ in Crore)

	For the Year ended (Audited) 31.03.2017	For the Year ended (Audited) 31.03.2016
Current Year	40.09	0.25
Deferred tax	(15.15)	5.96
MAT Credit Entitlement		
Earlier Years		
Total	24.94	6.21

Central Mine Planning and Design Institute Limited

NOTES TO THE FINANCIAL STATEMENTS

NOTE - 37 : OTHER COMPREHENSIVE INCOME

(₹ in Crore)

	For the Year ended (Audited) 31.03.2017	For the Year ended (Audited) 31.03.2016
(A) (i) Items that will not be reclassified to profit or loss		
Changes in revaluation surplus		
Remeasurement of defined benefit plans	(2.70)	22.68
Equity instrument through OCI		
Fair value changes relating to own credit risk of financial liabilities designated at FVTPL		
Share of OCI in Joint ventures		
	<u>(2.70)</u>	<u>22.68</u>
(ii) Income tax relating to items that will not be reclassified to profit or loss		
Changes in revaluation surplus		
Remeasurement of defined benefit plans	(0.93)	7.85
Equity instrument through OCI		
Fair value changes relating to own credit risk of financial liabilities designated at FVTPL		
Share of OCI in Joint ventures		
	<u>(0.93)</u>	<u>7.85</u>
Total (A)	<u>(1.77)</u>	<u>14.83</u>
(B) (i) Items that will be reclassified to profit or loss		
Exchange differences in translating the financial statements of a foreign operation		
Debt instrument through OCI		
The effective portion of gains and loss on hedging instruments in a cash flow hedge		
Share of OCI in Joint ventures		
	<u>-</u>	<u>-</u>
(ii) Income tax relating to items that will be reclassified to profit or loss		
Exchange differences in translating the financial statements of a foreign operation		
Debt instrument through OCI		
The effective portion of gains and loss on hedging instruments in a cash flow hedge		
Share of OCI in Joint ventures		
	<u>-</u>	<u>-</u>
Total (B)	<u>-</u>	<u>-</u>
Total (A+B)	<u>(1.77)</u>	<u>14.83</u>

Note 1: CORPORATE INFORMATION

Central Mine Planning & Design Institute Limited (CMPDIL) was incorporated under the Indian Companies Act, 1956 to provide consultancy support in coal and mineral exploration including geological, geophysical, hydrological and environmental data generation to CIL and its Subsidiaries and to other outside companies. CMPDIL is a schedule ' B' / Miniratna-Cat-II CPSE under the administrative control of Ministry of Coal. CMPDIL is a 100% subsidiary of Coal India Ltd. (CIL). Its Registered office is situated at Gondwana Place, Kanke Road, Ranchi - 834 031, Jharkhand, India. The authorized and paid up share capital of the Company is Rs. 50 crore and Rs. 19.04 crore respectively as on March 31, 2017.

Note 2: SIGNIFICANT ACCOUNTING POLICIES**2.1 Basis of preparation**

The financial statements of the Company have been prepared in accordance with Indian Accounting Standards (Ind AS) notified under the Companies (Indian Accounting Standards) Rules, 2015.

For all periods up to and including the year ended 31st March 2016, the Company prepared its financial statements in accordance with Accounting Standards (AS) notified under section 133 of the Companies Act 2013, read together with paragraph 7 of the Companies (Accounts) Rules, 2014 and in accordance with companies (Accounting Standards), Rules 2006 (erstwhile - Indian GAAP). These financial statements for the year ended 31st March 2017 are the first financial statements of the Company prepared in accordance with Ind AS.

The financial statements have been prepared on historical cost basis, except for certain financial assets and liabilities measured at fair value (refer accounting policy on financial instruments in para 2.9).

2.1.1 Rounding of amounts

Amounts in these financial statements have, unless otherwise indicated, have been rounded off to the 'rupees in crore' up to two decimal points.

2.2 Current and non-current Classification

The Company presents assets and liabilities in the Balance Sheet based on current/ non-current classification.

An asset is treated as current when:

- (a) It expects to realise the asset, or intends to sell or consume it, in its normal operating cycle;
- (b) It holds the asset primarily for the purpose of trading;
- (c) It expects to realise the asset within twelve months after the reporting period; or
- (d) The asset is cash or a cash equivalent (as defined in Ind AS 7) unless the asset is restricted from being exchanged or used to settle a liability for at least twelve months after the reporting period. All other assets are classified as non-current.

An entity shall classify a liability as current when:

- (a) It expects to settle the liability in its normal operating cycle;

- (b) It holds the liability primarily for the purpose of trading;
- (c) The liability is due to be settled within twelve months after the reporting period; or
- (d) It does not have an unconditional right to defer settlement of the liability for at least twelve months after the reporting period. Terms of a liability that could, at the option of the counterparty, result in its settlement by the issue of equity instruments do not affect its classification.

All other liabilities are classified as non-current.

2.3 Revenue recognition

2.3.1 Interest

Interest income is recognised using the Effective Interest Method.

2.3.2 Rendering of Services

When the outcome of a transaction involving the rendering of services can be estimated reliably, revenue associated with the transaction is recognised with reference to the stage of completion of the transaction at the end of the reporting period. The outcome of a transaction can be estimated reliably when all the following conditions are satisfied:

- (a) The amount of revenue can be measured reliably;
- (b) It is probable that the economic benefits associated with the transaction will flow to the entity;
- (c) The stage of completion of the transaction at the end of the reporting period can be measured reliably; and
- (d) The costs incurred for the transaction and the costs to complete the transaction can be measured reliably.

Revenue from Consultancy Services by CMPDIL, a subsidiary of Coal India Limited

Recognition of revenue arising out of Consultancy Services for exploration, mine planning/ project reports, environmental plans and other Engineering services is based on the pricing formula adopted for different categories of customers. The services rendered to Holding company and its other subsidiaries are priced uniformly at cost plus service charges of 10% for P&D service and 7.5% for Departmental drilling services, for drilling services performed by outsourced agencies service charges range from 7.5% to 20%. Environment monitoring jobs are carried out at 90% of Central Pollution Control Board (CPCB) rate of 2009, up to December' 2016 and from January' 2017 the rate has been revised & update the rate up to 2016 from base rate of 2009 and upon that 90 % of the revised rate of 2016 has been considered.

2.4 Grants from Government

Government Grants are not recognised until there is reasonable assurance that the company will comply with the conditions attached to them and that the grants will be received.

Government grants are recognised in Statement of Profit & Loss on a systematic basis over the periods in which the company recognises as expenses the related costs against which the grants are intended to compensate.

Government Grants related to assets are presented in the balance sheet by setting up the grant as deferred income.

Grants related to income (i.e. grant related to other than assets) are presented as part of statement of profit or loss under the general heading 'Other Income'.

A government grant that becomes receivable as compensation for expenses or losses already incurred or for the purpose of giving immediate financial support to the entity with no future related costs, is recognised in profit or loss of the period in which it becomes receivable.

2.5 Leases

A **finance lease** is a lease that transfers substantially all the risks and rewards incidental to ownership of an asset. Title may or may not eventually be transferred.

Finance leases are capitalised at the commencement of the lease at the inception date fair value of the leased property or, if lower, at the present value of the minimum lease payments. Lease payments are apportioned between finance charges and reduction of the lease liability so as to achieve a constant rate of interest on the remaining balance of the liability.

Finance charges are recognised in finance costs in the statement of profit and loss, unless they are directly attributable to qualifying assets, in which case they are capitalized in accordance with the Company general policy on the borrowing costs.

A leased asset is depreciated over the useful life of the asset. However, if there is no reasonable certainty that the Company will obtain ownership by the end of the lease term, the asset is depreciated over the shorter of the estimated useful life of the asset and the lease term.

An **operating lease** is a lease other than a finance lease.

2.6 Property, Plant and Equipment (PPE)

Land is carried at historical cost. Historical cost includes expenditure which are directly attributable to the acquisition of the land like, rehabilitation expenses, resettlement cost and compensation in lieu of employment incurred for concerned displaced persons etc.

After recognition, an item of all other Property, plant and equipment are carried at its cost less any accumulated depreciation and any accumulated impairment losses under Cost. The cost of an item of property, plant and equipment comprises:

- (a) Its purchase price, including import duties and non-refundable purchase taxes, after deducting trade discounts and rebates.
- (b) Any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management.
- (c) The initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located, the obligation for which an entity incurs either when the item is acquired or as a consequence of having used the item during a particular period for purposes other than to produce inventories during that period.

Each part of an item of property, plant and equipment with a cost that is significant in relation to the total cost of the item depreciated separately. However, significant part(s) of an item of PPE having same useful life and depreciation method are grouped together in determining the depreciation charge.

Costs of the day to-day servicing described as for the 'repairs and maintenance' are recognised in the statement of profit and loss in the period in which the same are incurred.

Subsequent cost of replacing parts of an item of property, plant and equipment are recognised in the carrying amount of the item, if it is probable that future economic benefits associated with the item will flow to the group; and the cost of the item can be measured reliably. The carrying amount of those parts that are replaced is derecognised in accordance with the derecognition policy mentioned below.

When major inspection is performed, its cost is recognised in the carrying amount of the item of property, plant and equipment as a replacement if it is probable that future economic benefits associated with the item will flow to the group; and the cost of the item can be measured reliably. Any remaining carrying amount of the cost of the previous inspection (as distinct from physical parts) is derecognised.

An item of Property, plant or equipment is derecognised upon disposal or when no future economic benefits are expected from the continued use of assets. Any gain or loss arising on such derecognition of an item of property plant and equipment is recognised in profit and Loss.

Depreciation on property, plant and equipment, except freehold land, is provided as per cost model on straight line basis over the estimated useful lives of the asset as follows:

Other Land

(Incl. Leasehold Land)	:	Life of the project or lease term whichever is lower
Building	:	3-60 years
Roads	:	3-10 years
Telecommunication	:	3-9 years
Railway Sidings	:	15 years
Plant and Equipment	:	5-15 years
Computers and Laptops	:	3 Years
Office equipment	:	3-6 years
Furniture and Fixtures	:	10 years
Vehicles	:	8-10 years

The residual value of Property, plant and equipment is considered as 5% of the original cost of the asset except some items of assets such as, Coal tub, winding ropes, haulage ropes, stowing pipes & safety lamps etc. for which the technically estimated useful life has been determined to be one year with a- nil residual value.

The estimated useful life of the assets is reviewed at the end of each financial year.

Depreciation on the assets added / disposed of during the year is provided on pro-rata basis with reference to the month of addition / disposal.

Value of "Other Lands" includes land acquired under Coal Bearing Area (Acquisition & Development) (CBA) Act, 1957, Land Acquisition Act, 1894, Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement (RFCTLAAR) Act, 2013, Long term transfer of government land etc, which is amortised on the basis of the balance life of the project, and in case of Leasehold land such is amortisation is based on lease period or balance life of the project whichever is lower.

Fully depreciated assets, retired from active use are disclosed separately as surveyed off assets at its residual value under Property, plant Equipment and are tested for impairment.

Capital Expenses incurred by the company on construction/development of certain assets which are essential for production, supply of goods or for the access to any existing Assets of the company are recognised as Enabling Assets under Property, Plant and Equipment.

Transition to Ind AS

The company elected to continue with the carrying value as per cost model (for all of its property, plant and equipment as recognised in the financial statements as at the date of transition to Ind ASs, measured as per the previous GAAP.

2.7 Intangible Assets

Intangible assets acquired separately are measured on initial recognition at cost. The cost of intangible assets acquired in a business combination is their fair value at the date of acquisition. Following initial recognition, intangible assets are carried at cost less any accumulated amortisation (calculated on a straight-line basis over their useful lives) and accumulated impairment losses, if any.

Internally generated intangibles, excluding capitalised development costs, are not capitalised. Instead, the related expenditure is recognised in the statement of profit or loss and other comprehensive income in the period in which the expenditure is incurred. The useful lives of intangible assets are assessed as either finite or indefinite. Intangible assets with finite lives are amortised over their useful economic lives and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortisation period and the amortisation method for an intangible asset with a finite useful life are reviewed at least at the end of each reporting period. Changes in the expected useful life or the expected pattern of consumption of future economic benefits embodied in the asset are considered to modify the amortisation period or method, as appropriate, and are treated as changes in accounting estimates. The amortisation expense on intangible assets with finite lives is recognised in the statement of profit or loss.

An intangible asset with an indefinite useful life is not amortised but is tested for impairment at each reporting date.

Gains or losses arising from derecognition of an intangible asset are measured as the difference between the net disposal proceeds and the carrying amount of the asset and are recognised in the statement of profit or loss

Cost of Software recognized as intangible asset, is amortised on straight line method over a period of legal right to use or three years, whichever is less; with a nil residual value.

2.8 Impairment of Assets

The Company assesses at the end of each reporting period whether there is any indication that an asset may be impaired. If any such indication exists, the Company estimates the recoverable amount of the asset. An asset's recoverable amount is the higher of the asset's or cash-generating unit's value in use and its fair value less costs of disposal, and is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets, in which case the recoverable amount is determined for the cash-generating unit to which the asset belongs.

2.9 Financial Instruments

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

2.9.1 Financial assets

2.9.1 Initial recognition and measurement

All financial assets are recognised initially at fair value, in the case of financial assets not recorded at fair value through profit or loss, plus transaction costs that are attributable to the acquisition of the financial asset. Purchases or sales of financial assets that require delivery of assets within a time frame established by regulation or convention in the market place (regular way trades) are recognised on the trade date, i.e., the date that the Company commits to purchase or sell the asset.

2.9.2 Subsequent measurement

For purposes of subsequent measurement, financial assets are classified in four categories:

- Debt instruments at amortised cost
- Debt instruments at fair value through other comprehensive income (FVTOCI)
- Debt instruments, derivatives and equity instruments at fair value through profit or loss (FVTPL)
- Equity instruments measured at fair value through other comprehensive income (FVTOCI)

2.9.2.1 Impairment of financial assets

In accordance with Ind AS 109, the Company applies expected credit loss (ECL) model for measurement and recognition of impairment loss on the following financial assets and credit risk exposure:

- a) Financial assets that are debt instruments, and are measured at amortised cost e.g., loans, debt securities, deposits, trade receivables and bank balance
- b) Financial assets that are debt instruments and are measured as at FVTOCI
- c) Lease receivables under Ind AS 17
- d) Trade receivables or any contractual right to receive cash or another financial asset that result from transactions that are within the scope of Ind AS 11 and Ind AS 18

The Company follows 'simplified approach' for recognition of impairment loss allowance on:

- Trade receivables or contract revenue receivables; and
- All lease receivables resulting from transactions within the scope of Ind AS 17

The application of simplified approach does not require the Company to track changes in credit risk. Rather, it recognises impairment loss allowance based on lifetime ECLs at each reporting date, right from its initial recognition.

2.9.3 Financial liabilities

2.9.3.1 Initial recognition and measurement

The Company financial liabilities include trade and other payables, loans and borrowings including bank overdrafts.

All financial liabilities are recognised initially at fair value and, in the case of loans and borrowings and payables, net of directly attributable transaction costs.

2.9.3.2 Subsequent measurement

The measurement of financial liabilities depends on their classification, as described below:

2.9.3.3 Financial liabilities at fair value through profit or loss

Financial liabilities at fair value through profit or loss include financial liabilities held for trading and financial liabilities designated upon initial recognition as at fair value through profit or loss. Financial liabilities are classified as held for trading if they are incurred for the purpose of repurchasing in the near term. This category also includes derivative financial instruments entered into by the Company that are not designated as hedging instruments in hedge relationships as defined by Ind AS 109. Separated embedded derivatives are also classified as held for trading unless they are designated as effective hedging instruments.

Gains or losses on liabilities held for trading are recognised in the profit or loss.

Financial liabilities designated upon initial recognition at fair value through profit or loss are designated as such at the initial date of recognition, and only if the criteria in Ind AS 109 are satisfied. For liabilities designated as FVTPL, fair value gains/ losses attributable to changes in own credit risk are recognized in OCI. These gains/ loss are not subsequently transferred to P&L. However, the Company may transfer the cumulative gain or loss within equity. All other changes in fair value of such liability are recognised in the statement of profit or loss. The Company has not designated any financial liability as at fair value through profit and loss.

2.9.3.4 Financial liabilities at amortised cost

After initial recognition, these are subsequently measured at amortised cost using the effective interest rate method. Gains and losses are recognised in profit or loss when the liabilities are derecognised as well as through the effective interest rate amortisation process. Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the effective interest rate. The effective interest rate amortisation is included as finance costs in the statement of profit and loss. This category generally applies to borrowings.

2.9.3.5 Derecognition

A financial liability is derecognised when the obligation under the liability is discharged or cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as the derecognition of the original liability and the recognition of a new liability. The difference between the carrying amount of a financial liability (or part of a financial liability) extinguished or transferred to another party and the consideration paid, including any non-cash assets transferred or liabilities assumed, shall be recognised in profit or loss.

2.9.4 Reclassification of financial assets

The Company determines classification of financial assets and liabilities on initial recognition. After initial recognition, no reclassification is made for financial assets which are equity instruments and financial liabilities. For financial assets which are debt instruments, a reclassification is made only if there is a change in the business model for managing those

assets. Changes to the business model are expected to be infrequent. The Company senior management determines change in the business model as a result of external or internal changes which are significant to the Company operations. Such changes are evident to external parties. A change in the business model occurs when the Company either begins or ceases to perform an activity that is significant to its operations. If the Company reclassifies financial assets, it applies the reclassification prospectively from the reclassification date which is the first day of the immediately next reporting period following the change in business model. The group does not restate any previously recognised gains, losses (including impairment gains or losses) or interest.

The following table shows various reclassification and how they are accounted for

Original classification	Revised classification	Accounting treatment
Amortised cost	FVTPL	Fair value is measured at reclassification date. Difference between previous amortized cost and fair value is recognised in P&L.
FVTPL	Amortised Cost	Fair value at reclassification date becomes its new gross carrying amount. EIR is calculated based on the new gross carrying amount.
Amortised cost	FVTOCI	Fair value is measured at reclassification date. Difference between previous amortised cost and fair value is recognised in OCI. No change in EIR due to reclassification.
FVTOCI	Amortised cost	Fair value at reclassification date becomes its new amortised cost carrying amount. However, cumulative gain or loss in OCI is adjusted against fair value. Consequently, the asset is measured as if it had always been measured at amortised cost.
FVTPL	FVTOCI	Fair value at reclassification date becomes its new carrying amount. No other adjustment is required.
FVTOCI	FVTPL	Assets continue to be measured at fair value. Cumulative gain or loss previously recognized in OCI is reclassified to P&L at the reclassification date.

2.9.5 Offsetting of financial instruments

Financial assets and financial liabilities are offset and the net amount is reported in the consolidated balance sheet if there is a currently enforceable legal right to offset the recognised amounts and there is an intention to settle on a net basis, to realise the assets and settle the liabilities simultaneously.

2.10 Taxation

Income tax expense represents the sum of the tax currently payable and deferred tax.

Current tax is the amount of income taxes payable (recoverable) in respect of the taxable profit (tax loss) for a period. Taxable profit differs from "profit before income tax" as reported in the statement of profit or loss and other comprehensive income because it excludes items of income or expense that are taxable or deductible in other years and it further excludes items that are never taxable or deductible. The company's liability for current tax is calculated using tax rates that have been enacted or substantively enacted by the end of the reporting period.

Deferred tax is recognised on temporary differences between the carrying amounts of assets and liabilities in the financial statements and the corresponding tax base used in the

computation of taxable profit. Deferred tax liabilities are generally recognised for all taxable temporary differences. Deferred tax assets are generally recognised for all deductible temporary difference to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilised. Such assets and liabilities are not recognised if the temporary difference arises from goodwill or from the initial recognition (other than in a business combination) of other assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit.

Deferred tax liabilities are recognised for taxable temporary differences associated with investments in subsidiaries and associates, except where the company is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax assets arising from deductible temporary differences associated with such investments and interests are only recognised to the extent that it is probable that there will be sufficient taxable profits against which to utilise the benefits of the temporary differences.

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered. Unrecognised deferred tax assets are reassessed at the end of each reporting year and are recognised to the extent that it has become probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the period in which the liability is settled or the asset is realised, based on tax rate (and tax laws) that have been enacted or substantively enacted by the end of the reporting period.

The measurement of deferred tax liabilities and assets reflects the tax consequences that would follow from the manner in which the company expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

Current and deferred tax are recognised in profit or loss, except when they relate to items that are recognised in other comprehensive income or directly in equity, in which case, the current and deferred tax are also recognised in other comprehensive income or directly in equity respectively. Where current tax or deferred tax arises from the initial accounting for a business combination, the tax effect is included in the accounting for the business combination.

2.11 Employee Benefits

2.11.1 Short-term Benefits

All short term employee benefits are recognized in the period in which they are incurred.

2.11.2 Post-employment benefits and other long term employee benefits

2.11.2.1 Defined contributions plans

A defined contribution plan is a post-employment benefit plan for Provident fund and Pension under which the company pays fixed contribution into fund maintained by a separate statutory body (Coal Mines Provident Fund) constituted under an enactment of law and the company will have no legal or constructive obligation to pay further amounts. Obligations for contributions to defined contribution plans are recognised as an employee benefit expense in the statement of profit and loss in the periods during which services are rendered by employees.

2.11.2.2 Defined benefits plans

A defined benefit plan is a post-employment benefit plan other than a defined contribution plan. Gratuity, leave encashment are defined benefit plans (with ceilings on benefits). The company's net obligation in respect of defined benefit plans is calculated by estimating the amount of future benefit that employees have earned in return of their service in the current and prior periods. The benefit is discounted to determine its present value and reduced by the fair value of plan assets, if any. The discount rate is based on the prevailing market yields of Indian Government securities as at the reporting date that have maturity dates approximating the terms of the company's obligations and that are denominated in the same currency in which the benefits are expected to be paid.

The application of actuarial valuation involves making assumptions about discount rate, expected rates of return on assets, future salary increases, mortality rates etc. Due to the long term nature of these plans, such estimates are subject to uncertainties. The calculation is performed at each balance sheet by an actuary using the projected unit credit method. When the calculation results in to the benefit to the company, the recognised asset is limited to the present value of the economic benefits available in the form of any future refunds from the plan or reduction in future contributions to the plan. An economic benefit is available to the company if it is realisable during the life of the plan, or on settlement of plan liabilities.

Re-measurement of the net defined benefit liability, which comprise actuarial gain and losses considering the return on plan assets (excluding interest) and the effects of the assets ceiling (if any, excluding interest) are recognised immediately in the other comprehensive income. The company determines the net interest expense (income) on the net defined benefit liability (asset) for the period by applying the discount rate used to measure the defined benefit obligation at the beginning of the annual period to the then net defined benefit liability (asset), taking into account any changes in the net defined benefit liability (asset) during the period as a result of contributions and benefit payments. Net interest expense and other expenses related to defined benefit plans are recognised in profit and loss.

When the benefits of the plan are improved, the portion of the increased benefit relating to past service by employees is recognised as expense immediately in the statement of profit and loss.

2.11.3 Other Employee benefits

Certain other employee benefits namely benefit on account of LTA, LTC, Life Cover scheme, Group personal Accident insurance scheme, settlement allowance, post-retirement medical benefit scheme and compensation to dependents of deceased in mine accidents etc., are also recognised on the same basis as described above for defined benefits plan. These benefits do not have specific funding.

2.12 Foreign Currency

The company's reported currency and the functional currency for majority of its operations is in Indian Rupees (INR) being the principal currency of the economic environment in which it operates.

Transactions in foreign currencies are converted into the reported currency of the company using the exchange rate prevailing at the transaction date. Monetary assets and liabilities denominated in foreign currencies outstanding at the end of the reporting period are translated

at the exchange rates prevailing as at the end of reporting period. Exchange differences arising on the settlement of monetary assets and liabilities or on translating monetary assets and liabilities at rates different from those at which they were translated on initial recognition during the period or in previous financial statements are recognised in statement of profit and loss in the period in which they arise.

Non-monetary items denominated in foreign currency are valued at the exchange rates prevailing on the date of transactions.

2.13.1 Stores & Spares

The Stock of stores & spare parts (which also includes loose tools) at central & area stores are considered as per balances appearing in priced stores ledger and are valued at cost calculated on the basis of weighted average method. The inventory of stores & spare parts lying at collieries / sub-stores / drilling camps/ consuming centres are considered at the yearend only as per physically verified stores and are valued at cost.

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

2.13.2 Other Inventories

However, Stock of stationery are not considered in inventory considering their value not being significant.

2.14 Provisions, Contingent Liabilities & Contingent Assets

Provisions are recognized when the company has a present obligation (legal or constructive) as a result of a past event, and it is probable that an outflow of economic benefits will be required to settle the obligation and a reliable estimate of the amount of the obligation can be made. Where the time value of money is material, provisions are stated at the present value of the expenditure expected to settle the obligation.

All provisions are reviewed at each balance sheet date and adjusted to reflect the current best estimate.

Where it is not probable that an outflow of economic benefits will be required, or the amount cannot be estimated reliably, the obligation is disclosed as a contingent liability, unless the probability of outflow of economic benefits is remote. Possible obligations, whose existence will only be confirmed by the occurrence or non-occurrence of one or more future uncertain events not wholly within the control of the company, are also disclosed as contingent liabilities unless the probability of outflow of economic benefits is remote.

Contingent Assets are not recognised in the financial statements. However, when the realisation of income is virtually certain, then the related asset is not a contingent asset and its recognition is appropriate.

2.15 Earnings per share

Basic earnings per share are computed by dividing the net profit after tax by the weighted average number of equity shares outstanding during the period. Diluted earnings per shares is computed by dividing the profit after tax by the weighted average number of equity shares considered for deriving basic earnings per shares and also the weighted average number

of equity shares that could have been issued upon conversion of all dilutive potential equity shares.

2.16 Judgements, Estimates and Assumptions

The preparation of the financial statements in conformity with Ind AS requires management to make estimates, judgements and assumptions that affect the application of accounting policies and the reported amounts of assets and liabilities, the disclosures of contingent assets and liabilities at the date of financial statements and the amount of revenue and expenses during the reported period. Application of accounting policies involving complex and subjective judgements and the use of assumptions in these financial statements have been disclosed. Accounting estimates could change from period to period. Actual results could differ from those estimates. Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimate are recognised in the period in which the estimates are revised and, if material, their effects are disclosed in the notes to the financial statements.

2.16.1 Judgements

In the process of applying the Company accounting policies, management has made the following judgements, which have the most significant effect on the amounts recognised in the financial statements:

2.16.2 Formulation of Accounting Policies

Accounting policies are formulated in a manner that result in financial statements containing relevant and reliable information about the transactions, other events and conditions to which they apply. Those policies need not be applied when the effect of applying them is immaterial.

In the absence of an Ind AS that specifically applies to a transaction, other event or condition, management has used its judgement in developing and applying an accounting policy that results in information that is:

- a) relevant to the economic decision-making needs of users and
- b) reliable in that financial statements :
 - (i) represent faithfully the financial position, financial performance and cash flows of the entity;
 - (ii) reflect the economic substance of transactions, other events and conditions, and not merely the legal form;
 - (iii) are neutral, i.e. free from bias;
 - (iv) are prudent; and
 - v) are complete in all material respects on a consistent basis

In making the judgement management refers to, and considers the applicability of, the following sources in descending order:

- (a) The requirements in Ind ASs dealing with similar and related issues; and
- (b) the definitions, recognition criteria and measurement concepts for assets, liabilities, income and expenses in the Framework.

In making the judgement, management considers the most recent pronouncements of International Accounting Standards Board and in absence thereof those of the other standard-

setting bodies that use a similar conceptual framework to develop accounting standards, other accounting literature and accepted industry practices, to the extent that these do not conflict with the sources in above paragraph.

The group operates in the mining sector (a sector where the exploration, evaluation, development production phases are based on the varied topographical and geomining terrain spread over the lease period running over decades and prone to constant changes), the accounting policies whereof have evolved based on specific industry practices supported by research committees and approved by the various regulators owing to its consistent application over the last several decades. In the absence of specific accounting literature, guidance and standards in certain specific areas which are in the process of evolution. The group continues to strive to develop accounting policies in line with the development of accounting literature and any development therein shall be accounted for prospectively as per the procedure laid down above more particularly in Ind AS 8.

The financial statements are prepared on going concern basis using accrual basis of accounting.

2.16.3 Materiality

Ind AS applies to items which are material. Management uses judgment in deciding whether individual items or groups of item are material in the financial statements. Materiality is judged by reference to the size and nature of the item. The deciding factor is whether omission or misstatement could individually or collectively influence the economic decisions that users make on the basis of the financial statements. Management also uses judgement of materiality for determining the compliance requirement of the Ind AS. In particular circumstances either the nature or the amount of an item or aggregate of items could be the determining factor. Further an entity may also be required to present separately immaterial items when required by law.

2.16.2 Estimates and assumptions

The key assumptions concerning the future and other key sources of estimation uncertainty at the reporting date, that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year, are described below. The Group based its assumptions and estimates on parameters available when the consolidated financial statements were prepared. Existing circumstances and assumptions about future developments, however, may change due to market changes or circumstances arising that are beyond the control of the Group. Such changes are reflected in the assumptions when they occur.

2.16.2.1 Impairment of non-financial assets

There is an indication of impairment if, the carrying value of an asset or cash generating unit exceeds its recoverable amount, which is the higher of its fair value less costs of disposal and its value in use. Group considers individual mines as separate cash generating units for the purpose of test of impairment. The value in use calculation is based on a DCF model. The cash flows are derived from the budget for the next five years and do not include restructuring activities that the Group is not yet committed to or significant future investments that will enhance the asset's performance of the CGU being tested. The recoverable amount is sensitive

to the discount rate used for the DCF model as well as the expected future cash-inflows and the growth rate used for extrapolation purposes. These estimates are most relevant to other mining infrastructures. The key assumptions used to determine the recoverable amount for the different CGUs, are disclosed and further explained in respective notes.

2.16.2.2 Taxes

Deferred tax assets are recognised for unused tax losses to the extent that it is probable that taxable profit will be available against which the losses can be utilised. Significant management judgement is required to determine the amount of deferred tax assets that can be recognised, based upon the likely timing and the level of future taxable profits together with future tax planning strategies. Further details on taxes are disclosed in Note 38.

2.16.2.3 Defined benefit plans

The cost of the defined benefit gratuity plan and other post-employment medical benefits and the present value of the gratuity obligation are determined using actuarial valuations. An actuarial valuation involves making various assumptions that may differ from actual developments in the future. These include the determination of the discount rate, future salary increases and mortality rates.

Due to the complexities involved in the valuation and its long-term nature, a defined benefit obligation is highly sensitive to changes in these assumptions. All assumptions are reviewed at each reporting date. The parameter most subject to change is the discount rate. In determining the appropriate discount rate for plans operated in India, the management considers the interest rates of government bonds in currencies consistent with the currencies of the post-employment benefit obligation.

The mortality rate is based on publicly available mortality tables of the country. Those mortality tables tend to change only at interval in response to demographic changes. Future salary increases and gratuity increases are based on expected future inflation rate.

2.16.2.4 Fair value measurement of financial instruments

When the fair values of financial assets and financial liabilities recorded in the balance sheet cannot be measured based on quoted prices in active markets, their fair value is measured using valuation techniques including the DCF model. The inputs to these models are taken from observable markets where possible, but where this is not feasible, a degree of judgement is required in establishing fair values. Judgements include considerations of inputs such as liquidity risk, credit risk and volatility. Changes in assumptions about these factors could affect the reported fair value of financial instruments.

NOTE – 38: ADDITIONAL NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31st MARCH, 2017 (STANDALONE)

1. Fair Value measurement

(₹ in Crore)

(a) Financial Instruments by Category

	31 st March 2017			31 st March 2016				1 April 2015		
	FVTPL	FVTOCI	Amortised cost	FVTPL	FVTOCI	Amortised cost	Cost	FVTPL	FVTOCI	Amortised cost
Financial Assets										
Investments :										
Secured Bonds										
Preference Share in Subsidiary										
Mutual Fund										
Loans			0.02			0.03				0.06
Deposits, receivable & Others			151.44			137.21				213.27
Trade receivables			327.65			248.24				236.06
Cash & cash equivalents			77.18			124.30				85.92
Other Bank Balances										
Financial Liabilities										
Borrowings										
Trade payables			1.13			0.99				0.77
Security Deposit and Earnest money			9.69			7.36				6.42
Other Liabilities			50.44			41.44				31.88

(b) Fair value hierarchy

Table below shows Judgements and estimates made in determining the fair values of the financial instruments that are (a) recognised and measured at fair value and (b) measured at amortised cost and for which fair values are disclosed in the financial statements. To provide an indication about the reliability of the inputs used in determining fair value, the group has classified its financial instruments into the three levels prescribed under the accounting standard. An explanation of each level follows underneath the table.

Financial assets and liabilities measured at fair value – recurring fair value measurement	31 st March 2017			31 st March 2016			1 April 2015		
	Level I	Level II	Level III	Level I	Level II	Level III	Level I	Level II	Level III
Financial Assets at FVTPL									
Investments :									
Mutual Fund									
Financial Liabilities									
If any item	-	-	-	-	-	-	-	-	-

(₹ in Crore)

Financial assets and liabilities measured at amortised cost for which fair values are disclosed at 31 st March, 2017	31 st March 2017			31 st March 2016			1 April 2015		
	Level I	Level II	Level III	Level I	Level II	Level III	Level I	Level II	Level III
Financial Assets at FVTPL									
Investments :									
Equity Shares in JV									
Mutual Fund									
Loans			0.02			0.03			0.06
Deposits, receivable & Others			151.44			137.21			213.27
Trade receivables			327.65			248.24			236.06
Cash & cash equivalents			77.18			124.30			85.92
Other Bank Balances									
Preference Share									
Borrowings									
Trade payables			1.13			0.99			0.77
Security Deposit and Earnest money			9.69			7.36			6.42
Other Liabilities			50.44			41.44			31.88

Level 1: Level 1 hierarchy includes financial instruments measured using quoted prices. This includes mutual funds that have quoted price and are valued using the closing NAV.

Level 2: The fair value of financial instruments that are not traded in an active market is determined using valuation techniques which maximize the use of observable market data and rely as little as possible on entity-specific estimates. If all significant inputs required to fair value an instrument are observable, the instrument is included in level 2.

Level 3: If one or more of the significant inputs is not based on observable market data, the instrument is included in level 3. This is the case for unlisted equity securities, preference shares borrowings, security deposits, loans, trade receivables, cash and cash equivalents and other liabilities/assets taken included in level 3.

(c) Valuation technique used in determining fair value

Valuation techniques used to value financial instruments include:

- The use of quoted market prices of instruments
- The fair value of the remaining financial instruments is determined using discounted cash flow analysis.

Fair value measurements using significant unobservable inputs

At present there are no fair value measurements using significant unobservable inputs.

Fair values of financial assets and liabilities measured at amortised cost

(₹ in Crore)

	31 st March 2017		31 st March, 2016		1 April 2015	
	Carrying Amount	Fair Value	Carrying Amount	Fair Value	Carrying Amount	Fair Value
Financial Assets						
Loans	0.02	0.02	0.03	0.03	0.06	0.06
Deposits & receivable	151.44	151.44	137.21	137.21	213.27	213.27
Trade receivables	327.65	327.65	248.24	248.24	236.06	236.06
Cash & cash equivalents	77.18	77.18	124.30	124.30	85.92	85.92
Other Bank Balances						
Financial liabilities						
Borrowings						
Trade payables	1.13	1.13	0.99	0.99	0.77	0.77
Security Deposit and Earnest money	9.69	9.69	7.36	7.36	6.42	6.42
Other Liabilities	50.44	50.44	41.44	41.44	31.88	31.88

- The carrying amounts of trade receivables, short term deposits, cash and cash equivalents, trade payables are considered to be the same as their fair values, due to their short-term nature.
- Other Financial assets accounted at amortised cost is not carried at fair value only if same is not material.
- The fair values for loans, security deposits and investment in preference shares were calculated based on cash flows discounted using a current lending rate. They are classified as level 3 fair values in the fair value hierarchy.

Significant estimates: the fair value of financial instruments that are not traded in an active market is determined using valuation techniques. Company uses its judgement to select a method and makes suitable assumptions at the end of each reporting period.

Security Deposits

The Company considers that the “Security Deposits” does not include a significant financing component. The milestone payments (security deposits) coincide with the company’s performance and the contract requires amounts to be retained for reasons other than the provision of finance. The withholding of a specified percentage of each milestone payment is intended to protect the interest of the company, from the contractor failing to adequately complete its obligations under the contract’. Accordingly transaction cost of Security deposit is considered as fair value at initial recognition and subsequently measured at amortised cost.

2. RISK ANALYSIS AND MANAGEMENT

Financial risk management objectives and policies

The Company principal financial liabilities, comprise loans and borrowings, trade and other payables. The main purpose of these financial liabilities is to finance the Company operations and to provide guarantees to support its operations. The Company principal financial assets include loans, trade and other receivables, and cash and cash equivalents that is derived directly from its operations.

The Company is exposed to market risk, credit risk and liquidity risk. The Company senior management oversees the management of these risks. The Company senior management is supported by a risk committee that advises, inter alia, on financial risks and the appropriate financial risk governance framework for the Company. The risk committee provides assurance to the Board of Directors that the Company financial risk activities are governed by appropriate policies and procedures and that financial risks are identified, measured and managed in accordance with the Company policies and risk objectives. The Board of Directors reviews and agrees policies for managing each of these risks, which are summarised below.

The Company is exposed to market risk, credit risk and liquidity risk. This note explains the sources of risk which the entity is exposed to and how the entity manages the risk and the impact of hedge accounting in the financial statements

Risk	Exposure arising from	Measurement	Management
Credit Risk	Cash and Cash equivalents, trade receivables financial asset measured at amortised cost	Ageing analysis	Department of public enterprises (DPE guidelines), diversification of bank deposits credit limits and other securities
Liquidity Risk	Borrowings and other liabilities	Periodic cash flows	Availability of committed credit lines and borrowing facilities
Market Risk-foreign exchange	Future commercial transactions, recognised financial assets and liabilities not denominated in INR	Cash flow forecast sensitivity analysis	Regular watch and review by senior management and audit committee.
Market Risk-Interest rate	Cash and Cash equivalents, Bank deposits and mutual funds	Cash flow forecast sensitivity analysis	Department of public enterprises (DPE guidelines), Regular watch and review by senior management and audit committee.

The Company risk management is carried out by the board of directors as per DPE guidelines issued by Government of India. The board provides written principals for overall risk management as well as policies covering investment of excess liquidity.

A. Credit Risk: Credit risk arises from cash and cash equivalents and deposits with banks and financial institutions, as well as including outstanding receivables.

Credit risk management:

Significant estimates and judgements Impairment of financial assets

The impairment provisions for financial assets disclosed above are based on assumptions about risk of default and expected loss rates. The Company uses judgement in making these assumptions and selecting the inputs to the impairment calculation, based on the Company past history, existing market conditions as well as forward looking estimates at the end of each reporting period

B. Liquidity Risk

Prudent liquidity risk management implies maintaining sufficient cash and marketable securities and the availability of funding through an adequate amount of committed credit facilities to meet obligations when due. Due to the dynamic nature of the underlying businesses, group treasury maintains flexibility in funding by maintaining availability under committed credit lines.

Management monitors forecasts of the Company liquidity position (comprising the undrawn borrowing facilities below) and cash and cash equivalents on the basis of expected cash flows. This is generally carried out at local level in the operating companies of the group in accordance with practice and limits set by the group.

(i) Financing arrangements

The Company had access to the following undrawn borrowing facilities at the end of the reporting period:

(₹ in Crore)

	31.03.2017	31.03.2016	01.04.2015
Expiring within one year (Bank overdraft and other facilities)	NIL	NIL	NIL
Expiring beyond one year (Bank Loans)	NIL	NIL	NIL

(ii) Maturities of financial liabilities

The tables below analyse the Company financial liabilities into relevant maturity groupings based on their contractual maturities.

The amounts disclosed in the table are the contractual undiscounted cash flows. Balances due within 12 months equal their carrying balances as the impact of discounting is not significant.

(₹ in Crore)

Contractual maturities of financial liabilities 31.03.2017	Less than 3 months	3 months to 6 months	6 months to 1 year	1 year to 2 years	2 year to 5 years	Total
Borrowings						
Obligation under finance lease						
Trade payables	0.79	0.00	0.25	0.08	0.01	1.13
Other financial liabilities	2.63	3.68	4.20	12.40	37.22	60.13
Total	3.42	3.68	4.45	12.48	37.23	61.26

(₹ in Crore)

Contractual maturities of financial liabilities 31.03.2016	Less than 3 months	3 months to 6 months	6 months to 1 year	1 year to 2 years	2 year to 5 years	Total
Borrowings						
Obligation under finance lease						
Trade payables	0.88	0.00	0.08	0.00	0.03	0.99
Other financial liabilities	1.59	2.23	2.55	10.61	31.82	48.80
Total	2.47	2.23	1.63	10.61	31.85	49.79

(₹ in Crore)

Contractual maturities of financial liabilities 01.04.2015	Less than 3 months	3 months to 6 months	6 months to 1 year	1 year to 2 years	2 year to 5 years	Total
Borrowings						
Obligation under finance lease						
Trade payables	0.54	0.09	0.10	0.00	0.04	0.77
Other financial liabilities	1.36	1.90	2.18	8.21	24.65	38.30
Total	1.90	1.99	2.28	8.21	24.69	39.07

Market risk

a) Foreign currency risk

The Company is exposed to foreign exchange risk arising from foreign currency transactions. Foreign exchange risk in respect of foreign operation is considered to be insignificant. The Company also imports and risk is managed by regular follow up. Company has a policy which is implemented when foreign currency risk becomes significant.

b) Cash flow and fair value interest rate risk.

The Company main interest rate risk arises from bank deposits with change in interest rate exposes the Company to cash flow interest rate risk. Company policy is to maintain most of its deposits at fixed rate.

Company manages the risk using guidelines from Department of public enterprises (DPE), diversification of bank deposits credit limits and other securities.

Capital management

The company being a government entity manages its capital as per the guidelines of Department of investment and public asset management under ministry of finance.

Capital Structure of the company is as follows:

(₹ in Crore)

	31.03.2017	31.03.2016	01.04.2015
Equity Share capital	19.04	19.04	19.04
Preference share capital	NIL	NIL	NIL
Long term debt	NIL	NIL	NIL

3. Company Information:

Name	Relationship with CIL (holding company)	Principal activities	Country of Incorporation	% of Equity interest		
				01.04.2015	31.03.2016	31.03.2017
Central Mine Planning & Design Institute Limited.	Subsidiary of CIL	Planning & Design, Exploration, Environmental Services	India	100 %	100 %	100 %

4. Employee Benefit : Recognition and Measurement (Ind AS-19)

i) Provident Fund:

Company pays fixed contribution towards Provident Fund and Pension Fund at pre-determined rates to a separate trust named Coal Mines Provident Fund (CMPF), which invests the fund in permitted securities. The contribution towards the fund during the year is ₹ 32.66 Crore (₹ 32.30 Crore) has been recognized in the Statement of Profit & Loss (Note 28).

ii) The Company operates some defined benefit plans as follows which are valued on actuarial basis:

(a) Funded-

- ♦ Gratuity

(b) Unfunded

- ♦ Leave Encashment
- ♦ Life Cover Scheme
- ♦ Settlement Allowance
- ♦ Group Personal Accident Insurance
- ♦ Leave Travel Concession
- ♦ Medical Benefits
- ♦ Compensation to dependent on Mine Accident Benefits

Total liability as on 31.03.2017 based on valuation made by the Actuary, details of which are mentioned below is ₹ 304.98 Crore.

The actuarial liability as on 31.03.2017:

(₹ in Crore)

Head	Opening Actuarial Liability as on 01.04.2016	Incremental Liability during the Year	Closing Actuarial Liability as on 31.03.2017
Gratuity	111.81	5.40	117.21
Earned Leave	57.54	16.48	74.02
Half Pay Leave	23.35	6.25	29.60
Life Cover Scheme	0.68	0.03	0.71
Settlement Allowance Executives	1.84	0.30	2.14
Settlement Allowance Non-executives	1.04	0.06	1.10
Group Personal Accident Insurance Scheme	0.05	0.00	0.05
Leave Travel Concession	13.78	3.67	17.45
Medical Benefits Executives	48.79	11.45	60.24
Medical Benefits Non-Executives	0.68	1.78	2.46
Compensation to dependents in case of mine accidental death	0.00	0.00	0.00
Total	259.56	45.42	304.98

(c) Disclosure as per Actuary's Certificate

The disclosures as per actuary's certificate for employee benefits for Gratuity (funded) and Leave Encashment (funded) are given below: -

ACTUARIAL VALUATION OF GRATUITY LIABILITY AS AT 31.03.2017**CERTIFICATES AS PER IND AS 19 (2015)****Table 1: Disclosure Item**

(₹ In Crores)

31.03.2016	Changes in Present Value of Obligation as at	31.03.2017
121.38	Present value of obligation as on last valuation	111.81
10.63	Current Service Cost	13.35
9.35	Interest Cost	7.43
	Participant Contribution	
	Plan Amendments: Vested portion at end of period(Past Service)	
	Plan Amendments: Non-Vested portion at end of period(Past Service)	
	Actuarial gain/loss on obligations due to Change in Financial Assumption	5.82
	Actuarial gain/loss on obligations due to Change in Demographic assumption	
-20.46	Actuarial gain/loss on obligations due to Unexpected Experience	-2.64
	Actuarial gain/loss on obligations due to Other reason	
	The effect of change in Foreign exchange rates	
9.09	Benefits Paid	18.56
	Acquisition Adjustment	
	Disposal/Transfer of Obligation	
	Curtailment cost	
	Settlement Cost	
	Other(Unsettled Liability at the end of the valuation date)	
111.81	Present value of obligation as on valuation date	117.21
164.10	Accrued Gratuity	162.33

Table 2: Disclosure Item

(₹ In Crores)

31.03.2016	Changes in Fair Value of Plan Assets as at	31.03.2017
0.00	Fair value of Plan Assets at Beginning of period	23.22
0.00	Interest Income	1.68
30.08	Employer Contributions	23.12
	Participant Contributions	

	Acquisition/Business Combination	
	Settlement Cost	
9.09	Benefits Paid	18.56
	The effect of asset ceiling	
	The effect of change in Foreign Exchange Rates	
	Administrative Expenses and Insurance Premium	
2.22	Return on Plan Assets excluding Interest Income	0.48
23.22	Fair value of Plan Assets at End of measurement period	29.94

Table 3: Disclosure Item

(₹ In Crores)

31.03.2016	Table Showing Reconciliation to Balance Sheet	31.03.2017
-88.59	Funded Status	-87.27
	Unrecognized Past Service Cost	
	Unrecognized Actuarial gain/loss at end of the period	
	Post Measurement Date Employer Contribution(Expected)	
	Unfunded Accrued/Prepaid Pension cost	
23.22	Fund Asset	29.94
111.81	Fund Liability	117.21

Table 4: Disclosure Item

31.03.2016	Table Showing Plan Assumptions	31.03.2017
8.00%	Discount Rate	7.25%
8.00%	Expected Return on Plan Asset	7.25%
6.25%	Rate of Compensation Increase(Salary Inflation)	9.00% for Executives & 6.50% for Non-Executives
N/A	Pension Increase Rate	N/A
16	Average expected future service (Remaining working Life)	15
16	Average Duration of Liabilities	15
	Mortality Table	IALM 2006-2008 Ultimate
60	Superannuation at age-Male	60
60	Superannuation at age-Female	60
1.00	Early Retirement & Disablement (All Causes Combined)	1.00%

Table 5: Disclosure Item

(₹ In Crores)

31.03.2016	Expense Recognized in statement of Profit/Loss as at	31.03.2017
10.63	Current Service Cost	13.35
	Past Service Cost(vested)	
	Past Service Cost(Non-Vested)	
9.35	Net Interest Cost	5.75
	Cost(Loss)/(Gain) on settlement	
	Cost(Loss)/(Gain) on curtailment	
	Actuarial Gain loss Applicable only for last year	
	Employee Expected Contribution	
	Net Effect of changes in Foreign Exchange Rates	
19.98	Benefit Cost (Expense Recognized in Statement of Profit/loss)	19.10

Table 6: Disclosure Item

(₹ In Crores)

31.03.2016	Other Comprehensive Income	31.03.2017
	Actuarial gain/loss on obligations due to Change in Financial Assumption	5.82
	Actuarial gain/loss on obligations due to Change in Demographic assumption	
-20.46	Actuarial gain/loss on obligations due to Unexpected Experience	-2.64
	Actuarial gain/loss on obligations due to Other reason	
-20.46	Total Actuarial (gain)/losses	3.18
2.22	Return on Plan Asset, Excluding Interest Income	0.48
	The effect of asset ceiling	
-22.69	Balance at the end of the Period	2.70
-22.69	Net(Income)/Expense for the Period Recognized in OCI	2.70

Table 7: Disclosure Item

(₹ In Crores)

31.03.2016	Table Showing Allocation of Plan Asset at end Measurement Period	31.03.2017
-	Cash & Cash Equivalents	-
-	Investment Funds	-
-	Derivatives	-
-	Asset-Backed Securities	-
-	Structured Debt	-
-	Real Estates	-

-	Special Deposit Scheme	-
-	State Government Securities	-
-	Government of India Assets	-
-	Corporate Bonds	-
-	Debt Securities	-
-	Annuity Contracts/Insurance Fund	-
-	Other	-
-	Total	-

Table 8: Disclosure Item

31.03.2016	Table Showing Total Allocation in % of Plan Asset at end Measurement	31.03.2017
-	Cash & Cash Equivalents	-
-	Investment Funds	-
-	Derivatives	-
-	Asset-Backed Securities	-
-	Structured Debt	-
-	Real Estates	-
-	Special Deposit Scheme	-
-	State Government Securities	-
-	Government of India Assets	-
-	Corporate Bonds	-
-	Debt Securities	-
-	Annuity Contracts/Insurance Fund	-
-	Other	-
-	Total	-

Table 9: Disclosure Item

Mortality Table	
Age	Mortality (Per Annum)
25	0.000984
30	0.001056
35	0.001282
40	0.001803

45	0.002874
50	0.004946
55	0.007888
60	0.011534
65	0.0170085
70	0.0258545

Table 10: Disclosure Item

(₹ In Crores)

31.03.2016		Sensitivity Analysis	31.03.2017	
Increase	Decrease		Increase	Decrease
-	-	Discount Rate (-/+ 0.5%)	113.85	120.82
-	-	%Change Compared to base due to sensitivity	-2.87%	3.08%
-	-	Salary Growth (-/+ 0.5%)	118.07	116.37
-	-	%Change Compared to base due to sensitivity	0.72%	-0.72%
-	-	Attrition Rate (-/+ 0.5%)	117.31	117.12
-	-	%Change Compared to base due to sensitivity	0.08%	-0.08%
-	-	Mortality Rate (-/+ 10%)	117.86	116.57
-	-	%Change Compared to base due to sensitivity	0.55%	-0.55%

Table 11: Disclosure Item

(₹ In Crores)

Table Showing Cash Flow Information	
	₹ In Crores
Next Year Total (Expected)	105.60
Minimum Funding Requirements	104.03
Company's Discretion	-

Table 12: Disclosure Item

Table Showing Benefit Information Estimated Future payments(Past Service)	
year	₹ In Crores
1	29.49
2	16.93



3	14.74
4	13.33
5	14.51
6 to 10	47.99
More than 10 years	83.08
Total Undiscounted Payments Past and Future Service	
Total Undiscounted Payments related to Past Service	220.07
Less Discount For Interest	102.86
Projected Benefit Obligation	117.21

Table 13: Disclosure Item

Table Showing Outlook Next Year Components of Net Periodic benefit Cost Next Period	
	₹ In Crores
Current service Cost (Employer portion Only) Next period	13.05
Interest Cost next period	7.43
Expected Return on Plan Asset	2.17
Unrecognized past service Cost	
Unrecognized actuarial/gain loss at the end of the period	
Settlement Cost	
Curtailment Cost	
other(Actuarial Gain/loss)	
Benefit Cost	18.31

Table 14: Bifurcation of Net liability

(₹ In Crores)

31.03.2016	Table Showing expected return on Plan Asset at end Measurement Period	31.03.2017
17.82	Current liability	28.47
93.99	Non-Current Liability	88.74
111.81	Net Liability	117.21

**ACTUARIAL VALUATION OF LEAVE ENCASHMENT BENEFIT (EL/HPL)
AS AT 31.03.2017**

CERTIFICATES AS PER IND AS 19 (2015)

Table 1: Disclosure Item

(₹ In Crores)

31.03.2016	Changes in Present Value of Obligation as at	31.03.2017
81.18	Present value of obligation as on last valuation	80.89
6.95	Current Service Cost	10.44
5.92	Interest Cost	5.49
	Participant Contribution	
	Plan Amendments: Vested portion at end of period(Past Service)	
	Plan Amendments: Non-Vested portion at end of period(Past Service)	
	Actuarial gain/loss on obligations due to Change in Financial Assumption	20.70
	Actuarial gain/loss on obligations due to Change in Demographic assumption	
1.24	Actuarial gain/loss on obligations due to Unexpected Experience	-3.58
	Actuarial gain/loss on obligations due to Other reason	
	The effect of change in Foreign exchange rates	
14.39	Benefits Paid	10.33
	Acquisition Adjustment	
	Disposal/Transfer of Obligation	
	Curtailment cost	
	Settlement Cost	
	Other(Unsettled Liability at the end of the valuation date)	
80.89	Present value of obligation as on valuation date	103.61
96.84	Accrued leave Encashment	99.93

Table 2: Disclosure Item

(₹ In Crores)

31.03.2016	Changes in Fair Value of Plan Assets as at	31.03.2017
	Fair value of Plan Assets at Beginning of period	
	Interest Income	
	Employer Contributions	
	Participant Contributions	

	Acquisition/Business Combination	
	Settlement Cost	
	Benefits Paid	
	The effect of asset ceiling	
	The effect of change in Foreign Exchange Rates	
	Administrative Expenses and Insurance Premium	
	Return on Plan Assets excluding Interest Income	
	Fair value of Plan Assets at End of measurement period	

Table 3: Disclosure Item

(₹ In Crores)

31.03.2016	Table Showing Reconciliation to Balance Sheet	31.03.2017
-80.89	Funded Status	-103.61
	Unrecognized Past Service Cost	
	Unrecognized Actuarial gain/loss at end of the period	
	Post Measurement Date Employer Contribution(Expected)	
	Unfunded Accrued/Prepaid Pension cost	
	Fund Asset	
80.89	Fund Liability	103.61

Table 4: Disclosure Item

31.03.2016	Table Showing Plan Assumptions	31.03.2017
8.00%	Discount Rate	7.25%
N/A	Expected Return on Plan Asset	N/A
6.25% p.a	Rate of Compensation Increase(Salary Inflation)	9.00% for Executives & 6.50 % for Non-Executives
N/A	Pension Increase Rate	N/A
16	Average expected future service (Remaining working Life)	15
16	Average Duration of Liabilities	15
	Mortality Table	IALM 2006-2008 Ultimate

60	Superannuation at age-Male	60
60	Superannuation at age-Female	60
1.00% p.a	Early Retirement & Disablement (All Causes Combined)	1.00% p.a
Ignored	Voluntary Retirement	Ignored

Table 5: Disclosure Item

(₹ In Crores)

31.03.2016	Expense Recognized in statement of Profit/Loss as at	31.03.2017
6.95	Current Service Cost	10.44
	Past Service Cost(vested)	
	Past Service Cost(Non-Vested)	
5.92	Net Interest Cost	5.49
	Cost(Loss)/(Gain) on settlement	
	Cost(Loss)/(Gain) on curtailment	
1.24	Actuarial Gain loss Applicable only for last year	17.12
	Employee Expected Contribution	
	Net Effect of changes in Foreign Exchange Rates	
14.11	Benefit Cost(Expense Recognized in Statement of Profit/loss)	33.05

Table 6: Disclosure Item

(₹ In Crores)

31.03.2016	Other Comprehensive Income	31.03.2017
	Actuarial gain/loss on obligations due to Change in Financial Assumption	
	Actuarial gain/loss on obligations due to Change in Demographic assumption	
	Actuarial gain/loss on obligations due to Unexpected Experience	
	Actuarial gain/loss on obligations due to Other reason	
	Total Actuarial (gain)/losses	
	Return on Plan Asset, Excluding Interest Income	
	The effect of asset ceiling	
	Balance at the end of the Period	
	Net(Income)/Expense for the Period Recognized in OCI	

Table 7: Disclosure Item

Mortality Table	
Age	Mortality (Per Annum)
25	0.000984
30	0.001056
35	0.001282
40	0.001803
45	0.002874
50	0.004946
55	0.007888
60	0.011534
65	0.0170085
70	0.0258545

Table 8: Disclosure Item

(₹ In Crores)

31.03.2016		Sensitivity Analysis	31.03.2017	
Increase	Decrease		Increase	Decrease
-	-	Discount Rate (-/+ 0.5%)	99.51	108.08
-	-	%Change Compared to base due to sensitivity	-3.96%	4.31%
-	-	Salary Growth (-/+ 0.5%)	107.98	99.56
-	-	%Change Compared to base due to sensitivity	4.22%	-3.91%
-	-	Attrition Rate (-/+ 0.5%)	103.70	103.52
-	-	%Change Compared to base due to sensitivity	0.09%	-0.09%
-	-	Mortality Rate (-/+ 10%)	104.15	103.07
-	-	%Change Compared to base due to sensitivity	0.52%	-0.52%

Table 9: Disclosure Item

Table Showing Benefit Information Estimated Future payments	
year	₹ In Crores
1	13.34
2	10.63

3	10.02
4	10.27
5	9.89
6 to 10	47.35
More than 10 years	126.90
Total Undiscounted Payments Past and Future Service	
Total Undiscounted Payments related to Past Service	228.40
Less Discount For Interest	124.79
Projected Benefit Obligation	103.61

Table 10: Bifurcation of Net liability

(₹ In Crores)

31.03.2016	Table Showing expected return on Plan Asset at end Measurement Period	31.03.2017
9.51	Current liability	12.88
71.74	Non-Current Liability	90.73
80.89	Net Liability	103.61

Unrecognised items:**a) Contingent Liabilities (Ind AS-37)**

Claims against the Company not acknowledged as debts (including interest, wherever applicable)

(₹ in Crore)

Claims against the company not acknowledged as debt			
		31.03.2017	31.03.2016
1	Central Govt. Income Tax Service Tax Royalty Central Excise	17.71 15.70	22.97 6.75
2	State Govt. and Local authorities Sales Tax Entry Tax		0.17
3	Central Public Sector Enterprises Suit against the company under litigation		
4	Others	6.23	4.44
	Total	39.64	34.33



b) Commitments (Ind AS-37)

Estimated amount of contracts remaining to be executed on capital account not provided for others is ₹ 16.57 Crores (₹ 25.48 Crores).

c) Guarantee

The Company has given Bank Guarantees of ₹ 0.14 Crore (₹ 0.14 Crore) for which there is a floating charge on Current Assets of the Company.

d) Letter of Credit :

As on 31.03.2017 outstanding letters of credit is ₹ 0.09 Crore (₹ Nil Crore).

Other Information

a) Provisions

The position and movement of various provisions except those relating to employee benefits which are valued actuarially, as on 31.03.2017 are given below:

(₹ in Crore)

Provisions	Opening Balance as on 1.04.2016	Addition during the year	Write back/ Adj. during the year	Unwinding of discounts	Closing Balance as on 31.03.2017
Note 1:- Property, Plant and Equipment: Impairment of Assets :					
Note 2:- Capital Work in Progress: Against CWIP :					
Note 3:- Exploration And Evaluation Assets: Provision and Impairment:					
Note 1:- Non Current Assets Held For Sale: Provision :					
Note 8:- Loans : Other Loans :					
Note 9:- Other Financial Assets: Current Account with Subsidiaries : Claim receivables : Other Receivables :					
Note 10:- Other Non-Current Assets: Exploratory Drilling Work : Against Security Deposit for Utilities:					

Note 11:- Other Current Assets :					
Advances for Revenue :	0.03				0.03
Advance Payment Against Statutory Dues:					
Other Deposits:					
Other Receivables:	0.05				0.05
Note 12:- Inventories :					
Stock of Coal :					
Stock of Stores & Spares :	0.57	0.03			0.60
Note 13:- Trade Receivables :					
Provision for bad & doubtful debts :	2.39	0.11			2.50
Note 21 :- Non-Current & Current Provision:					
Performance related pay :	181.14	12.01	-105.12		88.12
NCWA:		19.04			19.04
Executive Pay Revision:		5.03			5.03
Mine Closure:					
Others:	89.02	28.82	-17.17		100.67
Note 23 :- Other Current Liabilities :					

b) Earnings per share (Ins AS-33)

Sl. No.	Particulars	For the year ended 31.03.2017	For the year ended 31.03.2016
i)	Net profit after tax attributable to Equity Share Holders	40.59	9.14
ii)	Weighted Average no. of Equity Shares Outstanding	190400	190400
iii)	Basic and Diluted Earnings per Share in Rupees (Face value Rs.1000/- per share)	2131.83	480.04

c) Related Party Disclosures (Ind AS-24)

Key Managerial Personnel

Shekhar Saran (CMD)

V K Sinha (Director Technical)

Binay Dayal (Director Technical)

Ashim Kumar Chakarborthy (Director Technical from 03.08.2016)

B N Shukla (Director Technical)

Abhishek Mundhra (Company Secretary)

Independent Directors

R.K. Mittal (Independent Director)

Rajender Parshad (Independent Director)

Debasish Gupta (Independent Director)



Remuneration of Key Managerial Personnel

(₹ in Crore)

Sl. No.	Payment to CMD, Whole Time Directors and Company Secretary	For the year ended 31.03.2017	For the year ended 31.03.2016
i)	Short Term Employee Benefits		
	Gross Salary	1.64	1.31
	Perquisites	0.18	0.25
	Medical Benefits	0.06	0.21
ii)	Post-Employment Benefits	0.18	0.16
	Contribution to P.F. & other fund		
iii)	Termination Benefits (Paid at the time of separation)	NIL	0.92
	Leave Encashment		
	Gratuity		
	TOTAL	2.06	2.85

Note:

- Provision on the basis of actuarial valuation of defined benefits have not been considered in the above Director's remuneration.
- Besides above, whole time Directors have been allowed to use of cars for private journey upto a ceiling of 1000 KMs on payment of ₹ 2000 per month as per service conditions.

(₹ in Crore)

Sl. No.	Payment to Independent Directors	For the year ended 31.03.2017	For the year ended 31.03.2016
i)	Sitting Fees	0.12	0.04

Balances Outstanding as on 31.03.2017

(₹ in Crore)

Sl. No.	Particulars	As on 31.03.2017	As on 31.03.2016
i)	Amount Payable	Nil	Nil
ii)	Amount Receivable	Nil	Nil

Related Party Transactions within Group

The Company being a Government related entity is exempt from the general disclosure requirements in relation to related party transactions and outstanding balances with the controlling Government and another entity under same Government.

As per Ind AS 24, following are the disclosures regarding nature and amount of significant transactions.

(₹ in Crore)

Name of the Company	Nature of relationship	Amount of transactions during the year	Nature of Transactions
Eastern Coalfields Limited	Under Same Management	110.75	Employees Related, Sales &TDS
Bharat Coking Coal Limited	Under Same Management	43.43	Employees Related, Sales &TDS
Central Coalfields Limited	Under Same Management	103.81	Employees Related, Sales &TDS
Western Coalfields Limited	Under Same Management	115.47	Employees Related, Sales &TDS
Northern Coalfields Limited	Under Same Management	82.95	Employees Related, Sales &TDS
South Eastern Coalfields Limited	Under Same Management	369.16	Employees Related, Sales &TDS
Mahanadi Coalfields Limited	Under Same Management	60.24	Employees Related, Sales &TDS
CIL	100% Holding	919.59	Employees Related, Sales, Funds & TDS

d) Taxation (Ind AS-12)

An amount of 39.16 Crore (₹ 8.10 Crore) is provided in the accounts during current year towards income tax.

The Company is having a deferred tax asset (net) on the basis of calculation as per Ind AS-12, issued by Institute of Chartered Accountants of India. OR

Calculation of Deferred Tax

- (i) Deferred Tax Assets and Liability are being offset as they relate to Taxes on income levied by the same governing taxation laws.
- (ii) Deferred Tax Asset / (Liability) as at 31st March, 2017 and as at 31st March 2016 is given below:-

(₹ In Crores)

Deferred Tax Liability:

	As at 31.03.2017	As at 31.03.2016
Related to Fixed Assets	8.95	7.61

Deferred Tax Asset:

Provision for doubtful Debts, claims, etc.	0.90	0.87
Employee separation and retirement	123.46	107.01
Others	0.21	0.20
Total deferred tax Assets	124.57	108.08
Net Deferred Tax Asset/ (Deferred Tax Liability) :	115.62	100.47

• **Relationship between tax expense (income) and accounting profit.**

Numerical Reconciliation of difference

Sl. No.	Nature of Adjustments	Year ended 31.03.2017
1	Net Profit as per Statement of Profit and Loss (before tax)	62.83
2	Applicable Tax rate	34.608%
	1*2	21.74
3	Net Profit as per Income Tax	115.84
4	Tax Expense (Income)	40.09
5	Difference	18.35
	OR	
1	Average effective tax rate	63.807%
2	Applicable Tax rate	34.608%
3	Difference	27.199%

e) Provisions made in the Accounts

Provisions made in the accounts against slow moving/non-moving/obsolete stores, claims receivable, advances, doubtful debts etc. are considered adequate to cover possible losses.

f) Current Assets, Loans and Advances etc.

In the opinion of the Management, assets other than fixed assets and non-current investments have a value on realisation in the ordinary course of business at least equal to the amount at which they are stated.

g) Current Liabilities

Estimated liability has been provided where actual liability could not be measured.

h) Balance Confirmations

Balance confirmation/reconciliation is carried out for cash & bank balances, certain loans & advances, long term liabilities and current liabilities. Provision is taken against all doubtful unconfirmed balances.

i) Value of imports on CIF basis

(₹ in Crore)

Particulars	For the year ended 31.03.2017	For the year ended 31.03.2016
(i) Raw Material	NIL	NIL
(ii) Capital Goods	3.35	0.27
(iii) Stores, Spares & Components	0.01	7.20

j) Expenditure incurred in Foreign Currency

(₹ in Crore)

Particulars	For the year ended 31.03.2017	For the year ended 31.03.2016
Travelling Expenses	0.11	0.27
Training Expenses	NIL	NIL
Consultancy Charges	NIL	NIL
Interest	NIL	NIL
Stores and Spares	NIL	NIL
Capital Goods	NIL	NIL
Others	3.37	7.44

k) Earning in Foreign Exchange:

Particulars	For the year ended 31.03.2017	For the year ended 31.03.2016
Travelling Expenses	NIL	NIL
Training Expenses	NIL	NIL
Consultancy Charges	NIL	NIL

l) Total Consumption of Stores and Spares (Refer Note No. 26)

(₹ in Crore)

Particulars	For the year ended 31.03.2017		For the year ended 31.03.2016	
	Amount	% of total consumption	Amount	% of total con- sumption
(i) Imported Materials	0.00	0.00	0.00	0.00
(ii) Indigenous	26.65	100.00	21.92	100.00

m) Details of Loans given, Investments made and Guarantee given covered u/s 186(4) of the Companies Act, 2013

Loans given and Investments made are given under the respective heads.

Corporate guarantees given by the company in respect of loans as at 31.03.2017

(₹ in Crore)

Name of the Company	As at 31.03.2017	As at 31.03.2016
1. Eastern Coalfields limited (M/s. Indian Power Corporation Ltd. (M/s. DPSC Limited), Central Office, Sanctoria, P.O-Disergarh, distt. Burdwan.	0.14	0.14

**n) Significant accounting policy**

Significant accounting policy (Note-2) has been suitably modified / re-drafted over previous period, as found necessary to elucidate the accounting policies adopted by the Company in accordance with Indian Accounting Standards (Ind ASs) notified by Ministry of Corporate Affairs (MCA) under the Companies (Indian Accounting Standards) Rules, 2015.

The impact of change in accounting policy and other changes to comply with Ind AS in Net Profit is stated below:

Reconciliation of Profit between IND AS and previous Indian GAAP

(₹ in Crore)

Sl. No.	Nature of Adjustments	Year ended 31.03.2016
	Net Profit as per previous Indian GAAP (after tax)	28.48
1	Remeasurement of Mine Closure Provision as per Ind AS 16 (Net of tax)	
2	Actuarial loss/gain on remeasurement of employee defined benefit plan as per Ind AS 19 recognised in "Other Comprehensive Income" (Net of tax)	14.83
3	Effect of adjustments relating to Prior period (Net of tax)	4.51
	Net Profit as per Ind AS (after tax) attributable to equity shareholders	9.14
	Other Comprehensive Income (after tax)	14.83
	Total Comprehensive Income as per Ind AS (after tax) attributable to equity shareholders	23.97

7. First time adoption of Ind AS

These financial statements, for the year ended 31 March 2017, are the first the Company has prepared in accordance with Ind AS. For periods up to and including the year ended 31 March 2016, the Company prepared its financial statements in accordance with accounting standards notified under section 133 of the Companies Act 2013, read together with paragraph 7 of the Companies (Accounts) Rules, 2014 (Indian GAAP). Accordingly, the Company has prepared financial statements which comply with Ind AS applicable for periods ending on 31 March 2017, together with the comparative period data as at and for the year ended 31 March 2016, as described in the summary of significant accounting policies. In preparing these financial statements, the Company opening balance sheet was prepared as at 1 April 2015, the Company date of transition to Ind AS. This note explains the principal adjustments made by the Company in restating its Indian GAAP financial statements, including the balance sheet as at 1 April 2015 and the financial statements as at and for the year ended 31 March 2016.

Exemptions applied Ind AS 101 allows first-time adopters certain exemptions from the retrospective application of certain requirements under Ind AS. The Company has applied the following exemptions:

Fair value measurement of financial assets or financial liabilities (Ind AS 101.D20)

First-time adopters may apply Ind AS 109 to day one gain or loss provisions prospectively to transactions occurring on or after the date of transition to Ind AS. Therefore, unless a first-time adopter elects to

apply Ind AS 109 retrospectively to day one gain or loss transactions, transactions that occurred prior to the date of transition to Ind AS do not need to be retrospectively restated.

As a first time adopter of Ind AS, the Group has opted to apply Ind AS 109 prospectively.

Reconciliation of equity as at 1st April, 2015 (date of transition to Ind AS)

(₹ in Crore)

	Foot Note	Indian GAAP	Adjustment	Ind AS
ASSETS				
Non-Current Assets				
(a) Property, Plant & Equipments		76.30	0.75	77.05
(b) Capital Work in Progress		29.44	3.66	33.10
(c) Exploration and Evaluation Assets				
(d) Investment Property				
(e) Intangible Assets		4.53		4.53
(f) Intangible Assets under Development				
(g) Financial Assets				
(i) Investments				
(ii) Loans		4.07		0.06
(iii) Other Financial Assets				1.60
(h) Deferred Tax Assets (net)		106.43		106.43
(i) Other non-current assets		0.02		3.32
Total Non-Current Assets (A)		220.79		226.09
Current Assets				
(a) Inventories		6.10		6.10
(b) Financial Assets				
(i) Investments				
(ii) Trade Receivables		236.36	-0.30	236.06
(iii) Cash & Cash equivalents		85.92		85.92
(iv) Other Bank Balances				
(v) Loans		360.39		
(vi) Other Financial Assets				211.67
(c) Current Tax Assets (Net)				
(d) Other Current Assets		0.05		251.53
Total Current Assets (B)		688.82		791.28
Total Assets (A+B)		909.61		1017.37



EQUITY AND LIABILITIES	Foot Note	Indian GAAP	Adjustment	Ind AS
Equity				
(a) Equity Share Capital		19.04		19.04
(b) Other Equity		159.02	4.78	163.80
Equity attributable to equity holders of the company		178.06		182.84
Non-Controlling Interests				
Total Equity (A)		178.06		182.84
Liabilities	Foot Note	Indian GAAP	Adjustment	Ind AS
Non-Current Liabilities				
(a) Financial Liabilities				
(i) Borrowings				
(ii) Trade Payables				
(iii) Other Financial Liabilities				32.86
(b) Provisions		225.74		225.78
(c.) deferred Tax Liabilities (net)				
(d) Other Non-Current Liabilities				
Total Non-Current Liabilities (B)		225.74		258.64
Current Liabilities				
(a) Financial Liabilities				
(i) Borrowings				
(ii) Trade payables		0.77		0.77
(iii) Other Financial Liabilities				5.44
(b) Other Current Liabilities		195.63	-0.67	156.68
(c) Provisions		309.41		309.39
(d.) Current tax Liabilities (net)				103.61
Total Current Liabilities (C)		505.81		575.89
Total Equity and Liabilities (A+B+C)		909.61		1017.37

Reconciliation of equity as at 31st March, 2016 (date of transition to Ind AS)

(₹ in Crore)

	Foot Note	Indian GAAP	Adjustment	Ind AS
ASSETS				
Non-Current Assets				
(a) Property, Plant & Equipments		97.14	0.27	97.41
(b) Capital Work in Progress		61.44		61.44
(c) Exploration and Evaluation Assets				
(d) Investment Property				
(e) Intangible Assets		2.85		2.85
(f) Intangible Assets under Development				
(g) Financial Assets				
(i) Investments				
(ii) Loans		11.02		0.03
(iii) Other Financial Assets				1.32
(h) Deferred Tax Assets (net)		100.47		100.47
(i) Other non-current assets		0.02		10.29
Total Non-Current Assets (A)		272.94		273.81
Current Assets				
(a) Inventories		7.41		7.41
(b) Financial Assets				
(i) Investments				
(ii) Trade Receivables		248.24		248.24
(iii) Cash & Cash equivalents		124.30		124.30
(iv) Other Bank Balances				
(v) Loans		308.23		
(vi) Other Financial Assets				135.89
(c) Current Tax Assets (Net)				
(d) Other Current Assets		0.05		283.54
Total Current Assets (B)		688.23		799.38
Total Assets (A+B)		961.17		1073.19



EQUITY AND LIABILITIES	Foot Note	Indian GAAP	Adjustment	Ind AS
Equity				
(a) Equity Share Capital		19.04		19.04
(b) Other Equity		195.94	0.27	196.21
Equity attributable to equity holders of the company		215.25		215.25
Non-Controlling Interests				
Total Equity (A)		215.25		215.25
Liabilities				
Non-Current Liabilities				
(a) Financial Liabilities				
(i) Borrowings				
(ii) Trade Payables				
(iii) Other Financial Liabilities				42.43
(b) Provisions		195.92		203.06
(c) Other Non-Current Liabilities				
Total Non-Current Liabilities (B)		195.92		245.49
Current Liabilities				
(a) Financial Liabilities				
(i) Borrowings				
(ii) Trade payables		0.99		0.99
(iii) Other Financial Liabilities				6.37
(b) Other Current Liabilities		236.72		187.95
(c) Provisions		312.56		305.43
(d.) Current tax Liabilities (net)				111.71
Total Current Liabilities (C)		550.27		612.45
Total Equity and Liabilities (A+B+C)		961.17		1073.19

Reconciliation of profit or Loss for the year ended 31.03.2016

(₹ in Crore)

	Foot Note	Indian GAAP	Adjustments	Ind AS
Revenue from Operations			-	
Sales (Net)		759.27		759.27
Other Operating Revenue (Net)				
Revenue from Operations (A+B)				
Other Income		5.08		5.08
Total Income (I+II)		764.35		764.35
EXPENSES				
Cost of Materials Consumed		21.92		21.92
Changes in inventories of finished goods/work in progress and Stock in trade				
Employee Benefits Expense		412.40		435.08
Power Expense		3.55		3.55
Corporate Social Responsibility Expense		2.01		2.01
Repairs		19.90		19.90
Contractual Expense		205.09		205.09
Finance Costs		0.24		0.24
Depreciation/ Amortization/ Impairment expense		12.66	-0.27	12.39
Provisions		(0.11)		(0.11)
Write off				
Stripping Activity Adjustment				
Other Expenses		48.93		48.93
Total Expenses (IV)		726.59		749.00
Profit before Tax (V-VI)		37.76		15.35
Prior Period Adjustment { Charges/ (Incomes) }		4.78	4.78	
Profit/ (Loss) Before Tax		42.54		15.35
Tax expense		14.06		6.21
Profit for the Period (IX+XII+XIII)		28.48		9.14
Other Comprehensive Income				
A (i) Items that will not be reclassified to profit or loss				22.68
(ii) Income tax relating to items that will not be reclassified to profit or loss				7.85
B (i) Items that will be reclassified to profit or loss				
(ii) Income tax relating to items that will be reclassified to profit or loss				
Total Other Comprehensive Income				14.83
Total Comprehensive Income for the period (XIV+XV) (Comprising Profit (Loss) and Other Comprehensive Income for the period)		28.48	-4.51	23.97

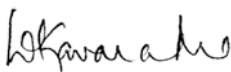
p) Others

- a) Previous period's figures have been restated as per Ind AS and regrouped and rearranged wherever considered necessary.
- b) Previous period's figures in Note No. 1 to 38 are in brackets.
- c) Note 1 to 23 form part of the Balance Sheet as at 31st March, 2017 and 24 to 37 form part of Statement of Profit & Loss for the year ended on that date. Note – 1 & 2 represents Significant Accounting Policies and Note – 38 represents Additional Notes to the Financial Statements.

Signature to Note 1 to 37.



(A. Mundhra)
Company Secretary



(D. K. Rao)
General Manager (F)



(V. K. Sinha)
Director
DIN-06793778



(Shekhar Sharan)
Chairman-Cum-
Managing Director
DIN-06607551

In terms of our report of even date attached

For K C TAK & CO.

Chartered Accountants

Firm Registration No.000216C



(CA ANIL JAIN)

Partner

Membership No. 079005

Date: 24th May, 2017

Place: Delhi