# COAL MINING POLICY AND MAJOR INITIATIVES

#### 4.1 GUIDELINES FOR MINE CLOSURE

With a view to restore mined out areas to the primary level to the extent possible, it has been decided to make it mandatory to prepare mine closure plans for which Ministry of Coal has issued guidelines for adoption by coal mine owners. This would help in addressing environmental issues related to coal mining. These guidelines are available on the website of this Ministry.

# 4.2 STATUS OF COAL MINES (NATIONALISATION) AMENDMENTBILL 2000

The Amendment Bill is awaiting arriving at consensus in the matter.

#### 4.3 REGULATOR FOR COAL SECTOR

The proposal to set up a Coal Regulatory Authority was considered by the Cabinet in its meeting on 10.5.2012, wherein it was decided to refer the issue to a Group of Ministers (GOM) The matter is under consideration of the GOM.

#### 4.4 CAPTIVE COAL MINING BLOCKS

4.4.1. Under the Coal Mines (Nationalisation) Act, 1973, coal mining was mostly reserved for the public sector. By an amendment to the Act in 1976, two exceptions to the policy were introduced viz., (i) captive

- mining by private companies engaged in production of iron and steel and (ii) sub-lease for coal mining to private parties in isolated small pockets not amenable to economic development and not requiring rail transport.
- 4.4.2. The Coal Mines (Nationalisation) Act, 1973 was amended in June, 1993 to allow coal mining for captive consumption for generation of power, washing of coal obtained from a mine and other end uses to be notified by Government from time to time. As per the provisions in Section 3 (3) (a) (iii) of the Coal Mines (Nationalisation) Act, 1973, a company engaged in production of iron and steel, generation of power, production of cement, and production of syn-gas obtained through coal gasification (underground and surface) and coal liquefaction only can do coal mining in India for captive consumption.
- 4.4.3. The Central Government, a Government company (including a State Government company), a Corporation owned, managed and controlled by the Central Government can do coal mining without the restriction of captive use.
- 4.4.4 So far, production has commenced in 33 coal blocks (19 private and 14

public). The production from captive coal blocks for the year 2011-12 was 36.167 million tonnes and for the current year 2012-2013 (up to December, 2012 prov.) was 27.66 million tonnes as reported by the Coal Controller's Office. Details are given below:

# PRODUCTION OF COAL FROM CAPTIVE BLOCKS DURING 2006-07 TO 2012-13

2018	Com name	BLK Name	PAC IN	Covi	SAL.	EUP	-	Production in Million Topices						
	THE STATE OF THE S		MEEA (4) Pr MD	HLK HLK	m x		2004-07	3017-08	2015-09	2009-10	2010-11	3811-12	Production for (Dec 2012)	Production for 2012-13
1	WBSEB	Tara (East)	2	2	d	Power	4.765	4.229	4.134	3.503	2.876	2.5is	0.259	2.357
2	WEPDCL	Tara (West)												
3	J5PL	Care Palma IV/	6	0	1	From & Steel	5.96#	5.994	2.998	5.999	5.000	5.9906	0.456	4.455
4	CESC	Sandiatali	3.5	0.	X)	Power	2.54h	2.751	2.979.	3.214	2,929	3.743	0.171	2.412
5	1411.	Talabira-I	1.5	0.	Ţ	Hower.	1.159	1.47	2.000	2.33	2.285	2.357	0.178	1.696
n	BLA	Contituesett & W)	8.53	0	2	Pvt Comm ercid	0.218	0.329	/I.236	0.299	0.297	0.299	aote	0.268
7.	MII.	Gare Palma IV/9	1.1	a	1	from de Shoel	0.668	0.835	0.989	1	0.951	0.851	0.058	0.557
Ħ.	PSER	Panchwara Central	£1	1	0	Power	1.603	3.797	4.175	8.476	8.41	H-301	0,42	5,429
9	JNL.	Gare Palma IV/4	0.48	i)	+	Iron & Steel	0.059	0.279	0.396	0.96	0.406	0,48	0.049	0,374
0	PIL.	Chotta	t	0	1	Iron & Steel	0.625	0.9	0.919	1	1	1	0.082	0.751
1	ANPMOL	Namehik Namphisk	8.2	1	P	Govt Commercial		6.079	0.137	0.25	0.299	11.222	et :	0.069
2	μr	Gare Palma IV 1 63	n.25	a	2	Power		0.42%	4.993	6.045	5.688	5.25	0.412	4.005
3	58L	Belgann	67.27	.0	3	Iron & Steel		0.001	11151	0.74	0.114	0.16	0.023	0.187
14	KPCL	Beranj I-IV Kilom and Mareira Deep	2.5	6	0	Power			0.993	129	2.275	2.189	0 247	1.749
15	UML	Kathautia	0.6	ø	1)	Iron & Steel			0.013	0.062	0.304	0.351	0.041	0.399
4	ESCL	Parbutpur	1.24	a	1	Iron & Steel			0.013	0.055	0.034	0.30%	0.011	8.022
7.	RAPL	Gare Palma IV/	12	0	1	Trun: & Steed			0.008	0.297	0.432	0.774	0.082	0.714
6	WBPDCL	Batiora	n.s.	T	0	Pawarr			0	0.115	11.252	0.213	0.041	0.195
198	SAJL	Такта	+	10	00	Inin & Steel				313063	0.014	0.04	0.012	0.08
20	DVC	Barjora (North)	3	1	0	Pensor					0.021	1.165	0.193	1.313
1	B.5.1spat	Marki Manlgi-l	0.33		1	Iron de Steel					0.014	0.003	0.012	0.04e
22	Shree Virangana Steel Ltd	Marki Mangli III	0.21		1.	Iron & Steel						0.065	0.027	0.259
13	WBMTDCL	Trins Damodar	1	1		Commercial							0.027	0.204
4	Savan Power LTD	Moher & Moher Amiori Extention	20		2	UMPP							0.014	R113
25	Sova Ispat Ltd. & Jai Walaji Indus	Ardhagram	0.4		100	Thin & Steel							0.009	(7.00%
		Total	64.91	14	19	Tetal	37.011	21.245	29,997	35.46	34.6	36.167	2.856	27.66

- 4.5. REVIEW OF ALLOTMENT OF COAL BLOCKS BY INTER-MINISTERIAL GROUP (IMG)
- 4.5.1 Monitoring of Progress of Captive Coal Blocks Allocated and its associated end use projects:

In pursuance of the announcement of the Hon'ble Finance Minister in the budget speech for the year 2012-13, an Inter-Ministerial Group (IMG) headed by Additional Secretary, Ministry of Coal has been constituted on 21.06.2012 to undertake periodic review of the development of coal / lignite blocks allotted by the Government. The terms of reference of the IMG are:

- The IMG shall undertake periodic review and the progress of allocated coal mines / blocks and make recommendations on action to be taken including de-allocations, if required.
- The IMG may consider the replies where the show cause notices have been given and recommend action against the allocate companies including de-allocation, wherever necessary.
- The IMG may make its own assessment and recommend action as to deduction of Bank Guarantee, if required.

- iv) Any matter where a reference is made by the Competent Authority.
- 4.5.2 The IMG took up for review, the 58 cases where the show cause notices were issued consequent to the Review / recommendations by the Review Committee held on 11th & 12 January, 2012. In addition the cases where a decision was taken, on the basis of earlier reviews, to deduct BG and were pending were also taken up.
- 4.5.3 The IMG has held 17 meetings so far. The IMG has discussed and finalized the guidelines/modalities for conduct of its business and also regarding computation of deduction of BG. The IMG has also decided to give an opportunity of giving personal hearing to all the allocatee companies of coal blocks before giving its recommendations. With respect to the allocations made to the Private Companies, the IMG has recommended de-allocation of 13 coal blocks allocated to 29 companies, deduction of Bank Guarantee in the cases of 14 blocks allocated to 19 companies and imposition of BG in case of 1 coal block. recommendations of the IMG have been accepted by the Competent Authority and orders have been issued except in one case due to orders

of Hon'ble High Court. Further, the IMG took up the cases of PSUs and after hearing the allocatees, the IMG recommended de-allocation of 11 blocks, deduction of BG in 5 cases, imposition of BG in 11 cases and no action in 6 cases including 3 cases on account of Court orders.

#### 4.6 TECHNOLOGICALINITIATIVES

Emphasis is laid on technology development through adoption of State of the Art Technologies for both underground and opencast operations for higher coal production, productivity and improved safety. Deployment of high capacity shovels and dumpers, surface miners etc. along with matching ancillary equipments and coal handling facilities for opencast mines is being practiced in various PSU coal companies.

Deployment of draglines in conjunction with shovel dumper combination is a time tested method in major projects with multiple seam extraction and high stripping ratios. Crusher conveyor technology for coal as well as overburden is also in use for quite some time in some of the opencast mines in these companies.

Of late, deployment of surface miners for selective mining, sizing and avoiding cyclic drilling and blasting operations in coal for improved productivity is assuming importance. In addition to the outsourced operations using surface miners, PSU coal companies are also procuring the same for departmental operations. Radar based monitoring of slope stability of benches in open cast mines is being adopted for improved safety of operations. GPS based truck despatch monitoring systems are also being adopted for improving productive use of dumpers.

Controlled blasting in opencast mines is being practiced to minimise ground vibrations. Coal handling plants with silos and rapid loading systems are being developed in all major open cast mines.

Similarly, planning new underground mines for adoption of mass production technologies like continuous miners and longwall equipments is continuing. Deployment of bolter miners in conjunction with longwall operations for faster gate road drivage is also assuming significance in mechanisation of workings. Planning longwall mines with bigger blocks and longer face lengths is becoming possible due to faster rate of gate road preparation.



Hydraulic Side Discharge Loader is being operated in an underground mine

Adoption of continuous miners, side discharge loaders and load haul dumpers and conveyors for mechanising the underground operations wherever it is technoeconomically feasible is being taken up. Man riding systems are being installed in a number of underground mines to avoid manual walking to reach the workings.

Recently, CIL and SCCL have adopted

high wall mining technology to extract coal from the high walls of open cast mines which otherwise would remain sterilised. This technology provides extraction of coal using high wall mining machines from the open cast benches when the economic extraction of coal from open cast operations is not feasible. This technology is widely in use in USA.

For lignite mines specialised mining equipment comprising bucket wheel excavators with high capacity conveyor systems and spreaders are being deployed for extraction of both overburden and lignite.

Further CIL has floated an expression of interest seeking application from international consultancy organisations for modernization and technology development in their mines with a view to integrate the systems and adopting new technologies as may be feasible for CIL to enhance their coal production in quickest possible manner and to improve the productivity and safety.

# 4.7 CLEAN COAL AND WASHERY CAPACITY

4.7.1 Coal washing is an important area from economic and environment point of view. A number of studies carried out earlier have clearly highlighted benefits of using washed coal in improving the economics of power generation and also reduction of emissions. The directive of Ministry of Environment & Forests (MoEF) restricts the use of coal containing more than 34% ash content in power stations located 1000 km away from pit heads. MoEF is contemplating to

further reduce this distance to 500 km. With this as a driver, the numbers of power utilities have shown inclination to use washed coal for power generation. Also coal washing is one of the clean coal technologies prior to combustion of coal.

The present installed capacity of washery for thermal coal is about 103 Mty and is envisaged to reach about 263 Mty in the next five years time.

- 4.7.2 Realizing the importance of washed coal supply, Ministry of Coal issued guidelines for setting up of coal washeries on Public Sector Coal Company's land in September'05. Accordingly, subsidiary coal companies of CIL are extending necessary assistance to facilitate setting up of coal washeries on their land to the private operators.
- 4.7.3 CIL has also decided in principle to wash all inferior grade coal linked to non-pit head power stations by setting up washeries with the state-of-the art technology on Build-Operate-Maintain [BOM] concept where CIL will provide the capital funding and other infrastructure facilities to the BOM operator. All new mines producing high ash coal (having capacity 2.5 Mty and above) not linked

- to pit head power plants will be designed with an integrated washery.
- 4.7.4 CIL has undertaken a massive programme of setting up of new washeries and have proposed to set up twenty washeries in its various subsidiaries with total installed capacity of 111.1 Mty (92 Mty in noncoking coal and 19.1 Mty in coking coal sector).

Out of the above twenty [20] new washeries, two washeries [one of coking coal at Dhori and another of non-coking coal at Piparwar] are proposed under "Turn-key" execution and the rest eighteen are on BOM concept.

Tenders for ten washeries have been floated. Agreements for two washeries have been signed and agreements for two more washeries are expected to be signed very soon. Balance six washeries are at various stages of Bid Process Management.

- 4.7.5 Two nos. of R&D Projects to promote dry coal beneficiation are also under implementation with CIL R&D Grant namely
  - Radiometric Dry Deshaling plant (Ardeesort) at Madhuband washery, BCCL

- All-mineral All-air Jig dry deshaling system at Bharatpur, MCL
- 4.7.6 Besides above, CIL has identified to set up seventeen [17] nos. of washeries with a total capacity of 128.8 Mty in the second phase.
- 4.7.7 To expedite the process of setting up of washeries, CIL is also exploring the possibility of setting up of washeries on Build-Own-Operate (BOO) concept and preparation of Model Bid Document (RFQ & RFP) is in process.

#### 4.8 COALBED METHANE (CBM)

- 4.8.1 New area of clean coal technologies like Coal Bed Methane (CBM) and Coal Mine Methane (CMM), Underground Coal Gasification (UCG) and Coal Liquefaction are under focus and Government is taking all the necessary steps for development of these areas within the existing legal framework.
- 4.8.2 CBM is one of the potent greenhouse gases which is generated during the coalification process. CBM is in adsorbed state on the coal surface and possess a potential threat from safety angle during mining operation. If extracted separately, it forms a supplementary source of energy. In

view of the abundant resource of coal in the country, there is a significant scope for commercial development of CBM. Methane associated with virgin coal beds is conventionally fermed as Coalbed Methane. Similarly, extraction of methane from working mines is termed as Coal Mine Methane (CMM).

4.8.3 Consequent to the formulation of CBM Policy in 1997, Govt. of India has so far allotted 33 CBM blocks in 4 rounds of global bidding to various operators for exploration and exploitation of CBM. CBM is jointly managed by Ministry of Coal and Ministry of Petroleum and Natural Gas. CMPDI is preparing data dossiers on prospective CBM blocks for their allotment in 5th round of global bidding. CMM related activities are being addressed by Ministry of Coal separately.

# 4.8.4 CBM/Shale gas Specific Data Generation during XII Plan

### 4.8.4.1 CBM Specific Data Generation

CMPDI is carrying out studies related to "Assessment of Coalbed Methane Gas-in-Place Resource of Indian Coalfields/Lignite fields" through boreholes being drilled under Promotional Exploration (XII Plan period) under Promotional Exploration (PRE) funding amounting to ₹13.46 crore. This study will enlarge the CBM resource base of the country and facilitate delineation of more blocks for CBM development.

A total of 60 boreholes (40 by CMPDI and 20 by GSI) are to be taken up for CBM related studies during XII plan period from April 2012. During this plan period from April, 2012 to December, 2012, a total of 5 (five) boreholes (4 by CMPDI and 1 by GSI) have been tested for CBM related studies.

During the period from January, 2013 to March, 2013, 7 (seven) more boreholes (4 by CMPDI and 3 by GSI) will be undertaken for CBM related studies.

# 4.8.4.2 Shale Gas Specific Data Generation

CMPDI is carrying out studies related to "Assessment of Shale Gas In-place Resource of Indian Coal/Lignite fields" through boreholes being drilled under Promotional Exploration (XII Plan period) under Promotional Exploration (PRE) funding amounting to ₹ 7.75 Crore. This study will identify and enlarge the Shale Gas resource base of the

country and facilitate delineation of more blocks for Shale gas development.

A total of 20 boreholes by CMPDI are to be taken up for Shale gas related studies during XII Plan period from April 2012. During this plan period, from April, 2012 to December, 2012, initial data acquisition for shale gas related studies has been done by CMPDI.

During the period from January, 2013 to March, 2013, 4 (four) boreholes will be undertaken by CMPDI for shale gas related studies.

#### 4.8.5 CIL R&D Project on CMM

CMPDI has taken up a CIL R&D project for delineation of prospective CMM blocks in BCCL and CCL areas of CIL and preparation of data dossiers for 1 or 2 most prospective and commercially viable CMM blocks.

5 prospective CMM blocks have been identified in mining leasehold areas of BCCL and CCL areas and a Tender has been floated for selection of suitable developer in April 2011 by CMPDI on behalf of CIL. Certain issues of operationalization of commercial development of CMM within CIL mining leasehold areas were raised by

MoP&NG and the tender floated by CMPDI was cancelled.

To resolve the issue, the matter was deliberated at the competent level of MoC and MoP&NG and it has been resolved in a meeting held between Adviser, MoC and Secretary, MoP&NG on 17th August, 2012. On receipt of Government approval, CMPDI/CIL will take further action for commercial development of CMM in the identified blocks

# 4.8.6 Commercial Development of CMM in the projectised areas of large opencast mines:

Project proposals for assessment of CMM potential related to large open cast mines in Moher Sub-basin of NCL, Singrauli Coalfield and Korba Coalfield has been completed and the assessment report has been submitted by CMPDI to respective coal companies. Further action for commercialization will be taken up by CIL/CMPDI after getting competent decision on harnessing of CMM from CIL mining leasehold areas.

# 4.8.7 CIL-ONGC Collaborative Project on CBM

#### 4.8.7.1 Jharia CBM Block

As per Govt. of India CBM policy, consortium of CIL and ONGC was allotted 2 blocks on nomination basis one each in Raniganj and Jharia coalfields and entered into a contract with Govt. of India for development of coalbed methane. The Govt. of Jharkhand granted the Petroleum Exploration License (PEL) for Jharia CBM block in August'2003. Slimhole drilling in the block commenced from Dec.'04 and all the 8 slimholes involving 8703.65 metre were completed by CMPDI. A report on assessment and compilation of data generated during slimhole drilling was submitted by CMPDI in Feb.'08. ONGC drilled two exploratory wells, six vertical pilot wells and two Horizontal Multilateral in-seam wells in the CBM block. Production testing is under progress. Further, sale of incidentally produced gas from Jharia CBM block is going on in line with the approval of the Govt.

ONGC submitted the final Development Plan for part area (Parbatpur Sector) within Jharia CBM block in the office of Directorate General of Hydrocarbons (DGH) in Oct'09. DGH advised ONGC to submit the revised Development Plan for the entire Jharia CBM Block.

ONGC has accordingly submitted Development Plan for entire Jharia CBM Block having budgetary outlay of ₹1137 crores to DGH on 24th August, 2012. The consortium of CIL-ONGC will take up the developmental activities after approval of Development Plan by DGH.

CIL is considering increasing its Participating Interest from existing 10% to 26% from Development Phase in terms of the provisions of the Operating Agreement between CIL and ONGC. Further, ONGC has indicated to CIL in a meeting held on 18th October, 2012 at CIL (HQ) to dilute 35% of their stake in Jharia CBM block for farming in a technology partner.

#### 4.8.7.2 Raniganj CBM Block

The Govt. of West Bengal granted the Petroleum Exploration License (PEL) for Raniganj CBM block in June' 2004. Slimhole drilling of the identified boreholes was taken up on 07.03.2006 and drilling in all the 8 slimholes involving 7853.50 metre was completed by CMPDI. A report on assessment and compilation of data generated during slimhole drilling was submitted by CMPDI in March'2009.

ONGC has drilled one exploratory well and two pilot wells in the CBM block and the requisite tests are going on. ONGC has prepared Development Plan having budgetary outlay of ₹ 957 crores for Raniganj block which has been submitted to DGH on 8th October, 2012. The consortium of CIL-ONGC will take up developmental activities after approval of the Development Plan by DGH.

# 4.8.8 Establishment of CBM/CMM Clearinghouse

A CMM/CBM clearinghouse was established at CMPDI, Ranchi under the aegis of Ministry of Coal and United States Environmental Protection Agency (US EPA) on 17th Nov.'08. The clearinghouse has been 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.

As envisaged in the work programme of the clearinghouse, the clearinghouse website is being maintained and updated on regular basis. Close co-ordination is being maintained with US EPA for development of CMM/VAM etc and for the purpose a team of CIL/CMPDI officials visited operational CMM sites in US during June'10 and October'11 for getting first hand experience in this field.

The initial 3 year term for US EPA grant of the Clearinghouse has been completed. The matter for extending the term of Clearinghouse was taken up with US EPA officials. MoC has approved the proposal for extension of term for further periods of three years on 31st August 2012 and US EPA has also given its consent for extension of terms of the Clearinghouse for a further period of three years.

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

> The above multi-organization multicountry project has been approved under partial funding scheme of European Union Research Commission. CMPDI and IIT, Kharagpur are the participating organizations from India amongst 11 other organizations. The funds required for carrying out activities of

CMPDI has been provided under a CILR&D scheme.

The project is under implementation as per the schedule and CMPDI has submitted the envisaged work in October 2012 and January 2013.

# 4.9 UNDERGROUND COAL GASIFICATION (UCG)

In India, UCG was taken up in mid 1980's by ONGC and CIL under technical collaboration with erstwhile USSR. Although one lignite block "Merta Road" in Rajasthan was found suitable, pilot appraisal could not be taken up due to apprehension of contamination of ground water.

Subsequently, consequent to signing of MoU between CIL & ONGC in November '05 for taking up pilot scale studies for UCG, CMPDI prepared data packages for 5 prospective UCG sites. Out of the five sites, one Kasta block in Ranigani coalfield was selected by the consultant engaged by ONGC. As required, drilling of slimholes for generation of additional data was completed in Kasta block for examining possibility of taking up pilot scale UCG project and an assessment report was prepared and submitted to ONGC for their examination.

Two blocks namely Kaitha in Ramgarh Coalfield (within CCL command area) and Thesgora-C in Pench Valley Coalfield (within WCL command area) were identified for commercial development of UCG. A tender was floated for selection of a suitable service provider for commercial development of UCG in these blocks. Good responses were received against both the tenders. The tender, however, could not be finalized on technical reasons and re-tendering has been advised at competent level. The tender document has been revised and is under competent approval after which action on tendering will be taken up.

# 4.10 DELINEATION OF SHALE GAS BLOCKS

4.10.1 CMPDI is preparing data dossiers on 06 (six) prospective Shale gas blocks in Gondwana basin for DGH. Draft data dossiers on Raniganj, Jharia, Bokaro, South Karanpura, North Karanpura and Sohagpur basins have been submitted. The reports were discussed with DGH officials in August 2012 and October 2012. The reports have been finalized and will be submitted to DGH by March, 2013 after final deliberation.

# 4.10.2 CIL R&D project titled "Assessment of prospect of Shale Gas in Gondwana basin with special reference to CIL areas"

A project titled "Assessment of prospect of Shale Gas in Gondwana basin with special reference to CIL areas" has been approved by CIL R&D for ₹ 400 lakh. The project is under implementation by CMPDI from 1st April 2011 with an approved duration of 2½ years where Advance Resources International, USA is the sub-implementing agency.

Procurement process of equipment is under progress. Three officials from CMPDI visited different shale gas sites / Lab in USA under this project in June 2012 and action has been taken for generation of requisite data and identification of areas in BCCL and CCL. Shale samples from these identified blocks have been collected and set of parametric data generation is in progress. One of the equipment for parametric data generation (TOC etc) for assessment of shale gas potentiality has been procured and is installed in CBM lab, CMPDI.

# 4.10.3 S&T Project titled "Shale Gas Potentiality Evaluation of Damodar Valley Basins of India"

A S&T project has been approved by the Govt. in November' 2012 having total cost of ₹ 16.9 crores. The project is jointly under implementation by National Geophysical Research Institute (NGRI), Hyderabad, Central Mine Planning & Design Institute Ltd. (CMPDI), Ranchi and Central Institute of Mining and Fuel Research (CIMFR), Dhanbad. The project duration is of three years. Areas have been identified in Jharia and Ranigani Coalfields for generation of data/studies and shale samples have been collected from Jharia Coalfield for generation of requisite data.

#### 4.11 CBM LAB SERVICES

CMPDI has established state-of-theart laboratory facilities in 2008 for conducting CBM related studies like Desorption studies, Gas composition etc, which are essential inputs for CBM resource assessment and forecasting production potential of a CBM reservoir. It has also added Adsorption Isotherm Setup, which can measure adsorptive capacity of coal samples up to a pressure as high as 20 Mpa (corresponding to approximately 2000 m strata depth). Recently ToC (Total Organic Carbon) Analyzer has been commissioned. This lab has gas Chromatograph also for analyzing gas composition of desorbed gas as well as mine air samples which helps in taking decisions related to mine safety.

# 4.12 REVISION OF RATES OF ROYALTY ON COAL AND LIGNITE

Based on the recommendations of the Study Group constituted for revision of royalty rates on coal and lignite, the Government, after having detailed discussions and deliberations with all the stakeholders, had switched over to ad-valorem regime in coal and lignite sector from the earlier system of charging a fixed and variable component as royalty. Accordingly royalty rate on coal and lignite has been fixed @ 14% and @ 6% advalorem respectively. The new royalty rates have been made effective from 10.5.2012.

Royalty paid by CIL, SCCL & NLC effected from 2009-10 to 2011-12 is as under:

(₹ in crore)

Year	West Bengal		Odisha	Madhya Pradesh	THE RESERVE OF THE PARTY OF THE	Chhattis- garh	Uttar Pradesh	Assam	Total
2009-10	9.20	1152.41	881.08	1022.77	512.71	939.56	149.09	30.86	4697.68
2010-11	9.66	1273.64	932.44	863.65	499.82	1024.26	167.72	28.33	4799.52
2011-12	9.48	1430.54	1027.77	1012.79	526.30	1100.80	181.94	25.52	5315.14

(₹ in crore)

Roya	lty Paid by SCCL	Royalty p	aid by NLC
2009-10	637.13	2009-10	155.66
2010-11	780.00	2010-11	158.42
2011-12	769.06	2011-12	177.44

#### 4.13 REVIVAL OF SICK PSUs

#### Eastern Coalfields Limited (ECL):

Revival plan of Eastern Coalfields Limited was approved by the Government of India on 5.10.2006. As per approved plan, net worth of the Company was slated to become positive in 2009-10 which did not fructify. Due to delay in implementation of various projects, it is apprehended that company will not be able to come out of BIFR in 2012-13 as well. A review hearing was held on 22.11.2010 by the BIFR. As advised by BIFR, the company has prepared Draft Modified/Revised Proposal for

revival of Eastern Coalfields Limited which was discussed in the joint meeting held on 22nd December, 2010 for its further consideration/acceptance.

The data in regard to ECL is as follows:

Profit : 2011-12 - ₹962.13crore

(Source : Annual Report of Accounts of

CIL for 2011-12)

Manpower: 2011-12 - 78009

(Source : Annual Report of Accounts of

CIL for 2011-12)

#### Bharat Coking Coal Limited (BCCL):

A revival plan for BCCL was submitted to BRPSE and BIFR. Both BRPSE and BIFR have accorded their approval to the revised scheme and the Government order conveying the sanction has been issued to CIL/BCCL on 25.2.2010. Data pertaining to BCCL is as follows:

#### Profit

#### Pre-tax Profit for 2011-12-₹ 822.36crore

(Source : Annual Report of Accounts of

CIL for 2011-12)

Manpower 2011-12- 64,844

(Source : Annual Report of Accounts of

CILfor 2011-12)

A meeting of BRPSE was held on 30.10.2012 to review the status of implementation of revival scheme of ECL/BCCL. BRPSE has recommended measures to come out of the BIFR status. A review meeting with representatives of ECL and BCCL was also held in the Ministry on 19.11.2012 on the recommendations of BRPSE and CIL was requested for taking appropriate action.

Implementation of Revival Scheme is being regularly monitored by BRPSE. Physical and financial performance including the status of progress of all ongoing projects is regularly monitored by the concerned Company Board. Major ongoing future projects and various activities are also being regularly monitored by Project Monitoring Division of CIL and the Projects whose capacity are more than 3 Mt. and Project costing ₹500 Cr. and above are being monitored at the level of Ministry of Coal. Monthly performance of BCCL and ECL are also being monitored in the meeting of CMD's Co-ordination held in every month.