



CENTRAL MINE PLANNING &  
DESIGN INSTITUTE LIMITED  
(A Subsidiary of Coal India Limited)  
A Mini Ratna Company

[www.cmpdi.co.in](http://www.cmpdi.co.in)

## 43<sup>rd</sup> ANNUAL REPORT & ACCOUNTS 2017-18



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# Annual Report & Accounts

## 2017-18



**CENTRAL MINE PLANNING & DESIGN INSTITUTE LIMITED**

(A SUBSIDIARY OF COAL INDIA LIMITED)

*A Mini Ratna Company (Cat-II)*

**AN ISO 9001:2015 CERTIFIED**

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

**CIN: U14292 JH1975 GOI 001223**

**Website: [www.cmpdi.co.in](http://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.*

## ***Management Policy of CMPDIL***

*With a mission of exploration of coal and other mineral resources and providing consultancy in mine planning, design, associated engineering and management systems, CMPDIL, as a premier consultant, strives to be the market leader in the expanding earth resource sector and other professional activities.*

### ***We are committed to:***

- 1. Continually improve the quality of our consultancy and other support services with due consideration of the environment, information security and energy performance;*
- 2. Protect the environment by minimizing the adverse impact of our activities on it by consistently reducing, reusing and recycling a part of the waste generated;*
- 3. Provide the resources for achieving the objectives and targets of the quality, environment, energy and information security management systems;*
- 4. Protect our information assets from threats and interruptions to maintain business continuity and continually improve information security performance;*
- 5. Comply with the legal and all other applicable requirements.*

## **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 31.03.2018

## EXECUTIVE DIRECTORS



Shri Shekhar Saran



Shri B.N. Shukla



Shri A.K. Chakraborty

## PART-TIME OFFICIAL DIRECTORS



Shri Binay Dayal



Dr. Anindya Sinha

## INDEPENDENT DIRECTORS



Dr. Debasish Gupta



Shri Rajender Parshad

## PERMANENT INVITEE



Shri Peeyush Kumar

## COMPANY SECRETARY



Shri Abhishek Mundhra

## MANAGEMENT DURING 2017-2018

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

### Functional Directors

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

Shri B.N. Shukla : Director (Technical) (From 17.08.2017)

Shri Binay Dayal : Director (Technical) (Upto 11.10.2017)

Shri V.K. Sinha : Director (Technical) (Upto 31.07.2017)

### Part – Time Official Director

Dr. Anindya Sinha : Project Adviser, Ministry of Coal, (From 05.02.2018)

Shri Binay Dayal : Director (Technical) (From 09.11.2017)

Shri D.N. Prasad : Adviser (Projects), Ministry of Coal, New Delhi  
(Upto 31.05.2017)

Shri Chandan Kumar Dey : Director (Finance), Coal India Ltd. (Upto 09.11.2017)

Shri Peeyush Kumar : Director (Technical), Ministry of Coal, New Delhi  
(From 09.06.2017 to 05.02.2018)

### Independent Directors / Part -Time Non-Official Director

Shri Rajender Parshad : Director (From 17.11.2015)

Dr. Debasish Gupta : Director (From 17.11.2015)

### Permanent Invitee

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

### Company Secretary

Shri Abhishek Mundhra : (From 18.02.2016)



## **MEMBERS OF THE BOARD AS ON 13.07.2018**

### **Functional Directors**

Shri Shekhar Saran	:	Chairman-cum-Managing Director
Shri B.N. Shukla	:	Director (Technical)
Shri A.K.Chakraborty	:	Director (Technical)

### **Part-time Official Directors**

Shri Binay Dayal	:	Director (Technical), Coal India Ltd., Kolkata
Dr. Anindya Sinha	:	Project Adviser, Ministry of Coal, New Delhi

### **Independent Director**

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

### **Permanent Invitee**

Shri Peeyush Kumar	:	Director (Technical), Ministry of Coal, New Delhi
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### **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 : U14292 JH1975 GOI 001223  
Website : [www.cmpdi.co.in](http://www.cmpdi.co.in)



## NOTICE FOR THE 43<sup>RD</sup> ANNUAL GENERAL MEETING

Notice is hereby given to all the shareholders of Central Mine Planning & Design Institute Limited that the 43<sup>rd</sup> Annual General Meeting of the Company will be held on Friday, 13<sup>rd</sup> July, 2018 at 10.30 A.M. at the Registered Office of the Company, Gondwana Place, Kanke Road, Ranchi-834031 to transact the following business:

### A. ORDINARY BUSINESS:

1. To consider and adopt the Audited Balance Sheet as on 31<sup>st</sup> March 2018, Profit & Loss Account for the financial year ended on that date together with the Reports of Statutory Auditor, Comptroller & Auditor General of India and Directors' Report.
2. To confirm payment of two Interim Dividends of ₹ 19.50 crores @ ₹ 1024.26 per share paid on 1,90,400 equity shares of the Company in March'18 and approve payment of Final Dividend proposed of ₹ 4.75 crores @ Rs 124.80 on 3,80,800 equity shares thus totaling to ₹ 24.25 crores as dividend for the financial year 2017-18.
3. To appoint a Director in place of Shri S. Saran (DIN: 06607551), Whole time Director who retires by rotation in terms of Section 152(6) of the Companies Act, 2013 and being eligible, offers himself for reappointment.
4. To appoint a Director in place of Shri B.N. Shukla (DIN:05131449), Whole time Director who retires by rotation in terms of Section 152(6) of the Companies Act, 2013 and being eligible, offers himself for reappointment.

### B. SPECIAL BUSINESS:

1. To consider and if thought fit to ratify the following resolution as an Ordinary Resolution with or without modification(s).

"RESOLVED THAT the remuneration approved by the Board in its 213th Board meeting, held on 12.05.2018 to the Cost Auditors, M/s DGM & Associates, Kolkata for the financial year 2018-19 at ₹ 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

**NOTE**

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.

**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 Cost 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 2018-19.**

The Companies (Cost Audit Report) Rules, 2011 were notified on 3<sup>rd</sup> 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 197<sup>th</sup> meeting held on 02.09.2016, M/s DGM & Associate, Kolkata was appointed for undertaking the cost Audit for the financial year 2017-18 to 2018-19 on the recommendation of Audit Committee.

M/s DGM & Associate has taken up the cost audit for the financial year 2017-18 and their performance was found satisfactory. The Board of Directors considered in view of the background, experience performance of the M/s DGM & Associates and approved the appointment of M/s DGM & Associate, Kolkata as Cost Auditor for the financial year 2018-19, which is subject to ratification of the appointment in General Meeting, at a remuneration to the Cost Auditor for the financial year 2018-19 at ₹ 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 Auditor was approved in the 213<sup>th</sup> Board Meeting held on 12.05.2018 and is to be ratified by the company in general meeting.





## ANNUAL REPORT 2017-18

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,

It gives me great pleasure to welcome you to the 43<sup>rd</sup> Annual General Meeting of CMPDI and present the Annual Report of your Company for the financial year 2017-18. The Directors' Report and the Audited Accounts of your Company for the year ended 31<sup>st</sup> March, 2018 together with the Report of the Statutory Auditors and the Report & Review of the Comptroller and Auditor General of India have already been circulated to you.

### **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 1<sup>st</sup> 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, Informational 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, coal based unconventional energy resources i.e. CBM, UCG 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. However, the company is highly committed in overall upgradation of its services and facilities to a level par excellence so as to keep pace with the changing scenario of business environment in India as well as abroad. This very assertion is well substantiated by the fact that the company has been actively involved in the computerization of the work place to the extent possible along with the use of latest software related to mining industry, addition of equipment especially related to environmental facilities, characterization of coal as well as introduction of ISO standards.

Capacity of drilling, one of the core activities of CMPDI, which enables projectisation of coal blocks for future production requirement, was hovering around 2 lakh meter per annum (2.02 lakh meter in 04-05 to 2.09 lakh meter in 07-08) and 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 the outsourced blocks during 2015-16 inspite 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 2017-18 was aimed at 12.50 lakh metre depicting an increase of around 11 percent from 11.26 lakh metre achieved during 2016-17.

Your company stood up to the challenge amazingly well. The departmental drilling capacity was raised to a level of 4.51 lakh metre during 2017-18 through various initiatives like deployment of adopting latest mud technology, induction of new higher capacity drills and high performance bits, addition of manpower, etc. The total drilling carried out in 2017-18 was 13.66 lakh metre which accounts for a CAGR (Cumulative Annualized Growth Rate) of around 18.8% when compared to the total drilling of 2.06 lakh metre carried out in 2006-07 (end of X Plan period). Further, your company reported the net sales of ₹ 1154.75 crore for the FY 2017-18, thereby ensuring an increase of 24.10% in net sales over the previous year. Consultancy services in respect of mining for other than CIL companies like OCPL, NALCO, NTPC, SAIL, NLC India Ltd., MOIL, THDC, NMDC, JSMD, OMC, MAHAGENCO, HINDALCO, GSECL, MPPGCL, 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 the foreseeable future.

## 2. Financial Performance:

During the financial year 2017-18, your company has achieved highest turnover of ₹ 1154.75 crore, with a profit before tax of ₹ 156.51 crore (post considering other comprehensive income of ₹ 35.69 crore). The net worth of your company has risen to ₹ 334.53 crore as on 31.03.2018 from ₹ 254.43 crore as on 31.03.2017. During the financial year, the earning per share has gone up to ₹ 2122.64 (computed on 3, 80,800 shares) from ₹ 2081.93 (computed on 1,90,400 shares) a year back.

## 3. Drilling Performance:

As stated above, your company carried out 13.66 lakh metre of drilling during 2017-18 in comparison to 11.26 lakh metre of drilling carried out during 2016-17 through departmental resources and outsourcing, registering a growth of about 21% over previous year. The drilling target for 2018-19 has been kept at 13.00 lakh meter, which is lesser than the achievement of 13.66 lakh meter of drilling carried out during 2017-18, due to uncertainty in funding for exploration in Non-CIL blocks, adverse law & order condition prevailing in some of the coal block areas, non-receipt of permission for detailed drilling during the last three years in respect of 85 coal blocks applications pending for forestry permission, etc.

CMPDI had entered into a long term MOU with MECL on 6<sup>th</sup> January, 2009 for offering up to one lakh metre of exploratory drilling per annum to MECL in different coal blocks which has been enhanced to 4.0 lakh metre per annum. Nine rounds of National / Global tendering & eleven rounds of e-tendering have been done since 2007-08 (till 2017-18) and work orders have been placed for 86 blocks involving 35.52 lakh metre.

## 4. Project Reports:

Out of 80 projects identified for PR preparation in the 1 Bt document of CIL, 73 PRs have been submitted till March, 2018. For 6 projects, GR preparation is delayed due to forestry clearances and law & order problems. In respect of these 6 projects, alternate projects have been identified to compensate for the 2.90 Mt production earmarked from these 6 projects. In place of PR for Madanpur OC (ECL), PR for Narainkuri OC (ECL) has been submitted in view of geo-mining constraints and unviability of Madanpur OC.

During the year under review, 30 PRs have been prepared with capacity addition of about 100 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. Geo-Chemical laboratory has been accredited by National Accreditation Board for Testing and Calibration Laboratories (NABL) for coal core analysis and testing. Surveillance assessment by NABL was done during the year 2017-18 for Geo-Chemical laboratory. All members of Petrography laboratory have been accredited by International Committee of Coal and Organic Petrology (ICCP). The existing Environment Laboratories have been strengthened with state of the art equipment. Environment labs of CMPDI (HQ), RI-IV, RI-V and RI-VII have been re-accredited by NABL. Efforts are underway for getting NABL accreditation for environmental laboratories of CMPDI at RI-I, RI-II and RI-VI. CPCB recognition of Environment Lab of CMPDI (HQ) was obtained during the year 2016-17, which is valid for 5 years. Mining Laboratory has been upgraded by adding one fully computerized servo controlled Universal Testing Machine (UTM) for testing of Physico-mechanical properties of rock / coal samples. 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:

The issue of Manpower requirement for Exploration, Planning and Design as well as allied engineering services has been addressed. During 2017-18, 87 nos. of Executives have been posted in CMPDI through recruitment and transfer. Similarly, 43 nos. of non-executive manpower have been added by recruitment / compassionate employment / transfer from other subsidiaries and further process of addition of manpower is going on.

## 7. Land Reclamation Monitoring and Land use/vegetation cover mapping:

Satellite surveillance for land reclamation monitoring of opencast coal mines of CIL having production more than 5 million m<sup>3</sup> (Coal+OB) per annum is being carried out on an annual basis since 2008. Further to this, land reclamation monitoring of opencast coal mines of CIL having production less than 5 million m<sup>3</sup> (Coal+OB) per annum is also being taken up from the year 2011 in phased manner at an interval of three years.

Accordingly, land reclamation monitoring of 92 nos. of opencast projects of CIL has been completed during 2017-18 based on high resolution satellite data. Vegetation cover mapping of seven coalfields viz. Pench Kanan Valley, Mand Raigarh, Raniganj, Rajmahal, Umrer, IB Valley and Sohagpur has also been carried out during 2017-18.

## 8. Assistance for setting up of coal washeries:

Technical assistance is provided to the subsidiary companies of CIL in setting up of washeries. Tender documents on Build-Operate-Maintain (BOM) and Build-Own-Operate (BOO) concepts were customized on e-Reverse Auctioning Process in record time. Technical support for modernization 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. CMPDI was actively involved in installation of Dahibari Washery (1.6 Mty) and Patherdih-I Washery (5 Mty) at BCCL which





were inaugurated by Secretary (Coal) in January and March, 2018, respectively. Washability studies of RoM coal samples and bore core coal samples are also carried out. Reports on “Assessing feasibility of washing coking coal to 13% ash content” was prepared for MoC. Moreover, CMPDI is assisting MoC in finalizing policy on reject utilization/disposal.

## **9. Environmental Services:**

During 2017-18, 43 nos. of EMPs (Environment Management Plans), including 20 Form-I, were prepared and Environmental Monitoring (air, water and noise) of 435 projects / establishments of CIL were carried out through nine environmental laboratories located at Asansol, Dhanbad, Nagpur, Bilaspur, Kusmunda, Hasdeo, Jayant, Bhubaneswar and Ranchi. Quick comments on 39 nos. of mine closure plans were prepared and sent to MoC during the year. 36 nos. of Mine closure status reports (MCSRs) were also prepared during the year. However, considering the future requirement of environmental services and possibility of more stringent stipulations from MoEFCC, 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 MoEFCC’s designated agency), New Delhi for Mining of Minerals including Opencast/ Underground Mining, Thermal and Coal Washeries Sectors.

## **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 CIL. To expand the scope of development of CBM/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 CBM/CMM blocks namely Raniganj CMM/CBM 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 Raniganj Coalfield (ECL areas) and Jharia Coalfield (BCCL areas) has been done by 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 with 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 after competent approval by 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. Model Bid Document & Model Contract Document for Development of UCG was prepared and submitted to MoC for further deliberation by IMC.

### **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 works by various academic and research institutes, CMPDI with its well established laboratories is also undertaking research in key areas like mining, coal exploration, clean coal technologies like Coal Bed Methane (CBM), Coal Mine Methane (CMM), Shale gas assessment, Coal Beneficiation & Utilisation and Mine Environment related issues.

Over the years, many of these 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. Different design/methodology/procedure have been developed specifically for Indian geo-mining conditions with problems like underground coal pillar design, analysis of roof cavability, prediction of surface subsidence, optimum blast design for various rock conditions, opencast slope stability, on-line coal washability analyser, sustainable livelihood activities on reclaimed open cast coal mines, etc.

During 2017-18, 2 Nos. of S&T projects have been completed. The completed projects pertains to 'Development of an on-line coal washability analyser' and 'Sustainable livelihood activities on reclaimed open cast coal mines: a technology enabled integrated approach in Indian coal sector'. Under the first project, an X-ray based online coal washability analyser was developed by comparing the data generated from the washability analyser with the efficiency data from traditional float-sink tests. In second project, permanent green cover has been developed on overburden dumps / backfilled mined land areas for eco-friendly mine reclamation and utilization of reclaimed land which in turn develops entrepreneurship and vocational skills among local community for empowerment in and around the project affected areas. It will also promote local economic growth by driving income generation activities.

All out efforts are continuing by CMPDI to involve more and more research & academic institutions, coal/lignite producing companies for need based research work beneficial to coal/lignite industry. At present, 38 projects are under implementation. These projects are related to 'Design and stability of pillars/arrays of pillars for different mining methods in coal mine workings', 'Hybrid PRESRIX process for simultaneous remediation of acid mine drainage and recovery of individual

metal sulphides', 'Reclamation of coal mined land of North Eastern Coalfields, Assam through soil amendment and revegetation with native plant species using integrated biological approach', 'Design of cost effective process flowsheet for improved washing efficiency of Indian coking and non-coking coals', 'Development of guidelines for increasing the height of overburden dumps at opencast coal mines in India', 'High ash coal gasification and associated upstream and downstream processes (Coal to Chemicals, CTC)', 'Assessment of applicability and performance of Ground based Interferometry Synthetic Aperture Radar (GblnSAR) in safety zoning of surface mining slopes', 'Optical fiber based solar illumination of pit bottom and underground mine roadways and working face', 'Development of Virtual Reality Mine Simulator (VRMS) for improving safety and productivity in coal mines', 'Dry beneficiation of high ash Indian thermal coal', etc. and are being executed in association with other organizations.

## 12. Corporate Social Responsibility and Sustainability:

CMPDIL 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, activities of sustainable development for communities in and around the drilling sites were carried out by CMPDIL.

Major activities carried out during the year 2017-18 include infrastructure development in schools/ villages, educational support to poor and needy school children, financial assistance for treatment and care of leprosy patients, skill development of blind girls of Brajkishore Netraheen Balika Vidhyalaya, Ranchi, providing hall for orphans at Ranchi, providing provision of drinking water by drilling and installation of bore wells in villages, solar light installation in Dadhu Panchayat, Chatra, Jharkhand and rural development activities in Orissa.

## 13. Consultancy Services in Management System standards:

CMPDI is the nodal agency for implementation of Management System standards in all subsidiaries of Coal India Limited, providing consultancy services for application 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 these standards.

CMPDI along with all its Regional Institutes has been licensed by Bureau of Indian Standards for fulfillment of the requirements of the new revised ISO 9001:2015 standard.

After completion of all the necessary documentation, we are now in the process of amalgamating the requirements of two new standards, ISO 14001 (Environment Management system) & ISO 50001 (Energy Management system), into our system of management for which the certification is expected by December, 2018.

Five of our laboratories are accredited by NABL for successfully implementing ISO 17025:2005 (General requirements for the competence of testing and calibration laboratories).

Under our guidance and support, CIL HQ, Kolkata has successfully implemented and got certified for ISO 9001:2015, ISO 14001:2015 and ISO 50001:2011 by Bureau of Indian Standards.



Three of the subsidiaries of CIL, namely, ECL, MCL and NCL are now certified for implementing successfully a companywide Integrated Management System (ISO 9001, ISO 14001 and OHSAS 18001). Companywide certification of CCL for Integrated Management System (ISO 9001, ISO 14001 and OHSAS 18001) is expected by June, 2018.

We are also providing support and guidance to BCCL, SECL and WCL who are next in line for implementing and getting certified for a companywide Integrated Management System (ISO 9001, ISO 14001 and OHSAS 18001/ISO 45001) in the next financial year.

### 14. Consultancy-other than CIL

During the year under review, 41 outside-CIL consultancy jobs were successfully completed by CMPDIL for 31 organizations. Some of the major clients/organizations are NTPC, MOIL, MAHAGENCO, THDC, OCPL, GSECL, MPPGCL, etc.

Presently, 29 outside-CIL consultancy jobs are being executed by CMPDIL for 16 organisations like OCPL, NALCO, NTPC, SAIL, NLCIL, THDC, NMDC, JSMD, OMC, PFCL, HINDALCO, Talcher Fertilizers Ltd., etc.

During the year 2017-18, jobs worth ₹ 66.77 crores were obtained from 27 Organisations which includes consultancy jobs from Ministry of Coal, PSUs/Govt. Organizations and Private Companies.

### 15. Information and Communication Technology services

CMPDIL has completed the task of implementation of e-Office for entire Coal India Limited. The centralised infrastructure at RailTel Data Center, Secunderabad, and MPLS connectivity at all Subsidiary HQ locations, CIL New Delhi, CIL HQ Kolkata, IICM, and NEC has been established. E-Office is running in all the locations. CMPDI has implemented e-Office across CIL HQ, CIL New Delhi, all Subsidiary HQ locations, IICM and NEC with about 5000 users.

Online Coal Block Information System Application (OCBIS) is developed to give information regarding Coal Block Data. Safety Clearance (SC) and Departmental Clearance (DC) for CIL executives are developed and implemented.

### 16. Recognition and Awards:

The Government of India recognized the contribution and relevance of CMPDI and conferred it with the status of a Mini Ratna (Category-II) in accordance with the provisions of the Department of Public Enterprise's (DPE's) guidelines in May, 2009. The 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 award for 'Excellent MoU Rating for 2016-17' with a score of 94.91% on 43<sup>rd</sup> Foundation Day of Coal India Limited celebrated on 1st November, 2017 at Kolkata.

CMPDIL received two awards viz. 'Best House Journal (Hindi): 3<sup>rd</sup>' and 'Best Corporate Film: Commendation' at SCOPE Corporate Communication Excellence Awards 2017 held during 7<sup>th</sup> - 8<sup>th</sup> December, 2017 at SCOPE, Convention Centre, New Delhi.

## 17. Corporate Governance:

The conditions of Corporate Governance, as stipulated in the guidelines on Corporate Governance for Central Public Sector Enterprises issued by Department of Public Enterprises, Govt. of India, have been complied with by CMPDIL. 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, wholehearted support from members of Trade Union (JCC) and Officer's Association as well as the 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 forward for achieving greater heights in the future and meet the challenges and expectations of the shareholders with our dedicated commitment and performance at all levels as in the past.

I express my sincere thanks to all the shareholders, Ministry of Coal, other Ministries and Departments, State Governments, all employees, trade unions, customers and vendors for their whole hearted support and relentless co-operation.

A handwritten signature in blue ink, appearing to be 'Shekhar Saran'.

(Shekhar Saran)

Chairman-cum-Managing Director

Place : Ranchi

Date : 13.07.2018





## CMPDI LTD

### PERFORMANCE AT A GLANCE

Particulars	Unit	2017-18	2016-17 (Restated as per Ind As)	2015-16 (Restated as per Ind As)
Sales of Services (Net Sales)	₹ in crore	1154.75	930.52	759.27
Profit before Tax	₹ in crore	120.82	64.58	38.03
Profit after Tax	₹ in crore	80.83	39.64	23.97
Net Block	₹ in crore	147.23	133.92	100.26
Net Worth	₹ in crore	334.53	254.43	215.25
Current Assets	₹ in crore	1165.69	820.03	799.38
Current Liabilities	₹ in crore	857.55	602.09	612.45
Working Capital	₹ in crore	308.14	217.94	186.93
Capital Employed	₹ in crore	455.37	351.86	287.19
Return Capital Employed excluding OCI	₹ in crore	26.53	18.35	17.88
Earnings Per Share	in ₹	2122.64	1040.97	1496.00

**Capital Employed=Net Block+Working Capital**

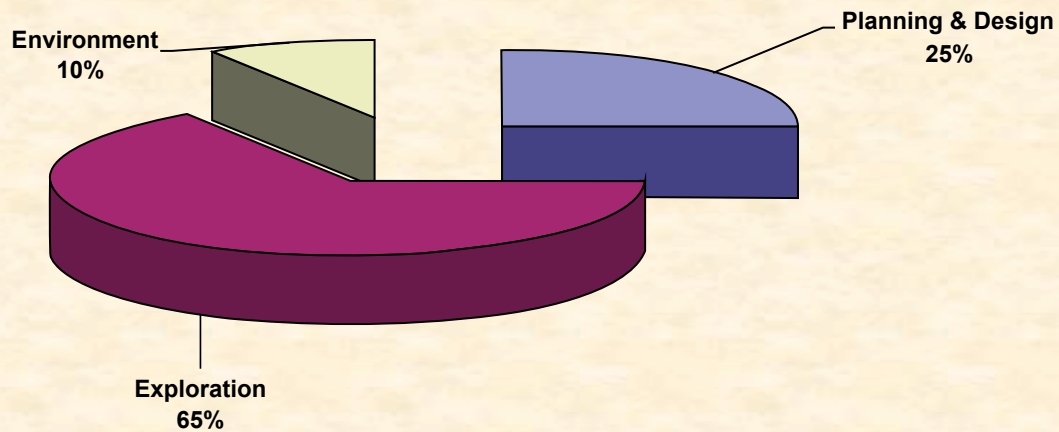
**Net worth=Paid up Capital+Reserves & Surplus-Accumulated Losses**

**Working Capital=Current Assets – Current Liabilities**

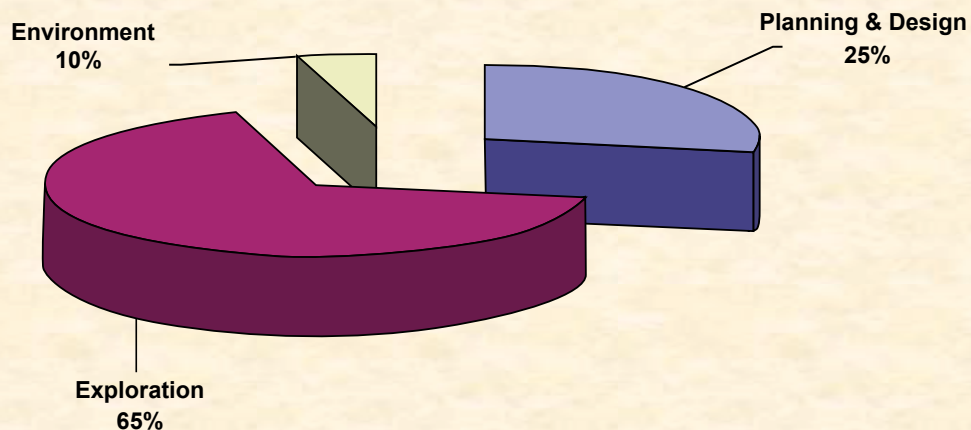


## FINANCIAL OVERVIEW OF CMPDIL

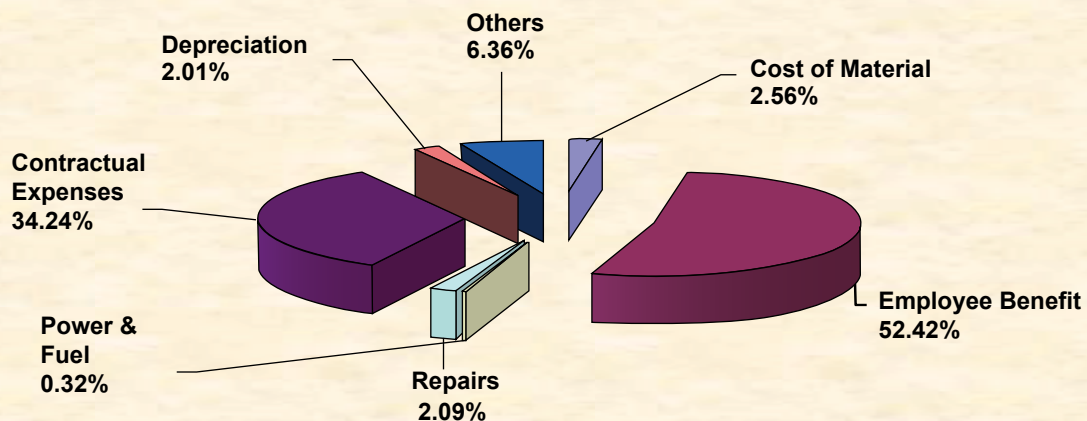
**Sales Breakup (2017-18)**



**Expenditure Breakup (2017-18)**

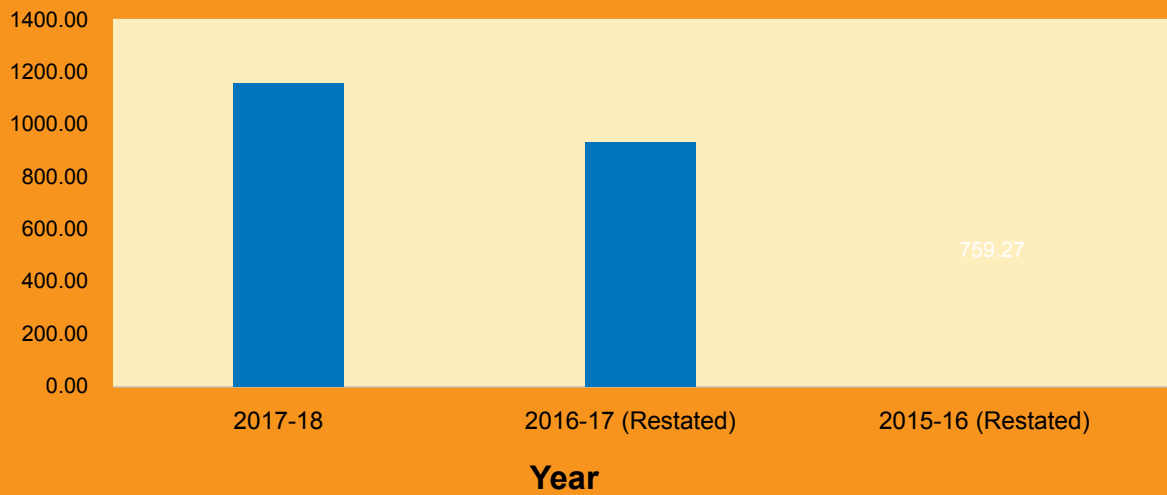


**Expenditure Breakup (2017-2018)**

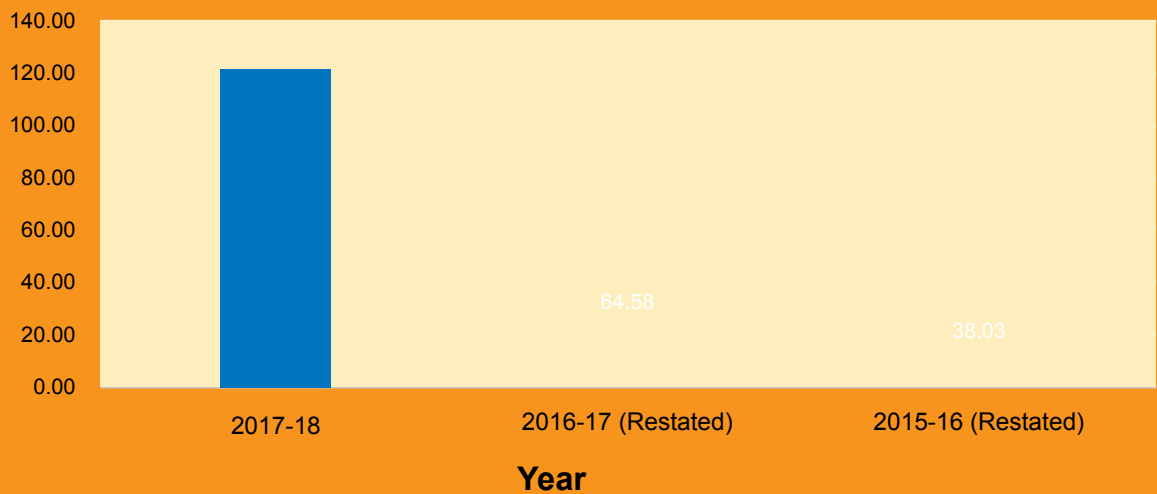


## FINANCIAL OVERVIEW OF CMPDIL

### Sales of services (Net sales) ₹ in Crores



### PBT ₹ in Crores



## DIRECTORS' REPORT

To

The Shareholders

Gentlemen,

On behalf of the Board of Directors, I have great pleasure in presenting the 43<sup>rd</sup> Annual Report on the working of your Company along with the Accounts for the year ended 31<sup>st</sup> March, 2018 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, Chattishgarh Mineral Development Corporation, Mahan Coal limited, and Karnataka Power Corporation Limited etc. were provided mainly through CMPDIL Headquarter. Besides these Consultancy services, CMPDIL 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 CMPDIL. This is the highest ever value of jobs obtained in a year by CMPDIL.

#### 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. CMPDIL, 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 ₹ 80.83 Crores. The working results of the company are given below:

Particulars	Year ending 31.03.2018	Year ending 31.03.2017	Year ending 31.03.2016 (Restated as per Ind As)
Net Sales	1154.75	930.52	759.27
Total expenses	1033.93	880.46	749
Profit Before Tax	120.82	65.53	15.35
Tax Expenses	39.99	24.94	6.21
Profit After Tax (A)	80.83	40.59	9.14
Other Comprehensive Income (OCI)*	35.69	(2.70)	22.68
Income Tax	12.35	(0.93)	7.85
Total Other Comprehensive Income (B)	23.34	(1.77)	14.83
<b>Total Comprehensive Income (A) + (B)</b>	<b>104.17</b>	<b>38.82</b>	<b>23.97</b>

## 1.3 Management Discussion and Analysis Report

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

### 1.3.1 Vision of CMPDIL:

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

### 1.3.2 Mission of CMPDIL:

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

### 1.3.3 Set corporate objectives to realize the above:

Major objectives of CMPDIL are as follows:

1. To provide consultancy 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 CMPDIL:

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

A. Geological exploration and support

services - This core function of CMPDIL 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 whereas in respect of opencast mines producing less than 5 million m<sup>3</sup> (coal+OB) per annum, it is being carried out 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). CMPDIL with all its Regional Institutes have been licensed by Bureau of Indian Standards for fulfillment of the requirements of the new revised ISO 9001:2015 standard.

- 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

As per Economic Survey 2017-18, flagship annual document of Ministry of Finance, Government of India, the year was marked by major reforms. The transformational Goods and Services Tax (GST) was launched in July, 2017 and the long-festering Twin Balance

Sheet (TBS) problem was decisively addressed by sending the major stressed companies for resolution under the new Indian Bankruptcy Code and implementing a major recapitalization package to strengthen the public sector banks. As a result of these measures, the dissipating effects of earlier policy actions, and the export uplift from the global recovery, the economy began to accelerate in the second half of the year. This should allow real GDP growth to reach 6¾ percent for the year as a whole, rising to 7-7½ percent in 2018-19, thereby re-instating India as the world's fastest growing major economy. Against emerging macroeconomic concerns, policy vigilance will be necessary in the coming year.

Mining in India is a major economic activity which contributes significantly to the economy of India. The coal mining and coal-fired thermal power generation sector are two of the core industries and together contribute about 12% to India's Index of Industrial Production (IIP), which shows their importance to the economy. Further, India's logistics industry, sponge iron industry, aluminum industry among several others, as on date depend on India's domestic coal industry. Coal demand in India has increased roughly one-third in the last five years and increase in demand has been driven by both, power sector and non-regulated sector. Power sector remains the key consumer segment with roughly 70% of overall coal demand. Even in the most pessimistic scenario, it appears that the demand for coal in India, as a source of primary energy, shall expand until 2030 and perhaps beyond. Overall coal demand is estimated to be ~900 to 1000 Mt by 2020 and ~1300 to 1900 Mt by 2030 as per draft Coal Vision 2030 document prepared by KPMG. CIL may continue





to play the balancing figure in the supply chain.

Out of about 19200 sq km of prognosticated coal bearing area in the country, more than 15920 sq km has been covered through Regional Exploration and about 7940 sq km has been covered through Detailed Exploration. The Government has further directed CMPDIL to expedite the Regional and Detailed Exploration in the country so as to identify the best of the properties for coal exploitation in the near future.

For CMPDIL, target for detailed drilling for 2018-19 has been kept at 13.00 lakh meter. A lesser target (2018-19) than the achievement (13.66 lakh meter) during 2017-18 has been kept due to uncertainty in funding for exploration in Non-CIL blocks, adverse law & order condition prevailing in some of the coal block areas, non-receipt of permission for detailed drilling during the last three years in respect of 84 coal blocks applications pending for forestry permission, etc. 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, CMPDIL's expert services had been in demand by other coal producers in public and private sectors as well. CMPDIL rendered consultancy services for other than CIL companies like OCPL, NALCO, NTPC, SAIL, NLC India, THDC, NMDC, JSMD, OMC, PFCCL, HINDALCO, Talcher Fertilizers Ltd., etc. Stride of coal companies, mainly of CIL, towards meeting the coal demand from indigenous supply will have a spurt in CMPDIL's services.

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 CMPDIL. Additionally, emerging area of Information and Communication Technology (ICT) in coal sector is also presenting additional opportunities for CMPDIL which will increase further in coming years. CMPDIL is also considering foray in rendering services for the e-auctioning of coal.

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 CMPDIL. 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 10 to 12 years' time, some doubts had been raised over India's reducing appetite for thermal coal and sustenance of the coal demand on a longer time horizon. 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.

Reduction in the demand of coal will undermine the requirement of exploration in coal. Exploration, being the major contributor to the turnover of CMPDIL,





would have to be diversified for metal sector to continue its dominance.

Considering the above and to infuse dynamism in business domain of CMPDIL, 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, foray in areas like e-auctioning of coal, etc.

## 1.3.6 Strategy adopted to realize above objectives and vision:

With the depth of knowledge and market place CMPDIL 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

- CMPDIL 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.
- Monopoly over detailed coal exploration in India. CMPDIL is recognized as the most preferred consultant amongst Indian clients besides having government 'preferences'.
- With the strategically located Regional Institutes, it is able to provide door-step service to all the subsidiaries of Coal India Ltd. along with the Ministry of Coal. CMPDIL has a 'Pan-India' presence in the vicinity of coal bearing areas.
- CMPDIL enjoys the distinction of possessing a large, authentic database relating to coal blocks, coal deposits, coal quality, etc. giving access to the knowledge of vast resources available in coal sector.
- It has a base of more than 1400 multidisciplinary skilled and experienced 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 7.5 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

- Dependence upon CIL subsidiary & Ministry of Coal for earning revenue.
- Dependence upon GSI/MECL for Regional exploration data which is prerequisite for detailed coal exploration.
- High operation cost and fixed cost i.e. employee compensation in comparison to peers in the industry.
- High rate of superannuation of skilled and experienced executive, workforce and attrition of new recruits after being trained.
- Non diversification i.e. only restricted to coal industry
- Shortage of skilled and qualified personnel in executive and non-executive cadre.

## 1.3.8 Opportunities and Threats

### Opportunities

- The demand for coal is likely to continue at least up to 10 to 12 years providing scope for CMPDIL services
- Auction/ allotment of coal blocks to captive users - both to public & private companies by the Government have created more market opportunities for CMPDIL outside CIL

- Develop as an agency acting as a service platform providing complete exploration and mining solution
- Need to enhance the application of IT in coal sector
- Diversification in non-coal sector
- Expansion of services in the field of specialized services related to CBM / CMM/UCG / Shale Gas / Other non-conventional energy resources.

### Threats

- The Indian coal sector is inching towards liberalization. Being basically state-owned mines in the past, the status is slowly getting favorable to such governmental reforms. Further opening of the coal sector may result in market competition from other domestic or international consultancy service providers.
- In absence of commensurate growth in the regional exploration, sustenance of the present detailed drilling capacity seems difficult in near future.
- Coal is fast being replaced by renewable energy sources like solar, wind, etc. Over the years, the development of these alternative power sources will increase and become cheaper. There may be a downward trend in coal mining leading to decrease in the consultancy assignments to CMPDIL.
- Restriction in exploration in forest area and law and order problem are affecting the drilling operations in these areas.

Being a dominantly human resource driven company, present high age profile will prove detrimental in future. Expert manpower is fast depleting, as many of its experienced technical experts are superannuating.



- Of late, there has been a spurt of small consultancy firms and individual consultants. Superannuated skilled and qualified persons, having such immense technical knowledge and proficiency, are joining these private exploration/mining consultants.

## 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 was reviewed by CMPDIL Board, in its 201<sup>st</sup> Meeting held on 30.01.2017.

Further, approval for retention of service charge in respect of internal consultancy jobs has been accorded by the Board in its 202<sup>nd</sup> Meeting held on 10.3.2017 and the same was implemented from 1<sup>st</sup> April, 2017.

## 1.3.10 Marketing Policy

CMPDIL 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, CMPDIL 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

Spurt in drilling, as witnessed during XI and XII Plans, could be maintained during 2017-18 as well. Through departmental drills and outsourcing, CMPDIL 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). The total drilling carried out in 2017-18 was 13.66 lakh metre with over 21% growth on the achievement during 2016-17 and with a CAGR (Cumulative Annualized Growth Rate) in drilling of 18.8% over the achievement of 2.06 lakh meter in 2006-07 (end of X Plan period).

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 CMPDIL.

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, CMPDIL, 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. CMPDIL is already in the process of capacity building of exploratory drilling with the involvement of modern improved techniques in drilling. It has already taken steps to intensively use modern technologies such as various geophysical survey techniques of exploration to reduce the dependence on time consuming process of drilling and





use them in preparation of Geological Report. This will expedite the preparation of Geological Reports and provide better confidence in Geological Model of the blocks.

The target for 2018-19 has been kept at 13.00 lakh meter, which is lesser than the achievement of 13.66 lakh meter during 2017-18, due to uncertainty in funding for exploration in Non-CIL blocks, adverse law & order condition prevailing in some of the coal block areas, non-receipt of permission for detailed drilling during the last three years in respect of 84 coal blocks applications pending for forestry permission, etc. CMPDIL had entered into a long term MOU with MECL on 6<sup>th</sup> 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 4.0 lakh meter per annum. Nine rounds of National / Global tendering & eleven rounds of e-tendering has been done since 2007-08 (till 2017-18) and work orders have been placed for 86 blocks involving 35.52 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 MoEFCC and concerned states by CMPDIL, CIL and MoC.

Out of 80 projects identified for PR preparation in the 1 Bt document of CIL, 73 PRs have been submitted till March, 2018. In respect of remaining projects, alternate projects have been identified to compensate production earmarked from those projects.

Capacities of all the laboratories in CMPDIL have been upgraded. Chemical and Petrography laboratories have been upgraded with sophisticated imported equipment and the capacities have been enhanced. Geo-Chemical laboratory has been accredited by National Accreditation

Board for Testing and Calibration Laboratories (NABL) for coal core analysis and testing. All members of Petrography laboratory are accredited by International Committee of Coal and Organic Petrology (ICCP). Environment labs of CMPDIL (HQ), RI-IV, RI-V and RI-VII have been re-accredited by NABL. Efforts are underway for getting NABL accreditation for environmental laboratories of CMPDIL at RI-I, RI-II and RI-VI. CPCB recognition of Environment Lab of CMPDIL (HQ) was obtained during the year 2016-17, which is valid for 5 years. Mining Laboratory has been upgraded by adding one fully computerized servo controlled Universal Testing Machine (UTM) for testing of Physico-mechanical properties of rock / coal samples. A state of the art CBM Lab is functional at CMPDIL to facilitate generation of all parametric data related to CBM/Shale gas related studies, reservoir characteristics and assessment of CBM and Shale gas resources.

Satellite surveillance for land reclamation monitoring of opencast coal mines of CIL having production more than 5 million m<sup>3</sup> (Coal+OB) per annum is being carried out on annual basis since 2008. Further to this, land reclamation monitoring of opencast coal mines of CIL having production less than 5 million m<sup>3</sup> (Coal+OB) per annum was also taken up from the year 2011 in phased manner at an interval of three years.

Drones were used for the first time in CIL for benchmarking its capabilities in various technical applications like generation of contours, ortho-photos and computation of stock pile volumes. This project was executed in 2 mines of CCL, viz. Rajrappa & Topa and 4 mines of NCL, viz. Amlohri, Nigahi, Jayant & Dudhichua in outsourcing mode. CMPDIL is working towards deployment of drones for regular operations in CIL in the near future.





Technical assistance is provided to the subsidiary companies of CIL in setting up of washeries. Tender documents on Build-Operate-Maintain (BOM) and Build-Own-Operate (BOO) concepts were customized on e-Reverse Auctioning Process in record time. Technical support for modernisation 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. CMPDIL was actively involved in installation of Dahibari Washery (1.6 Mty) and Patherdih-I Washery (5 Mty) at BCCL which were inaugurated by Secretary (Coal) in January and March, 2018, respectively.

CMPDIL 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. CMPDIL 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 CMPDIL the Nodal Agency for development of CMM in India.

CMPDIL is carrying out studies related to "Assessment of Coalbed Methane Gas-in-Place Resource of Indian Coalfields/Lignite fields" in selected boreholes being drilled under regionally explored areas. 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 with CSIRO, Australia is under consideration. The project has been approved, in principle, 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 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 CMPDIL the Nodal Agency for this purpose, as well.

CMPDIL is the Nodal Agency also to coordinate research activities funded under S&T Grant of Ministry of Coal (MoC) and R&D Board of CIL. Over the years, many of these 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. Different design/methodology/procedure have been developed specifically for Indian geo-mining conditions with problems like underground coal pillar design, analysis of roof cavability, prediction of surface subsidence, optimum blast design for various rock conditions, opencast slope stability, on-line coal washability analyser, sustainable livelihood activities on reclaimed open cast coal mines, etc.

Efforts are continuing by CMPDIL to involve more and more research & academic institutions, coal/lignite producing companies for need based research work beneficial to coal/lignite industry. At present, 38 projects are under implementation.

CMPDIL is also rendering services towards implementation of Management System standards in all subsidiaries of



Coal India Limited, like ISO 9001, ISO 14001, ISO 50001, ISO 27001, OHSAS 18001, etc. CMPDIL with all its Regional Institutes have been licensed by Bureau of Indian Standards for fulfillment of the requirements of the new revised ISO 9001:2015 standard. CMPDIL is in the process of amalgamating the requirements of two new standards, ISO 14001 and ISO 50001 into existing system of management for which the certification is expected by December, 2018.

Full digital mode of File Management System of eOffice was launched by CMPDIL on 19<sup>th</sup> June'17 and as such, CMPDIL became the first PSU in Jharkhand fulfilling the objective of Mission Mode Project of Govt. of India. Mobile Apps have been developed on behalf of Coal India for MoC. SEVA (Saral Eindhan Vitaran Application) App, developed in-house by Coal India Limited for power sector consumers, was launched by Hon'ble Minister of Coal on 22<sup>nd</sup> May, 2017. Online Coal Block Information System Application (OCBIS) has been developed to give information regarding Coal Block Data.

### 1.3.12 MOU between CMPDIL & CIL

For every financial year CMPDIL enters into an MoU with Coal India Limited to set various parameter for physical and financial performances. The achievements were graded on a scale of 1 to 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, CMPDIL 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 was changed from 5-point scale to percentage system. For the FY 2016-17, CMPDIL was

awarded with 'Excellent' rating whereas it is likely to achieve the 'Excellent' rating during FY 2017-18, as well.

### 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 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 CMPDIL.

### 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

CMPDIL 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. CMPDIL 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 2017-18 is ₹ 1169.84 crores as against ₹ 945.99 crores in the previous year, thus registering an increase of 23.66%. The total expenditure is ₹1013.33 Crores (Net of OCI).

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 ₹ 120.82 crores (Excluding OCI) as against ₹ 64.58 crores (Excluding OCI) (restated as per Ind AS) in the previous year, increased by ₹ 56.24 crores. The profit after tax is ₹ 80.83 crores (Excluding OCI) as against ₹ 39.64 crores (Excluding OCI) for the previous year, increased by ₹ 80.83 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:

(₹ In Crores)

Eligibility Criteria		Status of CMPDIL		
		F.Y. 2015-16 (Restated as per Ind As)	F.Y. 2016-17 (Restated as per Ind As)	F.Y. 2017-18
1.	Profit before Taxes (₹ in Crore) (Excluding OCI)	15.35	64.58	120.82
2.	Profit after Taxes (₹ in Crore) (Excluding OCI)	9.14	39.64	80.83
3.	Turnover (₹ in Crore)	759.27	930.52	1154.75
4.	Profit before tax to Turnover (%)	2.02	6.94	10.46
5.	Earning per share (₹)	480.04	1040.97	2122.64



#### 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 and 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 ₹ 38.08 crores against the authorized capital of ₹ 50 crores. The capital Reserve stands at Rs 19.20 crores, general reserve stands at ₹ 4.04 crores and the surplus in P/L account stands at ₹ 236.81 crores and totally constituting to the shareholders fund ₹ 296.45 crores. Non-current liability ₹ 305.62 crores and current liabilities ₹ 857.55 crores.

The company owns net fixed assets of ₹ 147.23 Crores, Deferred tax assets

(Net) ₹ 128.93 crores, Long term loans and advances is nil, other non-current assets ₹ 8.84 crores and current assets ₹ 1165.69 crores.

The total revenue from operations and other incomes stands at ₹ 1154.75 crores and after meeting all expenditure and taxes, the net profit stands at ₹ 80.83 crores excluding (OCI) ₹ 36.49. The earning per share (face value ₹ 1000 per share) works out ₹ 2122.64.

#### 1.4.4 Capital Expenditure till 31<sup>st</sup> March, 2018

	(₹ in Crores) 2016-17	(₹ in Crores) 2017-18
Land	0.00	0.09
Building	10.22	6.04
Plant & Machine	24.82	30.55
Office equipment	0.41	0.76
Furniture	0.62	0.74
Telecom	0.05	0.10
Vehicle	1.37	0.95
Software	1.31	2.43
<b>Total</b>	<b>38.8</b>	<b>41.66</b>

#### 1.4.5 Declaration of 1<sup>st</sup> Interim dividend

The Board recommended 1<sup>st</sup> Interim dividend in the Financial Year 2017-18, based on the working results for the period up to December, 2017, and Surplus in Statement of Profit & Loss as on 01.04.2017, thus absorbing ₹ 18 crore as 1<sup>st</sup> Interim dividend and ₹ 3.66 crore as Dividend Distribution tax thereon was paid by way of dividend to shareholders of the company.

#### 1.4.6 Declaration of 2<sup>nd</sup> Interim dividend

The Board recommended 2<sup>nd</sup> Interim dividend amounting to ₹ 1.5 Crore i.e. Rs 78.7815 per share (Dividend per share) be paid on 1,90,400 Equity shares of ₹ 1,000/- each (Face Value of Share)





out of current year's profit after tax and surplus in the Profit & loss Account of the Company as on 31.12.2017 for the FY 2017-18 be and is hereby declared. In addition, payment of Corporate Dividend Tax (including Surcharge & Cess) of ₹ 0.31 Crores approx. as per provision of the Income Tax Act, 1961 will be made by the company.

## 1.4.7 Declaration of 3<sup>rd</sup> & Final dividend

The Board had proposed in its 214<sup>th</sup> Board of Directors meeting held on 25<sup>th</sup> May, 2018 that 3<sup>rd</sup> and final dividend to ₹ 4.75 crores totaling to ₹ 24.25 crores for the financial year ended 31<sup>st</sup> March 2018 subject to confirmation of the same in the 43<sup>rd</sup> AGM of CMPDIL.

## 1.4.8 Issue of Bonus Shares:

In the 10<sup>th</sup> Extra Ordinary General Meeting of the CMPDIL held on 17<sup>th</sup> March, 2018, the members of the Company have approved the issue of Bonus Shares in the ratio of 1:1 i.e., one Bonus Share for each fully paid equity share held by the shareholder.

Accordingly, with reference to the consent received from M/s Coal India Limited, in its 360<sup>th</sup> Board meeting held on 10<sup>th</sup> March, 2018, the Board of Directors of our Company in its 212<sup>th</sup> Board Meeting held on 21<sup>st</sup> March, 2018, have approved the allotment of 1,90,400 Equity Shares of ₹ 1000/- each aggregating to ₹ 19,04,00,000/- to M/s. Coal India Limited.

## 1.4.9 Material changes after 31.03.2018

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. Ministry of Coal 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 31<sup>st</sup> March 2018, the Board of Directors of CMPDIL comprises of 7 (Seven) Directors out of which three 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

#### 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 2017-18.

Sl. No.	Number of Meeting	Dates	Day	Place
1.	203 <sup>rd</sup>	05.05.2017	Friday	New Delhi
2.	204 <sup>th</sup>	24.05.2017	Wednesday	New Delhi
3.	205 <sup>th</sup>	12.07.2017	Wednesday	Kolkata
4.	206 <sup>th</sup>	28.07.2017	Friday	Kolkata
5.	207 <sup>th</sup>	18.09.2017	Monday	Kolkata
6.	208 <sup>th</sup>	30.10.2017	Monday	CMPDIL, Ranchi
7.	209 <sup>th</sup>	01.12.2017	Friday	CMPDIL, Ranchi
8.	210 <sup>th</sup>	01.02.2018	Thursday	New Delhi
9.	211 <sup>th</sup>	09.03.2018	Friday	Kolkata
10.	212 <sup>th</sup>	21.03.2018	Wednesday	New Delhi

Coal, Govt of India on or before 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 31<sup>st</sup> March 2018 is as follows:

#### I. Whole-Time Directors

##### a. Chairman-cum-Managing Director

1. Shri Shekhar Saran

##### b. Functional Directors

1. Shri B.N. Shukla

2. Shri A.K.Chakraborty

#### II. Part-Time Official Directors

1. Shri Binay Dayal

2. Dr. Anindya Sinha

#### III. Part-Time Non-Official Directors

1. Shri Rajender Parshad

2. Dr. Debasish Gupta

#### IV. Permanent Invitee

1. Shri Peeyush Kumar



## 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
<b>Functional Directors</b>				
1.	Shri Shekhar Saran	10	10	Yes
2.	Shri V.K Sinha	4	4	Yes
3.	Shri Binay Dayal	5	5	-
4.	Shri A.K. Chakraborty	10	10	Yes
5.	Shri B.N. Shukla	6	6	-
<b>Part-time official Directors</b>				
6.	Dr. Anindya Sinha	2	2	-
7.	Shri D. N. Prasad	2	2	-
8.	Shri C.K. Dey	6	6	-
9.	Shri Binay Dayal	4	3	-
10.	Shri Peeyush Kumar	6	5	-
<b>Part-time Non-official Directors</b>				
11.	Shri Rajender Parshad	10	10	Yes
12.	Dr. Debasish Gupta	10	10	Yes

Sl. No. 6 has been appointed as Govt.Nominee Director from Ministry of Coal w.e.f. 05.02.2018.

Sl. No. 7 was appointed as Govt.Nominee Director from Ministry of Coal from 28.01.2011 upto 31.05.2017.

Sl. No. 8 was appointed as Nominee Director from Coal India Limited w.e.f. 10.01.2017 upto 09.11.2017.

Sl. No. 9 has been appointed as Nominee Director from Coal India Limited w.e.f. 01.12.2017.

## D (ii) Disclosure of interest

Sl. No.	Name of the Directors	Company in which interested	Nature of Interest i.e Chairman, Director, Manager & Secretary
<b>Functional Directors</b>			
1.	Shri Shekhar Saran	NIL	
2.	Shri A.K. Chakraborty	NIL	
3.	Shri B.N.Shukla	Coal India Africana Limitada	Director
<b>Part-time official Directors</b>			
4.	Shri Binay Dayal	1.Coal India Limited 2. Coal Indian Africana Limited 3.Talcher Fertilizers Limited 4.Bharat Coking Coal Limited	1.Director 2.Chairman Managing Director 3. Director 4 Director
5.	Dr. Anindya Sinha	NIL	
<b>Part-time Non- official Directors</b>			
6	Shri Rajender Parshad	NIL	-
7	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 from 31.10.2016 to 09.11.2017 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 1<sup>st</sup> 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, CMPDIL w.e.f. 01.01.2016.



**Shri Binay Dayal**  
(DIN 07367625) is Director (Technical), Coal India Limited. Shri Dayal graduated in Mining Engineering in 1983 from Indian School

of Mines (ISM), Dhanbad. He also obtained 1<sup>st</sup> 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 CMPDIL (HQ), Regional Director, CMPDIL, Regional Institute – V, Bilaspur, General Manager (Projects & Planning Services) in South Eastern Coalfields Limited. He took over the charge of Director Technical (Engineering Services), CMPDIL on 1.12.2015. He was Director (Technical), (Planning & Design), CMPDIL w.e.f. 1.12.2015 to 11.10.2017

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 5<sup>th</sup> 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 CMPDIL 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 22<sup>nd</sup> 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 has been appointed as Official part-time Director in CMPDIL w.e.f. 09.11.2017.



**Dr. Anindya Sinha**  
(DIN 08069992) a Graduate Mining Engineer and holder of First Class Mine Manager's Certificate of Competency to manage

coal mines and doctorate from Poland, has put in more than 33 (thirty three) years of overall experience in the Coal sector of India and abroad. His experience

includes around 10 years of operation and management of both UG (Underground) & OC (Opencast) coal mines of BCCL & MCL in CIL, 3 years of academic research and development, 20 years in mine planning & design at CMPDIL and about 4 months in Development Policy Planning for Energy fuels Coal & Lignite in Ministry of Coal, Govt. of India.

Dr. Sinha is presently deputed as Project Adviser (a Joint Secretary level post) in the Ministry of Coal, Govt. of India. His experience encompasses 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.

Dr. Sinha graduated in Mining Engineering in 1984 and completed his master's in 1986 both from Indian School of Mines (ISM), now IIT (ISM), Dhanbad. Being the topper of the batch, apart from being the recipient of a number of prizes/scholarships at ISM, he was awarded with Pickering Medal of MGMI and Gold Medal of ISM. Later, during 1993-96, Sri Sinha pursued his doctoral studies under Polish Government Fellowship (selected through UPSC, Ministry of Education, Govt. of India) in University of Science and Technology (AGH), Cracow, Poland. His research was in mine ventilation and air conditioning of underground coalmines, during which he visited and conducted studies in some of the best longwall mines of Poland. During that period, apart from publishing a number of research papers, he was a co-developer of a mine-ventilation software package

under the aegis of Polish Academy of Science (PAN), Poland. Subsequently, in 2008, he has attended Project Planning, Development & Management (PPDM) Course at Asian Institute of Management (AIM), Manila, Philippines.

Dr. Sinha is a Recognised Qualified Person (RQP) of Ministry of Coal for preparation of Mining Plan/Mine Closure Plan and a QCI-NABET accredited EIA Coordinator for preparation of EIA/EMPs. For his contribution to the mining sector, the Institution of Engineers (India) conferred Dr. Sinha with "Eminent Engineer Award" in the field of Mining in 2017.

Dr. Sinha represented Coal India Limited & Ministry of Coal on various Committees/ working groups related to coal development and visited a number of countries including Poland, Spain etc. in relation to professional work. He has contributed a number of technical papers on policy and issues in coal sector in various National & International Forums. He is a life member of professional bodies like Institution of Engineers (India), Mining, Geological and Metallurgical Institute of India (MGMI) etc.

Dr. Anindya Sinha is an Official part-time Director in CMPDIL w.e.f. 05.02.2018.



**Shri Bhola Nath Shukla (DIN 05131449)**, graduated in 1982 from I.T. BHU and did M. Tech in Opencast Mining from Indian School of Mines, Dhanbad in 1989. He is silver medalist at B. Tech and M. Tech level and was popular students' leader.

He joined SECL in 1982, where he was instrumental in deploying SDL and Chain Conveyor for depillaring in 1983. He experimented cast blasting in Jamuna Opencast mines and brought back Amalai opencast mines into production



which was stopped by DGMS for last six months due to vertical faces merged with OB benches. He joined Churcha East underground mine in 1999, where he experimented Hydrofracturing for hard roof management and constructed strata bunkers which reduced the breakdowns of belt conveyors and saving of power.

He joined as Sub-area Manager of Behraband U/G mine having modified continuous miner with LHD and the mine was adjudged the overall best mine in group 'A' of SECL alongwith 36% growth in production. He was posted as Project Officer, Balram OCP to sort out the R&R problem and poor geometry. The mine bagged 1<sup>st</sup> prize in overall annual safety week for successive two years. He was posted as General Manager, Bharatpur area in 2007, where he could sort out R&R problem and brought the mine into desired shape with sufficient land possession in hand. Then he was posted in most difficult area of MCL, i.e. Hingula area where the daily production was 21000 tpd, when he left the area, the daily production was 62000 tpd.

Considering his vision, knowledge, strategy he was posted as General Manager, Corporate Planning and Projects at MCL HQ, where he was instrumental in diversification of MCL into pit head Super critical thermal power projects (2 x 800 MW) for which MBPL company was formed and he was appointed Director w.e.f. 9.04.2012 to Sept.2015, other diversification were into solar, port and power transmission business.

He was key person in translating Jharsugda Barapalli rail link on paper to ground fighting tooth and nail to complete it by 2016 June, which is life line for growth of MCL. He got projects approved with total capacity of 322 MT (peak) from a level of 122 MT. He planned and monitored various infrastructural activities like road network, rail network, CHP, silo

and was actively involved in meetings with MoC, state Govt. to sort out forest, R&R and law & order problems.

He was Director (Technical)/Coal Resource Development, CMPDIL w.e.f. 1.10.2015 to 16.08.2016. During his tenure departmental drilling saw highest ever growth in volume of about 52000m. He was instrumental in getting CMPDIL notified under section 4(1) of MMDR 1957 for prospecting any mineral which is a landmark in the history of CMPDIL.

He visited China and presented many technical papers in seminars. He attended world mining congress at Rio-de-janerio in 2016. He was a very good sportsman and was captain of IT Boating club, BHU. He performed journey on cycle from BHU to Kathmandu, Nepal in 1981.

He was transferred to ECL as director (Technical) for 1 year w.e.f. 17.08.16 to 16.08.17. During his tenure, underground production increased to 10,89% & dispatch by 11.52% compared to last year. Now he has joined CMPDIL w.e.f. 17.08.2017.



**Shri Ashim Kumar Chakraborty (DIN 07601841)** took over the charge as Director (Technical) of CMPDIL on 3<sup>rd</sup> 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 CMPDIL before taking over the charge as Director (Technical) of CMPDIL.



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), CMPDIL w.e.f. 03.08.2016.



**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 Udhyog. 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 1<sup>st</sup> 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.

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 upto 05.02.2018) 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 2017-18.

## **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 as on 31<sup>st</sup> March, 2018 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)	Independent Director
2	Shri R. Parshad	Member (w.e.f. 30.12.2015)	Independent Director
3	Shri B. N. Shukla	Member (w.e.f. 30.10.2017)	Functional Director
4	Shri Binay Dayal	Member (w.e.f. 01.12.2017)	Official part-time Director
5	Dr. Anindya Sinha	Member (w.e.f. 05.02.2018)	Govt. Nominee Director
6	Shri D. N. Prasad	Member (w.e.f. 28.01.2011 upto 31.05.2017)	Govt. Nominee Director
7	Shri C. K. Dey	Member (w.e.f. 10.01.2017 upto 09.11.2017)	Official part-time Director
8	Shri Peeyush Kumar	Member (From 09.06.2017 upto 05.02.2018)	Govt. Nominee Director
9	Shri A. K. Chakraborty	Member (w.e.f. 18.09.2017 upto 30.10.2017)	Functional Director
10	Shri V. K. Sinha	Member (w.e.f. 29.10.2015 upto 31.07.2017)	Functional Director

General Manager (Finance), HoD (IAD) 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:

10 (Ten) meetings were held during the financial year 2017-18 on 05.05.2017, 24.05.2017, 06.07.2017, 28.07.2017, 18.09.2017, 30.10.2017, 20.11.2017, 01.02.2018, 09.03.2018 and 21.03.2018 respectively. The details of the Audit Committee meetings attended by members are as under:

S.N.	Name of Director	Status	Number of meetings attended
	<b>Functional Directors</b>		
1.	Shri V. K Sinha	4	4
2.	Shri A. K. Chakraborty	1	1
3.	Shri B. N. Shukla	5	5
4.	Shri Binay Dayal	3	2
	<b>Part-time official Directors</b>		
5.	Dr. Anindya Sinha	2	2
6.	Shri D. N. Prasad	2	2
7.	Shri C. K. Dey	6	4
8.	Shri Peeyush Kumar	6	4
	<b>Part-time Non-official Directors</b>		
9.	Shri Rajender Parshad	10	10
10.	Dr. Debasish Gupta	10	10



## 1.5.4 Nomination and Remuneration Committee

The Board constituted the Nomination & Remuneration Committee of CMPDIL in its 191<sup>st</sup> 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 as on 31<sup>st</sup> March 2018 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	Dr. Debasish Gupta	Member (w.e.f. 30.12.2015)	Independent Director
3	Shri A.K. Charkraborty	Permanent Invitee(w.e.f. 28.10.2016)	Functional Director
4	Shri Peeyush Kumar	Member (w.e.f. 09.06.2017 upto 05.02.2018)	Govt. Nominee Director

Company Secretary will act as Secretary to this Committee and GM/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 2017-18.

## 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 172<sup>nd</sup> meeting held on 10.05.2013.

### Composition:

The CSR Committee consists of following members as on 31<sup>st</sup> March, 2018 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	Dr. Debasish Gupta	Member (w.e.f 30.10.2017)	Independent Director
3	Shri A.K. Chakraborty	Member (w.e.f. 28.10.2016)	Functional Director
4	Shri B.N. Shukla	Member (w.e.f 30.10.2017)	Functional Director
5	Shri Binay Dayal	Member (w.e.f. 30.12.2015 upto 30.10.2017)	Official Part-time Director

General Manager (HRD) is the Nodal Officer of the Committee providing all services to the CSR Committee.

### Meeting and Attendance:

3 (Three) meetings were held during the financial year 2017-18 on 23.05.2017, 01.12.2017 and 31.01.2018. 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)	3
2	Dr. Debasish Gupta	Member (w.e.f. 30.10.2017)	2
3	Shri A.K. Chakraborty	Member (w.e.f. 28.10.2016)	3
4	Shri B.N. Shukla	Member (w.e.f 30.10.2017)	2
5	Shri Binay Dayal	Member (w.e.f. 30.12.2015 upto 30.10.2017)	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 as present on 31.03.2018 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	Chairman-cum-Managing Director	2246757.00	431046.00	0.00	307932.00	1872720.00	4858455.00	137835.00
Shri B.N. Shukla	Director (Tech)	1184992.00	228956.00	0.00	141893.00	1035956.00	2591798.00	37582.00
Shri A.K. Chakraborty	Director (Tech)	2065842.00	404292.00	0.00	287750.00	750336.00	3508220.00	60694.00

#### (B) Part-Time Official Directors

No remuneration is being paid to the Part-Time Official Directors by CMPDIL. Dr. Anindya Sinha, Project Adviser is the Govt. Nominee Director from the Ministry of Coal, New Delhi. His remuneration is being paid by the Ministry of Coal, Govt of India.



Shri Binay Dayal, Director (Technical) is the Nominee Director from Coal India Limited, Kolkata w.e.f. 09.11.2017 and Shri C.K. Dey, Director (Finance) was the Nominee Director from Coal India Limited, Kolkata from 19.12.2016 till 09.11.2017 and their remuneration is being paid by the Coal India Limited respectively.

## (C) Part-Time (Independent Directors)

No remuneration is being paid to the Independent 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 Independent Directors during the F.Y. 2017-18 are given as under:

Sl. No.	Name	Sitting Fees paid for attending		Total (₹)
		Board Meetings (₹)	Committee Meetings (₹)	
1.	Shri Rajender Parshad	2,00,000.00	3,40,000.00	5,40,000.00
2.	Dr. Debasish Gupta	2,00,000.00	3,60,000.00	5,60,000.00

## 1.5.7 (i) Annual General Meetings:-

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

Details	2014-15 40 <sup>th</sup> AGM	2015-16 41 <sup>st</sup> AGM	2016-17 42 <sup>nd</sup> AGM
Date	22.06.2015	27.06.2016	06.07.2017
Time	11:30 A.M.	10:30 A.M.	11:30 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	2015-16	2016-17	2017-18, 10 <sup>th</sup> EGM
Date	NIL	NIL	17.03.2018
Time			9:30 A.M.
Venue			At the Registered office of the company, Gondwana Place, Kanke Road, Ranchi, Jharkhand-834031
Special Resolution			Issue of Bonus Share

## (iii) Independent Directors Meeting :

As per the 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.



1 (One) meeting of Independent Directors was held during the financial year 2017-18 on 06.07.2017.

The detail of the meeting attended by the Independent Directors is as under:-

Sl. No.	Name of the Independent Director	Number of meeting attended
1	Dr. Debasish Gupta	1
2	Shri Rajender Parshad	1

#### (iv) Bonus Shares Committee:

As per the DIPAM guidelines, the Board constituted the Bonus Shares Committee in its 211<sup>th</sup> meeting held on 09.03.2018.

##### Composition:

The Bonus Shares Committee consists of following members and is headed by Chairman- cum-Managing Director of the Company, 1 Functional Director and 1 Independent Director:

1. Shri Shekhar Saran	- Chairman-cum-Managing Director	- Chairman
2. Dr. Debasish Gupta	- Independent Director	- Member
3. Shri B.N. Shukla	- Functional Director	- Member

##### Meeting and Attendance:

2 (Two) meetings were held during the financial year 2017-18 on 21.03.2018 and 27.03.2018. The details of the Bonus Shares Committee meeting attended by members are as under:

S. N.	Name of Director	Status	Number of meetings attended
1	Shri Shekhar Saran	Chairman	2
2	Dr. Debasish Gupta	Member	2
3	Shri B.N. Shukla	Member	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 31<sup>st</sup> March,

2018 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 2017-18 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 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.

- **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 2017-18 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](http://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 31<sup>st</sup> March 2018.

- **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 CMPDIL during the financial year 2017-18.

- **Annual Return**

Website Link i.e [www.cmpdi.co.in](http://www.cmpdi.co.in)

## 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", Mine Tech 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](http://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 31<sup>st</sup> March, 2018 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 163<sup>rd</sup> 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 4<sup>th</sup>, 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 192<sup>nd</sup> Board Meeting held on 02.02.2016 and reconstituted by the Board in its 207<sup>th</sup> Board Meeting held on 18.09.2017.

##### 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 A.K. Chakraborty	Member (w.e.f. 28.06.2016)	Functional Director
4	Shri B.N. Shukla	Member (w.e.f. 18.09.2017)	Functional Director
5	Shri V.K. Sinha	Member (w.e.f. 02.02.2016 upto 31.07.2017)	Functional Director





## B. Meeting and Attendance:

3 (Three) meetings were held during the financial year 2017-18 on 30.10.2017 and 20.11.2017 & 06.03.2018. 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)	3
2	Shri Rajender Parshad	Member (w.e.f. 28.06.2016)	3
3	Shri A.K. Chakraborty	Member (w.e.f. 28.06.2016)	3
4	Shri B.N. Shukla	Member (w.e.f. 18.09.2017)	3

The Risk Management Committee formed Risk Sub-committee and the composition of the Sub- Committee as on 31<sup>st</sup> March, 2018 is as under:-

### 1) Chief Risk Officer:

Shri Bijon Bhattacharjee, G.M (MSD).

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

- Shri Rajneesh Kumar, Chief Manager (E&M/Geomatics)
- Ms Suman Rastogi, Manager (P&A)
- Shri Rajib Dutta, Sr. Manager (E&M)
- Shri U. Chatterjee, Sr. Manager (Finance).

### 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 CMPDIL 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 CMPDIL 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 N.N. Thakur	-	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. CMPDIL 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 CMPDIL to implement its policies and programs.

Keeping in view the special nature of its business, CMPDIL initiated its CSR & Sustainability activities during 2017-18 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 ₹ 38.08 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 Coal India Limited for the Holding Company and its Subsidiary Companies.



## PART: B

### ANNUAL PERFORMANCE OVERVIEW

#### 1.0 GEOLOGICAL EXPLORATION & DRILLING

1.0.1 CMPDIL continued to carry out coal exploration activities in 2017-18 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 CMPDIL has substantially improved the capacity of drilling during XI & XII plan period. As against the achievement of 2.09 lakh metre in 2007-08, CMPDIL 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, 11.26 lakh meter in 2016-17 and 13.66 lakh m. achieved in 2017-18 (**Growth - 21%**) through departmental resources and outsourcing.

For capacity expansion through modernization of departmental drills, 39 new Mechanical drills & 19 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. CMPDIL has also replaced 57 mud pumps, 74 trucks and 17 Multiutility Crew Cab in last seven years. In addition to this, **6 Hi-Tech Hydrostatic drills** have been received in 2017-18.

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 CMPDIL 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 **86 blocks** involving **35.52 lakh metre** of drilling was awarded through tendering since 2008-09, out of which drilling has been concluded in **48 blocks**.

In 2017-18 a total of about **9.156 lakh m. (Growth- 34%)** is drilled through outsourcing, out of which 4.446 lakh m. is through tendering, 4.688 lakh m. through MoU with MECL and **0.002 lakh m.** through State Govts.

#### 1.1 Drilling Performance in 2017-18:

1.1.1 CMPDIL 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 have also deployed resources for detailed drilling/exploration in CIL/Non-CIL blocks. A total of 140 to 160 drills were deployed in 2017-18 out of which 66 were departmental drills.

CMPDIL continued the technical supervision of Promotional/NMET Exploration work undertaken by MECL in Coal Sector (CIL Areas) in **8 blocks**. Apart from it, DGM (Nagaland) has also undertaken Promotional Exploration in **1 block & CMPDIL in 2 blocks** in Coal Sector on behalf of MoC. Promotional/ NMET Exploration work undertaken by MECL in Lignite Sector in **5 blocks & GSI in 1 block**. A total of **1.347 lakh m.** of Promotional (Regional) drilling was carried out in Coal (**0.928 lakh m.**) & Lignite (**0.419 lakh m.**) during 2017-18 through CMPDIL.

1.1.2 In 2017-18, CMPDIL and its contractual agencies took up exploratory drilling in **118 blocks/mines** of **18 coalfields** situated in **6 States**. Out of 118 blocks/



mines, **42 were Non-CIL/Captive** blocks and **76 CIL** blocks/mines. These coalfields are Raniganj (6 blocks/mines), Rajmahal (7 blocks), Auranga (1 block), E. Bokaro (1 block), W. Bokaro (2 blocks), North Karanpura (6 blocks), Wardha Valley (12 blocks), Pench-Kanhan (2 blocks), Sohagpur (13 blocks), Mand Raigarh (22 blocks), Korba (4 blocks), Bistrampur (4 blocks / mines), Sonhat (3 blocks), Tatapani-Ramkola- (5 blocks), Singrauli (blocks), Talcher (11 blocks), Ib Valley (7 blocks) & Godavary Valley (2 blocks). Departmental drills of CMPDIL took up

exploratory drilling in **50 blocks/mines** whereas contractual agencies drilled in **68 blocks/mines**.

1.1.3 Under Promotional / NMET (Regional) Exploration Programme, MECL has undertaken Regional drilling in 8 coal blocks (Mand Raigarh = 5, Johila = 1, Tatapani-Ramkola = 1 & Singrauli = 1). DGM (Nagaland) has also undertaken 1 block for regional drilling in Coal Sector. CMPDIL has undertaken Promotional Exploration in 2 blocks, 1 in North Karanpura CF and 1 in Talcher CF.

The overall performance of exploratory drilling in 2017-18 is given below:

(Figures in Lakh meter)

Agency	Target 2017-18	Performance of Exploratory Drilling in 2017-18			Achieved Prev. Year: 2016-17	Growth %
		Achieved	Achieved (%)	+/-		
A. Detailed Drilling Undertaken by CMPDI :						
I. Departmental	4.750	4.505	95%	0.245	4.413	2%
II. OUTSOURCING						
State Govts.	0.030	0.021	71%	-0.009	0.005	301%
MECL (MOU)	4.000	4.688	117%	0.688	3.562	32%
Tendering	3.720	4.446	120%	0.726	3.275	36%
Total Outsourcing	7.750	9.156	118%	1.406	6.842	34%
Grand Total A*	12.500	13.661	109%	1.161	11.255	21%
B. Promotional / NMET Drilling by MECL, GSI, DGM (Nagaland) & DGM (Assam):						
I. COAL SECTOR						
GSI	0.000	0.000	0%	0.000	0.000	0%
MECL	0.858	0.853	99%	-0.005	0.491	74%
DGM, Nagaland	0.007	0.008	115%	0.001	0.006	35%
DGM, Assam	0.005	0.000	0%	-0.005	0.000	0%
CMPDIL	0.030	0.067	224%	0.037	0.000	100%
Total Coal:	0.900	0.928	103%	0.028	0.497	87%
II. LIGNITE SECTOR						
GSI	0.000	0.003	0%	0.003	0.035	-90%
MECL	0.850	0.416	49%	-0.434	0.522	-20%
Total Lignite	0.850	0.419	49%	-0.431	0.557	-25%
Grand Total B	1.750	1.347	77%	-0.403	1.054	28%

In 2017-18, 8.802 lakh m. has been drilled in CIL/Captive blocks and 4.859 lakh m. in Non-CIL blocks.

In 2017-18, CMPDIL achieved its departmental and overall drilling targets by 95% and 109% respectively. The performance of departmental drilling is better than previous year with growth of 2% and recording average operational drills productivity of 586 m/drill/month. Non-availability of permission to explore in forest areas & local problems (Law & Order) has affected the performance of departmental & outsourced drilling.

#### 1.1.4 Drilling in Non-CIL / Captive Mining Blocks:

In 2017-18, a total of **4.995 lakh m.** of drilling was targeted in Non-CIL blocks (departmental = 1.085 lakh m., outsourcing = 3.910 m). As against this, a total of **4.857lakh m.** has been achieved, out of which the departmental drills of CMPDIL have carried out **1.138 lakh m.** of exploratory drilling whereas **3.719 lakh m.** has been achieved through outsourcing.

Apart from above exploration work, CMPDIL 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 CMPDIL to allottee on payment of total cost of exploration.

As per guidelines issued by MoC, CMPDIL is certifying the plan submitted by the allocates, 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 encroached 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 of BCCL, CCL, WCL, SECL, NCL, ECL and MCL were completed during 2016-17.

1.2.2 Total 53 nos of Hydrogeological studies on GR/PR and others have been completed during this period, including 18 WCL, 15 SECL, 6 MCL, 1 ECL, 10 BCCL, 2 NCL, and 1 outside consultancy job for DVC.

1.2.3 Total 8 nos of Hydrogeological reports on Location and Design of Piezometers have been prepared and submitted during this period, including 5 ECL, 2 SECL, and 1 CCL.

1.2.4 Hydrogeological studies in 6 projects of WCL, SECL, NCL and MCL have been 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 for WCL.

1.2.6 40 Piezometers (23 of Talcher Coalfields and 17 in IB Valley) have been constructed under the technical supervision of Hydrogeologists of RI-VII. Long duration pumping test (1000 min cycle) and yield test were conducted by Hydrogeologists of RI-VII during 2016-17.

1.2.7 CMPDIL is carrying out groundwater monitoring of MOEF cleared projects 74 nos. of mines of WCL area and 15 nos. Cluster of mines in BCCL area. Water level monitoring in other areas of ECL, CCL, SECL, NCL and MCL were also carried out.

## 1.3 Geological Reports:

1.3.1 In 2017-18, **23** Geological Reports are prepared on the basis of detailed exploration conducted in previous years. The prepared Geological Reports, have upgraded about **5.0 Billion Tonnes** of additional coal resources to 'Proved' category.

1.3.2 Under Promotional Exploration Programme, GSI and MECL have submitted **3** Geological Reports on coal





blocks, established about **0.892 Billion Tonnes** of coal resources, in 'Indicated' & Inferred categories, above specified thickness.

## 1.4 Geophysical Surveys:

### 1.4.1 Geophysical Logging:

Boreholes drilled for exploration purposes were geophysically logged to get the in-situ information of different strata encountered in the boreholes. During the year 2017-18, a total of 3,41,422 metre of geophysical logging has been carried out for this purpose in CIL and Non-CIL projects with multi-parametric geophysical logging equipment. Out of this, 1,33,674 depth metre of logging was done by 6 departmental geophysical logging units and 2,07,748 m of logging was carried out by contractual agencies.

### 1.4.2 Surface Geophysical Surveys:

CMPDIL has also undertaken Electrical Resistivity & Magnetic Survey in CIL and Non-CIL blocks for delineation of In-crop of coal seams, delineation of dykes and ground water investigation. A total of **272.1 line km** of Resistivity profiling, **207** Vertical Electrical Sounding (VES) and **126.26 line km** of Magnetic survey have been carried out in 2017-18 for such purpose. With the 48-Channel signal enhancement Seismographs, a total of **122 line km** of High Resolution Shallow Seismic (HRSS) survey has been carried out in Bartara block, Sohagpur Coalfield, Gautamdihara and Block-IV blocks in Ib valley Coalfield and Sakhigopal-A block, Talcher Coalfield.

The State of the art PARADIGM software for the processing and interpretation of 2D Seismic data has been successfully installed at CMPDIL and all the Seismic reports henceforth shall be prepared by utilizing this program.

### 1.4.3 Reports:

A total of 23 Geophysical reports have been submitted during the year 2017-18. It includes five reports on geophysical logging, twelve on resistivity survey, four on magnetic survey. In addition to these, two number of reports on HRSS survey, namely, 'Report on 2D Seismic Survey in Kewai block' and 'Report on 2D Seismic Survey in Baheraband block', Sohagpur Coalfield were submitted in 2017-18.

## 1.5 Geosystem:

Modification/Updation exercise of GIS database in respect of block boundaries of different coalfields being carried out on regular basis to address requirement related to different categories of blocks. Updation of coalfield maps to incorporate geological features, PE-RE exercise, forest related and other requirements as and when required. Support to other departments e.g. CBM, Geomatics, Mining and other units of exploration division with preparation of various reports and data to resolve various issues.

Support to MoC to address different issues related to block boundaries, forest cover etc. Support in preparation of data for the web portal, OCBIS, creation in association with ICT. Exercise on regular basis has been taken up to provide DGPS surveyed block boundaries of the blocks allocated by MoC in association of RIs and Geomatics Division.

Minex modelling support to blocks of different RIs. Vetting of GRs and Minex models received from different RIs. Maintenance, cataloging of various data receive from different RIs in respect of GIS map data, GRs and Minex models.

Exercise has been taken up for creation of cross section of various NCIL blocks likely to be auctioned/ allocated by MoC.



Support to RIs and HQ on in-house developed software and Minex to RIs and HQ as and when required.

### 1.5.1 Forest:

The CMPDIL has undertaken exploratory drilling in forest areas with permission from MoEF & CC with a condition to ascertain the impact of exploratory drilling on terrestrial aquatic flora & fauna. The study was carried out by Environment Management Division, ICFRE, Dehradun (An autonomous body of MoEF & CC). Following two study reports were submitted by Environment management Division, ICFRE:-

The affects of pre & post exploratory drilling on terrestrial flora & fauna & aquatic lives in Makri-Barka west block (800Ha) & Makri - Barka East block (1000Ha) of Singrauli Coalfield, falling under Mahan Reserve Forest, District - Singrauli, Madhya Pradesh.

## 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. ONGC is the Operator for both CBM blocks and carrying out jobs as per contractual agreement with the Govt. of India and CMPDIL provides technical support to CIL in this regard. On completion of CIL part of work programme by CMPDIL 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 whereas Environmental Clearance has been granted in April, 2017. FDPs are in revision as per directive of MoP&NG considering overlap issues.

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 for optimum exploitation of coal by SAIL and CBM by ONGC (operator of the CBM block) has been finalized and agreed by DGMS. Now SAIL has conveyed ONGC to defer the execution of Co-Development Agreement till mining lease (ML) is granted to SAIL. ONGC through MoP&NG sought intervention for early execution of Co-Development Agreement. In pursuance to the Steering Committee meeting held on 30<sup>th</sup> March, 2017 at DGH Revised FDP and cost estimate taking in account all constraints has been prepared by ONGC and accordingly techno-economics has been done by ONGC. FR is under examination at ONGC.

In February, 2018 DGMS has communicated to ONGC that Directorate does not have any objections regarding resumption of CBM activities at the overlapping area between Prabatpur Coal block of SAIL and Jharia coal block of ONGC provided no underground working shall made at the west side of Fault F5-F5 after starting the CBM drilling operations. Thereafter HF job has been undertaken in Well# JH14 on 14<sup>th</sup> March, 2018 considering DGMS no objection.



## 1.6.2 CBM and Shale gas related studies under Promotional Exploration during 2017-2018

### 1.6.2.1 CBM related studies:

CMPDIL is carrying out studies related to "Assessment of Coalbed Methane Gas-in-Place Resource of Indian Coalfields/Lignite fields" through boreholes drilled during exploration. CBM specific data has been generated from eight boreholes during the year and achieved the target. This study create the data base for assessment of CBM potentiality and facilitate delineation of more blocks for CBM development.

A report based on CBM related studies on Patratu ABC Block, South Karanpura Coalfield, Jharkhand has been prepared.

### 1.6.2.2 Shale gas related studies:

CMPDIL is carrying out studies related to "Assessment of Shale Gas-in-Place Resource of Indian Coalfields/Lignite fields" through boreholes drilled during exploration. This study create the data base for assessment of shale gas potentiality and facilitate delineation of more blocks for Shale Gas development. During the year 2017-18 target has been achieved by completing the studies in five boreholes.

## 1.6.3 Commercial development of Coal Mine Methane (CMM)

Ministry of Coal vide Office Memorandum dated 29<sup>th</sup> 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 CMPDIL the Nodal Agency for development of CMM in India. MoP&NG vide notification dated 3<sup>rd</sup> November, 2015 has issued guidelines for exploration and exploitation of CBM by Coal India Limited (CIL) and its subsidiaries from areas under coal mining lease allotted to CIL.

MoC has requested MoP&NG to issue modified guidelines considering exemption of applicability of the ORD Act and PNG Rules within coal mining leasehold areas, exemption of penalty in delay of submission of FDP & Production and permission to engage experienced technical developers or service contractor from India or abroad as third party for CBM exploitation etc.

Considering GoI permission to CIL in July, 2015 to explore and exploit CBM from its areas under coal mining lease allotted to CIL, steps have been taken up by CMPDIL/CIL for identification of potential areas initially in Damodar Valley coalfields within CIL mining leasehold which appears to hold comparatively better potential for CBM. Accordingly one block each in Jharia coalfield (in BCCL command area) and in Raniganj coalfield (ECL command area) have been identified as prospective CBM/CMM blocks:

- 1) **Jharia CMM/CBM Block (BCCL Area):** A block of about 24.32 Sq. Km clubbing Kapuria, Moonidih, Jarma, Singra blocks has been delineated for commercial development in the mining leasehold area of BCCL having CBM resource of 25.22 BCM. Project feasibility report has been prepared based on Reservoir Modeling & Techno-Economic studies and submitted to BCCL for further perusal.
- 2) **Pre-drainage of coal mine methane at Moonidih mine (BCCL), Jharia Coalfield:** Pre-drainage of methane at Moonidih mine (BCCL) in working Seam XVI has been proposed to recovery methane to enhance production and safety and recovered gas may also be gainfully utilized. In





this regard a Pre-feasibility report on Pre-drainage of CMM from Moonidih UG mine in Jharia Cf has been prepared and submitted to BCCL for competent approval to incorporate Scope of work for the global bid.

An Expression of Interest was floated by CMPDIL to identify suitable organization to undertake pre-drainage of methane from Moonidih mine of BCCL in Jharia Cf. 15 responses to the offers received against this EoI. Bidder's meet held on 10th May, 2017 at CMPDIL, Ranchi in which 11 respondents of EoI participated which includes Service Provider/Developer from Australia, USA, Poland. Based on their inputs a draft Tender Specification Document (TSD) was prepared for the selection of the suitable experienced developer/service provider through global e-Tendering for carrying out the first pilot project in India. Draft TSD was circulated to respondents and deliberated in the Pre NIT meeting held on 7<sup>th</sup> September, 2017 at CMPDIL (Ranchi).

Accordingly, Pre- Feasibility report and Global Bid Document has been prepared for "Pre-drainage of Coal Mine Methane (CMM) from Moonidih UG Mine". The draft Global Bid Document has been sent to DGH for "Peer Review" also. DGH suggested that E&P of CBM in Moonidih mine can be done pursuant to extant GoI notification dated 3<sup>rd</sup> Nov, 2015 in this regard and CBM/CMM should be sold under the domain of ORD Act 1948. BCCL may enter into an agreement with GoI on lines similar to the CBM contracts, on a nomination basis because it already holds the coal mining lease. It was also

pointed out that methane drainage at Moonidih UG mine which is CMM also requires permission from MOP&NG in pursuant to extant GoI notification dated 3<sup>rd</sup> Nov, 2015. On approval of the BCCL Board NIT will be published to invite Global e tender for the selection of the suitable experienced developer/service provider.

- 3) **Raniganj CMM Block (ECL Area):**  
An area of 57 Sq. Km under mining leaseholds of Sripur, Satgram and Kunustoria Areas of ECL in Raniganj Coalfield has been delineated for commercial development of CMM having CBM resource of 3.93 BCM. Project feasibility report has been prepared based on Reservoir Modeling & Techno-Economic studies and submitted to ECL for further perusal. Considering constraints like Mining lease below Damodar river, limited access of free land & high cost of land require for acquisition, overlapping with GEECL, extensive old working above potential coal seam for CBM etc. it appears that the identified area may be technologically challenging for CBM/CMM extraction.

#### 1.6.4 CMM/CBM Clearinghouse in India

A CMM / CBM clearinghouse was established at CMPDIL, Ranchi under the aegis of Ministry of Coal and USEPA on 17<sup>th</sup> 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.cmmclearinghouse.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. After completion of initial three years term it was extended for another three years thereafter USEPA has further extended support for additional term i.e; three years upto 2017. US EPA is intended to extend their support for 2018-21 (3Yrs).

An International Workshop organized on 9<sup>th</sup> – 10<sup>th</sup> March, 2017 at Ranchi on “Best Practices in Methane Drainage and Use in Coal Mines” which is jointly organized by CIL-CMPDIL, GMI-US EPA, UNECE under aegis of GoI-MoC.

#### **1.6.5 Commercial development of Underground Coal Gasification (UCG)**

MoC has constituted Inter Ministerial Committee (IMC) for the development and identification of areas for UCG in the line broadly similar to the existing policy of CBM development. Potential blocks in coal (7) and lignite (7) 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 Cf (Maiki (North)–Maiki-Merkhi, Pathora, Chainpa), Tatapani-Ramkola Cf (Reonti-West), and Yelendu Coalfield - Godavari Valley, Banda – SCCL.

Model Bid Document & Model Contract Document for Development of UCG submitted to MoC for consideration. A coal block i.e; Kasta West block in Raniganj Cf under ECL area has also been identified to undertake Pilot Scale UCG Project

under R&D model in association with ECL/CMPDIL/CIL.

#### **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”**

An S&T project regarding “CBM Reserve estimation for Indian coalfields (Project Code# CE (EoI)/31)” is under implementation where IEST, Shibpur is main implementing agency and NGRI, Hyderabad, CMPDIL and TCE, Kolkata are sub implanting agencies. This project is approved under EoI of Coal S&T project of MoC The project is of 3 years duration, the revised completion schedule March, 2019. Draft report of 2D Seismic survey conducted in South Karanpura Cf has been submitted by NGRI where 5Sq. Km has been delineated for 3D seismic survey which is likely to be undertaken by NGRI by December, 2018.

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

An S&T project on “Capacity Building for Extraction of CMM Resource within CIL Command Areas (Project Code# CE-32)” has been approved under Coal S&T project of MoC and is under implementation. CMPDIL is the implementing agency and CSIRO, Australia is Sub implementing agency. The project completion schedule is March, 2019. The technical specification for laboratory equipment have been finalized in association with CSIRO and equipment are under procurement. Training of CBM Personnel and CBM Lab Personnel took place by CSIRO on laboratory procedures and field testing protocols.



## 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 regarding “Shale gas potentiality of Damodar basin of India (Project code–CE (Eol/30)” under S&T plan of Ministry of Coal (MoC) is under implementation. The project revised completion schedule is May, 2017. The project objective is to evaluate Damodar basin for their shale gas potentiality through integrated geophysical, geological, geo-chemical and petro-physical investigations. The revised completion schedule is November, 2018.

NGRI along with CMPDIL & CIMFR selected Rangamati B block (Tumni & Kanchanpur Sector) in Raniganj Cf and 3D seismic survey in 2.4 Sq Km of 3.2 Sq. Km has been completed. Four boreholes have been proposed by NGRI for validation of interpretation. 3D seismic survey is started in Radhanagar block, Jharia Cf. On completion of 3D Seismic Survey findings, CMPDIL will take up its part of committed activities i.e; drilling of deep boreholes.

### 1.6.6.4 Project on VAM

**CMPDIL has formulated a project jointly with CSIRO titled “Abatement and utilization of Ventilation Air Methane (VAM) from working underground degree – III coal mine in India”.** The implementing agencies for the project will be CSIRO and CMPDIL with BCCL as a sub-implementing agency. Identified project mine is Moonidih Underground Mine in Jharia coalfield of Bharat Coking Coal Ltd. (BCCL). CIL R&D Board has in principle approved the project with 100% retroactive funding at present and in due course 40% should be reimbursed from National Clean Energy & Environment Fund (NCEEF) for project duration of

36 months. CSIRO was requested to prepare a draft collaborative agreement which is to be signed between CMPDIL and CSIRO.

### 1.6.7 MoU 2017-18

As per MoU 2017-18 of CMPDIL, under the head ‘Special Projects’ for CMM/CBM Development in CIL leasehold areas “Project Feasibility Report on Jharia CMM/CBM Block, Jharia Coalfield (under BCCL Leasehold)” and “Project Feasibility Report on Raniganj CMM Block, Raniganj Coalfield (under ECL Leasehold)” was to be submitted by 31<sup>st</sup> Dec.’17 for ‘Excellent’ rating. Accordingly, the “Project Feasibility Report on Jharia CMM/CBM Block, Jharia Coalfield (under BCCL Leasehold)” was submitted on 28<sup>th</sup> Dec.’17 and “Project Feasibility Report on Raniganj CMM Block, Raniganj Coalfield (under ECL Leasehold)” was submitted on 31<sup>st</sup> Aug.’17.

## 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 2017-18 for building additional coal production capacity to the tune of 100 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:

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

During the year 2017-18, 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), Energy Audit (Diesel & Electrical) and Benchmarking of Opencast 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 Study on coal samples, Coal Core Processing & Analysis, Washability tests, OBR Survey, Man Riding System, Top Soil Management Study, Slope Stability Study, Effluent / Sewerage Treatment Plants, Mine Closure Auditing, etc.

During the year 2017-18, a total of 244 reports have been prepared. The break-up of reports prepared has been given below:

REPORTS	Nos.
Geological Reports	23
Project Reports	30
Draft EMPs (including 20 Form-I)	43
Other Studies	148
<b>TOTAL</b>	<b>244</b>

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

## ANNEXURE - I

### LIST OF COMPLETED REPORTS DURING 2017 - 18

Regional Institute/HQ		Name of the Reports
<b>Geological Reports</b>		
RI-I	1.	Pirpainty Barahat (Revised GR)
RI-III	1.	Tetariakhar
	2.	Ara
RI-IV	1.	Yekona-II
	2.	Bharatwada
RI-V	1.	Bicharpur North (Non CIL)
	2.	Shivsagar
	3.	Bicharpur East (Non CIL)
	4.	Marwatola Sector VI & VII
	5.	Sundergarh (Tulsi Block D)
RI-VI	1.	Inguri East
RI-VII	1.	Manoharpur & Dipside of Manoharpur
	2.	Mandakini B (Phase-I)
	3.	Ghogharpalli & Dip Extension
Contractual	1.	West Baisi (Non CIL)
	2.	Makri Barka West Ph-II
	3.	Singra
	4.	Mahuda West
	5.	Ghughra Central
	6.	Salanpur B
	7.	Bistupur South
	8.	Pundi East
	9.	Ghughra East
<b>Project Reports</b>		
RI-I	1.	RCE for Chitra OC
	2.	Siduli UG
	3.	Tilaboni UG Recast
	4.	Bankola UG

Regional Institute/HQ		Name of the Reports
	5.	Nakrakonda Kumardih B OC Recast
<b>RI-II</b>	1.	Amalgamated Joyrampur Colliery
	2.	Kalyaneswari OC
<b>RI-III</b>	1.	Konar Expn. OC Recast
	2.	Sirka OC
	3.	Rohini-Karkatta Amalgamation OC
	4.	Tetariakhar OC Expn.
	5.	Kotre-Basantpur-Pachmo OC
<b>RI-IV</b>	1.	Konda-Hardola OC
	2.	Sangam UG
	3.	Silewara Deep UG
	4.	Vishnupuri UG to OC
	5.	Pimpalgaon Deep OC Recast PR
	6.	Bhatadi Expn. (North West) OC
<b>RI-V</b>	1.	Syang OC
	2.	Chimtapani-Porda Combined OC
	3.	Rampur Batura OC (Recast)
	4.	Batura West OC
	5.	Bodri UG
<b>RI-VI</b>	1.	Amelia OC, M/s THDC India Ltd.
<b>RI-VII</b>	1.	Integrated Lakhanpur Belpahar (Recast)
<b>HQ</b>	1.	Gandbahera Ujheni, M/s MPPGCL
	2.	Gare-Pemla Sector-I OC+UG, M/s GSECL
	3.	Piparwar UG (Phase-I), CCL
	4.	PQ OCP Recast, NEC
	5.	Jagun OCP Recast, NEC
<b>Other Reports</b>		
<b>RI-I</b>	1.	Scheme for Itapara OC
	2.	Scheme for Sonapur Bazari OC
	3.	UCE for Nakrakonda-Kumardih B OC
	4.	Mining Plan for Cluster No.1 Mines
	5.	GR for PR for Bonjemehari block
	6.	GR for PR for Lakhimata
	7.	Mining Plans for Cluster 4 and 10
	8.	RCE of Bonbahal OC Patch Scheme
	9.	Trial blasting using SME at Shankarpur OCP unit of Chora Block Incline
	10.	Scheme for introduction of mass production technology at Amritnagar UG
	11.	Trial blasting, Vibration study within danger zone in Chitra Colliery
	12.	Scheme for North Searsole OC Patch
	13.	Scheme for Kapasara OC Patch
<b>RI-II</b>	1.	Energy audit and benchmarking of Vishwakarma OC

Regional Institute/HQ		Name of the Reports
	2.	Mine Closure status report of closed/abandoned mines of BCCL before 2009
	3.	Mining Plan for Amalgamated Joyrampur OC
	4.	GR for PR of Amalgamated Joyrampur OC
	5.	Mining Plan and Mine Closure Plan (Revised) for Rajapur OC
	6.	Mining Plan and Mine Closure Plan for Dobari OC
	7.	Mining Plan and Mine Closure Plan for Sendra Bansjora OC
	8.	Diesel Audit & Benchmarking of Amalgamated NT-ST Expn.- Jeenagora Opencast Mine
	9.	Mining Plan and Mine Closure Plan of Kuya OC
	10.	Geological Note on Mining Plan and Mine Closure Plan of Kendwadiah OC Mine
<b>RI-III</b>	1.	Mine Closure status report of Hutur, Semra, Gidhania, Karo UG, Khasmahal UG and AK UG (closed before 2009), CCL
	2.	UCE of North Urimari OC
	3.	UCE of Amrapali OCP
	4.	Recast EPR of Konar OCP
	5.	UCE of Magadh OCP
	6.	Operational Plan of AKK OCP
<b>RI-IV</b>	1.	UCE of Recast PR of Sharda UG Mine
	2.	UCE of Kumbharkhani Mine
	3.	UCE of Dhuptala OC (Sasti UG to OC)
	4.	Scheme for Mahadeopuri UG Mine
	5.	Geological Model in MINEX (GR to PR) for Borda UG & Bhatdih Expn
	6.	UCE of Dhau North
	7.	Operational Plan of Sasti OC
	8.	Operational Plan of Mungoli Nirguda OC
	9.	GR to PR for Murpar Expansion UG
	10.	Scheme of Bharat OC (Ph-II)
	11.	Subsidence Prediction study of Sangam UG Mine
	12.	Subsidence Prediction study of Silewara Deep UG Mine
	13.	GR to PR for Pimpalgaon Deep OC
	14.	UCE of Gandhigram Recast PR
	15.	UCE of Sharda UG Mine
	16.	UCE of PR of Gondagaon-Ghatrohana OC
	17.	UCE of Tawa-III UG Mine
	18.	GR to PR for Mathra Deep UG
	19.	UCE of Visapur OC
	20.	UCE of Silori OC
	21.	UCE of Pauni Combined OC
	22.	UCE of Gauri Central OC



Regional Institute/HQ		Name of the Reports
	23.	Vibration studies at New Majri UG to OC
	24.	Electrical Energy Audit Report with Benchmarking of Bhanegaon OC
	25.	Electrical Energy Audit Report with Benchmarking of Chattarpur-II UG
	26.	Electrical Energy Audit Report with Benchmarking of WCL HQ Building
	27.	Subsidence Prediction study of Silewara UG Mine
	28.	Subsidence prediction study of Chhatrapur-I Extn. UG mine
<b>RI-V</b>	1.	UCE of Jhiria West OC
	2.	Scheme for Umaria UG
	3.	Operational Plan for Chirimiri Expn. OC
	4.	Operational Plan for Gevra OC
	5.	Trial blasting study using SME at Mahan OCP
	6.	Controlled blasting study at Bisrampur OC
	7.	Controlled blasting study at Piparia UG Mine
	8.	Mine Plan for Khairaha UG
	9.	UCE of Rampur Batura OC
	10.	Conceptual Note for Tulsu Block C
	11.	Conceptual Note for Dipka OC (35.50 Mty)
	12.	Trial Controlled blasting study in West Chirimiri Colliery
	13.	Final Reclamation Plan of Chirimiri OC Mine
	14.	Manriding system for Haldibari UG
<b>RI-VI</b>	1.	Operational Plan of Nigahi OCP
	2.	Diesel auditing and benchmarking of Khadia OCP
	3.	Mining Plan of Krishnashila OCP
	4.	Mine Closure Auditing of 4 mines of NCL
	5.	Electrical energy auditing and benchmarking of Amlohri OCP
	6.	Diesel auditing and benchmarking of Nigahi OCP
<b>RI-VII</b>	1.	Mine Closure Status Report of South Balanda OCP
	2.	Mine Closure Status Reports of South Deulbera and South Handidua UGs
	3.	UCE of Bharatpur Reorganisation
	4.	Mine Closure Status Report of Basundhara East OCP
	5.	Mining Plan & Mine Closure Plan of Lakhanpur Expn. OCP
	6.	Mining Plan & Mine Closure Plan of Bhubaneswari Expn. OCP

Regional Institute/HQ		Name of the Reports
	7.	Mining Plan & Mine Closure Plan of Bharatpur OCP
	8.	Mining Plan & Mine Closure Plan of Siarmal OCP
	9.	Conceptual Note on Madhupur Block
	10.	UCE of Bharatpur Reorg. OCP (Cost base: Jan., 2018)
<b>HQ</b>	1.	Slope stability study of Kakri OCP, NCL
	2.	Slope stability study of Sonepur Bazari OCP, ECL
	3.	Top Soil management study of Tarmi OCP, CCL
	4.	Land use/cover mapping of buffer zone for Mugoli Nirguda OC of WCL
	5.	Controlled blasting and vibration study at Amalgamated Jayrampur Colliery, BCCL
	6.	Land use/cover mapping of buffer zone for Pauni-II OC of WCL
	7.	Report on Bendra Nala diversion at Gare Pelma OCP, SECL
	8.	Mine Closure Plan of Piparwar UG (Phase-I), CCL
	9.	Slope Stability Study of Lingraj OCP, MCL
	10.	Scientific study to assess the danger of inundation to Naigaon OCM, Wardha Valley coalfield from underground galleries below the Wardha River, WCL
	11.	Scientific study for assessing requirement of higher capacity main mechanical ventilator at Beheraband UG mine, SECL
	12.	Subsidence prediction study for Gandhigram UG Mine, WCL
	13.	Slope Stability Study of Gauri Deep OC, WCL
	14.	Slope Stability Study of Kusmunda OC for Workshop, SECL
	15.	Mine Closure Plan of PQ OCP, NEC
	16.	Assessment of capacity and capacity utilisation for opencast mines of CIL during 2016-17
	17.	Performance of HEMM in CIL subsidiaries during 2016-17
	18.	Specific consumption of Explosives, Diesel and Electric Power in opencast mines of CIL during 2016-17
	19.	Land use/ cover mapping of buffer zone for Durgapur Expn. OC and Bhanegaon Expn. OC of WCL
	20.	Mine Capacity Assessment of UG mines of CIL for the year 2017-18
	21.	Standard Price List for Mining Equipment - 2017



Regional Institute/HQ		Name of the Reports
	22.	Mine Closure Status Report (MCSR) of Dilli Jaipore mine of NEC
	23.	Report for assessing Technical Feasibility of washing Coking Coal to 13% ash content
	24.	Report on Collapsible OHE (Overhead Equipment) underneath SILO
	25.	Controlled blasting and vibration study at Karkatta OCP, CCL
	26.	Mine Closure Plan of Jagun OCP, NEC
	27.	Diesel Audit and Annual Benchmarking of 3 OCPs of SECL
	28.	Diesel Audit and Annual Benchmarking of 31 OCPs of CCL
	29.	Land use / cover mapping of Manikpur OC, Batura OC and Malachua OC of SECL
	30.	Gas survey of RI-VII Seam, Chora Block Incline, ECL
	31.	Slope Stability Study of Tetariakhar OCP, CCL
	32.	Controlled blasting and vibration study at Giddi C OCP, CCL
	33.	Controlled blasting and vibration study at ABG Colliery, BCCL
	34.	Controlled blasting and vibration study at Urimari OCP, CCL
	35.	Technological studies for enhancement of capacity utilisation of Kedla & Rajrappa washeries, CCL
	36.	Slope Stability Study of CHP, Jayant OCP, NCL
	37.	Land use / cover mapping of Jayant OC and Krishnashila OC, NCL
	38.	Land use/cover mapping of Tapin OC of WCL
	39.	Land use/cover mapping of Khairaha UG of SECL
	40.	Land use / cover mapping of Bhatadi OC and Gondegaon OC, WCL
	41.	Vegetation Cover mapping of Mand Raigarh Coalfield, SECL
	42.	Financial evaluation and cost updation of Kyada Chaudhar Gariapani OCP, ECL
	43.	Controlled blasting and vibration study at Religara OCP, CCL
	44.	Fire Mapping of Jharia, Karanpura and Bokaro Coalfields
	45.	Vegetation Cover mapping of Raniganj Coalfield, ECL
	46.	Vegetation Cover mapping of Umrer Coalfield, WCL
	47.	Slope Stability Study of Integrated Lakhapur-Belpahar-Lilari OCP, MCL

Regional Institute/HQ		Name of the Reports
	48.	Scientific study to assess the danger of inundation to Ballarpur OCP from underground galleries below Wardha River
	49.	Controlled blasting and vibration study at Samleswari OCP, MCL
	50.	Controlled blasting and vibration study at Giddi A OCP, CCL
	51.	Controlled blasting and vibration study at Bhagaband Colliery, BCCL
	52.	Controlled blasting and vibration study at Chitra Colliery, ECL
	53.	Diesel Audit and Annual Benchmarking of 8 OCPs of ECL
	54.	Vegetation Cover mapping of Pench-Kanhana Coalfield, WCL
	55.	Vegetation Cover mapping of Sohagpur Coalfield, SECL
	56.	Vegetation Cover mapping of Rajmahal Coalfield, ECL
	57.	Vegetation Cover mapping of Ib Valley Coalfield, MCL
	58.	Assessment of capacity of opencast mines of CIL - Projections as on 01.04.2018
	59.	Updation and revision of MCA & RFB documents with respect to recommendations of ISI reports, implementation of e-procurement/reverse bidding as applicable, implementation of GST & other relevant taxes
	60.	RMR and support design in three panels of Orient Colliery Mine No.1&2, MCL
	61.	Slope Stability Study of CHP, Dudhichua OCP, NCL
<b>Environment Management Plan</b>		
<b>Form-I</b>		
<b>RI-II</b>	1.	Cluster-III Mines (Amendment in EC)
	2.	Cluster-V Mines (Amendment in EC)
	3.	Cluster-VIII Mines (Amendment in EC)
	4.	Cluster-X Mines (Amendment in EC)
	5.	Cluster-XI Mines (Amendment in EC)
	6.	Cluster-IX Mines (Amendment in EC)
<b>RI-III</b>	1.	Kedla Colliery (UG & OC)
	2.	Urimari Expn. OC
	3.	Karo OCP (Violation case)
	4.	Tarmi OCP (Violation case)
	5.	Selected Dhori Group of Mines (Violation case)
	6.	Kuju OCP
	7.	Giddi A
	8.	Religara
<b>RI-V</b>	1.	Chhal OC
	2.	Gayatri UG



Regional Institute/HQ		Name of the Reports
	3.	Manikpur OC Expn.
	4.	Amadand Expn. OC
RI-VII	1.	Jagannath OC Expn.
	2.	Samaleswari Expn. OC
<b>Draft EMP</b>		
RI-I	1.	Cluster -1 Mines (under clause 7(ii))
	2.	Cluster No 10 (Group of 19 Mines) (Addendum EMP)
	3.	Cluster No 9 (Group of 12 Mines) (Addendum EMP)
	4.	Cluster No 4 (Group of 3 Mines) (Addendum EMP)
RI-II	1.	Cluster-XVII
RI-III	1.	Tapin South Expn. OCP
RI-IV	1.	Pauni II OC Expn.
	2.	Mungoli Nirguda Extn. OC
	3.	Murpar Expansion UG Mine (Ph-I) (under clause 7(ii))
	4.	Gondegaon Extn. OC (Addendum/Modified EMP)
	5.	Bhatadi Expn. OC (Addendum/Modified EMP)
	6.	Dinesh OC (Makardhokra-III) (Addendum/Modified EMP)
	7.	Gandhigram UG
	8.	Jamunia UG
RI-V	1.	Dipka Expn. OC (Revised)
	2.	Gevra Expn. OC (Revised)
	3.	Batura OC
RI-VI	1.	Jayant OCP
	2.	Krishnashila OC (Addendum/Modified EMP)
RI-VII	1.	Kulda Expn. OC
	2.	Lakhanpur Expn. OCP (under clause 7(ii))
	3.	Bhubaneswari OCP (under clause 7(ii))
	4.	Jagannath OCP Expn.

## 2.1 Coal & Mineral Preparation

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

carrying out laboratory scale studies.

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

- 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."

Some of the esteemed customers on CMP division's roster are ICVL, S&T Mining, MPEB, MECL, Neyveli Lignite, PSEB, BHEL, NTPC, TISCO, ICML, UNDP, MOIL, SCCL etc.

The following major works have been completed by this division during the year 2017-18.

### A. REPORTS/STUDIES.

9 Nos. of technical reports have been prepared. A break-up of these reports is illustrated hereafter:

#### ➤ Chapter on washery

- Rohini-Karkatta, CCL (8.0 Mty)
- Tetariakhar, CCL (2.5 Mty)
- Kalyaneshwari (3.6 Mty), BCCL
- Kapuria (2.5 Mty), BCCL
- Gare-Palma (15.0 Mty), GSECL

#### ➤ Conceptual Reports

- Kusmunda (10.0 Mty), SECL

#### ➤ Feasibility Reports

- Pre-Feasibility report for Setting up of Coal Processing Plant (2.0 Mty)
- Benga CPP(5.3Mty) of M/s ICVL in Tete Province of Mozambique
- Assessing Technical Feasibility of Washing Coking Coal to 13% ash



content

**B. TENDER DOCUMENT (ON REVERSE E-TENDERING MODE)**

9 Nos. of tender documents were prepared for various washeries of different subsidiaries of CIL

➤ **On BOM Concept**

- Konar (7.0 Mty), CCL
- Hingula (10.0 Mty), SECL
- Jagannath (10.0 Mty), SECL

➤ **On BOO Concept**

- Kusmunda (10.0 Mty), SECL
- Baroud (5.0 Mty), SECL
- Tapin (4.0 Mty), CCL
- New Kathara (3.0 Mty), CCL
- Hingula (10.0 Mty), SECL
- Jagannath (10.0 Mty), SECL

**C. CONTRACT DOCUMENTS****1 no. of Contract Document prepared/ modified**

- Lakhanpur (10.0 Mty), MCL

**D. APPROVAL OF CONSTRUCTION DRAWINGS**

157 Nos. of Construction drawings approved for Madhuband, Dahibari and Patherdih washeries of BCCL.

**E. R&D and S&T Projects**

A plant for “Dry Beneficiation of Coal using Radiometric Technique (Ardee-Sort)” under CIL R&D scheme at Madhuband washery, BCCL has been set-up.

**F. Other jobs**

- a) Remediation of acid mine drainage and reclamation, Gorbi OCP, NCL
- b) Reports for modernization of 4 nos. of existing washeries in BCCL prepared.

**2.2 Project Appraisal**

1. Scrutiny and appraisal of 22 nos. of draft PRs/RPRs/EPRs (till 5<sup>th</sup> March, 2018) prepared by Regional Institutes and CMPDIL (HQ) during the financial year 2017-18.
2. Scrutiny and appraisal of 13 nos. (till 5<sup>th</sup> March, 2018) of conceptual notes prepared by Regional Institutes and coordination for their assessment by Director (T/P&D) along with Opencast / Underground and PAD department for finalizing the main technical parameters before preparation of the draft PR/RPR/EPR.
3. Updating of status of implementation of ongoing projects costing more than ₹ 500 Crores, especially with respect to actions under CMPDIL's responsibility for the Secretary (Coal)'s Quarterly Review Meetings.

**3.0 UNDERGROUND AND OPEN-CAST MINING****3.1 Underground Mining****A. OUTSIDE CONSULTANCY JOBS**

- Preparation of Mining Plan & Project Report (PR) for Gondbahera Ujheni Coal Block for M P Power Generating Company Ltd. (MPPGCL) was completed during the year.
- Assessment of Normative Cost of sand stowing for Kalyani Khani no.1 incline, Mandamani area, SCCL was completed during the year.
- Updating TEFR, Cost Estimate, Tender Document & Assistance in Evaluation of Bids for Balaghat mine, MOIL was completed during the year.
- Mining Plan for Gare Pelma Sector-1 coal block was completed during the year.





## B. CIL JOBS

### Following jobs were completed during the year:

- Capacity assessment for Under Ground mines of CIL (2017-18) with company wise capacity utilization (2016-17) and growth analysis.
- Standard Price List for Mining Equipments.
- Mining plan and mine closure plan of Hirakhand Bundia Incline, Orient area, MCL.
- RPR of Piparwar Underground mine-Phase-I, CCL.
- Scientific study to access the danger of inundation to Naigaon OCM Wardha Valley CF from UG galleries below the Wardha River, WCL.
- Scientific study for accessing requirement of higher capacity main mechanical ventilator at Beherabandh U/G mine of Hasdeo area, SECL.
- Stability analysis of Head Gear for Nabakajora Colliery Pit no.8, Kajora Area, ECL.
- Stability analysis of Headframes of Kumardihi A Colliery, Pit no. 3 & 4 Bankola Area and CL Jambad Colliery Pit no.7 & 8, Kenda Area, ECL.
- Stability analysis of Head Gear for Karkend Pit no.2 & Marine Pit no.2 of Gopalichak Colliery, P.B.Area, BCCL.
- Gas survey of R-VII seam of Chora Block Incline, Kenda Area, ECL.
- Scientific study to access the danger of inundation to Ballarpur OCP from underground galleries below Wardha river.
- Preparation of RPR for Parej East UG Project, CCL.

a) To update & revise MCA &

RFB documents with respect to recommendations of ISI reports, implementation of e-procurement/ reverse bidding as applicable, implementation of GST & other relevant taxes.

b) Updation & Revision of MCA & RFB Documents.

## C. CIL JOBS (IN PROGRESS):

### Following jobs were undertaking during the financial year:

- 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, CCL.
- Ventilation simulation study of Churi-Benti U/G mine of N.K.Area, CCL.
- R&D on Ventilation Requirement of air in mine for mass production technology, Project code no. CIL/R&D/01/63/2016.
- PR of Patratu A/B/C.
- Preparation of scheme for introduction of Man riding system at Kalidaspur Project, Satgram Project, Satgram Incline, Puresearsole, J.K.Nagar colliery under Satgram Area of ECL.
- Stability analysis of Headgear for 5 nos. of headgear, Kenda Area, ECL.
- Stability analysis of Headgear at 10,11 & 12 pit of K.B.10/12 pit, P.B. Area, BCCL.
- 3D Subsidence prediction & management prediction for Dahankasa u/g mine of WCL.
- Preparation of BID document for deployment of CM on risk gain sharing basis at Piparwar u/g (Phase-I) mine, CCL.



- Stability analysis of Headgear Structures of 2 Pits of East Winder of P.B.Project, P.B.Area, BCCL.
- Scientific study for stability of pillars & effect of OB dumping by caving method for lower Semana of Bhurkunda mine "B" colliery, CCL.

### 3.2 Opencast Mining

Major Outside Consultancy jobs completed are:

- Feasibility study for Benga coal project of M/s ICVL, (Mozambique).
- Mining Plan for Patal East Coal Block of M/s JSMDCL
- Mining Plan & Project Report for Gare – Palma Sector-I of M/s GSECL
- Mining Plan for West Bokaro Leasehold of M/s Tata Steel
- Review of Draft RFP & Mine Services Assessment documents for selection of MDO for Manoharpur Coal Block of M/s OCPL
- Study of Techno-Economic Options for Sarisatoli Opencast Mine of M/s CESC.

**Major CIL Jobs completed are:**

- Project Report of Balram OCP, MCL
- Revised Project Report for PQ OCP, NEC
- Project Report for Jagun OCP, NEC
- Financial evaluation & Cost updation for Kyada Chaudhar Gariapani OCP, ECL
- Report on identification of one Mine of CIL/Non CIL for implementation of "High Angle Conveyor system (HAC)" developed under completed CIL R&D project titled: "Feasibility study of High Angle Conveyor System.

- Assessment of Capacity of opencast mines of CIL – Projection as on 01.04.2018.
- Assessment of capacity and capacity utilization for Opencast mines of CIL during 2016-17.
- Performance analysis of HEMM during 2016-17 for all subsidiaries of CIL.
- Performance analysis of Dumpers & Excavators and Summary of CIL during 2016-17.
- Analysis of Specific consumption in opencast mines of CIL during 2016-17 for explosive, Diesel & Electric-power.
- Allocation of CIL plant number for newly commissioned HEMM and Updation of database.

**Other jobs of Ministry of Coal includes:**

- Determination of Intrinsic Value of coal blocks for auction.
- Technical Scrutiny of Mining Plans.
- Status Report for Additional Coal Blocks of CIL.

## 4.0 ENGINEERING SERVICES

### 4.1 Civil Engineering Services

Following major services were completed during the year under review:

**PROJECT PLANNING JOBS:**

- A) PR preparation/Cost Updation of civil part of
1. Benga Coal Project of M/s ICVL in Tete Province of Mozambique
  2. Gare Palma Sector - I
  3. Rohini-Kerkatta OCP
  4. Kotre Basantpur, CCL
  5. Ramnagore Indikata, SAIL
  6. Balram OCP, MCL



- B) Technical vetting of PR/RPR for various reports forwarded to this department for technical vetting by PAD throughout the year.

## **CIVIL & ARCHITECTURAL DETAILED DESIGN JOBS:**

- Architectural and Structural Consultancy of township for Kusmunda Area, SECL.
- Preparation of Architectural and structural drawings for Standard Quarters for MCL and Town planning for Basundara Garjanbahal and Hingula Area of MCL.
- Advance planning for township for Vijay West and Rani Atari UG mine, Chirimiri Area, SECL
- Design of low cost housing costing ₹ 2.24 lakh for Basundhara Area, MCL

## **PREPARATION OF TENDER DOCUMENT:**

- Preparation of NIT for Amlohri workshop expansion.
- Preparation of revised scheme and tender document for integrated effluent treatment plant for Krishnashilla project of NCL
- Preparation of NIT for input crushing arrangement at Manikpur OCP (3.5 Mty) of Korba area of SECL
- Preparation of NIT for Purnadih substation, CCL
- Preparation of turnkey tender document for Jayant Incremental CHP (15MTY), NCL.
- Preparation of turnkey tender document for Tapin & Purnadih Workshop, CCL.
- System design, preparation of tender document and drawing scrutiny of Kusmunda Workshop (50 MTY), SECL.

## **PREPARATION OF SCHEME/ REPORT:**

- Design and Planning for Enhancement of Capacity of Water Treatment Plant at IWSS, Khadia, NCL.
- Preparation of Scheme for STP for Koyla Nagar, BCCL

## **STRUCTURAL ADEQUACY STUDY:**

- Structural Adequacy Study of various CHPs at Baikunthpur Area, SECL. (Total 5 nos. of CHPs)
- Structural Adequacy Study of CHPs of Kakri & Khadia, NCL.
- Structural adequacy study of Bina CHP (with deshaling plant), NCL.

## **DESIGN/ DRAWING SCRUTINY:**

- Technical vetting of Check Dams, Disiltation Check Dams for Soil Conservation Plan of Hurra "C", Rajmahal Area
- Planning, Design, Construction, Testing & Commissioning of Sewage Treatment Plant (STP) for Block-B Opencast Project, NCL on Turnkey basis.
- Scrutiny of drawings of Madhuband Rapid Loading system at BCCL
- Vetting of Drawings of Patherdih NLW washery (2.5 Mty cap), BCCL
- Checking of design & structural details of Sub-station foundation & Administrative Building at XV Seam, Moondih, BCCL.

## **R&D PROJECTS:**

- R&D Project - Constructing structures on back-filled open cast coal mines: An attempt to suggest viable methodologies.







Site Photo : Structural Adequacy Study for Bina CHP, NCL.

## 4.2 Electrical and Mechanical Engineering Services

### Jobs carried out in 2017-18

#### 4.2.1 Mine Planning (Infrastructure)

##### • Preparation of Project Report :

- a) Patal Fast (JSMDCL), Jagun OCP (NEC), PQ OCP (NEC) and Tirap OCP (NEC) by CMPDIL (HQ), Ranchi.
- b) Parasea Belbaid Re-organisation UG, Tilaboni UG Mine, Siduli UG, Narainkuri OCP, Lakhimata OCP, Nakrakonda Kumardihi B OC, Mohanpur OCP, North Searsole OC patch Nirsa OC patch and Itapara OC patch by Regional Institute-I.
- c) Kalyaneshwari OCP, Joyrampur OCP, Mining Plan of Rajapur OCP, Mining Plan of New Godhur Kusunda Colliery, Mining Plan of Kenduadih Mine and Scheme for dealing with fire at Amalgamated Joyrampur Colliery by Regional Institute-II.
- d) Kotre Basantpur OCP, Hazaribagh Area (5 Mty), Sirka OCP, Argada Area (1.5 Mty), Rohini Kerketta OCP, N.K.Area (10 Mty) and Tetariya Khar OCP, Rajhara Area (2.5 Mty) by Regional Institute-III.
- e) PR Kondha Hardola OC Mine (7.0 Mty), PR Silewara Deep UG Mine (3.00 Mty), PR Sangam UG Mine (4.00 Mty), PR Vishnupuri UG to OC Mine (2.00 Mty), RPR Pimpalgaon Deep OC Mine (2.00 Mty), RPR Bhatadi OC Mine (2.0 Mty) and PR Murpar Expansion UG Mine (0.87 Mty) by Regional Institute IV.
- f) Bodri UG 1.52 Mty, Karkatti UG 0.72 Mty, Damini OC 1.50 Mty and Porda Chintapani OC 15 Mty by Regional Institute V.





- g) PR for Amelia OCP (7mtpa), outside consultancy job by Regional Institute VI.
- h) Draft PR for Kulda - Garjanbahal (40 Mty), PR for Bharatpur Re-organisation (20 Mty), PR for Lakhanpur - Belphar - Lilari integrated (30 Mty), Draft PR of Bhubaneswari expansion (38Mty) and PR for Baitarini west OCP (15 Mty) by Regional Institute VII.
- **Updation of Project reports / cost estimate**
  - **Regional Institute I**  
Recast PR for Bankola UG and RCE for Chitra OCP.
  - **Regional Institute III**  
Konar OCP Recast, B&K Area (8 Mty), Amrapali OCP Recast, M&A Area (25Mty), UCE for Magadh OCP, M&A Area (51 Mty) and UCE for North Urimari OCP, Barka Sayal Area (7.5 Mty).
  - **Regional Institute IV**  
Recast PR Sharada UG Mine, PR Kumbharkhani UG to OC, PR Dhuptala (Sasti UG to OC), PR Dhau North UG Mine, Recast PR Gandhigram UG Mine, PR Gondegaon Ghatrohan OC Second updation of PR Sharda UG Mine, PR Tawa – III UG Mine, PR Gauri Central OC Mine, PR Visapur OC Mine, PR Pauni Combined OC Mine and PR Silori OC Mine.
  - **Regional Institute VI**  
Recast of PR of Bina-Kakri amalgamation OCP (10mtpa) and Draft Recast of PR of Semaria OCP (2mtpa).
  - **Regional Institute VII**  
RCE of Gopaljee PR (30 Mty) and RCE of Kaniha OCP (10 Mty)

## 4.2.2 Coal handling Plant

### ➤ Preparation of e-tender / tender documents:

- **Head Quarter**

Jayant Incremental CHP (15 Mtpa Incremental), NCL, Dudhichua Incremental Ph – III CHP (10 Mtpa), NCL, Manikpur CHP, SECL, Hura C CHP (3.0 Mtpa), ECL, Kottadih CHP (1.0 Mtpa), ECL, Jhanjra U/G (1.0 Mtpa), ECL and Konar CHP (8.0 Mtpa), CCL.

- **Regional Institute I**

Draft scheme for CHP with SILO and RLS for Sonapur-Bazari OCP (12.0 MTY), Final scheme for CHP with SILO and RLS for Sonapur-Bazari OCP (12.0 MTY) NIT all Volumes and TPS with SILO and RLS for Sonapur-Bazari OCP (12.0 MTY).

- **Regional Institute II**

Modification of Tender Document of RLS for Patherdih NLW Wahery.

- **Regional Institute III**

North Urimari CHP (7.5 Mtpa) and Magadh CHP (20 Mtpa).

- **Regional Institute V**

Final NIT for construction of Kusmunda Silos (4 nos.) with Truck Receiving Station (Kusmunda CHP Phase-II) 60 Mty and Draft NIT for Gevra CHP Phase-I of (35-70 Mty) Expansion.

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

- **Head Quarter**

Krishnashila Main CHP, NCL, Khadia Ph-II (6.0 Mtpa) CHP, NCL, Khadia Workshop, NCL, Krishnashila Workshop, NCL and Gevra OCP Expansion CHP



(Inpit Crushing System) Only Mechanical Part, SECL.

MW Chinakuri TPP, ECL with revised scope of work

- **Regional Institute V**

Kusmunda CHP Phase-I, 10 MTY, 2x40/50 MVA, 132/33 kV Substation at Kusmunda OCP and Gevra Inpit Conveying System (Electrical).

- **Regional Institute VI**

Centralized Air condition for Nehru Shatabdi Chikitsalaya of NCL.

- **Regional Institute VII**

Lingaraj CHP (15 Mty) with Silo loading arrangement (100%), Hingula CHP (10 Mty) with Pipe conveyor which is the first Pipe Conveyor Project of CIL and Silo construction (95%), GA of major structures of Bhubaneswari CHP with Pipe Conveyor (25 Mty) and Augmentation of 132/33 kV Nandira Substation (80%).

#### 4.2.3 Workshop & Store: Preparation of e-tender documents

- **Head Quarter**

Kusmunda Workshop, SECL and Amlohri Workshop, NCL.

- **Regional Institute III**

Tapin Workshop and Purnadih Workshop.

#### 4.2.4 FBC based Power Plant

- **Head Quarter**

Chapter on FBC based TPP for Recast PR of Konar OCP, CCL, Chapter on FBC based TPP for Recast PR of Amrapali OCP, CCL, Chapter on FBC based TPP (techno-economic feasibility) for Feasibility Study Report of ICVL coal project in Mozambique and Bid Document for leasing of 3x10

#### 4.2.5 Energy Audit and Benchmarking

- **Annual Diesel Benchmarking for seventy (91) nos. Opencast mines of CIL for the following subsidiaries by HQ, Ranchi**

14 OCPs of BCCL, 30 OCPs of CCL, 08 OCPs of ECL, 12 OCPs of MCL, 10 OCPs of NCL, 03 OCPs of SECL and 14 OCPs of WCL

- **Detailed Diesel Benchmarking and Equipment wise fixation of diesel consumption Norms for**

Parej East OCP of CCL by HQ, Ranchi, NT-ST OCP, Lodna Area, BCCL by RI-II, Dhanbad, Khadia OCP and Amlohri OCP, NCL by RI-VI, Singrauli.

- **Electrical Energy Audit & Benchmarking for**

Nigahi OCP, NCL by HQ, Dahibari OCP, BCCL by RI-II, Dhanbad and Chattarpur – II UG Mine, Patharkhera Area & Bhanegaon OC Mine, WCL by RI-IV, Nagpur

#### 4.2.6 Power Supply and Distribution & Control Systems

- E-tender document for shifting of 132/33 KV, 2x40 MVA Madhauri substation, NCL with capacity augmentation by additional 1x40 MVA power transformer at new location by HQ, Ranchi

- E-tender Document for 2x10 MVA, 33/6.6kV sub-station for Magadh OCP, CCL by RI-III, Ranchi

- E-tender Document for 2x16 MVA, 33/6.6kV sub-station for Amrapali OCP, CCL by RI-III, Ranchi

- E-tender Document for 33 kV OHTL for providing power to the Project S/S of Magadh OCP, CCL from the proposed





Sub-station of DVC by RI-III, Ranchi

- E-tender Document for 33 kV OHTL for providing power to the Project S/S of Amrapali OCP, CCL from the proposed Sub-station of DVC by RI-III, Ranchi
- NIT of 3 Nos. 33/6.6 kV substations at Kusmunda OCP, SECL by RI-V, Bilaspur
- NIT for Balance work of 3 Nos. 33 kV substations of Dipka OCP, SECL by RI-V, Bilaspur
- NIT for Balance work of 3 Nos. 33 kV substations of Gevra OCP, SECL by RI-V, Bilaspur
- NIT for 220/33kV, 2X100 MVA Sub-station of Gevra Expansion (35-70 Mty), SECL by RI-V, Bilaspur
- NIT for 3 nos of 33/6.6 kV, 2X16 MVA Sub-station of Gevra Expansion. (35-70 Mty), SECL by RI-V, Bilaspur
- NIT for OB Substation of Khadia and NIT for colony sub-station of Khadia OCP, NCL by RI-VI, Singrauli
- E-Tender document for 2x4 MVA, 33/3.3 kV Sub-station at Ananta OCP, MCL by RI-VII, Bhubaneswar

## 4.2.7 Solar Initiatives

- Tender document of 12KWp rooftop solar project for NEC office building, NIT submitted, work in progress by HQ, Ranchi
- Supply, Installation and commissioning of 80KWp Roof Top Solar Micro Power Plant at CMPDIL, RI-I Campus Asansol by RI-I, Asansol
- Supply, Installation and Commissioning of 50 kWp roof top Solar Power Plant (SPP) on RI-IV Office Building at Nagpur, work in progress by RI-IV, Nagpur

- Supply, Installation and Commissioning of 25 Nos of Solar LED in RI – IV, Colony, Nagpur by RI-IV, Nagpur
- Supply, Installation and Commissioning of 5 HP Solar Submersible Pump in Murpar Camp - TCR Stage by RI-IV, Nagpur
- Energy Efficient LED flood lights have been installed in Play Ground of CMPDIL Colony, Bilaspur by RI-V, Bilaspur
- Replacement of the conventional light fittings with LED light fittings at CMPDIL Residential Colony, Bhubaneswar by RI-VII, Bhubaneswar

## 4.2.8 Other Reports

- Illumination Survey of 06 Nos. OCPs, CCL (Piparwar, Ashok, Purnadih, Rohini, Dakra & KDH) by HQ, Ranchi
- A report on Feasibility study for ICVL coal project in Mozambique (E&M Part) was prepared and submitted by HQ, Ranchi
- Conducted feasibility study of conveyor transport system for seven iron ore mines of Karnataka in the district of Bellary and Chitradurga as per the directives of Central Empowered Committee (CEC) of Honorable Supreme Court of India by HQ, Ranchi
- Tender document for design, drawing & estimate of Dumper washing station at Krishnashila Workshop by HQ, Ranchi
- Scheme and NIT on ETP at Krishnashila OCP, NCL by HQ, Ranchi
- Mechanical Cost Estimate for IWSS system at Khadia OCP, NCL by HQ, Ranchi
- Perspective Planning implementation of Jharia Action Master Plan and other technical consultations by RI-II, Dhanbad



- Block Evaluation of North Dhadu, CCL by RI-III, Ranchi
- Operational Plan : SILO Design and Drawing for Mungoli Nirguda OC, WCL by RI-IV, Nagpur
- Electrical Energy Audit of WCL (HQ) Office Building, Koyala Vihar, Civil Lines, Nagpur by RI-IV, Nagpur
- Financial Viability Evaluation of Non CIL Blocks under MCL command area by RI-IV, Nagpur
  - Phuljari OC Mine (25.00 Mty)
  - Kardabahal – Brahmanbil OC Mine (25.00 Mty)
  - Budhgoria OC Mine (15.00 Mty)
  - Jamkani-Bijahan OC Mine (15.00 Mty)

- Pumping re-organisation Reports for Jayant, Dudhichua, Nigahi and Amlohri OCPs, NCL by RI-VI, Singrauli.

## 4.2.9 Inspection Services

- Pre-despatch Inspection Services for plant & machinery purchased by all CIL subsidiaries at the Manufacturer's Works
- Revenue earned from the services by CMPDIL for the year 2016-17 is around ₹ 2.61 crores.

## 4.2.10 NDT (Non-destructive Testing) Jobs

- NDT jobs carried out in 2017-18 by HQ, Ranchi, RI-V, Bilaspur and RI-VII, Bhubaneswar are detailed in **Annexure I.**

SINo.	Subject	Job No.	Area/company	EDs	Date
1.	A. NDT of 06 Nos. shovels at Nigahi project, NCL B. NDT of 24/96 Dragline "Jwala" at Dudhichua project, NCL C. NDT of P&H 1900 AL Shovel (07 Nos.) and 182 M AC marion Shovel (02 Nos.) at Nigahi Project, NCL D. NDT of 24/96 Dragline "Saurav" at Bina project, NCL E. NDT of 20/90 Dragline "Vidhwanath" at Khadia project, NCL F. NDT of 24/96 Dragline "Ajay" at Amlohri project, NCL G. NDT of CHP and bunkers at Jayant Project, NCL	014616138 014616138 014616138  014617088 014617088 014617088 014617089	NCL	150  300  50	12.04.2017 15.09.2017 20.09.2017  04.12.2017 08.12.2017 26.03.2017 26.03.2017
2.	NDT of 02 Nos. EKH-5 Shovels at K.D.H Project and 02 Nos. EKG-5 Shovels at Rohini project, N.K area	014313042	N.K Area CCL	96	26.04.2017
3.	NDT of 5 Nos. of Excavators & EKG-5(01 No.) Shovel of Hingula OCP, Hingula Area, MCL	014716025	Hingula Area MCL	100	25.04.2017 & 15.06.2017
4.	NDT of 8Nos. Surface bunkers at Khurja & Kapildhara mines, Hasdeo Area, SECL	014516024	Hasdeo Area SECL	40	25.05.2017
5.	NDT of Surface Bunkers at Jhiria U/G mines, Hasdeo Area, SECL	014515134	Hasdeo Area SECL	40	29.05.2017
6.	NDT of Structures of CHP and bunkers of Lingraj OCP, Lingraj Area, MCL	014716145	Lingraj Area, MCL	90	19.06.2017
7.	NDT of Structures & coal bunkers at Damini U/G mines at sohagpur Area, SECL	014516306	sohagpur Area, SECL	35	30.08.2017
8.	NDT of CHP & bunkers at Khairaha U/G mines at sohagpur Area, SECL	014517024	sohagpur Area, SECL	32	30.08.2017
9.	NDT of CHP at Padmapur OCP, at Chandrapur Area, WCL	014417046	Chandrapur Area, WCL	40	30.08.2017
10.	A. NDT of CHP & Winder components at Chandrapur Area, WCL B. NDT of Winder components at Ballarpur Area, WCL	014415120	Chandrapur Area, WCL	147	09.10.2017 23.10.2017
11.	NDT of HEMMs. at Basundhara Area, MCL	014715171	Basundhara Area, MCL	200	09.10.2017
12.	NDT of Winder components at Talcher Area, MCL	014717063	Talcher Area, MCL	35	20.10.2017
13.	NDT of Winder (04 Nos.) & CSG components at Moonidih project, W.J.Area, BCCL	014217076	W.J.Area, BCCL	34	30.10.2017
14.	NDT of CHP / bunkers and Shaft of Man Riding system at Bhatgaon Area, SECL	014517064	Bhatgaon Area, SECL	118	09.01.2018
15.	NDT of Nandan Washery at Kanhan Area, WCL	014416059	Kanhan Area, WCL	100	19.02.2018
16.	NDT of Components of Winding Installation at Handidhwa Colliery, Talcher area, MCL	014717043	Talcher area, MCL	30	23.03.2018
		<b>Total</b>	<b>1637 Eds.</b>		



## 4.2.11 Other Major Jobs

### • Head Quarters, Ranchi

- Design of Collapsible OHE underneath SILO to facilitate rapid loading of coal into wagons by electric locomotive in view of continued obsoleting of diesel locomotive by railways, further submitted to RDSO Lucknow which was approved for implementation in rapid loading arrangement for different subsidiaries of CIL, designed by HQ, Ranchi
- Preparation of e-NIT, finalization and processing of Tender for Vehicle Hiring in CMPDIL (HQ) and Vehicle Operation & Maintenance for CMPDIL
- Implementation of ISO Integrated Management System of CMPDIL for ensuring Quality and Data Security in E&M Division, CMPDIL (HQ)
- Implementation of E-office in E&M Division

### • Regional Institute I, Asansol

- Supply of two numbers 315 KVA, 11/0.433 KV distribution transformer & two numbers 11 KV/ 400 Amp. Vacuum Circuit Breaker in 11/0.433 KV substation in CMPDIL, RI-I, Asansol
- Supply, Installation and commissioning of 4 nos. ESE Advanced Lightning arrester at CMPDIL, RI-I Campus
- AMC for servicing and repairing 39 nos. window type and 12 nos. of split type room air conditioners and electrical maintenance of office and colony at CMPDIL, RI-Asansol
- Maintenance of EPABX and Operation and maintenance of a fleet of six departmental vehicles

### • Regional Institute II, Dhanbad

- Procurement of all capital items, revenue items and CSR items of RI-II by manual tendering and e-tendering process
- Electrical maintenance of office building and quarters of RI-II, maintenance of computer peripherals, EPABX system, telephone lines, CUG connection, vehicles, UPS system, photocopier machine, surveillance system, lifts, maintenance of MPLS LAN system and biometric attendance system

### • Regional Institute III, Ranchi

- Procurement of all Capital items, Revenue items and CSR items of RI-III by manual tendering and e-Tendering process at RI III.
- Updation of Data Bank under Integrated Management System of CMPDIL
- LAN management and system protection
- Procurement of IT related items as per requirement
- Day to day maintenance of vehicles under RI-III(HQ).
- Maintenance of P&M of drilling camps
- AMC of Office equipments such as photocopiers, printers etc
- Processing of AMC bills of PCs, Printers and ARC for supply of cartridges and toners.

### • Regional Institue IV, Nagpur

- Order placed amounting 30.21 Lakhs (approx.) for renovation of substation by replacing all HT/LT switchgear, ACB, APFC (Automatic Power Factor Correction) panel





- Reorganization of electrical wiring for DG set and UPS at Environment Lab
  - Electrical works of S.T.P (Sewage Treatment Plant of capacity 70,000 Liters/Day) with MBBD (Moving Bed Bio – film reactor) technology
  - Commissioning of 10 kVA DG set at Murpar Camp
  - Installation of Biometric attendance at RI – IV Camps & Sub Camps
  - Maintenance of residential and office building including electrical substation & DG set of CMPDIL, RI IV
  - Maintenance of all UPS systems, ACs , Air coolers, Water Cooler & Filters, Fans etc., installed in CMPDIL campus
  - Maintenance of telephones – exchange, broadband, intercom & CUG, CCTV & Biometrics attendance ,video conferencing system, PCS, Work Stations, Peripherals etc
  - Maintenance and operation of MPLS LAN system, 30 Nos of Hired vehicles including bus for tendering job and Departmental Vehicles.
- **Regional Institute V, Bilaspur**
    - Electrification work of Korba Exploration Camp (New Construction)
    - Electrification work of New Office Building of CMPDIL, RI-5, Bilaspur
    - Work of Telephone Cable laying from colony EPABX to all residential quarters and common places and installation of telephone sets in CMPDIL Colony, Bilaspur
- **Regional Institute VI, Singrauli**
    - Electrical Maintenance of CMPDIL colony & Office
    - Supervision of Electrical works of new office building
    - Assistance in e-procurement, Vehicles, Purchase, Electrical Maintenance of Drilling camps.
- **Regional Institute VII, Bhubaneswar**
    - CCTV cameras for the surveillance of the office premises of CMPDIL, RI-VII, Bhubaneswar have been installed
    - Installation of LED lighting systems, reorganization of electrical control room, provision of generator point in each quarter etc. have been undertaken at different camps which has acted as a major support towards achievement of drilling targets of CMPDIL, RI-VII
    - As per the statutory norms for multi-storeyed buildings, additional 04 nos. of passenger lifts have been installed at CMPDIL, RI-VII Residential Colony, Bhubaneswar.

### 4.3 Town Engineering Services

The services provided during the year 2017-18 the maintenance, construction and estate related works includes:

- i) 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.
- ii) Maintenance of all electrical, electronic and mechanical equipment pertaining to the office and maintaining the inventory of the same.



- iii) Maintenance of all office furniture.
- iv) Water supply management by taking-up necessary steps.
- v) Power management by taking-up necessary steps to conserve and save electricity.
- vi) To ensure receipt, checking and submission of proposals for payment of electricity bills, telephone bills, water bills and other statutory payments etc.
- vii) Liaison works with local statutory bodies like Municipal Corporation.
- viii) Operation of waste paper recycling plant.

Following are the list of completed and running works under Capital works, running repair works, special repair works and CSR works in 2017-18 in TE & CM Division of CMPDIL (HQ) :

Sl. No.	Name of works	Work Value (₹ in lakh)
<b>COMPLETED WORKS</b>		
1	External painting of STC and Chummary building including RCC repair, Tarfelting over roof, replacement of damaged external water supply pipe line, rain water pipe line at CMPDIL (HQ) Campus, Ranchi.	20.14
2	External Painting of 1C, 2C, 1D & 2D multistoried building including replacement of damaged external water supply pipe line, rain water pipe and firefighting pipe line at CMPDIL (HQ) campus, Ranchi	32.14
3	Renovation and repairing of Toilet & Kitchens of 'B' Type and 'A' Type quarters at CMPDIL (HQ) complex, Ranchi.	65.03
4	Construction of Hall for KARUNA N.M.O Ashram at Arogya Bhawan, Bariatu, Ranchi.	22.16
5	Construction of Hostel-cum-Computer Centre for blind girls students of Braj Kishore Netraheen Balika Vidyalaya, Bariyatu & Construction of toilets for girls students and drilling of borewell with supply & installation of centrifugal pump at Pramathanath Madhya Vidyalaya, Hinoo, Ranchi.	28.26
6	Upkeep work of CMPDIL(HQ) complex, Ranchi.	64.67
7	Maintenance contract for Civil Engineering Works for CMPDIL (HQ), Ranchi and NTS Barkakana for one year.	87.62
8	Annual Maintenance Contract for Garden including maintenance of seasonal plants (indoor and outdoor) at CMPDIL (HQ) complex, Ranchi.	30.04
9	Special repair and maintenance of Cash Section, Part of TE&CM, Finance, S&T and Blasting Department, Open Cast Division, MM Deptt., UMD, BDD, P&A Deptt. and Civil Deptt. at 1 <sup>st</sup> , 2 <sup>nd</sup> , 3 <sup>rd</sup> , 4 <sup>th</sup> & 6 <sup>th</sup> floor of CPEI Building, CMPDIL, Ranchi.	252.20
10	Repairing of damaged RCC structure i.e. Chhajja, Beams, Slab, Column and Stairs of Block 1D (balance work), Block 2D, 2C, 1C at CMPDIL (HQ) complex, Ranchi and Supplementary work order.	54.55
11	Operation & Maintenance of waste water treatment plant including operation & maintenance of pumps for one year in CMPDIL HQ.	7.27
12	Supply, installation, testing and commissioning of Tower type / floor mounting Air-conditioners 3.0 Tonne capacity at CMPDIL (HQ), Ranchi.	1.80
13	Operation of waste paper recycling plant at CMPDIL (HQ), Ranchi.	Departmentally
<b>ON-GOING WORKS</b>		
1	Repairing of old Damaged RCC chajja, column, beam, old spalled external plaster, Replacement of old damaged GI pipe line, Rain water pipe line and external painting of A,B,C Type quarters and executive family hostel at CMPDIL, Ranchi.	114.00
2	Re-arrangement of Sewerage line of CMPDIL Colony, Ranchi.	62.37

3	Construction of Toilet & Kitchen at Anchal Shishu Ashram at Ranchi.	10.48
4	Construction of 1 <sup>st</sup> floor of Braj Kishore Netraheen Balika Vidyalaya, Bariatu, Ranchi.	19.52
5	Construction of class room for Gondwana primary school, CMPDIL complex, Kanke Road, Ranchi.	17.35
6	Construction of boundary wall at Akshar Charitable Trust “LEKHN” at Patra Gonda, Ranchi.	6.85
7	Special repair and maintenance work of Residential quarter CMPDIL NTS Barkakana Colony.	81.79
8	Upkeep work of CMPDIL.(HQ) complex, Ranchi.	105.54
9	Maintenance Contract for Civil Engineering Works for Residential quarters at CMPDIL (HQ), Ranchi.	77.40
10	Maintenance Contract for Mosquito Control and Anti Termite Treatment for residential quarters and office building in CMPDIL campus for one year.	6.65
11	Annual Maintenance Contract for Garden including maintenance of seasonal plants (indoor and outdoor) at CMPDIL(HQ) campus, Ranchi.	50.28
12	Internal painting of residential quarter A, B, C, D & FH at CMPDIL (HQ), Ranchi.	31.39
13	Electrical Maintenance works of CMPDIL Complex, Ranchi (Residential and non-residential both) for one year.	45.09
14	Supply & installation of LED tubelight fitting as replacement of existing T5 tubelight fittings in CMPDIL office buildings, Ranchi.	7.02
15	Operation & Maintenance of waste water treatment plant including operation & maintenance of pumps for one year in CMPDIL HQ, Ranchi.	6.76
16	Supply and installation of capacitor Bank (Automatic Power Factor Correction Panel System) for sub-station at CMPDIL (HQ), Ranchi.	2.95
17	Operation of waste paper recycling plant at CMPDIL (HQ), Ranchi.	Departmentally

## 5.0 RESEARCH & DEVELOPMENT PROJECTS:

### 5.1 S&T PROJECTS FUNDED BY MINISTRY OF COAL

- 5.1.1** The Research & Development (R&D) activities 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 (CMPDIL), Singareni Collieries Company Limited (SCCL) and Neveli Lignite Corporation India Limited (NLCIL), Director General (DG) of Directorate General of Mines Safety (DGMS), Director General of Council of Scientific & Industrial Research (CSIR), representative from Department of Science & Technology, Adviser Energy, NITI Aayog, Director, CMIFR, Dhanbad and Director, TERI. The main functions of SSRC are to plan, program budget, approve new research projects, oversee their implementations and seek application of the R&D findings in actual field condition.
- 5.1.2** The SSRC is assisted by a Technical sub-committee headed by CMD, CMPDIL. This sub-committee deals with new 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** CMPDIL acts as the Nodal Agency for co-ordination of research activities in the coal sector, which involves identification of Thrust Areas for research activities, identification of agencies





which can take up the research work in the identified fields, scrutiny and processing the proposals for Government approval, preparation of budget estimates for research activities, disbursement of fund to implementing agencies based on the progress of the project and monitoring the progress of the projects, etc.

Total no. of S&T projects taken up (till 31.03.2018)	-	396 nos.
Total no. of S&T projects completed (till 31.03.2018)	-	321 nos.

## 5.1.4 Physical and financial performance during 2017 -18

### A. Physical performance

The status of Coal S&T projects during 2017 -18 is as follows (Annexure-A):

Projects on-going as on 01.04.2017	-	13
Projects approved by SSRC	-	06
Projects completed	-	02
Projects on-going as on 01.04.2018	-	17

### B. Financial status

Budget provisions and actual expenditure are shown below:

(₹ in Crore)

2016 -17		2017 -18	
BE	Actual	BE	Actual
10.0 (Including NER – 1.0)	10.38	10.0 (Including NER – 1.0)	11.50 (unaudited)

## Annexure-A

### S&T Projects funded by Ministry of Coal approved during 2017-18

Sl. No.	Name of the project	Implementing agencies	Approved cost (₹ in lakh)
1	Indigenous development of early warning radar system for predicting failures/slope instabilities in open cast mines.	SAMEER, Mumbai, ARDE, Pune, CSRE, IIT, Mumbai, CMPDIL, Ranchi and NCL, Singrauli	585.58
2	Design of water network to optimize water consumption in coal washeries for removal of impurities from coal.	IIT, Roorkee, CMPDIL, Ranchi & CCL, Ranchi	18.55
3	Electronification of ground water control and conveyor systems in mines	NLC India Ltd., Neyveli and NITT, Tamil Nadu	73.27
4	Design and Stability of Pillars/Arrays of Pillars for Different Mining Methods in Coal Mine Workings	CIMFR, Dhanbad, IIT-ISM, Dhanbad, CMPDIL, Ranchi, SECL, Bilaspur, BCCL, Dhanbad and SCCL, Kothagudem	562.29
5	Hybrid PRESRIX process for simultaneous remediation of acid mine drainage and recovery of individual metal sulphides	IIT, Roorkee, NEC, Margherita and SCCL, Kothagudem	74.45
6	Reclamation of coal mined land of North Eastern Coalfields, Assam through soil amendment and revegetation with native plant species using integrated biological approach	RFRI, Jorhat, & NEC, Margherita	83.18

## S&T Projects funded by Ministry of Coal (MoC) completed during 2017-18

Sl. No.	Name of the project	Implementing agencies	Approved cost (₹ in lakh)
1	Development of an on-line coal washability analyser	CIMFR, Dhanbad & M/s Ardee Hitech Pvt. Ltd., Vishakhapatnam	849.00
2	Sustainable livelihood activities on reclaimed open cast coal mines: a technology enabled integrated approach in Indian coal sector	TERI / TERI University, New Delhi, CMPDIL, Ranchi and BCCL, Dhanbad	371.69

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

R&D Board of CIL, headed by Chairman, CIL is responsible for in-house R&D activities of CIL. The R&D Board is assisted by an Apex Committee headed by Director (Tech.), CIL. CMPDIL acts as the Nodal Agency for preparation of budget estimates for research activities, evaluation of new project proposal, disbursement of fund to implementing agencies based on the progress of the project and monitoring the progress of the projects till their completion, etc.

In order to enhance R&D base in command areas of CIL, CIL Board in its meeting held on 24<sup>th</sup> March 2008 has delegated substantial powers to R&D Board of CIL 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, with a limit of ₹ 500.0 crore in a year.

So far, 86 projects have been taken up under the fund of CIL R&D Board out of which 62 projects have been completed till March 2018.

The status of CIL R&D Projects during 2017-18 are as follows (**Annexure- B**):

Projects on-going as on 01.04.2017	-	14
Projects approved by R&D Board of CIL	-	07
Projects on-going as on 01.04.2018	-	21

The disbursement of fund for CIL R&D projects during 2017 -18 is ₹ 59.24 Crore (Un-audited).



**R&D Projects funded by Coal India Limited (CIL) approved during 2017-18**

Sl. No.	Name of the project	Implementing agencies	Approved cost (₹ in lakh)
1	Design of cost effective process flowsheet for improved washing efficiency of Indian Coking and Non-coking coals	IIT-ISM, Dhanbad and CMP Division, CMPDIL (HQ), Ranchi, Washery Division, BCCL, Dhanbad. Technical collaboration with University of Newcastle (NIER Centre), Newcastle, Australia.	1266.98
2	Development of Guidelines for Increasing the Height of Overburden Dumps at Opencast Coal Mines in India	Environment Division, CMPDIL(HQ), Ranchi and IIT, Delhi.	428.08
3	High ash coal gasification and associated upstream and downstream processes (Coal to Chemicals, CTC)	IIT-ISM, Dhanbad, IIT-roorkee, CMPDIL, Ranchi, MCL, Sambalpur, ECL, Sanctoria and CCL, Ranchi. Technical collaboration of IIT-ISM, Dhanbad with Australian Universities: i) Curtin University, Western Australia, Perth ii) University of Melbourne, Melbourne, Victoria Australia and iii) Monash University, Clayton, Victoria, Australia.	2160.721
4	Assessment of applicability and performance of Ground based Interferometry Synthetic Aperture Radar (GblnSAR) in safety zoning of surface mining slopes	IIT, Kharagpur and ECL, Sanctoria.	478.27
5	Optical fiber based solar illumination of pit bottom and underground mine roadways and working face	IIT, Kharagpur and ECL, Sanctoria	155.53
6	Development of Virtual Reality Mine Simulator (VRMS) for improving safety and productivity in coal mines	IIT-ISM, Dhanbad ; UMD, CMPDIL, Ranchi; BCCL, Dhanbad; NCL, Singrauli and SIMTARS, Australia	1410.10
7	Dry Beneficiation of High Ash Indian Thermal Coal	National Metallurgical Laboratory (NML), Jamshedpur ; CMP Department CMPDIL, Ranchi and MCL, Sambalpur	216.77

**5.3 MoU 2017-18**

As per MoU 2017-18 of CMPDIL, under the head 'R&D, Innovation, Technology up-gradation parameter' one Report each was to be submitted for (i) Identification of one mine of CIL/Non-CIL for implementation of completed R&D Project pertaining to "High Angle Conveying System (HAC) in Opencast Coal Mines by Computer Modelling and Simulation" and (ii) Identification of one mine of CIL for implementation of completed R&D Project pertaining to "Rapid volumetric analysis of excavated in-situ overburden integrating High Resolution Satellite, Airborne Laser Scanner data supported with ETS through digital photogrammetric technique" by 28<sup>th</sup> Feb.'18 for 'Excellent' rating. Accordingly, Gare Palma Sector-I OCP was identified for introduction of High Angle Conveying System (HAC) as referred at sl.no (i) above and Joyrampur Project of BCCL was identified for OBR check measurement using the methodology developed through completed R&D project as referred at sl.no (ii) above the two Reports for its implementation were submitted on 28<sup>th</sup> Feb.'18.



## 6.0 LABORATORY SERVICES

### 6.1 Chemical Laboratory

During the year 2017-18, characterization of coal was carried out for borehole coal cores from 47 nos. of blocks from 15 coalfields. A total of 11,996 m coal cores were processed and 31,410 no. of samples were analyzed including the coal samples from Changki block of Nagaland (DGM, Nagaland) and MAHAGENCO. Chemical analysis for 23 no. of GRs were monitored and the results were submitted for preparation of GR.

### 6.2 Coal Petrography Laboratory

During the year 2017-18, characterization of coal was carried out for borehole coal cores from 35 nos. of blocks from 18 coalfields. A total of 915 nos. of samples were analyzed for Maceral determination and Reflectance study including the coal samples from a) Changki block of Nagaland (DGM, Nagaland), b) MAHAGENCO and c) Singhereni Collieries Coalfields Limited. A total of 40 nos. of coal samples were analyzed for micro-cleat study through Scanning Electron Microscope (SEM).

### 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 number of coal samples whose analysis has been carried out is given below:

- Bore Core Coal Samples - 41 (washability analysis only)
- RoM Coal Samples – 3 (washability analysis including Proximate Analysis, GCV, HGI, Caking Properties etc.)

### 6.4 Coalbed Methane (CBM) Laboratory

Relevant studies like Adsorption Isotherm (AI) studies for 78 numbers of coal samples, Total Organic Carbon (ToC) analysis for 51 number of Shale samples have been completed in addition to CBM studies in 8Bhs and Shale gas studies in 5Bhs. Further, Analysis of 971 mine air samples received from different collieries of CCL have been completed and results submitted.

### 6.5 Mining Laboratory Services

#### ROCK MECHANICS/ROCK TESTING

- Tests have been conducted for physico-mechanical properties on drill core samples of 3610.16m.
- Report on results of physico-mechanical properties of twelve (12) boreholes of different block of CIL/ Non-CIL.

#### STRATA CONTROL STUDIES

- Report on study of Rock Mass Rating (RMR) / specified gravity/capability study submitted for 11 mines/seams.
- Rock tests on roof rock samples (14 Nos.) for determination of strength properties, slake durability index and density for RMR study.
- Subsidence prediction completed for one mine of CIL.

## 7.0 ENVIRONMENTAL SERVICES

### 7.1 EIA / EMPs

#### CIL PROJECTS

During the year 2017-18 Environment Department prepared a total of 20 nos. of Form-1 and 23 nos. of Draft EMPs.

#### OUTSIDE PROJECTS

During the year 2017-18 Environment Department prepared scientific sand



replenishment studies for 76 mines of Rajasthan.

## 7.2 Environmental Monitoring of Air, Water and Noise

Once MoEF&CC accords the Environmental Clearance (EC) 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 and compliance of EC conditions.

During the year 2017-18, environmental monitoring of 435 projects/establishments of CIL (ECL-95, BCCL-69, CCL-72, WCL-86, SECL-78, NCL-10 and MCL-25) were carried out through Nine environmental laboratories located at Asansol, Dhanbad, Nagpur, Bilaspur, Bhubaneswar, Kusunda, Hasdeo, Jayant, and Ranchi.



Analysis of Water Samples at Environment Lab



HQA View of Environment Lab at CMPDIL, HQ

## 7.3 Accreditation to CMPDIL as EIA Consulting Organisation

CMPDIL 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 power and Coal Washeries sector. CMPDIL is the largest Accredited Consultant organization (ACO) for preparation of EIA & EMP and having (90 No.) of approved Experts in three sectors and 12 Functional Areas.

## 7.4 Accreditation of CMPDIL Environmental Laboratory

Environmental Laboratories of CMPDIL (HQ) Ranchi, RI-IV, Nagpur, RI-V, Bilaspur & RI -VII, Bhubaneswar have been accredited by National Accreditation Board for Testing & Calibration of Laboratories (NABL). Environment Lab, CMPDIL (HQ) has also been recognized by Central Pollution Control Board (CPCB), Delhi under Environment (Protection) Act, 1986.

## 7.5 ETP/STP/AMD(IWSS) Scheme for Coal Projects

Four number of schemes and tender documents were prepared during this year.

## 7.6 Quick Comments and Scrutiny of check-list on Mine Closure Plan for Coal Blocks sent by MoC to CMPDIL

39 nos. of Mine Closure Plans were scrutinized and comments sent to MoC during the year.

## 7.7 Mine Closure Status Report

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

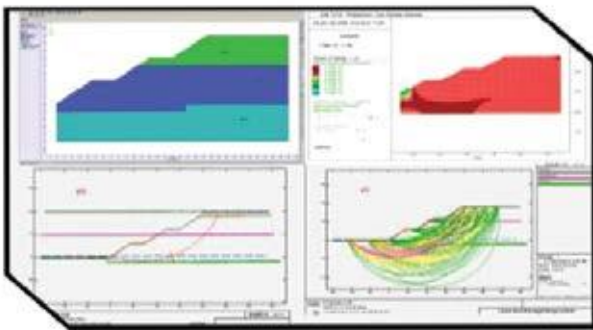
### 7.8 Monitoring of Mine Closure Activities

Monitoring of Mine Closure activities has been done for 19 nos. of mines for reimbursement from Escrow account.

### 7.9 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, 11 nos. slope stability study and determination of ultimate slope angle of high wall were completed.

Besides, 1 no. of soil erosion control studies of Coal projects and 1 no. of Nallah Diversion Scheme were also completed.



Typical Slope Stability analysis of OB Dump using  
FLAC & GALENA software

### 7.10 Mobile Apps

Environment Division was associated in collection of data, compilation and development of Mobile Apps viz. Green CIL and Coal Jal.

### 7.11 S&T/Special Studies

- Sustainable livelihood activities on reclaimed opencast mines- a technology enabled integrated approach for possible replication in Indian Coal sector-by CMPDIL (HQ), BCCL & 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 CMPDIL (HQ), CCL and 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 non-cohesive granular soil/sand in the opencast mines adjacent to the major perennial river- by CMPDIL, RI-IV, Nagpur & IIT, Mumbai.
- Development of Guidelines for increase of OB dump height in coal mines.

### 7.12 Automation of Environmental Laboratory

Automation work for direct transfer of analysis data generated by various laboratory equipment has been developed and introduced resulting in reduction in manpower and time required in preparation of environmental monitoring report.

### 7.13 Online Water Monitoring Equipment Procurement & Installation

As per stipulation of concerned State Pollution Control Board, installation of online water quality monitoring equipment was required in a time bound manner. Preparation of specification, procurement and installation of 11 nos. online water quality monitoring equipment for SECL and MCL was undertaken during the year by Environment Division.

### 7.14 Celebration of World Environment Day

The World Environment Day was celebrated on 5<sup>th</sup> June, 2017 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 CMPDIL.



**Typical Slope Stability analysis of OB Dump using  
FLAC & GALENA software**

## 8.0 INFORMATION & COMMUNICATION TECHNOLOGY

In addition to providing in-house support, CMPDILL has been extending consultancy services to CIL and its Subsidiaries. Some of the major jobs done during Financial Year 2017-18 are:

1. The following centralized software are also developed and maintained by ICT Division CMPDIL for entire CIL:
    - a. Portal for Contract Labour 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. On-line web enabled Annual Property Return system for all executives of Coal India Limited for the year 2016.
  - f. Safety Clearance (SC) and Departmental Clearance (DC) are developed and implemented.
  - g. Bank card rate system for CIL has been developed to enable CIL; to invite deposit rate offer from the bankers for depositing the fund by CIL.
  - h. Underground and Opencast Mine Capacity Assessment; Application have been developed and deployed for seamless entry of equipment data and allied data for calculating Mine Capacity Assessment.
  - i. Online Coal Block Information System Application is developed to give information regarding Coal Block Data.
2. CMPDIL has also been entrusted the task of the implementation of eOffice for entire Coal India Limited. The centralized infrastructure and MPLS connectivity has been established at all Subsidiary HQ locations, CIL New Delhi, CIL HQ Kolkata, IICM and NEC. E-office is running in all the locations.
  3. Mobile Apps have been developed on behalf of Coal India for MoC. SEVA (Sara Eindhana Vitharan) has been developed and launched by Hon'ble Minister of Coal on 22<sup>nd</sup> May 2017.
  4. Coal Net Financial Module is extended to Regional Institutes for uniform accounting.
  5. Online ED Booking System has been extended to Regional Institutes.



**MoU 2017-18:**

As per MoU 2017-18 of CMPDIL, under the head 'E-Office Utilisation' 75% or more login in E-Office was to be achieved by the month of Feb.'18 for 'Excellent' rating. Accordingly, 91% of login in E-Office was achieved by the month of Feb.'18. Further, under the head 'Special Projects' connectivity of all RIs with CMPDIL HQ through CoalNet was to be achieved by 28<sup>th</sup> Feb.'18. Accordingly, connectivity of all RIs with CMPDIL HQ through CoalNet was achieved in Feb.'18.

## 9.0 INFORMATION MANAGEMENT SYSTEM

### 1. Publication of quarterly magazines "Minetech" and "Gondwana Bharti"

Three issues each of the above said magazines have been published during the year 2017-18. Soft copy for Oct-Dec' 17 issue was handed over to the printing agency in the last week of March' 18. Timely publications of magazines are expected to be achieved in 2018-19.

### 2. Dispatch of magazines

Apart from in-house distribution, approximately 12000 copies of both the magazines were dispatched during the year 2017-18 to MOC, CIL and its different subsidiaries (HQ, Area and colliery unit), different institutes and other known organizations.

### 3. Publication of Book

A new book titled 'A Handbook on Rock Bolting in Indian Mines' was published during the year 17-18, authored by Dr. Ashim K. Sinha, DDG, DGMS, South Eastern Zone, Ranchi. A copy handbook is being sent to each mining engineer of CIL.

### 4. Sale of Book

Continuous follow up actions were taken for sale of technical books in different subsidiaries of CIL by sending letters. 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.

### 5. Social media activities

HOD (IMS) has also been nominated as Nodal Officer of social media of CMPDIL. Official Facebook page and Twitter handle as detailed below were opened and regular uploading of important activities of CMPDIL and CIL are done. Apart from in-house activities, important information/ achievement of Govt. of India, Ministry of Coal are also being shared. Social media activities are being also monitored from the office of Hon'ble Minister of Railway & Coal. CMPDIL's Facebook (<http://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 of office of Hon'ble Minister of Railway & Coal & are verified.

### 6. Special Achievement Awards:

CMPDIL's magazine "Gondwana Bharti" was awarded 3<sup>rd</sup> Prize in the category: 'Best House journal (Hindi)' in SCOPE CC Excellence Award(s) 2017 presented during the Inaugural Session of the SCOPE Corporate





Communication Summit 2017 on 7.12.2017. Nomination for the same was invited by SCOPE from all Central PSUs and the prize was received by Dy. GM (IMS) from Shri R. S. Rathore, MoS(IC) for Youth Affairs & Sports, GoI on 07.12.2017 at SCOPE Complex, New Delhi.



## 10.0 VIGILANCE

Vigilance activities and achievements during financial year 2017-18 is placed below:

### 1. Vigilance Awareness Week

It was observed in CMPDIL, Ranchi at its headquarters in Ranchi and all its seven Regional Institutes from 30.10.2017 to 04.11.2017. Vigilance Pledge was administered by Shri B.N. Shukla, Director (T/CRD), CMPDIL who also welcomed the gathering and threw light on the theme of this year i.e "My Vision-Corruption Free India".

During Vigilance Awareness Week-2017 at CMPDIL, the following Programmes were organised:-

- i) Essay Writing Competition for all employees & Painting Competition for family members of employees.
- ii) Elocution/Speech competition was held among the student of Jharkhand Raksha Shakti University, Ranchi.
- iii) A panel discussion was held among students of Mass Communication & Journalism, St. Xavier's College, Ranchi.
- iv) Elocution competition was also held among students of Ranchi College, SKM SS School, Kamre and Birsa Ucha Vidyalaya, Hathiagonda, Ranchi.

CVO, CMPDIL gave guest lectures at Indian Institute of Management, Ranchi and Indian Institute of Natural Resins and Gums, Namkum, Ranchi. A guest lecture was also organized at CMPDIL (HQ) on 03.11.2017 in which Hon'ble Justice Mr. D.K. Sinha, Former Judge of the Ranchi High Court spoke about his experience on corruption related laws and efforts of judiciary to reduce the number of outstanding cases.



## 2. Preventive Vigilance

Vigilance Department of CMPDIL has been oriented to take preventive measures in the area of contractual jobs / material procurement to prevent procedural lapses as well as financial loss to the company. Preventive measures are suggested by the Vigilance Department based on Surprise Check / Investigation conducted by it to keep an eye on corruption. System improvement studies have been undertaken in respect of (a) Lead measurement of OBR (Overburden removal) and its volumetric measurement through UAV including Coal Stock in subsidiary companies of Coal India. (b) CTE type study of outsourced exploration works. (c)

Steps to implement Anti bribery management system in terms of ISO 37001 have been initiated. (d) Active participation in formulation of Anti Fraud Policy of Coal India Limited. (e) System study in respect of formulation of SOP (Standard Operating Procedures) for recruitment of non-executives. (f) System study on use and Log Book maintenance of company's vehicles.

Surprise Check 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 stock, verification store materials, verification of Bank guarantee, refund of EMD/Security deposit of vendors and processing of PF & Pension of the employees. The need for due diligence in preparation of Projects was discussed with all the HODs in presence of RDs as preventive measures and concerned HODs were advised to strictly follow the standard

norms/procedures as well as guidelines laid down in this regard. Identification of sensitive departments and transfer/rotation of personnel occupying sensitive post for long are suggested by Vigilance Department which have subsequently been implemented.

### 3. In CMPDIL 15 Surprise Checks, 2 CTE and 60 APR scrutiny have been conducted.

### 4. Monetary gain to company due to vigilance activities in 2017-18

The following changes were undertaken during the year 2017-18 which will increase transparency and result in long term monetary gain to the company:

- i) Implementation of online bill tracking system to ensure the principle of first come first serve. Bill tracking has been made real time
- ii) Suggestion in Lead and volumetric measurement in OB removal.
- iii) Implementation of Biometric Attendance at Headquarter and its Regional Institutes.

### MoU 2017-18:

As per MoU 2017-18 of CMPDIL, under the head 'HRM Related Parameters' target for online quarterly vigilance clearance updation for senior executives (E7 and above) was 100% for 'Excellent' rating. The target of 100% online quarterly vigilance clearance updation for senior executives (E7 and above) was achieved during the year 2017-18.

## 11.0 SPECIALISED SERVICES

### 11.1 Geomatics

Geomatics Division 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.

## 11.1.1 Monitoring of OC mines through Remote Sensing

Satellite Surveillance for land reclamation monitoring of all the opencast mines is being done by CMPDIL regularly since the year 2008-09. Under this project land reclamation monitoring of 50 numbers of opencast projects having more than 5 million cu.m. capacity (Coal+OB) and 42 OC projects producing less than 5 million cu.m. (Coal+OB) have been completed based on high resolution satellite data during the year 2017-18.

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.

## 11.1.2 Vegetation cover mapping

Land use / vegetation cover mapping of seven (7) coalfields have been done based on satellite data during the year 2017-18 to assess the impact of coal mining.

- Rajmahal
- Raniganj
- Ib-Valley
- Mand Raigarh
- Sohagpur
- Umrer
- Pench-Kanhan

## 11.1.3 Land use/cover mapping of projects for EMP.

During 2017-18 land use/cover mapping of core and buffer zone of 20 projects (4 projects CCL, 5 projects of SECL, 1 project of MCL, 2 projects of NCL & 8 projects of WCL) have been completed for generating baseline information for Environmental Management Plan (EMP).

## 11.1.4 Monitoring of Coal Mine Fire

Monitoring of coal mine fire in Jharia, Raniganj, Karanpura and Bokaro coalfield based on Thermal Remote Sensing Satellite data for the year of 2017-18 have been done. CMPDIL is carrying out Coal Mine Fire studies regularly since year 2012.

## 11.1.5 OBR measurement

CMPDIL has been entrusted with OBR check measurement in all the outsourced patches & departmental mines of CIL as third party agency. OBR measurement of 35 departmental OCPs and 190 outsourced patches have been done during 2017-18. Besides this OBR measurements at Pakri-Barwadih and Dulanga coal mining projects of M/s NTPC have also been done during the year.

## 11.1.6 DGPS Survey of forest boundary

As per MoEF's guidelines, forest land to be acquired for mining/ other purposes is to be surveyed using DGPS and its shape file has to be submitted along with the application for stage-I forest clearance. DGPS survey of forest land in 25 coal/ railways projects (2 in BCCL, 8 in CCL, 12 in SECL, one in Banai Block of M/s NTPC and 2 of Indian Railways) have been completed during the year for forestry clearance.

## 11.1.7 DGPS survey

Following DGPS surveys were carried out during the year 2017-18:

- i. DGPS survey for transferring of cardinal points on ground of Amelia Coal Block, completed
- ii. DGPS survey for demarcation of block boundary, preparation of geo-referenced cadastral map of Banai Coal Block of M/s NTPC, completed
- iii. DGPS survey for finding co-ordinates of stations in CV Area, BCCL, completed



- iv. DGPS survey for boundary demarcation, Borehole survey of Gare IV/4 & IV/5 Blocks of M/s Hindalco, completed
- v. DGPS survey for verification of points of cluster –IV boundary, BCCL, completed
- vi. DGPS survey of coal evacuation corridor of Amelia coal mine project of M/s THDC, done.

#### 11.1.8 Survey using Drone/ Unmanned Aerial Vehicle (UAV) (in contractual mode)

- i. High resolution photography using UAV and preparation of Orthophoto-mosaic at Rajrappa and Topa OC Projects of CCL
- ii. Generation of orthophoto-mosaic, Digital terrain Model, contour maps in four OC Projects of NCL, namely, Jayant, Dudhichua, Nigahi & Amlohri and volume computation of coal heap using UAV based LiDAR.

## 12.0 BLASTING

CMPDIL 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. CMPDIL 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 to different subsidiaries of Coal India Limited & outside agencies during 2017-18:**

#### 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:

- BCCL, CCL, MCL & NEC - tested by Blasting Division of CMPDIL (HQ)
- ECL - tested by Blasting cell of CMPDIL (HQ) & RI-I, CMPDIL.
- WCL - tested by Blasting cell of RI-IV, CMPDIL
- SECL - tested by Blasting cell of RI-V, CMPDIL
- NCL - tested by Blasting cell of RI-VI, CMPDIL

❖ **Determination of Bench Mark Powder Factor (BMPF)**

- Blasting cell of CMPDIL (HQ) : 17 mines
- Blasting cell of RI-I, CMPDIL : 12 mines
- Blasting cell of RI-IV, CMPDIL : 11 mines
- Blasting cell of RI-V, CMPDIL : 13 mines
- Blasting cell of RI-VI, CMPDIL : 15 mines

❖ **Scientific study for controlled blasting & vibration study:**

- Blasting cell of CMPDIL (HQ) : 11 mines
- Blasting cell of RI-I, CMPDIL : 2 mines
- Blasting cell of RI-IV, CMPDIL : 1 mines
- Blasting cell of RI-V, CMPDIL : 6 mines
- Blasting cell of RI-VI, CMPDIL : 1 mines

❖ **Scientific study for Introduction of SME/SMS (Site-mixed Emulsion/ Slurry):**

- Blasting cell of CMPDIL (HQ) : 10 mines
- Blasting cell of RI-IV, CMPDIL : 2 mines





## B. OUT- SIDE CONSULTENCY JOB DONE BY BLASTING DIVISION OF CMPDIL(HQ)

### ❖ Performance evaluation of explosives & accessories supplied by various manufacturers to the mines of NLC India Limited

### ❖ Performance evaluation of new Explosives & Accessories:

- Performance evaluation of Bulk Explosives, named "IDEAL COLUMN-S (SMS/BULK) of M/s Ideal Industries Explosives Ltd
- Performance evaluation of Bulk Explosives, named "SOLAR BE-201" of M/s Solar Industries India Ltd
- Performance evaluation of Bulk Explosives, named "Safex-1 BULK" of M/s Premier Explosives Ltd
- Performance evaluation of Bulk Explosives, named "BULK STAR" of M/s Black Diamond Explosives Pvt. Ltd
- Performance evaluation of Bulk Explosives, named "EMULKING 200" of M/s IDL Explosives Pvt. Ltd
- Performance evaluation of "Cast Booster (PETN) (SUPERCAST)" explosives & accessories of M/s Solar Industries India Limited
- Test & Trial of New Bulk Explosives "BLASTEC90" of M/s Blastec (India) Private Limited

## C. SPECIAL JOBS DONE BY BLASTING DIVISION OF CMPDIL (HQ)

- Preparation of the Technical Specifications for NIT required for procurement of explosives & accessories for all the subsidiaries of CIL (2017-19)

- Scientific study to assess the effects of UG blasting and blast induced ground vibration at surface structure lying above Bhagaband Colliery, P B Area, BCCL.
- 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-III OCM, Umrer Area, WCL
- 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 principle-implementing agency in an R&D Project titled "Study of Techno-Commercial efficacy of ANFO with Low Density Porous prilled Ammonium Nitrate for blasting in overburden of coal mines".
- Working as Sub-implementing agency in an R&D Project titled "Multiple layer trial blasting for better recovery with less diluted coal"
- Technical support/vetting of reports for RI's/CIL.

## 13.0 MINING ELECTRONICS

Mining Electronics Division of CMPDIL renders services in preparing Feasibility Reports, Detailed Design Reports and Tender Documents for establishing communication network, Telemonitoring of Environmental Parameters for U/G and O/C mines. It also renders valuable services to subsidiary companies in repairing and calibration of methane gas detectors used in underground mines for safety purpose, as well as in repairing of Imported/Indigenous HEMM cards.

The department has also undertaken the R&D/S&T Projects for Open Cast and Underground Mines. The following jobs were completed during the year.

### 13.1 R&D/S&T Projects

- 1) MoC S&T Project on – “On-line coal dust suppression system for Open cast Mine”- Ashoka Opencast mine, CCL. – Assembled and tested at C-DAC lab for field trial at site.
- 2) MoC S&T Project on – “Indigenous development of Early Warning Radar System for Predicting Failure/Slope Instabilities in O/C Mines”- Dudhichua OCP of NCL- GoI sanction alongwith fund allocation obtained from MoC.
- 3) CIL R&D Project- “Indigenous development of Through the Earth (TTE) two-way Communication system for Underground mines”- Simulated Antenna fabricated for calibration. Also, documents for DGMS R&D clearance for Field Trial at Bhurkunda U/G, CCL submitted to DGMS Dhanbad.

### 13.2 P&D/NIT/other jobs

- 1) Final E-NIT alongwith Bill of material for Environmental Telemonitoring System for Mine No.4 of Orient Area of MCL has been submitted.
- 2) Final Technical specification alongwith estimated cost for CCTV Surveillance system for CMPDIL (HQ) has been prepared and submitted.
- 3) Chapters on Electronics & Telecommunication for 25 Nos. of U/G and OCP for inclusion in Project Reports of different subsidiaries of CIL and outside agencies have been prepared.

### 13.3 Repairing / Calibration / Testing of Electronic Cards / Gas Monitors

- 1) Repairing of new model HEMM cards-123 Nos.

- 2) Repairing & Calibration of Methanometers -30 Nos.

## 14.0 COAL TECHNOLOGY

The Chemical and Petrographic units of CT& Lab Division is equipped with conventional and imported state-of-art equipment to carry out complete characterization of Coking and Non-coking coal for their downstream utilization.

- Systematic characterization of coal at exploration stage is being carried out on routine basis for incorporation in Geological Report.
- Systematic characterization of raw & clean coal samples (washery products) is being carried out for ascertaining the clean coal properties.
- Systematic characterization of coal samples for CBM assessment.

### Upgrading & Equipment procurement

- Geo-Chemical and Petrography laboratories have been upgraded with sophisticated imported equipment and the capacities have been enhanced.
- Installation of equipments like Pulverizer, Proximate Analyzer, Bomb Calorimeter.
- Setting up of new chemical analysis lab at CMPDIL, RI-VII, Bhubaneshwar.

### NABL and ICCP Accreditation:

- Geo-Chemical laboratory has been accredited by National Accreditation Board for Testing and Calibration Laboratories (NABL) for Coal core Analysis Testing.
- Surveillance audit was conducted for NABL accreditation laboratory review and new scope for GCV, Switch over from BIS to ASTM method included. In addition, C H N will also be taken up in new scope.



- During the year, three no. of personnel have been trained in NABL Accreditation (17025-2005).
- All members of Petrography laboratory have been accredited by International Committee of Coal and Organic Petrology (ICCP).

## 15.0 MANAGEMENT SYSTEM CONSULTANCY FOR CIL & ITS SUBSIDIARIES

Over the years, CMPDIL has substantially expanded its capabilities in the field of consultancy service for implementation of the various management systems, like ISO 9001 - Quality management systems, ISO 14001 - Environmental management systems, OHSAS 18001 - Occupational health & safety management system, ISO/IEC 27001 - Information security management system, ISO 50001 - Energy management systems, SA 8000 - Social Accountability, ISO/IEC 17025 - Requirements for the competence of testing and calibration laboratories.

CMPDIL provides such consultancies through the design and implementation of either the individual management system or Integrated Management Systems (IMS) conforming simultaneously to the requirements of different management systems standards, facilitating the creation and documentation of management systems, providing training, initial implementation, and support/guidance during certification and post certification period, etc.

### DURING 2017-18:

As a consultant, we were instrumental in the achievement of ISO 14001:2015 certification for Coal India Ltd. HQ, Kolkata through Bureau of Indian Standards. CIL HQ is now certified to ISO 9001:2015, ISO 14001:2015 and ISO 50001:2011. All the necessary support and guidance,

were provided for the successful implementation and certification for the above standards.

Three of our subsidiaries, MCL, ECL & NCL are now certified for their companywide Integrated Management System. While MCL and NCL are certified for implementing the ISO 9001:2008, ISO 14001:2004 and OHSAS 18001:2007 standards, ECL is certified for the ISO 9001:2015, ISO 14001:2015 and OHSAS 18001:2007 standards. Transition to revised version of standards in case of MCL and NCL is expected shortly.

During the year, the documentation for implementation of company-wide Integrated Management System with the revised version of standards i.e. ISO 9001:2015 and ISO 14001:2015 was completed for ECL, CCL, NCL and MCL.

CMPDIL and all its Regional Institutes have been licensed by Bureau of Indian Standards for fulfillment of the requirements of the new revised ISO 9001:2015 standard. After completion of all necessary documentation, we are now in the process of amalgamating the requirements of two new standards, ISO 14001 (Environment Management system) & ISO 50001 (Energy Management system), into our system of management for which the certification is expected by December, 2018.

About 20 nos of training programs on general awareness of standards and 4 nos of training on Internal Auditing Skills in Management Systems were arranged and conducted at CIL, MCL, NCL, CCL, ECL and IICM besides the various programs at STC, CMPDIL and the Regional Institutes.

### PLANS FOR 2018-19:

The documentation for the company-wide Integrated Management System as per revised ISO 9001 and ISO 14001 standards have been completed for CCL,





MCL and NCL. While MCL and NCL are likely to be transitioned by July 2018, CCL is expected to achieve certification by August 2018.

For CMPDIL, the implementation of standards, ISO 14001:2015 and ISO 50001:2011 is under progress and certification is expected by December, 2018.

The OHSAS 18001:2007 standard has now been superseded by the new ISO 45001:2018 standard in March 2018. The re-documentation of the Integrated Management System manual of ECL, MCL, NCL, CCL and BCCL will be taken up during the 2<sup>nd</sup> quarter of 2018-19 for alignment with the requirements of the new ISO 45001:2018 standard.

Training programs on general awareness of standards and Internal Auditing Skills will be organized and conducted at STC, CMPDIL, all Regional Institutes, IICM for CIL HQ and all its subsidiaries as per their requirement.”

## 16.0 MATERIAL MANAGEMENT

Procurement profile for the year 2017-18 and the previous year.

(Figures in ₹ Lakh)

Sl. No.	Particulars	FY: 2016-17	FY: 2017-18
I	Total annual procurement (in value)	2885.10	3263.44
II	Total value of goods and services procured from MSEs (including MSEs owned by SC/ST entrepreneurs)	856.46	1519.88
III	Total value of goods and services procured from only MSEs owned by SC/ST entrepreneurs	72.03	NIL
IV	Percentage of procurement from MSE (including MSEs owned by SC/ST entrepreneurs) out of total procurement	29.68%	46.57%
V	Percentage of procurement from only MSE owned by SC/ST entrepreneurs out of total procurement	2.5 %	NIL
VI	Total number of vendor development programmes for MSEs	01	01

**Note:** The target of total Annual Procurement during the FY 2018-19 is ₹ 3,589.78 Lakh, out of which ₹ 900 Lakh (approx. 25%) is targeted for procurement from MSEs, subject to participation of MSEs in the tenders being issued by CMPDIL.

### MoU 2017-18:

As per MoU 2017-18 of CMPDIL, under the head ‘Master Codification & Unification: (Providing Inputs to CIL)’ exercise in respect of three MoU parameters viz. (i) Item codification as per 11 digit CIL scheme, (ii) Asset Codification (Master Data preparation) and (iii) Vendor Codification (Master data preparation) were to be completed in respect of CMPDIL and codification data (100%) submitted for ‘Excellent’ rating. Accordingly, codification exercise, in line with guideline/instruction of CIL, for all three MoU parameters was completed and codification data submitted.

## 17.0 HUMAN RESOURCE DEVELOPMENT

During the year 2017-18, exposures were given to CMPDIL employees in the following major areas:-

Major Area	STC	IICM	External	Foreign	Total
Managerial	795	169	119	0	1083
Technical/Functional	499	33	240	19	791
Cross Functional	139	9	35	0	183
<b>Total</b>	<b>1433</b>	<b>211</b>	<b>394</b>	<b>19</b>	<b>2057</b>

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

### TRAINING AT STAFF TRAINING COLLEGE (STC)

(a) Training & Development is an integral part of employees growth. Therefore in CMPDIL an attempt has already been made to ensure that their holistic development continues through out the years. In this regard during 2017-18 all



together 1433 employees have been trained, in which major trainings are 1198 & minor trainings are 235 against the target of 960 employees on different technical & non-technical subjects which are need based and customized, some are mentioned below:-

- TRAINING ON VENTISM SOFTWARE.
- RISCAN PRO-ACQUISITION AND PROCESSING SOFTWARE.
- GST OUTREACH PROGRAMME.
- TRAINING ON PARADIGM SOFTWARE.
- TRAINING ON WELL CAD SOFTWARE.
- TRAINING ON USE OF PFMS FOR EAT MODULE FOR FINANCE.
- MINEX SOFTWARE (ENGINEERS / GEOLOGISTS) etc.

(b) Technology Skill Development Program for 168 MT's of CIL for various discipline has been conducted for the year 2017-18.

CMPDIL has also taken massive lead in conducting conferences, seminars and workshops on different subjects during the year 2017-18 like, Brainstorming Session on Best Practices in CMPDIL, Workshop on Biometric Programme, Workshop on GST and Brainstorming Session on Corruption Free Society etc.

## 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's

need. During the year 2017-18 total 211 executives have gone under such training.

## EXTERNAL TRAINING

Every year from different disciplines, executives are being sent to different reputed organizations / reputed institutions for attending Training, Conference, Workshop and Symposium etc related to technical/managerial skill upgradation. This year 394 nos. of executives and non-executives have attended programs 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 competent authority as per the need of the company.

Names of some institutes where our employees have been sent are as under:-

1. BHU Varanasi.
2. Bhide's Institute of Testing Technology Pvt. Ltd, Mumbai.
3. IIM, Ahmedabad.
4. IIM, Lucknow.
5. IIT, Kharagpur.
6. Rajiv Gandhi National Ground Water Training & Research Institute, Raipur
7. ASCI, Hyderabad.
8. SCOPE Complex, New Delhi
9. FICCI New Delhi etc.
10. National Productivity Council etc.

## FOREIGN TRAINING

During the year 2017-18, total 19 nos. of executives from CMPDIL had visited foreign countries for attending Seminars/ Conferences/ Trainings/ Technology Up gradation.

## INTERNSHIP TRAINING AT CMPDIL FOR STUDENTS OF DIFFERENT INSTITUTIONS

Summer & winter internship training to the students of various institutions are being



imparted by HRD Division at different regional institutes of CMPDIL and HQ. Total 235 numbers of students have been trained at CMPDIL during 2017-18. The students have undergone these Trainings / Project works for 4-6 weeks in their respective fields. After completion of training / Project and on submission of their project reports, HRD Division issues certificates for successful completion of Training / Project.

The Institutions approached for training are:-

1. VIT Vellore
2. BHU Varanasi
3. BIT Ranchi
4. IIT(ISM) Dhanbad
5. Patna University, Patna
6. SDM College of Engg. & Technology, Dharwad
7. Central University of Jharkhand
8. MIT Manipal
9. XISS Ranchi
10. AMU Aligarh
11. IIT Bhubaneshwar
12. KIIT Bhubaneshwar.
13. University of Petroleum & Energy Studies, Dehradun
14. Usha Martin Academy, Ranchi
15. SRM University, Ghaziabad/Chennai
16. Chankaya National Law University, Patna
17. IIT, Kharagpur
18. NIT, Surathkal
19. NIT, Rourkela Etc.

### **BOARD OF PRACTICAL TRAINING (BOPT)**

BOPT of Eastern Region under Apprentice Act 1961 from time to time allotted candidates of Govt. Polytechnic College, Koderma to go under one

year apprenticeship training at CMPDIL on drilling techniques. During the year 2017-18 CMPDIL rendered apprentice training to 17 apprentices in drilling. All 17 candidates allotted from BOPT have been deputed in different drilling camps of RI's for their training.

### **SKILL DEVELOPMENT**

Under Skill India Mission scheme CMPDIL 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 2017-18 the total target for skilling unskilled & semiskilled employees was 200 against which 202 have been trained.

Training programs conducted for Unskilled & Semiskilled employees under skill India Mission are:-

1. TRAINING OF CAT-I, II & III ON DIFFERENT LABS OPERATING IN CMPDIL (HQ) & RI'S.
2. TRAINING OF UN-SKILLED (CAT-I) AND SEMI-SKILLED (CAT-II & III) ON EOFFICE.
3. TRAINING FOR CAT-I, II & III ON DIFFERENT LABS OPERATING IN CMPDIL (HQ) & RI'S.

### **MoU 2017-18:**

As per MoU 2017-18 of CMPDIL, under the head 'HRM Related Parameters' at least 5% of Executives were to be imparted training in Centre of Excellence e.g. IITs, IIMs, NITs, ICAI, IICM, ASCI, etc. for 'Talent management and career progression' for 'Excellent' rating. Accordingly, 78 Executives were imparted training in compliance of the above requirement. Considering the Executive strength of 917 as on 31.3.2017, 8.5%





Executives have been imparted training in Centre of Excellence.

## 18. OUTSIDE CIL CONSULTANCY

During the FY 2017-18, 41 outside-CIL consultancy jobs were successfully completed by CMPDIL for 31 organisations outside CIL. Some of the major clients / organizations are NTPC Ltd., MOIL Ltd., Maharashtra State Power Generation Co. Ltd. (MAHAGENCO), THDC India Ltd., Odisha Coal and Power Limited (OCPL), Gujarat State Electricity Corporation Limited (GSECL), Madhya Pradesh Power Generating Co. Ltd. (MPPGCL) etc.

Presently, 29 outside-CIL consultancy jobs are being executed by CMPDIL for 16 organisations like OCPL, NALCO, NTPC Ltd., SAIL, NLC India, THDC India Ltd., National Mineral Development Corporation (NMDC), Jharkhand State Mineral Development Corporation (JSMDC), Odisha Mining Corporation Ltd. (OMC), PFC Consulting Limited (PFCCL), HINDALCO, Talcher Fertilizers Ltd. etc.

During the year 2017-18, 47 outside-CIL consultancy jobs worth ₹ 66.77 crores were procured by CMPDIL from 27 organizations which includes consultancy jobs from Ministry of Coal, PSUs/Govt. Organizations and Private Companies.

## 19. MANPOWER AND WELFARE ACTIVITIES

### 19.1 Status of Manpower:

Particulars		As on March 31, 2017	As on March 31, 2018
Executive		917	931
Non-Executive	Monthly Rated	1201	1101
	Daily Rated	1380	1347
<b>Grand Total</b>		<b>3498</b>	<b>3379</b>

### MoU 2017-18:

As per MoU 2017-18 of CMPDIL, under the head 'HRM Related Parameters' on-line submission of ACR/APAR in respect of all executives (E0 & above) along with compliance of prescribed timelines w.r.t. writing of ACR/APAR was to be completed for 'Excellent' rating. Accordingly, achievement in respect of this MoU parameter was 100%.

### 19.2 Welfare Activities:

1. CMPDIL has 2071 nos. of quarters at its Headquarter and Regional Institute. There is satisfaction among residents/employees of CMPDIL residing in the Company's quarter.
2. Adequate supply of drinking water has been made available to the employees of CMPDIL.
3. All the employees and their dependents are provided with the medical facilities through its dispensaries and the hospitals owned by the subsidiary companies of CIL. Patients are also referred to CIL empaneled hospitals.
4. CMPDIL has provided financial assistance/ grant of Rupees One lakh only to DAV Public School, Gandhi Nagar, Ranchi.
5. There are 31 nos. of school buses including hired small vehicle for school going children of employees.
6. Cash awards of ₹ 3000/- and ₹ 2000/- each were given to the wards of the employees of CMPDIL securing 90% and above marks in the 12<sup>th</sup> & 10<sup>th</sup> Board Examination in the March 2017 respectively.
7. Online Gratuity payment is done in the account of superannuating employees on the very next day of their superannuation.

8. A grant of ₹ 30,000/- (₹ Thirty Thousand Only) was given to Kasturi Mahila Sabha for organizing Sawan Milan.
9. A grant of ₹ 20, 000/- was given for the celebration of Dr. Bhim Rao Ambedkar Jayanti in CMPDIL.
10. A grant of ₹ 33,000/- [Thirty three thousand only] & ₹ 37,000/- (Thirty seven thousand only) was given to Recreation & Gondwana Club respectively for celebration of Annual get together/ New Year.
11. CIL Merit Scholarship amounting to ₹ 43,800/- (₹ Forty three thousand eight hundred only) were given to 15 wards of employees and CIL General Scholarship amounting ₹ 89,520/- [Eighty nine thousand five hundred twenty only] was given to 77 wards of the employees as per the guidelines of the Company.
12. An amount of ₹ 10,39,162/- (Ten lakh thirty nine thousand one hundred sixty two only) was given to wards of the employees studying in NIT/IIT/ Medical/Govt. colleges as per existing guidelines.
13. A summer camp was organized in the premises of CMPDIL, Gondwana place where the wards of CMPDIL employees participated in the fifteen days camp from 20.05.2017 to 03.06.2017. The children were trained as per their interest/ choices made during enrollment in the summer camp in various sports activities such as Badminton, Chess, Table tennis, Carrom board, Volleyball, Lawn Tennis, Cricket, Football and other Athletic activities.
14. To popularize the game Football for the FIFA under 17 World Cup, a directive was received from the office of Under Secretary to Government of India, Ministry of Coal to organize Football tournament for the nearby school children. CMPDIL organized a football tournament for under 17 school children of Birsa High School, Hathia Gonda, Kanke Road, Ranchi on 24.06.2017.
15. Swachhta Pakhwada was observed in CMPDIL and its Regional Institutes from 16.08.17 to 31.08.17. A line of activities in regard to the Swachhta Pakhwada was carried out during the Pakhwada. The Cleanliness drive was also taken up in Gondwana Primary School & Birsa High School, Hathiyagonda, Kanke Road, Ranchi by CMPDIL.
16. Vigilance Awareness Week was observed in CMPDIL from 30.10.17 to 04.11.17. During the week, competitions such as quiz/ extempore & speech competition was organized in nearby three colleges and two schools. Painting and essay competition were organized for the dependents and the employees of CMPDIL respectively.
17. National Unity day was observed in CMPDIL on 31.10.2017. CMD, CMPDIL flagged off the "Run for Unity" from CPEI building.
18. Constitution day was observed in CMPDIL on 27.11.2018. A pledge was sworn by the employees of CMPDIL followed by essay competition.
19. Aids Day was observed in CMPDIL on 01.12.2017. Employees of CMPDIL were educated related to transmission of HIV/AIDS. The causes and the precautions and other issues related to the transmission of HIV/AIDS were discussed and the queries were answered.
20. CMPDIL celebrated the International Women's Day on 08.3.2018 at Mayuri Hall.



## 19.3 Sports Activities:

1. CMPDIL hosted Coal India Inter Company Volleyball Tournament from 28.01.2018 to 30.01.2018. All the subsidiaries of Coal India and the team of Singareni Collieries Company participated in the tournament.
2. CMPDIL conducted Inter Regional Institute Tournament for Badminton, Table Tennis, Carrom, Chess, Athletic Meet, Football, Volley-Ball, Bridge, Lawn Tennis and Cultural Meet.
3. A celebrity football tournament was organized on 15.08.17 at CMPDIL ground between the team of CMD-XI and Directors-XI.
4. A Canvass ball cricket was played between the teams of CMD-XI and Directors-XI on 26.01.18 at CMPDIL ground.

## 19.4 Executive Establishment Matters:

1. Timely payment of gratuity to all executives retired in 2017-18.
2. All resignation cases were processed timely and various previous pending resignation cases were settled through realization of bond money after a lot of persuasion on Company as well as personal level.
3. All CPRMSE cards were issued and updated on regular basis. Further, bills were processed with due diligence.
4. All applications received from ONLINE TRANSFER PORTAL OF CMPDIL for Inner Company transfer of executives were timely processed.
5. Effective implementation of e-office through various activities assigned as LOCAL ADMIN of the e-office application.

## 19.5 HRIS/RTI/Grievance:

1. GOAL SETTING as well as HALF YEARLY REVIEW under PMS (Online) for PRIDE as well as PAR for the year 2017-18 was successfully completed in respect of all executives. Further, FINAL APPRAISAL under PMS for the year 16-17 was 100 percent completed for CMPDIL, within the scheduled timeline.
2. Creation of New PRIDEs/PARs, filing up of GOAL SETTING, follow up action on the online PMS were done through regular basis.
3. Continuous coordination and follow up with Policy Cell, CIL as well as Subsidiaries was done for updation of EIS and other modules of HRIS was done.
4. PRP data for the years 2014-15 and 2015-16 was prepared as per CIL guidelines for felicitating final payment.
5. Timely reply of RTI questions were given by doing continuous follow up.
6. All efforts were taken for maintaining ZERO Grievance in CMPDIL. In 2017-18, 42 grievances were received on the CPGRAM Portal and all cases have been redressed. Regular meetings of the Grievance Redressal Committee was convened and regular follow up was done of grievances received on the CPGRAM Portal as well as Grievances of general nature.

## 19.6 Administration/ Manpower/ Pension Cell:

1. Manpower Budget for 2017-18 for CMPDIL has been completed within the prescribed time.
2. Total 40 pension cases have been settled.
3. 254 cases of outside medical referral in respect of existing employees and





their dependents has been processed at CMPDIL (HQ) level.

4. As per Directives of CIL, all the Contractors and Contractors workers have been registered on CLIP. The payment of Contractors workers is being processed through CLIP.
5. As per Directives of CIL, Biometric Attendance System [BAS) has been implemented in CMPDIL (HQ as well as RI Headquarters and Drilling Camps and attendance is now registered through Biometric Attendance Device.

### 19.7 Legal:

In the financial year 2017-18, the Legal section of CMPDIL(HQ) has advised on array of matters especially related with tenders, contract management, labour laws, service matters, IPR, Corporate Law etc. The number of cases have been drastically reduced from 122 as on 31.03.2017 to 108 till 31.03.2018. Out of these, two important cases No. WP (C)No 4217 /2003 CMPDIL vs National Commission for SC/ST and MA No 609/98 CMPDIL vs M/s Telekrik Electricals have been decided in favour of CMPDIL.

### 19.8 Medical:

1. Diabetes Clinic as regularly be conducted on every second Friday of the month during 2017-18. Screening of 767 patients have been done for Diabetes.
2. AIDs/HIV awareness clinic is being conducted in CMPDIL Dispensary on every 3<sup>rd</sup> Friday of the Month. Beneficiaries are employees, the dependents and nearby Society.

### 19.9 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 Bharati", a Renowned & National Level House Magazine of your company also continued to promote the creative writing in Hindi, which was praised all over the country.

In the month of September, 2017, "Raj Bhasha Mah" was organized as per the directives of Ministry of Coal. In order to promote and make Hindi popular among the employees of the company, several Hindi competitions were organized during the month. A large number of employees participated in all the competitions held during the month. Winners were awarded first prize of Rs5000, second prize Rs4000, third prize Rs3000 and consolation prize Rs800. All prize winners were also awarded certificate in their respective category. 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 who has done most of his official work in hindi among



all RIs has also been given Chairmans' winner shield by honourable Chairman-cum-Managing Director of your company. In addition remainder participants were also awarded.

A grand 'Kavi Sammelan' was also organized successfully during Rajbhasha Mah.

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 Hindi in daily routine work.

As per the Directive and Annual Programme issued by Department of Official Language, Ministry of Home Affairs, New Delhi inspection of RIs and different department of headquarters was also done.

Four quarterly meetings of Official Language Implementation Committee were also organized under the Chairmanship of CMD to review quarterly progress of Official Language in different departments of your company as per the Directive and Annual Programme issued by Department of Official Language, Ministry of Home Affairs, New Delhi.

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

## 19.10 Disclosure and Information Undersexual Harassment to Women:

No complaint or no case of sexual harassment to women at working place in CMPDIL has been reported during the year 2017-18 under the disclosure and information under sexual harassment

to women at work place (prevention, prohibition and redressal) Act, 2013.

Number of sexual harassment complaints received in a year - Nil

Number of complaints disposed of in a year - Nil

Number of cases pending for more than 90 days - 01

Number of awareness programs or workshops against sexual harassment conducted in a year - Nil

Nature of action taken by the employer or District Officer with respect to the case - Nil

## 20.0 CSR & SUSTAINABILITY ACTIVITIES OF CMPDIL (2017-18):

### CSR initiatives at CMPDIL:

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, and 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 has its own CSR policy inline of Section 135 of Companies Act, 2013 and the rules made there under.

## 20.1 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 CMPDIL. Major activities carried out during the year 2017-18 include Infrastructure Development in schools / villages, educational support to poor and needy school children, financial assistance to Pyari Foundation, Purulia for treatment and care of leprosy patients, skill development of blind girls of Brajkishore Netraheen Balika Vidhyalaya, Ranchi, providing provision of drinking water by drilling and installation of bore wells in villages, etc.

## 20.2 CSR & Sustainability Activities of CMPDIL (2017-18):

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. CMPDIL CSR projects are undertaken in and around the areas of operations which includes drilling camps spread across seven states of the country to cater to the

needs of the affected community for their development and wellbeing.

## 20.3 CSR Policy:

### PREAMBLE

The concept of Corporate Social Responsibility has gained prominence from all avenues. Organizations have realized that Govt. alone will not be able to get success in its endeavor to uplift the downtrodden of Society. With the rapidly changing corporate environment, more functional autonomy, operational freedom etc. Central Mine Planning and Design Institute Limited (CMPDIL) has adopted CSR as a strategic tool for sustainable growth. For CMPDIL in the present context, CSR means not only investment of funds for Social Activity but also Integration of Business processes with Social processes.

Even much before the issue of CSR became global concern, CMPDIL was aware of its Corporate Social Responsibility and was fulfilling the aspiration of the Society through well-defined "Community Development Policy" within the periphery of 25 km. of the Project sites. This has resulted into a harmonious relationship between CMPDIL and the peripheral Communities.

## 20.4 Introduction

CMPDIL was established in the year 1975 as a subsidiary of Coal India Limited (a Government of India Public Sector Undertaking). CMPDIL operates through its headquarters at Ranchi and seven Regional Institutes designated as RI-I to RI-VII located at Asansol, Dhanbad, Ranchi, Nagpur, Bilaspur, Singrauli and Bhubaneswar respectively. Exploration of coal has profound impact on the people living in and around the areas where the project of CMPDIL are established.





Hence, the primary beneficiaries of CSR should be PAP and those staying within the radius of 25 km of the Project. Poor and needy section of the society living in different parts of India should be second beneficiaries.

In the aforesaid backdrop, policy on Corporate Social Responsibility of CMPDIL 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 DPEs guidelines and broadly covers the following: -

- a) Welfare measures for the community at large, so as to ensure the poorer section of the Society derived 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.

## 20.5 Objective

The main objective of CSR policy is to lay down guidelines for the CMPDIL 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. CMPDIL will act as a good Corporate Citizen, subscribing to the principles of Global Compact for implementation.

## 20.6 Areas to be Covered

The poor and needy Section of the Society living in different parts of India would normally be covered. The CSR Programme 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 CMPDIL, 80% of the budgeted amount should be spent within the radius of 25 Km of the Project Site/ Company HQ and 20% of the budget would be spent within the State/States in which the Regional Institutes are operating.
- In case CSR budget of CMPDIL (HQ), or any Regional Institutes is exhausted, the CMD of CMPDIL may refer the particular CSR activity/ project/programme to CIL which are considered to be emergent/important by the CMD.

## 20.7 Allocation of Fund

- (i) The fund for the CSR should be 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 years of CMPDIL.

## 20.8 Scope

As per Schedule VII of New Companies Act 2013 the following should be 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;
- viii) 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;

## 20.9 Implementation

- a) The investment of CSR should be project based and for every project time framed periodic mile stones should be 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 Principal pertaining to the Environment Business are asked to





- a. Support a precautionary approach to environment challenges.
- b. Undertake initiatives to promote greater environmental responsibility and
- c. Encourage the development and diffusion of environmentally friendly technologies.

## 20.10 Institutional Arrangement

- a) All proposals under CSR activity would be examined by the CSR committee keeping in view of the Companies Act, 2013 latest DPEs guidelines together with cost benefit analysis.
- b) CMPDIL 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 atleast 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 CMPDIL and proposals beyond ₹ 25.00 lakhs shall be approved by respective Boards.

## 20.11 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.
- 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 CMPDIL Website.

## 20.12 Monitoring

- a) The CSR committee of CMPDIL 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 CMPDIL 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 CMPDIL





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

### 20.13 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.

### 20.14 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 CMPDIL 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.

### 20.15 Conclusion

The above guidelines would form the framework around which the CSR activities would be undertaken. CMPDIL, 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.

### 20.16 CSR Projects/Activities undertaken by CMPDIL in 2017-18:

#### A. Education:

Educational support like scholarship to meritorious students, sponsorship to girl students from poor families in the form of school fees, stationaries, uniforms for promoting “Beti Padhao, Beti Bachao” abhiyan of Hon’able Prime Minister of India, supply of desk benches, school uniforms, financial support/ assistance in the form of scholarship to disabled students are being provided by CMPDIL 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.







**Fig:** Educational support being provided to Birsa Uchha Vidhyalaya, Ranchi



**Fig:** Educational items being provided to Gondwana Primary School, Ranchi



**Fig:** Classes going on for the mentally challenged students at Asansol Anandam



**Fig:** Distribution of desk benches in a school of Asansol.



**Fig:** Educational support being provided in the form of desks and benches by RI II, Dhanbad

School Bags & Sweaters have been distributed to 120 students in Balnikunj School, Nagpur and Distribution of School Bags, Sweater & Shoes to 28 students in Shaskiya Prathamik Shala Neemdhana, Amarwada distt, MP were done by RI IV, Nagpur. In addition to this, mid – day meal sheds have been constructed by RI- IV, Nagpur at Jila Parishad Uchh Prathamik Shala, Varoda, Chandrapur, Maharastra and at N.P. Urdu Vidhayalya, Varoda, Chandrapur, Maharastra.



**Fig:** Distribution of School Bags & Sweaters among students by RI IV, Nagpur



Construction of One additional Hostel room is in progress while borewell has been installed at Saraswati Shishu Mandir, HS Residential School, Sendri Koni, Bilaspur. Construction of one shed for cycle stand has been done at Middle & Higher Secondary School, Khamtari.



**Fig:** Construction of One additional Hostel room in progress and Borewell installed at Saraswati Shishu Mandir, HS Residential School, Sendri Koni, Bilaspur.

### B. Healthcare :

Financial assistance has been provided for hospitalization cost of 10 leprosy patients at Gandhi memorial Leprosy Hospital, Balarampur, Purulia, West Bengal run by Pyari Foundation – India Trust has been provided by CMPDIL.



**Fig:** Treatment of leprosy patients going on

### C. Sanitation and Drinking water:

One bore well has been installed in Singpur area adjacent to Singpur camp, Chhattisgarh and one number of water tank (1000 ltr.) to Gopalpur FP School, GT Road Distt. Burdwan.

### D. Skill Development:

CMPDIL has been working towards the skill development and providing infrastructural facility to the blind girls of Brajkishore Netraheen Balika Vidhyalaya, Bargain Village, Ranchi. Computer cum training centre has been constructed through CMPDIL which was inaugurated recently by CMD, CMPDIL. In addition to this, annual school fees for 12 blind girl students of Brajkishore Netraheen Balika Vidyalaya is being sponsored by CMPDIL in 2017-18 for the skill development of the girls. Construction of computer centre cum hostel on first floor is in progress.

CMPDIL is also providing support for skill development in sewing and computer operating for destitute children at Adruta Children Home, Bhubaneshwar.



**Fig :** Blind girls receiving training on computers





## E. Social welfare and Rural Development:

Infrastructural facilities have been provided by CMPDIL through

- construction of a hall for the orphans at Karuna orphanage, Ranchi,
- Construction of one no open shed with CGI sheet roofing at akhada maidan of Chalkari village, Peterwar, Bokaro, Jharkhand.
- Construction of Kalyan Mandap for villagers congreagation at Changudia, Kosala camp, Orissa
- Construction of Kalyan Mandap for villagers congreagation at Santarbandh Village near Kosala camp, Orissa
- Construction of Kalyan Mandap for villagers congreagation at Kakudia near Kosala camp, Orissa



**Fig:** Newly constructed hall for orphans, Ranchi



**Fig:** Kalyan Mandap at Changudia

## F. Sustainable Development:

Four number of Solar lights have been installed in Khutitola village, Tandwa, Chatra district, Jharkhand by RI III, Ranchi.



**Fig:** Installed solar lights in Chatra, Jharkhand

## G. Promoting Sports:

CMPDIL along with Gramin Uthan has been promoting sports among the youths from remote areas and poor families.



**Fig:** Football match going on





**Fig:** Winner team with trophy

#### H. Swachhta Action Plan:

CMPDIL celebrated Swachhta Pakhwada from 15<sup>th</sup> August 2017 to 31<sup>st</sup> August 2017 and “Swachhta hi Sewa” campaign from 15<sup>th</sup> September to 2<sup>nd</sup> October 2017 in addition to the regular cleanliness programs in which massive tree plantation including fruit bearing trees was carried out by HQ and all seven RIs. Cleanliness drive was carried out not only in the office premises of all drilling camps of the seven Regional Institutes and at headquarter but also at different schools, villages to inculcate the habit of keeping self and surroundings clean. Swachhta Oath was taken at mass level by students, villagers, officials, staff and residents. Drawing completions, door to door campaign, wall paintings, swachhta rallies were also organized.



CMPDIL RI-IV, Nagpur : Wall painting



Swachhta Rally in RI V, Bilaspur



Sapling plantation by CMD, CMPDIL in RI VII, Bhuwanesahwar



Cleanliness drive by RI III, Ranchi





## 21.0 PERFORMANCE OF MEMORANDUM OF UNDERSTANDING OF CMPDIL FOR THE YEAR 2017-18.

For every financial year CMPDIL enters into an MoU with Coal India Limited to set various parameter for physical and financial performances. The achievements were graded on a scale of 1 to 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, CMPDIL 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 was changed from 5-point scale to percentage system. For the FY 2016-17, CMPDIL was awarded with 'Excellent' rating whereas it is likely to achieve the 'Excellent' rating during FY 2017-18, as well.

## 22.0 COAL INDIA FOUNDATION DAY CELEBRATED IN CMPDIL.

CMPDIL, a Mini-Ratna Company, celebrated the Coal India Foundation day with full fervor on 1<sup>st</sup> and 7<sup>th</sup> November, 2017. The Chief Guest of this occasion, Prof. Shailendra Singh, Director, IICM in his speech emphasized on importance of happiness and stress management in life to perform in better way. Self-esteem and self-evaluation is the essential for improving one's inner strength and toughness of mind. He also told that appreciation of good things happening in one's life will bring happiness in life.

On this occasion, Shri Shekhar Saran, CMD, CMPDIL highlighted the achievements of CMPDIL during F.Y. 2016-17 and 2017-18. He stated that CMPDIL has achieved all time high drilling of 11.26 lakh meter with an impressive CAGR of about 19% since 2006-07. He further stated that out of 315

BT of coal resources as on 01.04.2017, proved coal resources were 143 BT which was mainly due to CMPDIL's efforts. He stressed upon the need of diversifying into other than coal sector and also emphasized upon taking up regional exploration of coal in addition of detailed drilling. He also stated that CMPDIL has developed the application for online generation of environmental monitoring report directly from the equipment used for analysis and for this purpose, generation of environmental monitoring report of CCL command has been made operational.

On this occasion, Shri B.N.Shukla, Director (T/CRD); Shri A. K. Chakraborty, Director (T/ES); 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.







## 22.1 Activities of Forum of Women in Public Sector (WIPS) CMPDIL in 2017-18.

- WIPS, CMPDIL Bagged Best Enterprise SCOPE Award at Regional Meet of 22 PSUs at MCL, Sambalpur on 28.10.17 - CMPDIL was awarded the "Best Enterprise Award" in the Mini Ratna category for 2<sup>nd</sup> position, specially for the exemplary work done for employees' welfare and entrusted upon them by CMPDIL CSR which they have taken up with great vigour and delivered, to reach out to the illiterate women and children of Hatma Basti under CSR funded "Project Swawalambi" that is encompassed in the WIPS objectives to improve the status of women in the vicinity of corporates. In 2016-17, CMPDIL RI-4, Nagpur has done commendable job under WIPS banner for welfare of employees and in society. The award was given away by Director (Tech/Operations), MCL in presence of CVO, MCL. WIPS members owe their thanks to CMPDIL Management for their continuous support and inspiration. Team WIPS handed over the trophy to Sri Ashim Chakraborty, Director (Tech/ES), CMPDIL in his office today on returning from Sambalpur.
- 2017: Workshops attended by Team CMPDIL on 24.08.17 at IOCL, Guwahati and 16.09.17 at ERPL, Kolkata.
- The Forum of Women in Public Sector (WIPS), Eastern Region (ER) in collaboration with WIPS cell, Guwahati Refinery, IOCL organized a day long training program on 24.08.2017 at its Learning & Development Centre. The training program titled 'The Art of Assertion & Being Goal Driven' was conducted by Ms. Urmila Baruah from M/s. Human Network.
- WIPS ER in collaboration with WIPS cell, ERPL, IOCL Kolkata organized a day long training program on "I Aspire: personal effectiveness" was conducted by Ms Tumpa Sarkar from M/s CII Centre for Excellence.
- Concluding part of CSR Initiative "Project Swawalambi," 15.12.2017
- Smt. Mita Saran, President, Kasturi Mahila Sabha, CMPDIL inaugurated M/s. Usha certified sewing and stitching session for another four (4) women of Hatma Basti, Kanke Road, Ranchi, in CMPDIL office campus itself, 5 days a week for next 3 months, 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.
- Forum continues since 18.01.14 with the following activities
- Remedial classes for underprivileged children
- Employment generation of self-help group for women



- Coordinator WIPS, CMPDIL was elected unopposed as Secretary WIPS, Eastern Region for 2016- 18 and member of CGB (Central Governing Body), WIPS APEX, officiated for two years and under her guidance received award for best newsletter of WIPS ER from Chief Minister, Assam on 12.02.18 at Guwahati.
- Pilot project on segregation of bio-degradable kitchen waste by CMPDIL, Nagpur
- An initiative was taken by WIPS, CMPDIL, Nagpur for segregation and decomposition of biodegradable household waste. For implementing, seminar was conducted by WIPS team for house-wives residing in CMPDIL premises. Need and methodology of segregation & decomposition of Bio-degradable kitchen waste were explained. For this purpose, Dustbins were distributed in all quarters so that biodegradable waste can be collected

and allowed to form a compost which was used as manure in the gardens of CMPDIL premises. The project was successful and the WIPS initiative was highly appreciated by Regional Director, CMPDIL, Nagpur.

- International Womens' Day, 2017 celebrated at CMPDIL Nagpur.
- Zumba (Workout in Dance form) session was organized for all the women employees considering the importance of physical fitness in life by Zumba professional.
- WIPS members of CMPDIL, Nagpur visited Panchavati Vridhashram, Nagpur (an Old-age home) and spent quality time with the inmates, cutting cake, distributing sweets & fruits, all members played few games and gave them some joyful moments. 2 numbers of air-coolers were donated to the old-age home as a token of love and respect.





## 23.0 DIRECTOR'S RESPONSIBILITY STATEMENT:

- 23.1 In the preparation of the annual accounts, the applicable accounting standards had been followed along with proper explanation relating to material departures.
- 23.2 The directors had selected such accounting policies and applied them consistently and made judgments and estimates that are reasonable and prudent so as to give a true and fair view of the state of affairs of the company at the end of the financial year and of the profit or loss of the company for that period.
- 23.3 The Directors had taken proper and sufficient care for the maintenance of adequate accounting records in accordance with the provisions of this Act for safeguarding the assets of the company and for preventing and detecting fraud and other irregularities.
- 23.4 The Directors had prepared the Annual Accounts on a going concern basis.
- 23.5 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 2017-18. 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 2017-18.

## ACKNOWLEDGMENT :

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 2017-18 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

Ranchi

Date: 13-07-2018

## 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 Initiatives to reduce carbon footprints**

CMPDIL has undertaken energy conservation studies in 2017-18 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 Bureau of Energy Efficiency (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 CMPDIL 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

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



## (A1) Energy Conservation initiatives taken up by CMPDIL for the year 2017-18

SI No.	JOB Description	Proposed Investment (in ₹ lakh)	Proposed Saving Potential
<b>Energy Audit and Benchmarking studies carried out by CMPDIL (HQ) in 2017-18</b>			
<b>A</b>	<b>Diesel Audit and Benchmarking</b>		
		<b>Diesel Consumption</b>	
1.	Annual benchmarking of 14 OCPs identified by BCCL	37772 KL	1218 K Litre/yr
2.	Annual benchmarking of 30 OCPs identified by CCL	59726 KL	2887 K Litre/yr
3.	Annual benchmarking of 08 OCPs identified by ECL	34115 KL	1578 K Litre/yr
4.	Annual benchmarking of 12 OCPs identified by MCL	43147 KL	1419 K Litre/yr
5.	Annual benchmarking of 10 OCPs identified by NCL	102582 KL	4916 K Litre/yr
6.	Annual benchmarking of 03 OCPs identified by SECL	46461 KL	2226 K Litre/yr
7.	Annual benchmarking of 14 OCPs identified by WCL	64698 KL	2929 K Litre/yr
8.	Detailed Diesel Audit & Benchmarking of Parej East OCP, CCL by HQ, Ranchi	23.15 (Av diesel cost ₹ 46.23/litre)	50.065 K Litre/yr
9.	Detailed Diesel Audit & Benchmarking of NT-ST OCP, Lodna Area, BCCL by RI-II, Dhanbad	106.50 (Av diesel cost ₹ 46.03/litre)	231.38 K Litre/yr
10.	Detailed Diesel Audit & Benchmarking of Khadia OCP, NCL by RI-VI, Singrauli	-	Work in progress
11.	Detailed Diesel Audit & Benchmarking of Amlohri OCP, NCL by RI-VI, Singrauli	-	Work in progress
<b>B</b>	<b>Electrical Energy Audit and Benchmarking</b>		
1.	Electrical Energy Audit and Benchmarking of Nigahi OCP, NCL by HQ, Ranchi	374.69	205.32 ₹ lakh/yr
2.	Electrical Energy Audit and Benchmarking of Dahibari OCP, BCCL by RI-II, Dhanbad	10.00	8.37 ₹ lakh/yr
3.	Electrical Energy Audit and Benchmarking of Chattarpur II UG Mine, Patharkera Area, WCL by RI-IV, Nagpur	39.49	55.52 ₹ lakh/yr
4.	Electrical Energy Audit and Benchmarking of Bhanegaon OC Mine, Nagpur Area, WCL by RI-IV, Nagpur	-	Work in progress

## (A2) Mine Illumination Report taken up by CMPDIL for the year 2017-18

SI No.	JOB Description	Proposed Investment (in lakh)
1.0	Illumination Survey of Piparwar OCP	99.25
2.0	Illumination Survey of Rohini OCP	55.63
3.0	Illumination Survey of Ashoka OCP	63.23
4.0	Illumination Survey of Dakra OCP	20.10
5.0	Illumination Survey of Purnadih OCP	64.23

## Proposed LED in Mine Illumination Report taken up by CMPDIL for the year 2017-18

SI No.	LED Fittings	Quantity
<b>Piparwar OCP</b>		
1.0	Street Light Luminaires 140 W LED lamp for mounting on Steel tubular pole.	488
2.0	Street Light Luminaires 200 W LED lamp for mounting on Steel tubular pole.	96
3.0	Street Light Luminaires 300 W LED lamp for mounting on Steel tubular pole. (Flood Light / Street light)	350
4.0	High bay / Medium bay LED luminaire of 140-150W for workshop shed	133



Rohini OCP		
1.0	Street Light Luminaires 210 W LED lamp for mounting on Steel tubular pole.	36
2.0	Street Light Luminaires 180 W LED lamp for mounting on Steel tubular pole.	130
3.0	Flood Light Luminaires 300 W LED lamp for mounting on towers.	336
4.0	High bay / Medium bay LED luminaire of 150W for workshop shed	60
Ashoka OCP		
1.0	Street Light Luminaires 120 W LED lamp for mounting on Steel tubular pole.	240
2.0	Street Light Luminaires 140 W LED lamp for mounting on Steel tubular pole.	414
3.0	Street Light Luminaires 200 W LED lamp for mounting on Steel tubular pole.	72
4.0	Street Light Luminaires 300 W LED lamp for mounting on Steel tubular pole (Flood Light / Street Light.	562
Dakra OCP		
1.0	Street Light Luminaires 120 W LED lamp for mounting on Steel tubular pole.	36
2.0	Street Light Luminaires 140 W LED lamp for mounting on Steel tubular pole.	69
3.0	Street Light Luminaires 200 W LED lamp for mounting on Steel tubular pole.	24
4.0	Street Light Luminaires 300 W LED lamp for mounting on Steel tubular pole (Flood Light / Street Light.	88
	High bay / Medium bay LED luminaire of 140-150W	24
Purnadih OCP		
1.0	Street Light Luminaires 180 W LED lamp for mounting on Steel tubular pole.	224
2.0	Flood Light Luminaires 300 W LED lamp for mounting on towers.	366

### Green Initiatives utilizing Solar Power and LED lighting

- Tender document of 12KWp rooftop solar project for NEC office building, NIT submitted, work in progress by HQ, Ranchi.
- Supply, Installation and commissioning of 80KWp Roof Top Solar Micro Power Plant at CMPDIL, RI-I Campus Asansol by RI-I, Asansol.
- Supply, Installation and Commissioning of 50 kWp roof top Solar Power Plant (SPP) on RI-IV Office Building at Nagpur, work in progress by RI-IV, Nagpur.
- Supply, Installation and Commissioning of 25 Nos of Solar LED in RI – IV, Colony, Nagpur by RI-IV, Nagpur.
- Supply, Installation and Commissioning of 5 HP Solar Submersible Pump in Murpar Camp - TCR Stage by RI-IV, Nagpur.
- Energy Efficient LED flood lights have been installed in Play Ground of CMPDIL Colony, Bilaspur by RI-V, Bilaspur.
- Replacement of the conventional light fittings with LED light fittings at CMPDIL Residential Colony, Bhubaneswar by RI-VII, Bhubaneswar.

### B. FOREIGN EXCHANGE EARNING AND OUTGO

Sl.No.	Particularsp	2017-18
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) (b) Total foreign exchange (₹ in Crore) (Travelling Expenses ₹ 0.18 Crore + Others ₹ 8.92 Crores)	Nil ₹ 9.10 Crores



**C. RESEARCH AND DEVELOPMENT AND TECHNOLOGY ABSORPTION**

- (i) 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 CMPDIL, Ranchi and Gujarat Energy Research and Management Institute (GERMI), Gujarat. Total approved cost of the project is ₹ 351.30 lakh (CMPDIL, Ranchi - ₹ 33.80 lakh and GERMI, Gujarat - ₹ 317.50 lakh).

Under the above project, the solar photovoltaic plant has been erected and commissioned on the roof tops of CMPDIL office buildings. The total installed capacity of the plant is 190 kW. 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 supply through grid interactive inverters to feed to internal grid of CMPDIL. Solar energy produced through the installed plant are being fully utilized by CPMDI as a first preference and rest of the power requirement of CMPD are being meet by conventional sources. The project efficiently and effectively reduces energy bill of CMPDIL, reduces carbon footprint, maximizes renewable energy system, improves power quality, minimizes diesel consumption and introduced autonomous operation with real time control and monitoring. The total life of the plant is about 25 years and requires 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 CMPDIL, Ranchi. Total approved cost of the project is ₹ 860.44 lakh (CMPDIL, 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, CO<sub>2</sub> scrubbing, liquefaction and liquid collection have been completed at the CIMFR, Digwadih Campus, Dhanbad. The coal from Dabor OCP, Salanpur Area, ECL with ash content of ~33% was 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 were conducted. Two Co-based catalyst have been tested successfully in the CTL pilot plant for liquefaction reaction. One catalyst i.e. CTL/Co/Cat-1 has given the maximum output of liquid hydrocarbon for syngas conversion through Fischer Tropsch (FT) route and it has a potential for further scale up studies. The CTL crude is diesel equivalent with the calorific value of 10900 kcal/kg.

- (iii) An R&D project titled **“High ash coal gasification and associated upstream and downstream processes (Coal to Chemicals, CTC)”** has been taken up by IIT-ISM, Dhanbad in association with IIT, Roorkee and CMPDIL, Ranchi. Total approved cost of the project is ₹ 2160.721 lakh [IIT-ISM, Dhanbad- ₹ 1872.007 lakh, IIT, Roorkee- ₹ 131.804 lakh and CMPDIL, Ranchi – ₹ 156.910 lakh]

The prime aim of this project is to convert high ash Indian coal to value-added chemicals through indigenous developed coal gasification technology with proper environmental considerations. Conversion of high ash coal to value-added chemicals would be attained through physico-chemical & geological characterization of coal, coal gasification (Fluidized and Entrained Bed), chemical looping gasification, hot gas filtration, gas separation/ purification, catalytic conversion of syngas to chemicals, water use minimization and waste water minimization through R3 (reduce, recycle



and reuse) concept and Pinch Technology and modelling and simulation for pilot-plant and up-scaling. Curtin University, Perth, Australia, University of Melbourne, Australia, and Monash University, Australia have been associated as collaborating agencies for in-depth study on the above new subject in the Indian context, as they have vast experience on the subject matter.

- (iv) An S&T project titled “**Electronification of Ground Water Control and Conveyor System in Mines**” has been recently taken up by NLC India Limited (NLCIL), Neyveli & National Institute of Technology Tiruchirappalli (NITT), Tamilnadu. Total approved cost of the project is ₹ 179.53 lakh [ NLCIL- ₹ 113.54 lakh and NITT: ₹ 65.99 lakh]

The prime aim of the above project is to develop indigenously low cost high performance sensors to monitor the temperature, vibration, voltage, current etc. and to provide programmable logic control (PLC) based solution for conveyor system at NCIL through RF/GPRS based wireless technology.

#### D. TECHNOLOGY ABSORPTION:

The R&D in coal sector is mainly for improvement of efficiency parameters in mining operations including mine safety, coal beneficiation/utilization, protection of mine environment and ecology and development of clean coal technology etc. Some completed research projects have produced tangible impact on coal industry and also strengthened the mine planning, design for both operating mines and mining projects expected to come in future.

Following two research projects have been completed during the year 2017-18. The objectives of these completed projects are given as:

##### (i) Development of an on-line coal washability analyser

This project has been executed by CIMFR, Dhanbad in association with Ardee Hi-Tech Pvt. Ltd., Visakhapatnam with an aim to develop an X-ray based, online coal washability analyser and demonstrate the capabilities of the analyser by comparing efficiency data from traditional float-sink tests with efficiency data generated by the washability analyser.

Total approved cost of the project is ₹ 849.00 lakh.

##### (ii) Sustainable livelihood activities on reclaimed open cast coal mines: a technology enabled integrated approach in Indian coal sector

This project is executed by TERI / TERI University, New Delhi, CMPDIL, Ranchi and BCCL, Dhanbad. Under this project, permanent green cover has been developed on overburden dumps / backfilled mined land areas for eco- friendly mine reclamation and utilization of reclaimed land. This would in turn develop entrepreneurship and vocational skills among local community for empowerment in and around the project affected areas. It will also promote local economic growth by driving income generation activities.

Total approved cost of the project is ₹ 371.69 lakh.

##### (iii) Demonstration of Coal Dry Beneficiation System using Radiometric Technique.

This project is under implementation by CMPDIL, 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.

**(iv) 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 was executed by CIMFR, Dhanbad in association with ECL. The prime objective of the project was to design a feasible and optimal method for safe liquidation of thick coal seams and to validate the same at the selected mine site at Khottadih Colliery, Raniganj Coalfield, ECL.

- ♦ While designing and showcasing demonstrative trial, the two important aspects i.e., ground control and fire propensity aspects were considered tandemly in a way to increase the number of coal pillars per panel. In order to address the issues of coal extraction from ground control as well as spontaneous heating points of view, this scientific study was conducted to delineate the factors/parameters influencing and ensuing such scenarios in Raniganj coalfield as a whole and Khottadih Colliery in particular.
- ♦ Because of better rib design and sequence of coal extraction, the stress change and the deformation occurrences were found to be much below the threshold safe limit for better operational safety for design and implementation of induced goaf blasting.
- ♦ This comprehensive research project is thus able to extract more numbers of pillars per panel even in a seam (here R-VI) of very low incubation period, using the 'tandem' approach right from the start of the panel extraction.
- ♦ Fire ladder has been developed for the seam which aids in early detection of fire. Identification of intrinsic parameters (Moisture, Volatile Matter, Ash Content, Fixed Carbon) and external factors (Goaf Frictional Ignition & Ventilation) influencing spontaneous heating/fire including liberation of oxidative heat and factors favouring heat accumulation in the closed system of sectionalized panels have been assessed. Based on the understanding and analysis of these factors, along with optimization of pressure differential across the panel, pro-active environmental monitoring was gainfully undertaken at Khottadih Colliery, ECL.

Total approved cost of the project is ₹ 41.066 lakh



**(v) 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 exist 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) Sonepur 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.

**(vi) 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, Proto type of Mobile coal sampler has been developed. Field trial has been carried out in the mines of SCCL with newly developed truck mounted coal sampler machine.

Total approved cost of the project is ₹ 167.60 lakh.

**(vii) Optimization of various parameters of lab scale Coal Winnowing System (Phase-II)**

The project was implemented by CIMFR, Nagpur in association with CMPDIL, 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. Analysis of the results obtained clearly indicate that the equipment and process developed under this project is efficient to reduce the overall ash percentage of feed coal up to 37%.

Total approved cost of the project is ₹ 18.55 lakh.

**(viii) 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 by deploying the SAGES in the depillaring panel of RK-7 Mine of SCCL.

Total approved cost of the project is ₹ 73.27 lakh.

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

This project is under implementation by CMPDIL, Ranchi. The aim of this project is 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.

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

This project is under implementation by IIT-ISM, Dhanbad & CMPDIL, Ranchi. IIT-ISM, Dhanbad has technical participation with University of Queensland, Brisbane, Australia on this 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 leading to increased coal seam recovery. 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 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.

**(xi) 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 CMPDIL, 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, 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 CO<sub>2</sub> / NO<sub>x</sub> 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.

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

This project is under implementation by IIT, Bombay in association with CMPDIL, 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 are 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.

**(xiii) 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 in association S&R Division, CIL (HQ), Kolkata and SIMTARS, Australia 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.

**(xiv) 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 CMPDIL (HQ), Ranchi and National Remote Sensing Centre (NRSC), ISRO, Hyderabad.

The prime objective of the above project is to develop a methodology for air quantity monitoring and modelling by analysis of satellite data at regional level and collection of ground based observations with emphasis on dust (PM10 and PM2.5), NOx, SOx in coal fields areas. The proposed study will help in taking 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, NOx, SOx 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.

**(xv) Development of Virtual Reality Mine Simulator (VRMS) for improving safety and productivity in coal mines.**

The above research project has been taken up by IIT-ISM, Dhanbad in association with CMPDIL, Ranchi, BCCL, Dhanbad, NCL, Singrauli and SIMTARS, Australia for



development of an immersive 360-degree Virtual Reality Mine Simulator (VRMS) to simulate workplace environment for mines safety training under various scenarios and development of safety training strategies using various training aids at IIT-ISM, Dhanbad in collaboration with SIMTARS, Australia.

Under the proposed VRMS, coal mine safety and operation modules will be developed for one opencast project [i.e. Nigahi Project, NCL] and one underground coal mine [i.e. Moonidih Mine, BCCL] of CIL. All the necessary data from the mine environment including map data, geo-technical data, visual data, etc. will be collected and provided into the system to create the prototype mine environment in Virtual Reality mode. After the completion of project, necessary training programmes will be run by IIT-ISM, Dhanbad for CIL to build the capacity in mining technologies and mines safety with active participation from subsidiaries of CIL on mutually agreed cost basis.

Total approved cost of the project is ₹ 1410.10 lakh.

**(xvi) Design and Stability of Pillars/Arrays of Pillars for Different Mining Methods in Coal Mine Workings**

The above project is being implemented by CIMFR, Dhanbad, IIT-ISM, Dhanbad, CMPDIL, Ranchi, SECL, Bilaspur, BCCL, Dhanbad and SCCL, Kothagudem

Under this project, design and stability of underground coal pillars and arrays of pillars in coal mine workings will be done for

- (a) Estimation of load/stress on pillars for shallow as well as deeper horizons
- (b) Estimation of pillar strength for deeper horizons and finally
- (c) Development of guidelines to link (a) and (b) by proper safety factor of pillars depending on mining methods and purposes. Project also aims to establish mode of failure (progressive or instantaneous nature) vis-à-vis squat pillar design and risk assessment vis-à-vis parametric analysis with respect to pillar stability.

Total approved cost of the project is ₹ 562.29 lakh.

**(xvii) Hybrid PRESRIX process for simultaneous remediation of acid mine drainage and recovery of individual metal Sulphides**

The above project is being implemented by IIT, Roorkee in association with NEC, Margherita and SCCL, Kothagudem

The project aims to develop an Acid Mine Drainage (AMD) treatment process by neutralization of the acidity in the polluted water by generating enough alkalinity and removal of heavy metals and reduction of total dissolved solid content of the AMD. Also, efforts will be made for recovering heavy metal ions sequentially from the AMD having commercial values.

Total approved cost of the project is ₹ 74.45 lakh.

**(xviii) Reclamation of coal mined land of North Eastern Coalfields, Assam through soil amendment and revegetation with native plant species using integrated biological approach**

The above project is being implemented by RFRI, Jorhat in association with NEC, Margherita





The project aims to develop rehabilitate degraded post-mining land by soil amendments and revegetation with native plant species using integrated biological approach.

Total approved cost of the project is ₹ 83.18 lakh.

**(xix) Optical fiber based solar illumination of pit bottom and underground mine roadways and working face.**

The above research project has been taken up by IIT, Kharagpur in association with ECL, Sanctoria.

The above study will find out the applicability of the optical fiber cable for multipurpose (illumination & sensing and communication) applications and development of a business model for implementation of optical fiber based illumination in mine roadways and working faces. It will also evaluate the replacement costs of the existing system and analyse the payback period.

Total approved cost of the project is ₹ 155.52 lakh.

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

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

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 CMPDIL which may be replicated at respective Regional Institutes of CMPDIL associated with CIL subsidiaries.

Under this project, US\$ 540,000 (US Dollar Five lakh forty thousand only) has been disbursed to Commonwealth Scientific and Industrial Research Organization (CSIRO), Australia.

Total approved cost of the project is ₹ 2392.79 lakh.

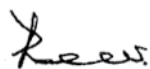
**Addendum - II**

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

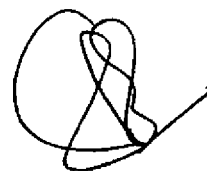
**CEO AND CFO CERTIFICATION**

We, Shekhar Saran, Chairman-cum-Managing Director and N.N. Thakur; 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, 2018 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 ending 31<sup>st</sup> March 2018 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 financial year under reference;
  - ii. There has not been any significant changes in accounting policies during the year ended 31<sup>st</sup> March 2018 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.



(N.N. Thakur)  
General Manager (F)



(Shekhar Saran)  
Chairman-cum-Managing Director



## Addendum - III

**FORM NO. MGT 9**  
**EXTRACT OF ANNUAL RETURN**  
**As on financial year ended on 31.03.2018**

Pursuant to Section 92 (3) *of the Companies Act, 2013* and rule 12(1) of the Company (Management & 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 MINI RATNA (Category-II)
- 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)

S. 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	25.4
2	GEOLOGY & DRILLING	NOT APPLICABLE	65.5

**III. PARTICULARS OF HOLDING, SUBSIDIARY AND ASSOCIATE COMPANIES**

SN	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-2017]				No. of Shares held at the end of the year [As on 31-March-2018]				% Change during the year
	Demat	Physical	Total	% of Total Shares	Demat	Physical	Total	% of Total Shares	
<b>A. Promoters</b>									
(1) <b>Indian</b>									
a) Individual/ HUF	-	-	-	-	-	-	-	-	-
b) Central Govt			-	-			-	-	-
c) State Govt(s)			-	-			-	-	-
d) Bodies Corp.	Nil	190,400	190,400	100%	Nil	380,800	380,800	100%	-
e) Banks / FI			-	-			-	-	-
f) Any other			-	-			-	-	-
<b>Sub Total (A) (1)</b>	<b>Nil</b>	<b>190,400</b>	<b>190,400</b>	<b>100.00%</b>	<b>Nil</b>	<b>380,800</b>	<b>380,800</b>	<b>100.00%</b>	<b>-</b>
(2) <b>Foreign</b>									
a) NRI Individuals			-	-			-	-	-
b) Other Individuals			-	-			-	-	-
c) Bodies Corp.			-	-			-	-	-
d) Any other			-	-			-	-	-
<b>Sub Total (A) (2)</b>	-	-	-	-	-	-	-	-	-
<b>TOTAL (A)</b>	<b>Nil</b>	<b>190,400</b>	<b>190,400</b>	<b>100.00%</b>	<b>Nil</b>	<b>380,800</b>	<b>380,800</b>	<b>100.00%</b>	<b>-</b>
<b>B. Public Shareholding</b>									
<b>1. Institutions</b>									
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)			-	-			-	-	-
<b>Sub-total (B)(1):-</b>	-	-	-	-	-	-	-	-	-
<b>2. Non-Institutions</b>									
a) Bodies Corp.									
i) Indian			-	-			-	-	-
ii) Overseas			-	-			-	-	-
b) Individuals									
i) Individual shareholders holding nominal share capital upto ₹ 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			-	-			-	-	-
<b>Sub-total (B)(2):-</b>	-	-	-	-	-	-	-	-	-
<b>Total Public (B)</b>	-	-	-	-	-	-	-	-	-
<b>C. Shares held by Custodian for GDRs &amp; ADRs</b>			-	-				-	-
<b>Grand Total (A+B+C)</b>	<b>Nil</b>	<b>190,400</b>	<b>190,400</b>	<b>100.00%</b>	<b>Nil</b>	<b>380,800</b>	<b>380,800</b>	<b>100.00%</b>	<b>100.00%</b>

## (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 total Shares of the company	% of Shares Pledged/ encumbered to total shares	No. of Shares	% of total Shares of the company	% of Shares Pledged / encumbered to total shares	
1	COAL INDIA LIMITED	190,400	100.00%	0	380,800	100.00%	0	100.00%

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

SN	Particulars	No. of Shares	% of total Shares of the Company
	At the beginning of the year	190,400	100.00%
	Changes during the year	190,400	100.00%
	At the end of the year	380,800	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	% of total shares of the company
	At the beginning of the year	-	-
	Changes during the year	-	-
	At the end of the year	-	-

## (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		Date wise increase/ decrease during the year	Shareholding at the end of the year	
		No. of Shares	% of total shares of the company		No. of Shares	% of total shares of the company
	-	-	-	-	-	-
<b>TOTAL</b>		-	-		-	-

**V. INDEBTEDNESS**

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

(Amt. ₹/Lacs)

Particulars	Secured Loans excluding deposits	Unsecured Loans	Deposits	Total Indebtedness
<b>Indebtedness at the beginning of the financial year</b>				
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
<b>Total (i+ii+iii)</b>	<b>NIL</b>	<b>NIL</b>	<b>NIL</b>	<b>NIL</b>
<b>Change in Indebtedness during the financial year</b>				
* Addition	NIL	NIL	NIL	NIL
* Reduction	NIL	NIL	NIL	NIL
Net Change	NIL	NIL	NIL	NIL
<b>Indebtedness at the end of the financial year</b>				
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
<b>Total (i+ii+iii)</b>	<b>NIL</b>	<b>NIL</b>	<b>NIL</b>	<b>NIL</b>

**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/WT/ Manager					Total Amount
	Name	Shri Shekhar Saran	Shri V.K. Sinha	Shri B.N. Shukla	Shri Binay Dayal	Shri A.K. Chakraborty	(in ₹)
	Gross salary						
	(a) Salary as per provisions contained in section 17(1) of the Income-tax Act, 1961	4,487,149.20	2,797,869.80	2,562,160.20	1,685,795.00	3,503,934.00	15,036,908.20
1	(b) Value of perquisites u/s 17(2) Income-tax Act, 1961	568,881.00	263,184.00	266,538.00	290,674.00	464,986.00	1,854,263.00
	(c) Profits in lieu of salary under section 17(3) Income-tax Act, 1961	-	-	-	-	-	-
2	Stock Option	-	-	-	-	-	-
3	Sweat Equity	-	-	-	-	-	-
	Commission						-
4	- as % of profit	-	-	-	-	-	-
	- others, specify (CMPF Emp Share)	307,932.00	120,927.00	141,893.00	137,934.00	287,750.00	996,436.00
5	Others, please specify	-	-	-	-	-	-
	<b>Total (A)</b>	<b>5,363,962.20</b>	<b>3,181,980.80</b>	<b>2,970,591.20</b>	<b>2,114,403.00</b>	<b>4,256,670.00</b>	<b>17,887,607.2</b>





## B. Remuneration to other Directors

SN.	Particulars of Remuneration	Name of Directors		Total Amount
		Shri Rajender Parshad	Dr. Debasish Gupta	(in ₹)
	<b>Independent Directors</b>			
1	Fee for attending Board Meetings and committee meetings	540,000.00	560,000.00	1,100,000.00
	Commission			-
	Others, please specify			-
	Total (1)	540,000.00	560,000.00	1,100,000.00
2	Other Non-Executive Directors			-
	Fee for attending Board and committee meetings			-
	Commission			-
	Others, please specify			-
	Total (2)			-
	<b>Total (B)=(1+2)</b>	<b>540,000.00</b>	<b>560,000.00</b>	<b>1,100,000.00</b>
	<b>Total Managerial Remuneration</b>			<b>20,087,607.20</b>

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

SN.	Particulars of Remuneration	Name of Key Managerial Personnel		Total Amount
	Name	Shri Nag Nath Thakur	Shri Abhishek Mundhra	(in ₹)
	Designation	CFO	CS	
1	Gross salary			
	(a) Salary as per provisions contained in section 17(1) of the Income-tax Act, 1961	3,525,571.00	1,232,857.10	4,758,428.10
	(b) Value of perquisites u/s 17(2) Income-tax Act, 1961	484,998.00	233,307.00	718,305.00
	(c) Profits in lieu of salary under section 17(3) Income- tax Act, 1961			-
2	Stock Option			-
3	Sweat Equity			-
4	Commission			
	- as % of profit			-
	- others, specify (CMPF Emp Share)	271,217.00	115,263.00	386,480.00
5	Others, please specify			-
	<b>Total</b>	<b>4,281,786.00</b>	<b>1,581,427.10</b>	<b>5,863,213.10</b>

## VII. PENALTIES / PUNISHMENT/ COMPOUNDING OF OFFENCES:

Type	Section of the Companies Act	Brief Description	Details of Penalty / Punishment/ Compounding fees imposed	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



**Surabhi Jain, ACS**

Company Secretary

M. No.: A45022

Email ID: [sj@way2corporates.in](mailto:sj@way2corporates.in)

**CORPORATE GOVERNANCE COMPLIANCE CERTIFICATE**

CIN of the Company: U14292JH1975GOI001223

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

Paid up Capital: Rs. 38,08,00,000 (Rupees Thirty Eight Crores Eight 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 **31<sup>st</sup> March, 2018**, 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 issued for ensuring good governance practices, in line with the provisions of the

Flat No. 401, Paras Apartment, Court Road, Ranchi - 834001







**Surabhi Jain, ACS**  
Company Secretary

M. No.: A45022  
Email ID: [sj@way2corporates.in](mailto:sj@way2corporates.in)

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.

Place: **Ranchi**  
Date: **14<sup>th</sup> May, 2018**

For **Surabhi Jain**



**Surabhi Jain**  
Company Secretary  
ACS No.: 45022



## Addend

K.C. TAK & Co.  
CHARTERED ACCOUNTANTS



### INDEPENDENT AUDITOR'S REPORT

To the members of Central Mine Planning & Design Institute Limited

#### Report on the Financial Statements

We have audited the accompanying financial statement of **Central Mine Planning & Design Institute Limited** ('the Company'), which comprise the Balance Sheet as at 31st March 2018, 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.

#### Management's Responsibility for the Financial Statements

The 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 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 the Companies (Indian Accounting Standards) Rules, 2015, as amended, and other accounting principles generally accepted in India.

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 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 financial statements based on our audit.

In conducting the 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 and the Order issued under section 143(11) of the Act.

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 financial statements are free from material misstatement.

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**K.C. TAK & Co.**  
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An audit involves performing procedures to obtain audit evidence about the amounts and the disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal financial control relevant to the Company's preparation of the 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 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 financial statements.

**Opinion**

In our opinion and to the best of our information and according to the explanations given to us, the aforesaid 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 , of financial position of the Company as at 31st March 2018, 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. 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.


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- d. In our opinion, the aforesaid financial statements comply with the Accounting Standards specified under section 133 of the Act;
- e. On the basis of the written representations received from the directors as on 31<sup>st</sup> March 2018 taken on record by the Board of Directors, none of the directors is disqualified as on 31st March, 2018 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". Our report expresses an unmodified opinion on the adequacy and operating effectiveness of the Company's internal financial controls over financial reporting.
- 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 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.
  - iii. As per the written representation received from the management, there were no amounts which were required to be transferred to the Investor Education and Protection Fund by the Company.

*For K C TAK & CO.*  
*Chartered Accountants*  
Firm's Registration No.: 000216C

  
**CA Anil Jain**  
Partner  
Membership Number: 079005  
Ranchi  
25/05/2018



**K.C. TAK & Co.**  
CHARTERED ACCOUNTANTS

**Annexure – 1 to the Independent Auditors' Report**

The Annexure referred to in Independent Auditors' Report of the **Central Mine Planning & Design Institute Limited** on the financial statements for the year ended 31 March 2018;

**Annexure – A**

**Revised Directions under section 143 (5) of the Companies Act, 2013 applicable for the financial year 2017-18**

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?

**It was observed that the company has clear title/lease deeds in respect of Freehold/Leasehold lands as per the details and records provided to us.**

2. Whether there are any cases of waiver/write off of debts/loans/interest etc. If yes, the reasons there for and amount involved.

**As per information and explanations given to us and as examined by us, there is no cases 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 other authorities.

**As per the information and explanations received from the management, there are no inventories lying with the third parties. As explained to us, no assets have been received as gifts/grants from government or other authorities. The company is maintaining separate records properly in respect of funds received from time to time, from Ministry/Govt. or other authorities for carrying out the specific project/works.**

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**Annexure – B**

**Additional 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 financial year 2017-2018**

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 to CMPDIL.**

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 and as represented to us, there is no such case of Split & merger/ re-structure of an area during the year or any period, hence not applicable.**

3. Whether separate Escrow Accounts for each mine has been maintained in CIL and its subsidiary companies. Also examine the utilization of the fund of the account.

**Not Applicable to CMPDIL.**

4. Whether the impact of penalty for illegal mining as imposed by the Hon'ble Supreme Court has been duly considered and accounted for?

**Not Applicable to CMPDIL.**

*For K C TAK & CO.*  
*Chartered Accountants*  
Firm's Registration No.: 000216C

  
**CA Anil Jain**  
Partner  
Membership Number: 079005  
Ranchi  
25/05/2018



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**K.C. TAK & Co.**  
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**Annexure - 2 to the Independent Auditors' Report** (Referred to in paragraph 2 under 'Report on Other Legal and Regulatory requirements' of our report of even date on the accounts of, **Central Mine Planning & Design Institute Limited** for the year ended on 31<sup>st</sup> March 2018, 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 of fixed assets.
- (b) According to the information and explanations given to us, physical verification of fixed assets of the Company is being carried out in a phased manner. During the year, the fixed assets of the Company have been physically verified by the management. As informed to us, no material discrepancies have been noticed during the course of such verification.
- (c) According to the information and explanations given to us, and the details and the records as provided to us and based on the examination of the conveyance deeds provided to us, we report that, the title deeds, comprising all the immovable properties of land and buildings which are freehold, are held in the name of the Company as at the 31<sup>st</sup> March 2018.
- (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 ended 31<sup>st</sup> March 2018. 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) The Company has not accepted any deposits from the public.
- (vi) As per information and explanation 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) (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

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## K.C. TAK & Co. CHARTERED ACCOUNTANTS

statutory dues have been 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 2018 for a period of more than six months from the date they became payable.

b) According to the information and explanations given to us, there are no material dues of duty of customs which have not been deposited with the appropriate authorities on account of any dispute. **However, the following dues of income tax, sales tax, duty of excise, service tax and value added tax have not been deposited by the Company on account of disputes.**

(As per "Annexure 2A")

- (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) According to the information and explanations given to us and as represented by management, no material fraud by the Company or on the Company by its officers or employees has been noticed or reported during the financial 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 of 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 and based on our examination of the records of the Company, transactions with the related parties are in compliance with sections 177 and 188 of the Act where applicable and details of such transactions have been disclosed in the financial statements as required by the applicable accounting standards.
- (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.


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(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  
Ranchi  
25/05/2018



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**K.C. TAK & Co.**  
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## **ANNEXURE "3" TO THE INDEPENDENT AUDITOR'S REPORT**

(Referred to in paragraph 3(f) under 'Report on Other Legal and Regulatory Requirements' section of our report to the Central Statutory Auditor of the 'Central Mine Planning & Design Institute Limited' on the financial statements for the year ended 31 March 2018,)

### **Report on the Internal Financial Controls Over Financial Reporting under Clause (i) of Subsection 3 of Section 143 of the Companies Act, 2013 ("the Act")**

We have audited the internal financial controls over financial reporting of 'Central Mine Planning & Design Institute Limited' ("the Company") as of 31 March 2018 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.

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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 authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized 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 31st March, 2018, 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  
Ranchi  
25/05/2018



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**"Annexure 2A"** to the Independent Auditors' Report (referred to in paragraph Report on Other Legal and Regulatory requirement of our report of even date on the accounts of **Central Mine Planning & Design Institute Limited**, for the year ended on 31st March 2018.

List of pending cases of Direct tax as on 31.03-2018 is as under: -

Cases pending before CIT(A)

Sl. No.	Assessment Year	Amount in dispute / demand	Remark
1	2013-2014	53,350	Regarding disallowances of CSR Expenses.
2	2014-2015	17,960	Regarding disallowances of CSR Expenses.

71,310

Cases Pending before ITAT

Sl. No.	Assessment Year	Total Revenue/ Expenses	Amount in dispute / Demand	Remark
1	2008-2009	122,470,022	41,627,560	Amount of addition made by department Regarding disallowances of prior period expenses and employees contribution towards Coal Provident Fund & miscellaneous Provisions Act.
2	2009-2010	338,729,256	115,134,074	Amount of addition made by department Regarding disallowances of prior period expenses and employees contribution towards Coal Provident Fund & miscellaneous Provisions Act.
3	2010-2011	38,040,000	12,929,796	Amount of addition made by department Regarding disallowances of prior period expenses and employees contribution towards Coal Provident Fund & miscellaneous Provisions Act.
4	2011-2012	934,349	310,367	Amount of addition made by department Regarding disallowance of prior period expenses.
5	2012-2013	21,583,891	7,002,893	Amount of addition made by department Regarding disallowance of CSR, Medical Expenses and profit from sale of asset.

521,757,518      177,004,691

List of pending cases of Indirect tax as on 31.03.2018 is as under-

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Sl. No.	RI's	Reference	Year of Appeal	Adjudicating Authority	Matter in Brief	Status
1.	III	V(65)12/CMP DI/ADJ/RAN-I/2017/11805 dtd: 30/11/17	2017	Addl. Commissioner order against SCN	Addl. Commissioner order against SCN, Rs.3,94,353/- as interest & Rs. 2,000 and Rs.7,65,959/- as penalty for PVC bills issued to CCL.	Appeal filed on Date for Personal hearing with Commissioner Appeal is awaited as on date.
2.	III	V(65)81/CMP DI/ADJ/RAN-I/2016/550 dtd: 23/03/17	2017	Dy. Commissioner order against SCN	Dy. Commissioner order against SCN, Rs.4,82,195/- as interest & Rs.2,000 and Rs.16,98,824/- as penalty for PVC bills issued to CCL.	Personal hearing completed on 6/3/18. Commissioner appeals has set aside the order of Dy. Commissioner Ref: Vide-ST-100/DN13/2017-18/781-785 dtd: 26/3/2018, as communicated to CMPDI RI-3 on 2/4/2018.
3.	VII	C.No.VII(10) 41/Adjn/BBSR Stax Divn/2016/274	2017	High Court	Stay has been obtained from High Court amounting Rs. 13,69,142	C.No.VII(10)41/ Adjn/BBSR Stax Divn/2016/274 dated 17.02.2017, notice had been sent to bank u/s 87 of Finance Act, 1994 for recovery of Interest amounting Rs. 13,69,142.
	VII	AC/GST & CX DIVIN/B-II/03/2018	2018	Commissioner (Appeals)	Order in Original AC/GST & CX DIVIN/B-II/03/2018 dated 19/01/2018 had been issued for payment of penalty of Rs.1, 37,339/-.	Order In Original AC/GST & CX DIVIN/B-II/03/2018 dated 19/01/2018 had been issued for payment of penalty of Rs.1, 37,339/-.

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**K.C. TAK & Co.**  
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4.	HQ	W.P.(T)No. 2534 of 2014	2014	Jharkhand High Court	Appeal filed by CMPDIL HQ for quashing/ set aside demand for arrear of Service Tax interest and penalty amounting Rs. 11,56,35,000/- (revised).	Already paid amounting Rs. 8,72,86,713/- against original demand of Rs. 5,05,52,750/-
	HQ	166/2004	2004	Jharkhand High Court	Appeal filed by Department for demand of service tax for the period relating to sep 1997-mar 1998 amounting Rs. 3,81,37,338/-	Already deposited under protest amounting Rs. 3,41,13,068/-
	HQ	02/CGST & C.EX./Assistant Commr. /2017-18	2017	Commissioner Appeals	Appeal filed before Higher Forum i.e. Commissioner Appeals for amounting Rs. 2,65,473/-	Order-in-original no. 02/CGST & C.EX./Assistant Commr. /2017-18 dated 27.12.2017 from Asst. Commissioner, CGST & Central Excise, Ranchi South Division for imposing penalty for evasion of Service tax on Liquidity damages recovered from client

1, NEW ANANTPUR, DORANDA, RANCHI-2



## Addendum - VI



**Surabhi Jain, ACS**  
Company Secretary

M. No.: A45022

Email ID: [sj@way2corporates.in](mailto:sj@way2corporates.in)

**SECRETARIAL AUDIT REPORT**

*For The Financial Year Ended March  
31<sup>st</sup>, 2018*

*[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]*

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

We have conducted the Secretarial Audit of the compliance of applicable statutory provisions and the adherence to good corporate practices by M/s M/s Central Mine Planning & Design Institute Limited Gondwana Place, Kanke Road, Ranchi, Jharkhand – 834008 (hereinafter called the “Company”). Secretarial Audit was conducted in a manner that provided us a reasonable basis for evaluating the corporate conducts/statutory compliances and expressing our opinion thereon.

Based on our verification of the Company’s books, papers minute books, forms and return filed and other records maintained by the Company and also the information provided by

the Company, its officers, agents and authorized representatives during the audit period from

April, 2017 to March, 2018, complied with the statutory provisions listed

**Surabhi Jain**

Company Secretary

Flat No. 401, Paras Apartment, Court Road,  
Ranchi, Jharkhand - 834001

Ph:- 7209344224

E-Mail:- [sj@way2corporates.in](mailto:sj@way2corporates.in)

PAN:-

hereunder 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 hereinafter

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 31<sup>st</sup> March, 2018 according to the provisions of:

1. The Companies Act, 2013 and the Rules made there under.

Flat No. 401, Paras Apartment, Court Road, Ranchi – 834001







**Surabhi Jain, ACS**

Company Secretary

M. No.: A45022

Email ID: [sj@way2corporates.in](mailto:sj@way2corporates.in)

2. Secretarial Standards issued by the Institute of Company Secretaries of India.
  3. Contract Labour (Regulation and Abolition) Act, 1970.
  4. The Building and other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996 and all other applicable Labour Laws
  5. 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.
  6. The Environment (Protection) Act, 1986 and other environmental laws and rules framed thereunder.
  7. Other Acts and Laws as applicable on the Company.
- 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.
3. Composition of the Board of Directors with an adequate balance of Executive and Non-Executive 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. Convening and holding of the Meetings of Board of Directors and Committees thereof.
7. Convening and holding of 42<sup>nd</sup> Annual General Meeting of the Members on Monday, 23<sup>rd</sup> June, 2017.

Flat No. 401, Paras Apartment, Court Road, Ranchi – 834001





**Surabhi Jain, ACS**  
Company Secretary

M. No.: A45022

Email ID: [sj@way2corporates.in](mailto:sj@way2corporates.in)

8. 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.
9. Payment of Remuneration to Directors.
10. Appointment and Remuneration of Statutory Auditors, Internal Auditors and Cost Auditors.
11. Composition and terms of reference of the Audit Committee and Nomination & Remuneration Committee.
12. Service of Documents by the Company on its Members and Auditors.
13. Undertaking of all the compliances with regard to filling of the various Statutory Returns, maintenance of Registers of Contractors, etc as prescribed under Contract Labour (Regulation and Abolition) Act, 1970, The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996 and all other applicable Labour Laws.

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 was no prosecution initiated and no fines or penalties were imposed on the Company, its Directors and Officers, during the period under review.
4. No compliances of any nature are pending with the company based on the compliance mechanism established by the company and on the basis of the Compliance Certificate(s) & other certificate issued by the Company Secretary and Compliance Officer of the Company.

#### MANAGEMENT'S RESPONSIBILITY

1. Maintenance of Secretarial Records is the responsibility of the management of the Company. Our responsibility is to express an opinion on these secretarial records based on our Audit.

#### II. We further report that

Flat No. 401, Paras Apartment, Court Road, Ranchi - 834001







**Surabhi Jain, ACS**  
Company Secretary

M. No.: A45022

Email ID: [si@way2corporates.in](mailto:si@way2corporates.in)

2. 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.
3. We have examined the financial records in line of the compliances of the Companies Act.
4. Wherever required, we have obtained the Management Representation/Certification about the compliance of laws, rules and regulations, happening of events, etc.
5. 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.
6. 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.

1. We have not verified the correctness and appropriateness of financial records and books of account of the Company.



For **Surabhi Jain**

**Surabhi Jain**  
Company Secretary  
ACS No.: 45022  
C.P. No.: 17016

Place: **Ranchi**  
Date: **14<sup>th</sup> May, 2018**

Disclaimer:-

Flat No. 401, Paras Apartment, Court Road, Ranchi – 834001





## 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



सत्यमेव जयते

No. CAR/2017/3. Finance/Accounts/COMP/18-19/136

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... 14.06.2018...

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 2018.**

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 2018.

The receipt of this letter may please be acknowledged.

Yours faithfully,

Encl: As stated.

Place: Kolkata

Dated: 14 June 2018

(Reena Saha)

Principal Director of Commercial Audit  
& Ex-Officio Member, Audit Board-II  
Kolkata

दु० भा० / Phone : 91-33-22875380/7165/2360/8838, 22810043/5654

ईमेल / E-mail : mabkolkata2@cag.gov.in

फैक्स / Fax : 91-33-2280-0062

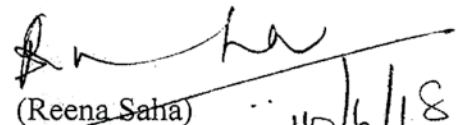
तार : "कोयलेखा" / Telegram : "COLADIT"

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 2018.

The preparation of financial statements of Central Mine Planning & Design Institute Limited for the year ended 31 March 2018 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 25 May 2018.

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 2018. 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: 14 June 2018



**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
<b>1.</b>	<b>Details of contracts or arrangement or transactions not at arm's length basis</b>	<b>NIL</b>
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	
<b>2.</b>	<b>Details of material contracts or arrangement or transactions at arm's length basis</b>	<b>As per Annexure -A</b>
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	

## Annexure - A

**Related Party Transactions within Group as on 31.03.2018**

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	119.26	Sales
Bharat Coking Coal Limited	Under Same Management	36.05	Sales
Central Coalfields Limited	Under Same Management	106.45	Sales
Western Coalfields Limited	Under Same Management	146.61	Sales
Northern Coalfields Limited	Under Same Management	89.01	Sales
South Eastern Coalfields Limited	Under Same Management	390.48	Sales
Mahanadi Coalfields Limited	Under Same Management	72.95	Sales
North Eastern Coalfields (NEC)	Under Same Management	3.07	Sales
Coal India Limited (CIL)	100% Holding Company	7.14	Sales
<b>Grand Total</b>		<b>971.02</b>	



## Addendum - IX

**ANNEXURE FORMING PART OF DIRECTORS' REPORT FOR THE YEAR ENDED 31.03.2018-  
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 (₹)	Nature of employment Permanent / temporary	Qualification	Experience (yrs.)	Date of commencement	Age on 31 <sup>st</sup> Mar 2018 (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 ₹ 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 ₹ 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 - X****Annexure to CSR Report****Expenditure incurred in CSR 2017-18**

The CSR budget as per the 2 % rule of Companies Act, 2013 (i.e. 2% of the net average profits of the last three years) for the financial year 2017-18 was Rs. 98.27 lakhs. Looking at the widespread network of CMPDIL; the CSR budget for FY 2017-18 was increased to Rs. 150 lakhs by the Board and the actual expenditure incurred on CSR in 2017-18 was Rs. 137.40 lakhs.

**CSR Budget and Expenditure for 2017-18**

UNIT	Budget (Rs. in Lakhs)	Actual Expenditure (Rs. in Lakhs)
HQ, Ranchi	51.01	50.04
RI-I, Asansol	11.00	10.99
RI-II, Dhanbad	4.99	4.91
RI-III, Ranchi	10.00	8.83
RI-IV, Nagpur	21.00	18.95
RI-V, Bilaspur	21.00	14.99
RI-VI, Singrauli	8.00	7.97
RI-VII, Bhubaneswar	23.00	20.72
<b>TOTAL</b>	<b>150.00</b>	<b>137.40</b>

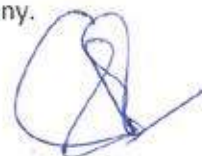
**Thematic Area Wise Expenditure On CSR**

Sl. No.	Areas	Actual Expenditure (Rs. in lakhs)
1	Education	71.24
2	Infrastructure	19.12
3	Water Supply	2.30
4	Health	4.00
5	Women Empowerment/ Skill Dev.	15.73
6	Social Development	11.26
7	Sustainability	1.35
8	Others including Swachta Action Plan	12.41
	<b>Total</b>	<b>137.40</b>

The execution of activities under CSR is in compliance with CSR objectives and is in line with Schedule VII, Section 135 of the Companies Act 2013 and the policy of the Company.



Director (T/ES)/ Member, CSR Committee



Chairman-cum-Managing Director





# ANNUAL ACCOUNTS 2017-18



# Central Mine Planning and Design Institute Limited

Balance Sheet As at 31<sup>st</sup> March, 2018

(₹ in Crore)

	Note No.	Figures as at the end of	
		As as 31.03.2018	As as 31.03.2017
<b>ASSETS</b>			
<b>Non-Current Assets</b>			
(a) Property, Plant & Equipments	3	145.42	131.69
(b) Capital Work in Progress	4	45.85	46.53
(c) Exploration and Evaluation Assets	5	-	-
(d) Other Intangible Assets	6	1.81	2.23
(e) Intangible Assets under Development			
(f) Investment Property			
(g) Financial Assets			
(i) Investments	7	-	-
(ii) Loans	8	-	0.02
(iii) Other Financial Assets	9	1.16	1.15
(h) Deferred Tax Assets (net)		128.93	115.62
(i) Other non-current assets	10	8.84	13.03
<b>Total Non-Current Assets (A)</b>		<b>332.01</b>	<b>310.27</b>
<b>Current Assets</b>			
(a) Inventories	12	8.43	9.38
(b) Financial Assets			
(i) Investments	7	-	-
(ii) Trade Receivables	13	611.38	327.65
(iii) Cash & Cash equivalents	14	179.27	77.18
(iv) Other Bank Balances	15	-	-
(v) Loans	8	-	-
(vi) Other Financial Assets	9	89.80	150.29
(c) Current Tax Assets (Net)			
(d) Other Current Assets	11	276.81	255.53
<b>Total Current Assets (B)</b>		<b>1,165.69</b>	<b>820.03</b>
<b>Total Assets (A+B)</b>		<b>1,497.70</b>	<b>1,130.30</b>
<b>EQUITY AND LIABILITIES</b>			
<b>Equity</b>			
(a) Equity Share Capital	16	38.80	19.04
(b) Other Equity	17	296.45	235.39
<b>Equity attributable to equity holders of the company</b>		<b>334.53</b>	<b>254.43</b>
Non-Controlling Interests		-	-
<b>Total Equity (A)</b>		<b>334.53</b>	<b>254.43</b>





## Balance Sheet As at 31<sup>st</sup> March, 2018

(₹ in Crore)

	Note No.	Figures as at the end of	
		As as 31.03.2018	As as 31.03.2017
<b>Liabilities</b>			
<b>Non-Current Liabilities</b>			
(a) Financial Liabilities			
(i) Borrowings	18	-	-
(ii) Trade Payables (if any)			
(iii) Other Financial Liabilities	20	62.10	49.62
(b) Provisions	21	243.52	224.16
(c) Deferred Tax Liabilities (net)			
(d) Other Non-Current Liabilities	22	-	-
<b>Total Non-Current Liabilities (B)</b>		<b>305.62</b>	<b>273.79</b>
<b>Current Liabilities</b>			
(a) Financial Liabilities			
(i) Borrowings	18	-	-
(ii) Trade payables	19	1.31	1.13
(iii) Other Financial Liabilities	20	33.56	39.13
(b) Other Current Liabilities	23	297.30	147.22
(c) Provisions	21	308.86	263.74
(d) Current Tax Liabilities (net)		216.52	150.87
<b>Total Current Liabilities (C)</b>		<b>857.55</b>	<b>602.09</b>
<b>Total Equity and Liabilities (A+B+C)</b>		<b>1497.70</b>	<b>1130.30</b>

The Accompanying Notes & Note 1, 2 & 38 form an integral part of Financial Statements.

**(A. Mundhra)**  
Company Secretary

**(N. N. Thakur)**  
General Manager (F)

**(B. N. Shukla)**  
Director  
DIN-07367625

**(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: 25<sup>th</sup> May, 2018

Place: Ranchi

# Central Mine Planning and Design Institute Limited

## STATEMENT OF PROFIT & LOSS For the Year Ended 31<sup>st</sup> March, 2018

(₹ in Crore)

	Note No.	For the Year ended 31.03.2018	For the Year ended 31.03.2017
<b>Revenue from Operations</b>			
A Sales (Net)	24	1154.75	930.52
B Other Operating Revenue (Net)		-	-
(I) <b>Revenue from Operations (A+B)</b>		1154.25	930.52
(II) Other Income	25	15.09	15.47
(III) <b>Total Income (I+II)</b>		1169.84	945.99
(IV) <b>EXPENSES</b>			
Cost of Materials Consumed	26	25.92	26.65
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	566.88	481.75
Power & Fuel		3.22	3.30
Corporate Social Responsibility Expense	29	1.18	1.02
Repairs	30	21.19	23.18
Contractual Expense	31	346.95	271.07
Finance Costs	32	0.25	0.31
Depreciation/Amortization/ Impairment expense		20.39	21.21
Provisions	33	0.27	0.13
Write off	34		
Other Expenses	35	62.77	52.79
<b>Total Expenses (IV)</b>		1049.02	881.41
(V) Profit before exceptional items and Tax (III-IV)		120.82	64.58
(VI) Exceptional Items		-	-
(VII) <b>Profit before Tax (V-VI)</b>		120.82	64.58
(VIII) Tax expense	36	39.99	24.94
(IX) Profit for the period from continuing operations (VII-VIII)		80.83	39.64
(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) <b>Profit for the Period (IX+XII+XIII)</b>		80.83	39.64
<b>Other Comprehensive Income</b>	37		
A (i) Items that will not be reclassified to profit or loss		35.69	(2.70)
(ii) Income tax relating to items that will not be reclassified to profit or loss			



# ANNUAL REPORT & ACCOUNTS 2017-18

## STATEMENT OF PROFIT & LOSS For the Year Ended 31<sup>st</sup> March, 2018

(₹ in Crore)

	Note No.	For the Year ended 31.03.2018 (Audited)	For the Year ended 31.03.2017 (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		12.35	(0.93)
<b>(XV) Total Other Comprehensive Income</b>		<b>23.34</b>	<b>(1.77)</b>
<b>(XVI) Total Comprehensive Income for the period (XIV+XV) (Comprising Profit (Loss) and Other Comprehensive Income for the period)</b>		<b>104.17</b>	<b>37.87</b>
<b>Profit attributable to:</b>			
Owners of the company		80.83	39.64
Non-controlling interest		80.83	39.64
<b>Total Comprehensive Income attributable to:</b>			
Owners of the company		104.17	37.87
Non-controlling interest		104.17	37.87
<b>(XVII) Earnings per equity share (for continuing operation):</b>			
(1) Basic		2,122.64	1,040.97
(2) Diluted		2,122.64	1,040.97
<b>(XVIII) Earnings per equity share (for discontinued operation):</b>			
(1) Basic		-	-
(2) Diluted		-	-
<b>(XIX) Earnings per equity share (for discontinued &amp; continuing operation):</b>			
(1) Basic		2,122.64	1,040.97
(2) Diluted		2,122.64	1,040.97

The Accompanying Notes & Note 1, 2 & 38 form an integral part of Financial Statements.



**(A. Mundhra)**  
Company Secretary



**(N. N. Thakur)**  
General Manager (F)



**(B. N. Shukla)**  
Director  
DIN-07367625



**(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: 25<sup>th</sup> May, 2018  
Place: Ranchi



# Central Mine Planning and Design Institute Limited

## CASH FLOW STATEMENT (INDIRECT METHOD) For the Year Ended 31<sup>st</sup> March, 2018

(₹ in Crore)

	For the Year ended 31.03.2018	For the Year ended 31.03.2017
<b>A. CASH FLOWS FROM OPERATING ACTIVITIES:</b>		
<b>Total Comprehensive Income before tax</b>	<b>156.51</b>	61.88
<b>Adjustment for:</b>		
Depreciation & Impairment of Fixed Assets	<b>20.53</b>	20.94
Interest from Bank Deposits	<b>(10.43)</b>	(11.25)
Finance cost	<b>0.25</b>	0.31
Interest / Dividend from investments	-	-
Profit / Loss on sale of Fixed Assets	<b>(0.06)</b>	(0.14)
Other non-operating Income	<b>(4.60)</b>	(4.08)
Liability write back during the period	-	-
Advance Stripping Activity Adjustment	-	-
<b>Operating profit before Current / Non Current Assets and Liabilities Adjustments for :</b>	<b>162.20</b>	67.66
Trade Receivable	<b>283.73</b>	(79.41)
Inventories	<b>0.95</b>	(1.97)
Short/Long term Loans/Advances & Other Current Assets	<b>30.10</b>	(4.10)
Short/Long term Liabilities and Provisions	<b>287.30</b>	17.93
<b>Cash generated from operations</b>	<b>196.82</b>	0.11
Income Tax paid / refund	<b>(52.34)</b>	(24.01)
Interest paid	<b>(0.25)</b>	(0.31)
<b>Net Cash Flow from Operating Activities (A)</b>	<b>144.23</b>	(24.21)
<b>B. CASH FLOWS FROM INVESTING ACTIVITIES</b>		
Purchase of Fixed Assets	<b>(33.16)</b>	(40.04)
Proceeds from sale of Assets	<b>0.06</b>	0.17
Other Long Term Loans & Advances (Capital Advances)	-	-
Interest received on Fixed Deposit / Loan to Subsidiary	<b>10.43</b>	11.25
Other non-operating Income	<b>4.60</b>	4.08
Investment in Bank Deposit	-	-
Change in investments	-	-
Investment in joint venture	-	-
Interest pertaining to Investing Activities	-	-
Interest / Dividend from investments	-	-
<b>Net cash flow from Investing Activities (B)</b>	<b>(18.07)</b>	(24.54)



## C. CASH FLOWS FROM FINANCING ACTIVITIES

Proceed from short term Borrowings/Govt. Grant	(0.60)	1.63
Repayment of Borrowings	-	-
Interest & Finance cost pertaining to Financing Activities	-	-
Receipt of Shifting & Rehabilitation Fund	-	-
Dividend & Dividend Tax	(23.47)	-
Buyback of Equity Share Capital	-	-
<b>Net cash used in Financing Activities (C)</b>	<b>(24.07)</b>	<b>1.63</b>
<b>Net increase/ decrease in Cash &amp; Bank Balances (A+B+C)</b>	<b>102.09</b>	<b>(47.12)</b>
<b>Cash &amp; cash equivalents as at the beginning of the year (Refer Note 14 for components of cash &amp; cash equivalents)</b>	<b>77.18</b>	<b>124.30</b>
<b>Cash &amp; cash equivalents as at the end of the year (Refer Note 14 for components of cash &amp; cash equivalents)</b>	<b>179.27</b>	<b>77.18</b>

(All figures in bracket represent outflow)



**(A. Mundhra)**  
Company Secretary



**(N. N. Thakur)**  
General Manager (F)



**(B. N. Shukla)**  
Director  
DIN-07367625



**(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: 25<sup>th</sup> May, 2018

Place: Ranchi



## Central Mine Planning and Design Institute Limited

### STATEMENT OF CHANGES IN EQUITY FOR THE YEAR ENDED 31.03.2018

#### A. EQUITY SHARE CAPITAL

(₹ in Crore)

Particulars	Balance as at 01.04.2016	Changes In Equity Share Capital During The Year	Balance as at 31.03.2017	Balance as at 01.04.2017	Changes In Equity Share Capital During The Year	Balance as at 31.03.2018
3,80,800 Equity Shares of ₹1000/- each	19.04	-	19.04	19.04	19.04	38.08

#### B. OTHER EQUITY

	Equity portion of Preference Share Capital	Other Reserves				General Reserve	Other Comprehensive Income	Retained Earnings	Total	Non-Controlling Interest	Equity
		Capital Redemption reserve	Capital reserve	CSR Reserve	Sustainable Development Reserve						
<b>Balance as at 01.04.2016</b>	-	-	18.17	-	-	5.77	14.83	157.44	196.21	-	196.21
Additions during the year	-	-	-	-	-	-	-	-	-	-	-
Adjustments during the year	-	-	-	-	-	-	-	-	-	-	-
Changes in accounting policy	-	-	-	-	-	-	-	(0.32)	0.32	0.64	0.96
Prior period errors	-	-	-	-	-	-	-	-	-	-	-
<b>Restated balance as at 01.04.2016</b>	-	-	18.17	-	-	5.77	14.83	157.12	195.89	0.64	195.25
Additions during the year	-	-	2.32	-	-	-	-	-	2.32	-	2.32
Adjustments during the year	-	-	(0.69)	-	-	-	-	39.64	(0.69)	-	(0.69)
Profit for the year	-	-	-	-	-	-	(1.77)	-	-	-	-
<b>Re measurement of Defined Benefits Plans (net of Tax)</b>	-	-	-	-	-	-	-	-	-	-	-
<u>Appropriations</u>	-	-	-	-	-	-	-	-	-	-	-
Transfer to / from General reserve	-	-	-	-	-	-	-	-	-	-	-
Transfer to / from Other reserves	-	-	-	-	-	-	-	-	-	-	-





# 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 Infrastructure	Surveyed Off Assets	Others (Specify in note)	Total
Gross Carrying Amount:															
As at 1 April 20 16	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
As at 1 April 2017	1.15	1.34	-	47.45	90.23	0.20	-	8.67	1.04	9.18	-	-	0.70	-	159.96
Additions	-	0.09	-	1.57	29.49	0.10	-	0.74	0.76	0.95	-	-	0.01	-	33.71
Deletions/Adjustments	-	-	-	0.95	(0.69)	(0.01)	-	0.70	-	(0.15)	-	-	0.03	-	(1.13)
As at 31 March 2018	1.15	1.43	-	48.07	119.03	0.29	-	10.11	1.80	9.98	-	-	0.68	-	192.54
Accumulated Depreciation and Impairment															
As at 1 April 20 16	-	0.03	-	1.04	6.21	-	-	1.23	-	0.74	-	-	-	-	9.25
Charge for the year	-	0.02	-	1.63	15.07	0.02	-	1.13	0.34	1.76	-	-	-	-	19.97
Impairment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Deletions/Adjustments	-	(0.01)	-	-	(0.60)	-	-	(0.27)	0.01	(0.08)	-	-	-	-	(0.95)
As at 31 March 2017	-	0.04	-	2.67	20.68	0.02	-	2.09	0.35	2.42	-	-	-	-	28.27
As at 1 April 2017	-	0.04	-	2.67	20.68	0.02	-	2.09	0.35	2.42	-	-	-	-	28.27
Charge for the year	-	0.03	-	1.40	14.13	0.03	-	1.24	0.33	1.43	-	-	-	-	18.59
Impairment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Deletions/Adjustments	-	-	-	(0.01)	0.46	-	-	(0.13)	0.03	(0.09)	-	-	-	-	0.26
As at 31 March 2018	-	0.07	-	4.06	35.27	0.05	-	3.20	0.71	3.76	-	-	-	-	47.12
Net Carrying Amount															
As at 31 March 2018	1.15	1.36	-	44.01	83.76	0.24	-	6.91	1.09	6.22	-	-	0.68	-	145.42
As at 31 March 2017	1.15	1.30	-	44.78	69.55	0.18	-	6.58	0.69	6.76	-	-	0.70	-	131.69

#### Note:

- Depreciation has been provided as per Company's accounting policy (Refer to note No 2)
- Other land includes the lease hold land of ₹ 1.30 cr (Net Carrying Amount) of RI-7. Lease period for the same is for 90 Years w.e.f from 18.07.1990 & 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/ Develop ment	Others (to be specified in note)	Total
Gross Carrying Amount:						
As at 1 April 20 16	21.72	39.72	-	-	-	61.44
Additions	10.31	25.32	-	-	-	35.63
Capitalisation/ Deletions	(17.74)	(32.80)	-	-	-	(50.54)
<b>As at 31 March 2017</b>	<b>14.29</b>	<b>32.24</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>46.53</b>
As at 1 April 20 17	14.29	32.24	-	-	-	46.53
Additions	5.35	12.31	-	-	-	17.66
Capitalisation/ Deletions	(0.88)	(17.46)	-	-	-	(18.34)
<b>As at 31 March 2018</b>	<b>18.76</b>	<b>27.09</b>	<b>.</b>	<b>.</b>	<b>.</b>	<b>45.85</b>
<b>Accumulated Provision and Impairment</b>						-
As at 1 April 20 16	-	-	-	-	-	-
Charge for the year	-	-	-	-	-	-
Impairment	-	-	-	-	-	-
Deletions/Adjustments	-	-	-	-	-	-
<b>As at 31 March 2017</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
As at 1 April 20 1 7	-	-	-	-	-	-
Charge for the year	-	-	-	-	-	-
Impairment	-	-	-	-	-	-
Deletions/Adjustments	-	-	-	-	-	-
<b>As at 31 March 2018</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Net Carrying Amont</b>						-
<b>As at 31 March 2018</b>	<b>18.76</b>	<b>27.09</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>45.85</b>
<b>As at 31 March 2017</b>	<b>14.29</b>	<b>32.24</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>46.53</b>



# Central Mine Planning and Design Institute Limited

## NOTES TO THE FINANCIAL STATEMENTS

### NOTE - 5 : Exploration and Evaluation Assets

(₹ in Crore)

	Exploration and Evaluation Costs
Gross Carrying Amount:	
As at 1 April 20 16	-
Additions	-
Deletions/ Adj ustments	-
<b>As at 31 March 2017</b>	-
As at 1 April 20 17	-
Additions	-
Deletions/ Adj ustments	-
<b>As at 31 March 2018</b>	-
Accumulated Provision and Impairment	
As at 1 April 20 16	-
Charge for the year	-
Impairment	-
Deletions/ Adj ustments	-
<b>As at 31 March 2017</b>	-
As at 1 April 20 17	-
Charge for the year	-
Impairment	-
Deletions/ Adj ustments	-
<b>As at 31 March 2018</b>	-
<b>Vet Carrying Amont</b>	
<b>As at 31 March 2018</b>	-
<b>As at 31 March 2017</b>	-



# 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
<b>Gross Carrying Amount:</b>			
As at 1 <sup>st</sup> April 20 16	4.82	-	4.82
Additions	1.31	-	1.31
Deletions/Adjustments	-	-	-
<b>As at 31 March 2017</b>	<b>6.13</b>	<b>-</b>	<b>6.13</b>
As at 1 <sup>st</sup> April 20 17	6.13	-	6.13
Additions	1.26	-	1.26
Deletions/Adjustments	-	-	-
<b>As at 31 March 2018</b>	<b>7.39</b>	<b>-</b>	<b>7.39</b>
<b>Accumulated Amortisation and Impairment</b>			
As at 1 <sup>st</sup> April 20 16	1.97	-	1.97
Charge for the year	1.93	-	1.93
Impairment	-	-	-
Deletions/Adjustments	-	-	-
<b>As at 31 March 2017</b>	<b>3.90</b>	<b>-</b>	<b>3.90</b>
As at 1 <sup>st</sup> April 20 17	3.90	-	3.90
Charge for the year	1.66	-	1.66
impairment	-	-	-
Deletions/Adjustments	0.02	-	0.02
<b>As at 31 March 2018</b>	<b>5.58</b>	<b>-</b>	<b>5.58</b>
<b>Net Carrying Amount</b>			
<b>As at 31 March 2018</b>	<b>1.81</b>	<b>-</b>	<b>1.81</b>
<b>As at 31 March 2017</b>	<b>2.23</b>	<b>-</b>	<b>2.23</b>

# Central Mine Planning and Design Institute Limited

## NOTES TO THE FINANCIAL STATEMENTS

### NOTE - 7 : INVESTMENTS

(₹ in Crore)

	As at 31.03.18	As at 31.03.17
<b>Non Current</b>		
Investment in Shares	-	-
Equity Shares in Joint Venture Companies	-	-
Other Investments	-	-
In Secured Bonds	-	-
In Co-operative Shares	-	-
<b>Total</b>	-	-
Aggregate amount of unquoted investments:	-	-
Aggregate amount of quoted investments:	-	-
Market value of quoted investments:	-	-
Aggregate amount of impairment in value of investments:	-	-

### NOTE - 7 (contd.)

### INVESTMENTS

(₹ in Crore)

	As at 31.03.18	As at 31.03.17
<b>Current</b>		
<b>Mutual Fund Investment</b>		
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	-	-
<b>Total</b>	-	-
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)

	As at 31.03.18	As at 31.03.17
Non-Current		
Loans to Related parties		
- Secured, considered good	-	-
- Unsecured, considered good	-	-
- Doubtful	-	-
Less: Allowance for doubtful loans	-	-
Loans to Employees		
- Secured, considered good		0.02
- Unsecured, considered good	-	-
- Doubtful	-	-
Less: Allowance for doubtful loans	-	-
Other Loans		
- Secured, considered good	-	-
- Unsecured, considered good	-	-
- Doubtful	-	-
Less: Allowance for doubtful loans	-	-
Total	-	0.02
CLASSIFICATION		
Secured, considered good	-	-
Unsecured, Considered good	-	-
Doubtful	-	-
Current		
Loans to Related parties		
- Secured, considered good	-	-
- Unsecured, considered good	-	-
- Doubtful	-	-
Less: Allowance for doubtful loans	-	-
Loans to Employees		
- Secured, considered good	-	-
- Unsecured, considered good	-	-
- Doubtful	-	-
Less: Allowance for doubtful loans	-	-
Other Loans		
- Secured, considered good	-	-
- Unsecured, considered good	-	-
- Doubtful	-	-
Less: Allowance for doubtful loans	-	-
Total	-	-
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)

	As at 31.03.18	As at 31.03.17
<b>Non Current</b>		
Bank deposits		-
Deposits with bank under		
- Mine Closure Plan	-	-
- Shifting & Rehabilitation Fund scheme	-	-
Receivable from Escrow Account for Mine Closure		
Expenses	-	-
Other deposits *	0.91	0.76
Less : Allowance for doubtful deposits	0.04	0.04
	0.87	0.72
Other receivables	0.29	0.43
Less: Allowance for doubtful receivables	-	-
	0.29	0.43
<b>TOTAL</b>	<b>1.16</b>	<b>1.15</b>
<b>Current</b>		
Surplus Fund with CIL	-	-
Receivable from Escrow Account for Mine Closure		
Expenses	-	-
Current Account with		
-CIL	79.47	128.59
- Subsidiaries	-	-
-IICM	-	-
Less : Allowance for doubtful Advances	-	-
Interest accrued on		
- Investments	-	-
- Bank Deposits	2.39	2.79
- Others (specify in note)	-	-
Other deposits*	-	-
Less : Allowance for doubtful deposits	-	-
Claims receivables	5.95	5.97
Less : Allowance for doubtful claims	-	-
	5.95	5.97
Other receivables	1.99	12.94
Less : Allowance for doubtful claims	-	-
	1.99	12.94
<b>TOTAL</b>	<b>89.80</b>	<b>150.29</b>

Note: Other deposits\* includes -

	31.03.2018	31.03.2017
Deposit to Gas Company & Others	0.03	0.03
Deposit to Electricity Company	0.72	0.56
Deposit P & T	0.07	0.07
Security Deposit Paid	0.09	0.09
<b>Total</b>	<b>0.91</b>	<b>0.76</b>



# Central Mine Planning and Design Institute Limited

## NOTES TO THE FINANCIAL STATEMENTS

### NOTE 10 : OTHER NON-CURRENT ASSETS

(₹ in Crore)

	As at 31.03.18	As at 31.03.17
<b>(i) Capital Advances</b>	8.36	13.00
Less : Provision for doubtful advances	-	-
	8.36	13.00
<b>(ii) Advances other than capital advances</b>		
(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	0.48	0.03
Less : Provision for doubtful advances	-	-
	0.48	0.03
(e) Prepaid Expenses	-	-
	-	-
(f) Others	-	-
<b>Total</b>	<b>8.84</b>	<b>13.03</b>



# Central Mine Planning and Design Institute Limited

## NOTES TO THE FINANCIAL STATEMENTS

### NOTE -11 : OTHER CURRENT ASSETS

(₹ in Crore)

	As at 31.03.18	As at 31.03.17
(a) Advance for Revenue (goods & services)	0.40	0.85
Less : Provision for doubtful advances	0.03	0.03
	0.37	0.82
(b) Advance payment of statutory dues	243.62	243.92
Less : Provision for doubtful advances	-	-
	243.62	243.92
(c) Advance to Related Parties	-	-
(d) Advance to Employees	-	-
Less : Provision for doubtful advances	-	-
	-	-
(e) Advance- Others *	2.01	4.83
Less : Provision for doubtful claims	-	-
	2.01	4.83
(f) Deposits- Others **	0.07	0.07
Less: Provision	0.05	0.05
	0.02	0.02
(g) CENVAT/ VAT CREDIT receivable		5.49
(h) Input Tax Credit Receivable	30.79	
(i) MAT CREDIT ENTITLEMENT	-	-
(j) Prepaid Expenses	-	0.45
(k) Receivables- Others	-	-
Less: Provision	-	-
	-	-
(l) OBR Advance Stripping		
<b>Total</b>	<b>276.81</b>	<b>255.53</b>

Note: Advance & Deposits Others Includes-

1 -(e) **Advance- Others\***

	31.03.2018	31.03.2017
ADVANCE (XA)	0.33	0.18
PERMANENT IMPREST	-	-
PAY ADVANCE	0.01	-
PERMANENT ADVANCE	-	-
L.T.C. ADVANCE	0.09	0.09
T.A. (OFFICERS)	0.25	0.26
T-A. (STAFF)	1.01	0.40
T.A. ADVANCE (OUTSIDE COUNTRY)	0.02	0.02
MEDICAL ADVANCE	0.29	0.68
CIL DELHI	-	0.21
CIL HYDERABAD & OTHERS	0.01	0.02
OTHER	-	2.97
<b>Total</b>	<b>2.01</b>	<b>4.83</b>

2-(f) **Deposit- Others\*\***

EX-COAL BOARD & OTHERS	0.07	0.07
<b>Total</b>	<b>0.07</b>	<b>0.07</b>



# Central Mine Planning and Design Institute Limited

## NOTES TO THE FINANCIAL STATEMENTS

### NOTE - 12 : INVENTORIES

(₹ in Crore)

	As at 31.03.18	As at 31.03.17
(a) Stock of Coal		
Coal under Development	-	-
Less : Provision	-	-
Stock of Coal (Net)	-	-
(b) Stock of Stores & Spares (at cost)	8.65	9.42
Add: Stores-in-transit	0.41	0.56
Less : Provision	0.63	0.60
Net Stock of Stores & Spares (at cost)	8.43	9.38
(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	-	-
	8.43	9.38

### NOTE- 13 : TRADE RECEIVABLES

(₹ in Crore)

	As at 31.03.18	As at 31.03.17
<b>Current</b>		
Trade receivables		
- Secured, considered good	-	-
- Unsecured, considered good	611.38	327.65
- Doubtful	2.73	2.50
	614.11	330.15
Less : Allowance for bad & doubtful debts	2.73	2.50
<b>Total</b>	<b>611.38</b>	<b>327.65</b>
<b>CLASSIFICATION</b>		
Secured, considered good		
Unsecured, Considered good	614.11	330.15
Doubtful	2.73	2.50

# Central Mine Planning and Design Institute Limited

## NOTES TO THE FINANCIAL STATEMENTS

### NOTE - 14 : CASH AND CASH EQUIVALENTS

(₹ in Crore)

	As at 31.03.18	As at 31.03.17
(a) Balances with Banks		
- in Deposit Accounts	89.34	1.37
- in Current Accounts	89.90	75.55
- in Cash Credit Accounts	-	-
(b) Bank Balances outside India	-	-
(c) Cheques, Drafts and Stamps in hand	0.01	0.19
(d) Cash on hand	0.02	0.07
(e) Cash on hand outside India	-	-
(f) Others	-	-
<b>Total Cash and Cash Equivalents</b>	<b>179.27</b>	<b>77.18</b>
(g) Bank Overdraft	-	-
<b>Total Cash and Cash Equivalents(net of Bank Overdraft)</b>	<b>179.27</b>	<b>77.18</b>

### NOTE - 15 : OTHER BANK BALANCES

(₹ in Crore)

	As at 31.03.18	As at 31.03.17
Balances with Banks		
- Deposit accounts	-	-
- Mine Closure Plan	-	-
- Shifting and Rehabilitation Fund scheme	-	-
- Escrow Account for Buyback of Shares	-	-
- Unpaid dividend accounts	-	-
- Dividend accounts	-	-
<b>Total</b>	<b>-</b>	<b>-</b>





# Central Mine Planning and Design Institute Limited

## NOTES TO THE FINANCIAL STATEMENTS

### NOTE - 16 : EQUITY SHARE CAPITAL

(₹ in Crore)

	As at 31.03.18	As at 31.03.17
<b><u>Authorised</u></b>		
5,00,000 Equity Shares of ₹ 1000/- each	50.00	50.00
	50.00	50.00
<b><u>Issued, Subscribed and Paid-up</u></b>		
(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)	-	-
275792 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)	27.58	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
<b>Total</b>	<b>38.08</b>	<b>19.04</b>

#### 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	380800	100%

#### 2. During the period the company has issued 190400 bonus shares for consideration other than cash

# 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	Other Comprehensive Income	Retained Earnings	Non-Controlling Interest	Equity
		Capital Redemption reserve	Capital reserve	CSR Reserve					
Balance as at 01.04.2016	-	-	18.17	-	5.77	14.83	157.44	-	196.21
Additions during the year	-	-	-	-	-	-	-	-	-
Adjustments during the year	-	-	-	-	-	-	-	-	-
Changes in accounting policy or prior period errors	-	-	-	-	-	-	(0.32)	-	-
Restated balance as at 01.04.2016	-	-	18.17	-	5.77	14.83	157.12	-	195.89
Additions during the year	-	-	2.32	-	-	-	-	-	2.32
Adjustments during the year	-	-	(0.69)	-	-	-	-	-	(0.69)
Profit for the year	-	-	-	-	-	-	39.64	-	39.64
Remeasurement of Defined Benefits Plans (net of Tax)	-	-	-	-	-	(1.77)	-	-	(1.77)
ADDroorations	-	-	-	-	-	-	-	-	-
Transfer to / from General reserve	-	-	-	-	-	-	-	-	-
Transfer to / from Other reserves	-	-	-	-	-	-	-	-	-
Interim Dividend	-	-	-	-	-	-	-	-	-
Final Dividend	-	-	-	-	-	-	-	-	-
Corporate Dividend tax	-	-	-	-	-	-	-	-	-
Pre-operative expenses	-	-	-	-	-	-	-	-	-
<b>Balance as at 31. 03. 201 7</b>	-	-	<b>19.80</b>	-	<b>5.77</b>	<b>13.06</b>	<b>196.76</b>	-	<b>235.39</b>



# 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	Other Comprehensive Income	Retained Earnings	Non-Controlling Interest	Equity
		Capital Redemption reserve	Capital reserve	CSR Reserve	Sustainable Development Reserve					
<b>Balance as at 01.04.2017</b>	-	-	19.80	-	-	5.77	13.06	196.76	-	235.39
Additions during the year	-	-	0.39	-	-	4.04	-	-	-	4.43
Adjustments during the year	-	-	(0.99)	-	-	-	-	-	-	(0.99)
Changes in accounting policy or prior period errors	-	-	-	-	-	-	-	-	-	-
Profit for the year	-	-	-	-	-	-	-	80.83	-	80.83
Remeasurement of Defined Benefits Plans (net of Tax)	-	-	-	-	-	-	23.34	-	-	23.34
<u>Appropriations</u>	-	-	-	-	-	-	-	-	-	-
Transfer to / from General reserve	-	-	-	-	-	-	-	(4.04)	-	4.04
Interim Dividend	-	-	-	-	-	-	-	(19.50)	-	(19.50)
Bonus	-	-	-	-	-	(5.77)	-	(13.27)	-	(19.04)
Final Dividend	-	-	-	-	-	-	-	-	-	-
Corporate Dividend tax	-	-	-	-	-	-	-	(3.97)	-	(3.97)
Pre-operative expenses	-	-	-	-	-	-	-	-	-	-
<b>Balance as at 31.03.2018</b>	-	-	19.20	-	-	4.04	36.40	236.81	-	296.45





# Central Mine Planning and Design Institute Limited

## NOTES TO THE FINANCIAL STATEMENTS

### NOTE -17 (Contd.)

#### RESERVES & SURPLUS Contd...

**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	3.45	0.05	0.06	-	15.80	0.41	0.03	19.80
Addition	0.37	-	-	-	0.02	-	-	0.39
Less : Depreciation & Adjustment	3.82 0.49	0.05 -	0.06 -	- -	15.82 0.45	0.41 0.04	0.03 0.01	20.19 0.99
<b>TOTAL AS ON 31.03.2018</b>	<b>3.33</b>	<b>0.05</b>	<b>0.06</b>	<b>-</b>	<b>15.37</b>	<b>0.37</b>	<b>0.02</b>	<b>19.20</b>
<b>TOTAL AS ON 31.03.2017</b>	<b>3.45</b>	<b>0.05</b>	<b>0.06</b>	<b>-</b>	<b>15.80</b>	<b>0.41</b>	<b>0.03</b>	<b>19.80</b>

# Central Mine Planning and Design Institute Limited

## NOTES TO THE FINANCIAL STATEMENTS

### NOTE 18: BORROWINGS

(₹ in Crore)

	As at 31.03.18	As at 31.03.17
<b>Non-Current</b>		
Term Loans		
- From Banks	-	-
- From Other Parties	-	-
Loans from Related Parties	-	-
Other Loans	-	-
<b>Total</b>	-	-
<b>CLASSIFICATION</b>		
Secured	-	-
Unsecured	-	-
<b>Current</b>		
Loans repayable on demand		
- From Banks	-	-
- From Other Parties	-	-
Loans from Related Parties	-	-
Other Loans	-	-
<b>Total</b>	-	-
<b>CLASSIFICATION</b>		
Secured	-	-
Unsecured	-	-



# Central Mine Planning and Design Institute Limited

## NOTES TO THE FINANCIAL STATEMENTS

### NOTE - 19 :TRADE PAYABLES

(₹ in Crore)

	As at 31.03.18	As at 31.03.17
<b>Current</b>		
Trade Payables for Micro, Small and Medium Enterprises	0.17	0.30
Other Trade Payables for		
- Stores and Spares	1.14	0.83
- Power and Fuel	-	-
- Others	-	-
<b>Total</b>	<b>1.31</b>	<b>1.13</b>

	31.03.2018	31.03.2017
Ageing of Micro, Small and Medium Enterprises		-
Less than three months	0.17	0.30





# Central Mine Planning and Design Institute Limited

## NOTES TO THE FINANCIAL STATEMENTS

### NOTE - 20 : OTHER FINANCIAL LIABILITIES

(₹ in Crore)

	As at 31.03.18	As at 31.03.17
<b>Non Current</b>		
Security Deposits	3.82	2.68
Earnest Money	3.40	0.13
Others *	54.88	46.81
<b>Total</b>	<b>62.10</b>	<b>49.62</b>
<b>Current</b>		
Surplus fund from Subsidiaries	-	-
Current Account with	-	-
- Subsidiaries	-	-
- IICM	-	-
Current maturities of long-term debt	-	-
Unpaid dividends	-	-
Security Deposits	2.06	3.45
Earnest Money	0.81	3.43
Liability for Salary, Wages and Allowances	27.98	28.62
Others *	2.71	3.63
<b>Total</b>	<b>33.56</b>	<b>39.13</b>

Note: Others\* Includes -

	31.03.2018	31.03.2017
CONTRACTORS KEEP BACK	1.16	1.37
EXPLORATION KEEP BACK	51.93	43.60
ADV & DEPOSITS FROM EMPLOYEES	4.50	5.47
<b>Total</b>	<b>57.59</b>	<b>50.44</b>



# Central Mine Planning and Design Institute Limited

## NOTES TO THE FINANCIAL STATEMENTS

### NOTE - 21 : PROVISIONS

(₹ in Crore)

	As at 31.03.18	As at 31.03.17
<b>Non Current</b>		
Employee Benefits		
- Gratuity	101.37	58.80
- Leave Encashment	64.68	93.68
- Other Employee Benefits	77.45	71.66
Mine Closure	-	-
Overburden Removal	-	-
Others*	0.02	0.02
<b>Total</b>	<b>243.52</b>	<b>224.16</b>
<b>Current</b>		
Employee Benefits		
- Gratuity	30.36	28.69
- Leave Encashment	14.47	14.74
- Ex- Gratia	14.05	13.93
- Performance Related Pay	63.71	88.12
- Provision for National Coal Wages Agreement (NCWA)	30.28	19.04
- Executive Pay Revision	53.00	5.03
- Other Employee Benefits**	102.99	94.19
	<b>308.86</b>	<b>263.74</b>
Site Restoration/Mine Closure	-	-
Excise Duty on Closing Stock of Coal	-	-
Others	-	-
<b>Total</b>	<b>308.86</b>	<b>263.74</b>

Note 1: Others\* includes-

	31.03.2018	31.03.2017
PROVISION FOR WEALTH TAX	0.02	0.02
<b>Total</b>	<b>0.02</b>	<b>0.02</b>

**Note 2:** \*\*Other Employee Benefits includes Employees Benefits ₹ 92.40 Crores Provided for super-anuuation benefits @ 9.84% as on 31.03.2018.

**Note 3:** Department of Public Enterprises (DPE) Office Memorandum (OM) No. W-02/0028/2017-DPE(WC)-GL-XIII/17 dated 3<sup>rd</sup> August, 2017 has circulated the approval of the Government of India regarding the guidelines of the revision of pay and allowances of Board level and below Board level Executives and non unionized supervisors of Central Public Sector Enterprises (CPSEs) w.e.f 01.01.2017.

Pending final implementation of these guidelines, the provision for Executive pay revision of Rs 53 crores. Considering estimated impact of increase in all elements of executive salary (including the employer's PF contribution), other employee benefits and all superannuation benefits as per DPE guidelines, covering the period 01.01.2017 to 31.03.2017, has been made/kept in the financial statement

**Note 4:** National Coal Wage Agreement (NCWA)-X for non-executive employees effective from 01.07.2016 was finalised on 10th October 2017 and payment of Salary to Non-Executives Employees as per NCWA-X has been started from October, 2017 Provision against arrear salary for NCWA-X amounting to ₹ 39.85 crore has been made for the period from 01.07.2016 to 30.09.2017. An advance amounting to ₹ 9.57 crore has been paid in October, 2017 against above arrear which is net-off with the provision as shown in Note-21.



# Central Mine Planning and Design Institute Limited

## NOTES TO THE FINANCIAL STATEMENTS

### NOTE - 22 : OTHER NON CURRENT LIABILITIES

(₹ in Crore)

	As at 31.03.18	As at 31.03.17
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	-	-



# Central Mine Planning and Design Institute Limited

## NOTES TO THE FINANCIAL STATEMENTS

### NOTE - 23: OTHER CURRENT LIABILITIES

(₹ in Crore)

	As at 31.03.18	As at 31.03.17
<b>Capital Expenditure</b>		
<b>Statutory Dues:</b>		
Goods and Service Tax	43.37	-
GST Compensation Cess	-	-
Sales Tax/Vat		0.12
Provident Fund & Others	0.37	0.37
Central Excise Duty	-	-
Royalty & Cess on Coal	-	-
Stowing Excise Duty	-	-
Clean Energy Cess	-	-
National Mineral Exploration Trust	-	-
District Mineral Foundation	-	-
Other Statutory Levies	1.88	2.54
Income Tax deducted/collected at Source	2.33	1.56
Advance for Coal Import	-	-
Advance from customers / others	2.96	3.27
Cess Equalization Account	246.39	139.36
Others liabilities*		
<b>Total</b>	<b>297.30</b>	<b>147.22</b>

Note-Others liabilities \*

	31.03.2018	31.03.2017
C B M CELL	2.06	2.35
LIC RECOVERY FROM EMPLOYEES	0.01	0.01
CO-OPERATIVE CR. SOCIETY	0.08	0.09
RELIEF FUND	0.02	0.01
OTHER DEDUCTION	0.04	0.02
CREDIT FOR STALE CHEQUES	0.16	0.24
O/S LIABILITY FOR MEC	152.96	31.22
O/S LIABILITY FOR GSI & OTHER	35.69	28.63
UNPAID FROM IMPREST	0.22	0.31
O/S LIABILITY FOR POWER	1.18	1.11
O/S LIABILITY CONTRACTUAL	3.81	2.03
O/S LIABILITIES FOR REV.	26.90	24.66
O/S LIABILITIES CAPITAL	2.42	7.47
MINING ELECTRONIC GRANT	0.01	0.01
TESTING LABORATORY	0.28	0.28
UNDP FUND	0.27	0.27
CIL CIMFR FUND	0.21	0.21
SUNDRY CREDITOR - CAPITAL	1.61	0.33
PROVISION ON LOSS OF ASSETS	0.01	0.01
FUNDS	18.45	40.10
<b>Total</b>	<b>246.39</b>	<b>139.36</b>





# Central Mine Planning and Design Institute Limited

## NOTES TO THE FINANCIAL STATEMENTS

### NOTE - 23 (Contd.)

#### 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
<b>Opening Balance as on 01-04-2017</b>	2.79	1.47	0.24	13.60	0.26	21.83
Addition						
1. MINISTRY OF COAL	8.80	55.78	0.00	103.50	-	-
2. MINISTRY OF STEEL	-	-	-	-	-	-
3. CIL KOLKATA	-	-	-	-	-	54.24
4. ADJUSTMENT	-	-	-	-	-	-
5. BANK INTEREST ON FUND	0.01	-	-	0.01	-	0.43
	<b>11.60</b>	<b>57.25</b>	<b>0.24</b>	<b>117.11</b>	<b>0.26</b>	<b>76.50</b>
Less : Disbursement / Utilisation	11.50	56.84	--	116.78	-	59.24
<b>Closing Balance as on 31-03-2018</b>	<b>0.10</b>	<b>0.41</b>	<b>0.24</b>	<b>0.33</b>	<b>0.26</b>	<b>17.26</b>

# Central Mine Planning and Design Institute Limited

## NOTES TO THE FINANCIAL STATEMENTS

### NOTE - 24 : REVENUE FROM OPERATIONS

(₹ in Crore)

	For the Year ended	For the Year ended
	(Audited) 31.03.2018	(Audited) 31.03.2017
<b>A. Sales of Services</b>	<b>1,355.94</b>	<b>1,072.46</b>
<b>Less -.Other Statutory Levies</b>		
Goods and Service Tax	157.79	-
GST Compenstaion Cess	-	-
Royalty	-	-
Cess on Coal	-	-
Stowing Excise Duty	-	-
Central Sales Tax	-	-
Clean Energy Cess	-	-
State Sales Tax/VAT	-	-
Additional Royalty	-	-
Other Levies	43.40	141.94
<b>Total Levies</b>	<b>201.19</b>	<b>141.94</b>
<b>Net Sales (A)</b>	<b>1,154.75</b>	<b>930.52</b>
<b>B. Other Operating Revenue</b>		
Facilitation charges for coal import	-	-
Subsidy for Sand Stowing & Protective Works	-	-
Loading and additional transportation charges	-	-
Less: Excise Duty	-	-
Less : Other Statutory Levies	-	-
Evacuation facilitating Charges	-	-
Less: Levies	-	-
<b>Other Operating Revenue (B)</b>	<b>-</b>	<b>-</b>
<b>Revenue From Operations (A+B)</b>	<b>1,154.75</b>	<b>930.52</b>



# Central Mine Planning and Design Institute Limited

## NOTES TO THE FINANCIAL STATEMENTS

### NOTE 25 : OTHER INCOME

(₹ in Crore)

	For the Year ended	For the Year ended
	(Audited) 31.03.2018	(Audited) 31.03.2017
<b><u>Interest Income</u></b>		
Deposit with Banks	3.90	1.03
Loans and Advances to Employees	-	-
Investments	-	-
Loans	-	-
Funds parked within Group	-	-
Others (From Income Tax)	6.53	10.22
<b><u>Dividend Income</u></b>		
Investments in Subsidiaries	-	-
Investments in Mutual Funds	-	-
Investments in Govt Securities (8.5% Tax free Special Bonds)	-	-
<b><u>Other Non-Operating Income</u></b>		
Apex charges	-	-
Profit on Sale of Assets	0.06	0.14
Gain on Foreign exchange Transactions	-	-
Exchange Rate Variance	-	-
Lease Rent	-	-
Liability / Provision Write Backs	-	-
Excise Duty on Decrease in Stock	-	-
Misc. Income	4.60	4.08
<b>Total</b>	<b>15.09</b>	<b>15.47</b>



# 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) 31.03.2018	For the Year ended (Audited) 31.03.2017
Explosives	-	-
Timber	-	-
Oil & Lubricants	10.04	8.94
HEMM Spares	-	-
Other Consumable Stores & Spares	15.88	17.71
Total	25.92	26.65

### NOTE 27 : CHANGES IN INVENTORIES OF FINISHED GOODS, WORK IN PROGRESS AND STOCK IN TRADE

	For the Year ended (Audited) 31.03.2018	For the Year ended (Audited) 31.03.2017
Opening Stock of Coal	-	-
Add: Adjustment of opening stock	-	-
Less: Deterioration of Coal	-	-
Closing Stock of Coal	-	-
Less: Deterioration of Coal	-	-
<b>A. Change in Inventory of Coal and WIP</b>	-	-
Add: Adjustment of Opening Stock	-	-
Less: Provision	-	-
and WIP	-	-
Less: Provision	-	-
<b>B. Change in Inventory of workshop</b>	-	-
Press Opening Job	-	-
i)Finished Goods	-	-
ii)Work in Progress	-	-
Less: Press Closing Job	-	-
i)Finished Goods	-	-
ii)Work in Progress	-	-
<b>C. Change in Inventory of Closing Stock of Press Job</b>	-	-
<b>Change in Inventory of Stock in trade (A+B+C)</b>	-	-
<b>{Decretion / ( Accretion)}</b>	-	-





# Central Mine Planning and Design Institute Limited

## NOTES TO THE FINANCIAL STATEMENTS

### NOTE 28 : EMPLOYEE BENEFITS EXPENSES

(₹ in Crore)

	For the Year ended (Audited) 31.03.2018	For the Year ended (Audited) 31.03.2017
Salary, Wages, Allowances, Bonus etc.	270.75	262.08
Provision for National Coal Wages Agreement (NCWA)*	20.81	19.04
Executive Pay Revision	47.97	5.03
** Ex-Gratia	14.77	14.83
Performance Related Pay	11.16	12.01
Contribution to P.F. & Other Funds	33.06	32.66
Gratuity	102.96	20.00
Leave Encashment	(3.04)	38.85
VRS	-	-
Workmen Compensation	-	-
Medical Expenses for existing employees	9.31	9.23
Medical Expenses for retired employees	9.53	13.17
Grants to Schools & Institutions	0.05	0.06
Sports & Recreation	0.80	0.78
Canteen & Creche	0.21	0.23
Power - Township	2.91	2.78
Hire Charges of Bus, Ambulance etc.	0.57	0.56
Other Employee Benefits***	45.06	50.44
<b>Total</b>	<b>566.88</b>	<b>481.75</b>

The NCWA -X for the year ended 31.03.18 above includes ₹ 19.04 crores relating to the period 01.07.16 to 31.03.17

As per payment of Gratuity (Amendment) Act, 2018 and the notification issued thereafter, the ceiling for maximum gratuity has been increased from ₹ 10 lakhs to ₹ 20 Lakhs wef 29.03.18. Gratuity for the year ended 31.03.18 above includes ₹ 68.61 crores for impact of above change in gratuity ceiling.

#### **\*\*Note for Executive Pay Revision**

DPE(WC)-GL-XIII/17 dated 3<sup>rd</sup> August, 2017 has circulated the approval of the Government of India regarding the guidelines of the revision of pay and allowances of Board level and below Board level Executives and non unionized supervisors of Central Public Sector Enterprises (CPSEs) w.e.f 01.01.2017.

Pending final implementation of these guidelines, the provision for Executive pay revision of ₹ 53 crores. Considering estimated impact of increase in all elements of executive salary (including the employer's PF contribution), other employee benefits and all superannuation benefits as per DPE guidelines, covering the period 01.01.2017 to 31.03.2017, has been made/kept in the financial statement.

# Central Mine Planning and Design Institute Limited

## NOTES TO THE FINANCIAL STATEMENTS

### NOTE 29 : CORPORATE SOCIAL RESPONSIBILITY EXPENSE

(₹ in Crore)

	For the Year ended	For the Year ended
	(Audited) 31.03.2018	(Audited) 31.03.2017
CSR Expenses	1.18	1.02
<b>Total</b>	<b>1.18</b>	<b>1.02</b>

### NOTE 30 : REPAIRS

(₹ in Crore)

	For the Year ended	For the Year ended
	(Audited) 31.03.2018	(Audited) 31.03.2017
Building	7.39	7.31
Plant & Machinery	6.64	5.30
Others	7.16	10.57
<b>Total</b>	<b>21.19</b>	<b>23.18</b>



# Central Mine Planning and Design Institute Limited

## NOTES TO THE FINANCIAL STATEMENTS

### NOTE 31 : CONTRACTUAL EXPENSES

(₹ in Crore)

	For the Year ended (Audited) 31.03.2018	For the Year ended (Audited) 31.03.2017
Transportation Charges :		
- Sand	-	-
- Coal	-	-
- Stores & Others	-	-
Wagon Loading	-	-
Hiring of P&M	-	-
Other Contractual Work	346.95	271.07
<b>Total</b>	<b>346.95</b>	<b>271.07</b>

### NOTE 32 : FINANCE COSTS

(₹ in Crore)

	For the Year ended (Audited) 31.03.2018	For the Year ended (Audited) 31.03.2017
Interest Expenses		
Borrowings	-	-
Reclamation of Land/Mine Closure Expenses	-	-
Interest on Escrow Account	-	-
Unwinding of discounts	-	-
Funds parked within Group	-	-
Others	0.25	0.31
Other Borrowing Cost		
Guarantee Fees on (IBRD & JBIC) Loan	-	-
<b>Total</b>	<b>0.25</b>	<b>0.31</b>



# Central Mine Planning and Design Institute Limited

## NOTES TO THE FINANCIAL STATEMENTS

### NOTE 33 : PROVISIONS (NET OF REVERSAL)

(₹ in Crore)

	For the Year ended 31.03.2018	For the Year ended 31.03.2017
<b>(A) ALLOWANCE/PROVISION MADE FOR</b>		
Doubtful debts	0.23	0.11
Grade Variance		
Doubtful Advances & Claims	0.04	0.02
Stores & Spares	-	-
Others	-	-
<b>Total (A)</b>	<b>0.27</b>	<b>0.13</b>
<b>(B) ALLOW ANNCE/ PROVISION REVERSAL</b>		
Doubtful debts	-	-
Grade Variance		
Doubtful Advances & Claims	-	-
Stores & Spares	-	-
Others	-	-
<b>Total (B)</b>	<b>-</b>	<b>-</b>
<b>Total (A-B)</b>	<b>0.27</b>	<b>0.13</b>

### NOTE 34 : WRITE OFF ( Net of past provisions)

(₹ in Crore)

	For the Year ended (Audited) 31.03.2018	For the Year ended (Audited) 31.03.2017
Doubtful debts	-	-
Less :- Provided earlier	-	-
Grade Variance	-	-
Doubtful advances	-	-
Less :- Provided earlier	-	-
Stock of Coal	-	-
Less :- Provided earlier	-	-
Others	-	-
Less :- Provided earlier	-	-
<b>Total</b>	<b>-</b>	<b>-</b>





# Central Mine Planning and Design Institute Limited

## NOTES TO THE FINANCIAL STATEMENTS

### NOTE 35 : OTHER EXPENSES

(₹ in Crore)

	For the Year ended (Audited) 31.03.2018	For the Year ended (Audited) 31.03.2017
Traveling expenses		
- Domestic	19.34	16.65
- Foreign	0.69	0.54
Training Expenses	1.63	1.28
Telephone & Postage	2.36	1.07
Advertisement & Publicity	1.28	2.44
Freight Charges	-	0.07
Demurrage	-	-
Donation/Subscription	-	-
Security Expenses	16.40	9.47
Service Charges of CIL	-	-
Hire Charges	6.57	5.67
Legal Expenses	0.18	0.21
Bank Charges	0.02	0.05
Guest House Expenses	0.79	0.51
Consultancy Charges	3.97	3.39
Under Loading Charges	-	-
Loss on Sale/Discard/Surveyed of Assets	-	0.01
Auditor's Remuneration & Expenses		
- For Audit Fees	0.06	0.04
- For Taxation Matters	0.02	0.04
- For Other Services	0.11	0.01
- For Reimbursement of Exps.	0.21	0.11
Internal & Other Audit Expenses	0.60	0.53
Rehabilitation Charges	-	-
Royalty & Cess	-	-
Central Excise Duty	-	-
GST		
Rent	0.46	0.49
Rates & Taxes	0.50	0.77
Wealth Tax	-	-
Insurance	0.02	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	0.22	0.24
Miscellaneous expenses	7.33	9.16
<b>Total</b>	<b>62.77</b>	<b>52.79</b>



# Central Mine Planning and Design Institute Limited

## NOTES TO THE FINANCIAL STATEMENTS

### NOTE 36 : Tax Expense

(₹ in Crore)

	For the Year ended (Audited) 31.03.2018	For the Year ended (Audited) 31.03.2017
Current Year	53.30	40.09
Deferred tax	(13.31)	(15.15)
MAT Credit Entitlement	-	-
Earlier Years	-	-
<b>Total</b>	<b>39.99</b>	<b>24.94</b>



# Central Mine Planning and Design Institute Limited

## NOTES TO THE FINANCIAL STATEMENTS

### NOTE 37 : Other Comprehensive Income

(₹ in Crore)

	For the Year ended (Audited) 31.03.2018	For the Year ended (Audited) 31.03.2017
<b>(A) (i) Items that will not be reclassified to profit or loss</b>		
Changes in revaluation surplus		
Remeasurement of defined benefit plans	35.69	(2.70)
Equity instrument through OCI	-	-
Fair value changes relating to own credit risk of financial		
Liabilities designated at FVTPL	-	-
Share of OCI in Joint ventures	-	-
	35.69	(2.70)
<b>(ii) Income tax relating to items that will not be reclassified to profit or loss</b>		
Changes in revaluation surplus	-	-
Remeasurement of defined benefit plans	12.35	(0.93)
Equity instrument through OCI		-
Fair value changes relating to own credit risk of financial		
Liabilities designated at FVTPL	-	-
Share of OCI in Joint ventures	-	-
	12.35	(0.93)
<b>Total (A)</b>	<b>23.34</b>	<b>(1.77)</b>
<b>(B) (i) Items that will be reclassified to profit or loss</b>		
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	-	-
<b>(ii) Income tax relating to items that will be reclassified to profit or loss</b>		
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	-	-
<b>Total (B)</b>		-
<b>Total (A+B)</b>	<b>23.34</b>	<b>(1.77)</b>

## 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 ₹ 50 crore and ₹ 38.08 crore respectively as on March 31, 2018.

## 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.

#### 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.

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.

## 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:

- Financial assets that are debt instruments, and are measured at amortised cost e.g., loans, debt securities, deposits, trade receivables and bank balance
- Financial assets that are debt instruments and are measured as at FVTOCI
- Lease receivables under Ind AS 17
- 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 amortised 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.

### 2.9.6 Cash & Cash equivalents

Cash and cash equivalent in the balance sheet comprise cash at banks and on hand and short-term deposits with an original maturity of three months or less, which are subject to an insignificant risk of changes in value. For the purpose of the consolidated statement of cash flows, cash and cash equivalents consist of cash and short term deposits, as defined above, net of outstanding bank overdrafts as they are considered an integral part of the company's cash management.

## 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.

### 2.16.4 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.

#### 2.16.4.1 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.

### **2.16.4.2 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.

### **2.16.4.3 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.

### **2.16.4.4 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 31<sup>st</sup> MARCH, 2018**

**1. Fair Value Measurement**

(₹ in Crore)

**(a) Financial Instruments by Category**

	31 <sup>st</sup> March 2018			31 <sup>st</sup> March 2017		
	FVTPL	FVTOCI	Amortised cost	FVTPL	FVTOCI	Amortised cost
<b>Financial Assets</b>						
Investments :						
Secured Bonds						
Preference Share in Subsidiary						
Mutual Fund						
Loans			-			0.02
Deposits, receivable & Others			90.96			151.44
Trade receivables			611.38			327.65
Cash & cash equivalents			179.27			77.18
Other Bank Balances						
<b>Financial Liabilities</b>						
Borrowings						
Trade payables			1.31			1.13
Security Deposit and Earnest money			10.09			9.69
Other Liabilities			85.57			79.06

**(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 <sup>st</sup> March 2018			31 <sup>st</sup> March 2017		
	Level I	Level II	Level III	Level I	Level II	Level III
<b>Financial Assets at FVTPL</b>						
Investments :	-	-	-	-	-	-
Mutual Fund	-	-	-	-	-	-
<b>Financial Liabilities</b>						
If any item	-	-	-	-	-	-



(₹ in Crore)

Financial assets and liabilities measured at amortised cost for which fair values are disclosed at 31 <sup>st</sup> March, 2018	31 <sup>st</sup> March 2018			31 <sup>st</sup> March 2017		
	Level I	Level II	Level III	Level I	Level II	Level III
<b>Financial Assets at FVTPL</b>						
Investments :			-			-
Equity Shares in JV			-			-
Mutual Fund			-			-
Loans			-			0.02
Deposits, receivable & Others			90.96			151.44
Trade receivables			611.38			327.65
Cash & cash equivalents			179.27			77.18
Other Bank Balances						
Preference Share						
Borrowings						
Trade payables			1.31			1.13
Security Deposit and Earnest money			10.09			9.69
Other Liabilities			85.57			79.06

**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.

### (d) Fair value measurements using significant unobservable inputs

At present there are no fair value measurements using significant unobservable inputs.

### (e) Fair values of financial assets and liabilities measured at amortised cost

- The carrying amounts of trade receivable, 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.

- 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.

**Significant estimates:** The fair value of financial instruments that are not traded in an active market is determined using valuation techniques. The Company uses its judgment to select a method and makes suitable assumptions at the end of each reporting period.

## 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.

	31.03.2018	31.03.2017
Gross Carrying Amount	614.11	330.15
Expected Loss rate	0.44%	0.76%
Expected Credit Loss allowance	2.73	2.50

## 31.03.2018

Ageing	Due for 2 month	Due for 6 month	Due for 1 years	Due for 2 years	Due for 3 years	Due for more than 3 years	Total
Gross Carrying Amount	313.16	156.57	81.67	27.01	7.97	27.73	614.11
Expected Loss rate	-	-	-	-	-	9.84%	0.44%
Expected Credit (Loss allowance provision)	-	-	-	-	-	2.73	2.73

## 31.03.2018

Ageing	Due for 2 month	Due for 6 month	Due for 1 years	Due for 2 year	Due for 3 year	Due for more than 3 year	Total
Gross Carrying Amount	112.57	137.59	25.25	16.45	7.29	31.00	330.15
Expected Loss rate	-	-	-	-	-	8.06%	0.76%
Expected Credit (Loss allowance provision)	-	-	-	-	-	2.50	2.50

## 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 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 Company.

## 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)

	31.03.2018	31.03.2017
Equity Share capital	38.08	19.04
Preference share capital	NIL	NIL
Long term debt	NIL	NIL

## 3. Company Information:

Name	Relationship with CIL (holding company)	Principal activities	Country of Incorporation	% of Equity interest	
				31.03.2018	31.03.2017
Central Mine Planning & Design Institute Limited.	Subsidiary of CIL	Planning & Design, Exploration, Environmental Services	India	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 ₹ 33.06 Crore (₹ 32.66 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 31.03.2018 based on valuation made by the Actuary, details of which are mentioned below is ₹ 333.04 Crore.

The actuarial liability as on 31.03.2018:

(₹ in Crore)

Head	Opening Actuarial Liability as on 01.04.2017	Incremental Liability during the Year	Closing Actuarial Liability as on 31.03.2018
Gratuity	117.21	50.33	167.54
Earned Leave	74.02	(20.91)	53.11
Half Pay Leave	29.60	(9.16)	20.44
Life Cover Scheme	0.71	(0.09)	0.62
Settlement Allowance Executives	2.14	0.97	3.11
Settlement Allowance Non-executives	1.10	(0.20)	0.90
Group Personal Accident Insurance Scheme	0.05	-	0.05
Leave Travel Concession	17.45	0.95	18.40
Medical Benefits Executives	60.24	3.78	64.02
Medical Benefits Non-Executives	2.46	2.39	4.85
Compensation to dependents in case of mine accidental death	-	-	-
<b>Total</b>	<b>304.98</b>	<b>28.06</b>	<b>333.04</b>

**(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 31.03.2018**  
**CERTIFICATES AS PER IND AS 19 (2015)**

**Table 1: Disclosure Item**

(₹ In Crores)

<b>31.03.2017</b>	<b>Changes in Present Value of Obligation as at</b>	<b>31.03.2018</b>
111.81	Present value of obligation as on last valuation	117.21
13.35	Current Service Cost	28.58
7.43	Interest Cost	8.32
	Participant Contribution	
	Plan Amendments: Vested portion at end of period(Past Service)	67.25
	Plan Amendments: Non-Vested portion at end of period(Past Service)	
5.82	Actuarial gain/loss on obligations due to Change in Financial Assumption	-5.92
	Actuarial gain/loss on obligations due to Change in Demographic assumption	
-2.64	Actuarial gain/loss on obligations due to Unexpected Experience	-29.34
	Actuarial gain/loss on obligations due to Other reason	
	The effect of change in Foreign exchange rates	
18.56	Benefits Paid	18.56
	Acquisition Adjustment	
	Disposal/Transfer of Obligation	
	Curtailment cost	
	Settlement Cost	
	Other(Unsettled Liability at the end of the valuation date)	
117.21	Present value of obligation as on valuation date	167.54
162.33	Accrued Gratuity	117.21

**Table 2: Disclosure Item**

(₹ In Crores)

<b>31.03.2017</b>	<b>Changes in Fair Value of Plan Assets as at</b>	<b>31.03.2018</b>
23.22	Fair value of Plan Assets at Beginning of period	23.22
1.68	Interest Income	1.74
23.12	Employer Contributions	23.12
	Participant Contributions	
	Acquisition/Business Combination	
	Settlement Cost	
18.56	Benefits Paid	18.56
	The effect of asset ceiling	
	The effect of change in Foreign Exchange Rates	
	Administrative Expenses and Insurance Premium	
0.48	Return on Plan Assets excluding Interest Income	0.42
29.94	Fair value of Plan Assets at End of measurement period	29.94





**Table 3: Disclosure**

(₹ in Crores)

31.03.2017	Table Showing Reconciliation to Balance Sheet	31.03.2018
-87.27	Funded Status	-137.60
	Unrecognized Past Service Cost	
	Unrecognized Actuarial gain/loss at end of the period	
	Post Measurement Date Employer Contribution(Expected)	
	Unfunded Accrued/Prepaid Pension cost	
29.94	Fund Asset	29.94
117.21	Fund Liability	167.54

**Table 4: Disclosure Item**

31.03.2017	Table Showing Plan Assumptions	31.03.2018
7.25%	Discount Rate	7.71%
7.25%	Expected Return on Plan Asset	7.71%
9.00% for Executives & 6.50 % for Non-Executives	Rate of Compensation Increase(Salary Inflation)	9.00% for Executives & 6.25 % for Non-Executives
N/A	Pension Increase Rate	N/A
15-	Average expected future service (Remaining working Life)	15
15	Average Duration of Liabilities	15
IALM 2006-2008 Ultimate	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)	0.30%

**Table 5: Disclosure Item**

(₹ in Crores)

31.03.2017	Expense Recognized in statement of Profit/Loss as at	31.03.2018
13.35	Current Service Cost	28.58
	Past Service Cost( vested)	67.25
	Past Service Cost(Non-Vested)	
5.75	Net Interest Cost	6.58
	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	
19.10	Benefit Cost(Expense Recognized in Statement of Profit/loss)	102.41

**Table 6: Disclosure Item**

(₹ in Crores)

31.03.2017	Other Comprehensive Income	31.03.2018
5.82	Actuarial gain/loss on obligations due to Change in Financial Assumption	-5.92
	Actuarial gain/loss on obligations due to Change in Demographic assumption	
-2.64	Actuarial gain/loss on obligations due to Unexpected Experience	-29.34
	Actuarial gain/loss on obligations due to Other reason	
3.18	Total Actuarial (gain)/losses	-35.26
0.48	Return on Plan Asset, Excluding Interest Income	0.43
	The effect of asset ceiling	
2.70	Balance at the end of the Period	-35.69
2.70	Net (Income)/Expense for the Period Recognized in OCI	-35.69

**Table 7: Disclosure Item**

(₹ in Crores)

31.03.2017	Table Showing Allocation of Plan Asset at end Measurement Period	31.03.2018
-	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 Contrast /Insurance Fund	-
-	Other	-
-	Other	-



**Table 8: Disclosure Item**

31.03.2017	Table Showing Total Allocation in % of Plan Asset at end Measurement	31.03.2018
-	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)

31.03.2017		Sensitivity Analysis	31.03.2018	
Increase	Decrease		Increase	Decrease
113.85	120.82	Discount Rate (-/+ 0.5%)	162.90	172.52
-2.87%	3.08%	%Change Compared to base due to sensitivity	-2.77%	2.98%
118.07	116.37	Salary Growth (-/+ 0.5%)	170.00	165.05
0.72%	-0.72%	%Change Compared to base due to sensitivity	1.47%	-1.49%
117.31	117.12	Attrition Rate (-/+ 0.5%)	167.66	167.41
0.08%	-0.08%	%Change Compared to base due to sensitivity	0.08%	-0.08%
117.86	116.57	Mortality Rate (-/+ 10%)	168.36	166.71
0.55%	-0.55%	%Change Compared to base due to sensitivity	0.49%	-0.49%

**Table 11: Disclosure Item**

(₹ in Crores)

Table Showing Cash Flow Information	
Next Year Total (Expected)	151.74
Minimum Funding Requirements	144.44
Company's Discretion	

**Table 12: Disclosure Item**

(₹ in Crores)

Table Showing Benefit Information Estimated Future payments (Past Service)	
year	₹ In Crores
1	42.46
2	22.71
3	24.88
4	22.90
5	16.77
6 to 10	71.57
More than 10 years	141.63
Total Undiscounted Payments Past and Future Service	
Total Undiscounted Payments related to Past Service	342.92
Less Discount For Interest	175.38
Projected Benefit Obligation	167.54





**Table 13: Disclosure Item**

<b>Table Showing Outlook Next Year Components of Net Periodic benefit Cost Next Period</b>	
	₹ In Crores
Current service Cost(Employer portion Only) Next period	9.51
Interest Cost next period	11.99
Expected Return on Plan Asset	12.57
Unrecognized past service Cost	
Unrecognized actuarial/gain loss at the end of the period	
Settlement Cost	
Curtailment Cost	
other( Actuarial Gain/loss)	
Benefit Cost	8.93

**Table 14: Bifurcation of Net liability**

(₹ in Crores)

<b>31.03.2017</b>	<b>Table Showing expected return on Plan Asset at end Measurement Period</b>	<b>31.03.2018</b>
28.47	Current liability	23.16
88.74	Non-Current Liability	144.38
117.21	Net Liability	167.54

## ACTUARIAL VALUATION OF LEAVE ENCASHMENT BENEFIT (EL/HPL) AS AT

**31.03.2018**

## CERTIFICATES AS PER IND AS 19 (2015)

**Table 1: Disclosure Item**

(₹ in Crores)

<b>31.03.2017</b>	<b>Changes in Present Value of Obligation as at</b>	<b>31.03.2018</b>
80.89	Present value of obligation as on last valuation	103.61
10.44	Current Service Cost	4.32
5.49	Interest Cost	7.59
	Participant Contribution	
	Plan Amendments: Vested portion at end of period(Past Service)	
	Plan Amendments: Non- Vested portion at end of period(Past Service)	
20.70	Actuarial gain/loss on obligations due to Change in Financial Assumption	-3.19
	Actuarial gain/loss on obligations due to Change in Demographic assumption	
-3.58	Actuarial gain/loss on obligations due to Unexpected Experience	-28.44
	Actuarial gain/loss on obligations due to Other reason	

	The effect of change in Foreign exchange rates	
10.33	Benefits Paid	10.33
	Acquisition Adjustment	
	Disposal/Transfer of Obligation	
	Curtailment cost	
	Settlement Cost	
	Other(Unsettled Liability at the end of the valuation date)	
103.61	Present value of obligation as on valuation date	73.56

**Table 2: Disclosure Item**

(₹ in Crores)

31.03.2017	Changes in Fair Value of Plan Assets as at	31.03.2018
	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)

31.03.2017	Table Showing Reconciliation to Balance Sheet	31.03.2018
-103.61	Funded Status	-73.56
	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	
103.61	Fund Liability	73.56



**Table 4: Disclosure Item**

(₹ in Crores)

31.03.2017	Table Showing Plan Assumptions	31.03.2018
7.25%	Discount Rate	7.71%
N/A	Expected Return on Plan Asset	N/A
9.00% for Executives & 6.50 % for Non-Executives	Rate of Compensation Increase (Salary Inflation)	9.00% for Executives & 6.25% for Non-Executives
N/A	Pension Increase Rate	N/A
15	Average expected future service (Remaining working Life)	15
15	Average Duration of Liabilities	15
IALM 2006-2008 Ultimate	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)	0.30% p.a
Ignored	Voluntary Retirement	Ignored

**Table 5: Disclosure Item**

(₹ in Crores)

31.03.2017	Expense Recognized in statement of Profit/Loss as at	31.03.2018
10.44	Current Service Cost	4.32
	Past Service Cost (vested)	
	Past Service Cost (Non-Vested)	
5.49	Net Interest Cost	7.59
	Cost (Loss / (Gain) on settlement	
	Cost(Loss/(Gain) on curtailment	
17.12	Actuarial Gain loss Applicable only for last year	-31.63
	Employee Expected Contribution	
	Net Effect of changes in Foreign Exchange Rates	
33.05	Benefit Cost(Expense Recognized in Statement of Profit/loss)	-19.72

**Table 6: Disclosure Item**

(₹ in Crores)

31.03.2017	Other Comprehensive Income	31.03.2018
	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**

(₹ in Crores)

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)

31.03.2017		Sensitivity Analysis	31.03.2018	
Increase	Decrease		Increase	Decrease
99.51	108.08	Discount Rate (-/+ 0.5%)	70.68	76.70
-3.96%	4.31%	%Change Compared to base due to sensitivity	-3.92%	4.27%
107.98	99.56	Salary Growth (-/+ 0.5%)	76.65	70.70
4.22%	-3.91%	%Change Compared to base due to sensitivity	4.20%	-3.89%
103.70	103.52	Attrition Rate (-/+ 0.5%)	73.64	73.49
0.09%	-0.09%	%Change Compared to base due to sensitivity	0.10%	-0.10%
104.15	103.07	Mortality Rate (-/+ 10%)	73.95	73.17
0.52%	-0.52%	%Change Compared to base due to sensitivity	0.53%	-0.53%

**Table 9: Disclosure Item**

(₹ in Crores)

Table Showing Benefit Information Estimated Future payments	
year	₹ In Crores
1	9.19
2	8.98
3	8.11
4	8.50
5	6.81
6 to 10	38.14
More than 10 years	109.07
Total Undiscounted Payments Past and Future Service	
Total Undiscounted Payments related to Past Service	188.79
Less Discount For Interest	115.23
Projected Benefit Obligation	73.56

**Table 10: Bifurcation of Net liability**

(₹ in Crores)

31.03.2017	Table Showing expected return on Plan Asset at end Measurement Period	31.03.2018
12.88	Current liability	8.88
90.73	Non-Current Liability	64.69
103.61	Net Liability	73.56

## 5. Unrecognised Items:

### a) Contingent Liabilities (Ind AS-37)

Claims against the Company not acknowledged as debts (including interest, wherever applicable)

(a1)

(₹ in Crore)

Claims against the company not acknowledged as debt			
		31.03.2018	31.03.2017
1	<b>Central Govt.</b> <b>Income Tax</b> <b>Service Tax</b> Royalty Central Excise	17.71 15.89	17.71 15.70
2	<b>State Govt. and Local authorities</b> Sales Tax Entry Tax		0.17
3	<b>Central Public Sector Enterprises</b> Suit against the company under litigation		
4	<b>Others</b>	4.73	6.23
	<b>Total</b>	<b>38.33</b>	<b>39.64</b>

(a2)

(₹ in Crore)

SI No.	Particulars	Central Government	State Government and other localities	CPSE	Others	Total
1	Opening as on 01.04.2017	33.41			6.23	39.64
2	Addition during the year	0.19			0.59	0.78
3	Claims settled during the year					
	a. From opening balance				2.09	2.09
	b. Out of addition during the year					
	c. Total claims settled during the year (a+b)					
4	Closing as on 31.03.2018	33.60			4.73	38.33

### b) Commitments (Ind AS-37)

Estimated amount of contracts remaining to be executed on capital account not provided for others is ₹ 7.81 Crores (₹ 16.57 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.



## 6. Prior Period Item

(₹ in Crore)

Particulars	For Year (for which retained earning/profit has been adjusted for PPA) 2016-17
Total Comprehensive Income attributable to owners of the company reported earlier	38.82
<i>Adjustment for prior period items :</i>	
Each individual Head of expenditure adjusted for PPA - Depreciation	0.95
Total Comprehensive income attributable to owners of the company (Restated)	37.87

## 7. Other Information

(₹ in Crore)

Provisions	Opening Balance as on 1.04.2017	Addition during the year	Write back/ Adj. during the year	Unwinding of discounts	Closing Balance as on 31.03.2018
<b>Note 1:-Property, Plan and Equipment:</b> Impairment of Assets :					
<b>Note 2:- Capital Work in Progress :</b> Against CWIP :					
<b>Note 3:- Exploration And Evaluation</b> Assets : Provision and Impairment:					
<b>Note 1:- Non Current Assets Held For Sale:</b> Provision :					
<b>Note 8:- Loans :</b> Other Loans :					
<b>Note 9:- Other Financial Assets:</b> Current Account with Subsidiaries : Claim receivables : Other Receivables :					
<b>Note 10:- Other Non-Current Assets :</b> Exploratory Drilling Work : Against Security Deposit for Utilities:					
<b>Note 11:- Other Current Assets :</b>					
Advances for Revenue :	0.03				0.03
Advance Payment Against Statutory					
Dues: Other Deposits:	0.05				0.05
Other Receivables:					
<b>Note 12:-Inventories :</b> Stock of Coal : Stock of Stores & Spares :	0.60	0.03			0.63
<b>Note 13:-Trade Receivables :</b> Provision for bad & doubtful debts :	2.50	0.23			2.73

<b>Note 21 :- Non-Current &amp; Current Provision:</b>					
Performance related pay :	88.12	11.16	-35.57		63.71
NCWA:	19.04	20.81	-9.57		30.28
Executive Pay Revision:	5.03	47.97			53.00
Mine Closure:					
NPS:	81.69	10.71			92.40

**b) Authorised Share Capital)**

Particulars	As on 31.03.18	As on 31.03.17
5,00,000 Equity Shares of ₹1000/- each	50.00	50.00

**c) Earnings per share (Ins AS-33)**

(₹ in Crore)

Sl. No.	Particulars	For the year ended 31.03.2018	For the year ended 31.03.2017
i)	Net profit after tax attributable to Equity Share Holders	80.83	39.64
ii)	Weighted Average no. of Equity Shares Outstanding	380800.00	380800.00
iii)	Basic and Diluted Earnings per Share in Rupees (Face value ₹ 1 0007- per share)	2122.64	1040.97

**d) Related Party Disclosure (Ins AS-24)**

**Key Managerial Personnel**

Shekhar Saran (CMD)

V K Sinha (Director Technical)

B N Shukla (Director Technical)

Binay Dayal (Director Technical)

Ashim Kumar Chakraborty (Director Technical)

Abhishek Mundhra (Company Secretary)

**Independent Directors**

Rajender Parshad (Independent Director)

Debasish Gupta (Independent Director)





**Remuneration of Key Managerial Personnel**

(₹ in Crore)

SI No.	Remuneration to CMD, Whole Time Directors and Company Secretary	For the year ended 31.03.2018	For the year ended 31.03.2017
i)	<b>Short Term Employee Benefits</b>		
	Gross Salary	1.63	1.64
	Perquisites	0.16	0.18
	Medical Benefits	0.04	0.06
ii)	<b>Post-Employment Benefits</b>	0.11	0.18
	Contribution to P.P. & other fund		
iii)	<b>Actuarial Valuation of Defined Benefits</b>	1.06	1.27
iv)	<b>Retirement Benefits</b>	0.10	
v)	<b>Termination Benefits</b>		
	Leave Encashment		
	Gratuity	NIL	NIL
	<b>TOTAL</b>	<b>3.10</b>	<b>3.33</b>

**Note:**

- (i) 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)

SI. No.	Payment to Independent Directors	For the year ended 31.03.2018	For the year ended 31.03.2017
i)	Sitting Fees	0.11	0.0965

**Balances Outstanding of Sitting Fees.**

(₹ in Crore)

SI. No.	Particulars	As on 31.03.2018	As on 31.03.2017
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	122.32	Employees Related, Sales &TDS
Bharat Coking Coal Limited	Under Same Management	40.72	Employees Related, Sales &TDS
Central Coalfields Limited	Under Same Management	113.48	Employees Related, Sales &TDS
Western Coalfields Limited	Under Same Management	149.51	Employees Related, Sales &TDS
Northern Coalfields Limited	Under Same Management	90.32	Employees Related, Sales &TDS
South Eastern Coalfields Limited	Under Same Management	401.42	Employees Related, Sales &TDS
Mahanadi Coalfields Limited	Under Same Management	75.13	Employees Related, Sales &TDS
CIL	100% Holding	10.21	Employees Related, Sales, Funds & TDS

(₹ in Crore)

Name of the Company	Nature of relationship	Amount of outstanding balances
Eastern Coalfields Limited	Under Same Management	11.99
Bharat Coking Coal Limited	Under Same Management	15.49
Central Coalfields Limited	Under Same Management	51.29
Western Coalfields Limited	Under Same Management	51.79
Northern Coalfields Limited	Under Same Management	17.03
South Eastern Coalfields Limited	Under Same Management	97.86
Mahanadi Coalfields Limited	Under Same Management	47.38
CIL	100% Holding	19.07

#### e) Taxation (Ind AS-12)

An amount off ₹ 65.65 Crore (₹ 39.16 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.

#### Calculation of Deferred Tax

- Deferred Tax Assets and Liability are being offset as they relate to Taxes on income levied by the same governing taxation laws.
- Deferred Tax Asset / (Liability) as at 31<sup>st</sup> March, 2018 and as at 31<sup>st</sup> March 2017 is given below:-



(₹ In Crores)

**Deferred Tax Liability:**

Related to Fixed Assets

**As at  
31.03.2018****7.82****As at  
31.03.2017****8.95****Deferred Tax Asset:**

Provision for doubtful Debts, claims, etc.

1.00

0.90

Employee separation and retirement

135.53

123.46

Others

0.22

0.21

Total deferred tax Assets

**136.75****124.57****Net Deferred Tax Asset/ (Deferred Tax Liability) :****128.93****115.62****(f) 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.

**(g) 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.

**(h) Current Liabilities**

Estimated liability has been provided where actual liability could not be measured.

**(i) 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.

**(j) Value of imports on CIF basis**

(₹ in Crore)

Particulars	For the year ended 31.03.2018	For the year ended 31.03.2017
(i) Raw Material	NIL	NIL
(ii) Capital Goods	8.48	3.35
(iii) Stores, Spares & Components	0.66	0.01

**(K) Expenditure incurred in Foreign Currency**

(₹ in Crore)

Particulars	For the year ended 31.03.2018	For the year ended 31.03.2017
Travelling Expenses	0.18	0.11
Training Expenses	NIL	NIL
Consultancy Charges	NIL	NIL
Interest	NIL	NIL
Stores and Spares	NIL	NIL
Capital Goods	NIL	NIL
Others	8.92	3.37

**(l) Earning in Foreign Exchange:**

Particulars	For the year ended 31.03.2018	For the year ended 31.03.2017
Travelling Expenses	NIL	NIL
Training Expenses	NIL	NIL
Consultancy Charges	NIL	NIL

**m) Total Consumption of Stores and Spares (Refer Note No. 26)**

(₹ in Crore)

Particulars	For the year ended 31.03.2018		For the year ended 31.03.2017	
	Amount	% of total consumption	Amount	% of total consumption
(i) Imported Materials	0.00	0.00	0.00	0.00
(ii) Indigenous	25.92	100.00	26.65	100.00

**(o) Others**

- Previous period's figures have been restated as per Ind AS and regrouped and rearranged wherever considered necessary.
- Previous period's figures in Note No. 1 to 38 are in brackets.
- Note 1 to 23 form part of the Balance Sheet as at 31<sup>st</sup> March, 2018 and 24 to 37 form part



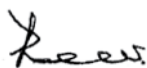


of Statement of Profit & Loss for the year ended on that date. Note - 1 & 2 represents Significant Accounting Policies and Note - 38 represents Additional Notes to the Financial Statements.

Signature to Note 1 to 38.



**(A. Mundhra)**  
Company Secretary



**(N. N. Thakur)**  
General Manager (F)



**(B. N. Shukla)**  
Director  
DIN-07367625



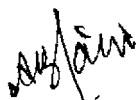
**(Shekhar Sharan)**  
Chairman-Cum-  
Managing Director  
DIN-06607551

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: 25<sup>th</sup> May, 2018

Place: Ranchi



## **CENTRAL MINE PLANNING & DESIGN INSTITUTE LIMITED**

(A Subsidiary of Coal India Limited)

A Mini Ratna Company (Cat-II)

AN ISO 9001:2015 Certified

Gondwana Place, Kanke Road, Ranchi - 834 031

