

**GOVERNMENT OF INDIA
MINISTRY OF COAL**

**LOK SABHA
UNSTARRED QUESTION NO. 161
TO BE ANSWERED ON 02.02.2017**

Accidents in Coal Mines

161. SHRI JOSE K. MANI; SHRIMATI APARUPA PODDAR; DR. C. GOPALAKRISHNAN; SHRI SULTAN AHMED; KUMARI SUSHMITA DEV; SHRI VISHNU DAYAL RAM; SHRI C.N. JAYADEVAN; SHRI JYOTIRADITYA M. SCINDIA; SHRI RAM MOHAN NAIDU KINJARAPU; SHRIMATI KOTHAPALLI GEETHA.

Will the Minister of Coal be pleased to state:

- (a) the number of accidents occurred in the coal mines in the country including the recent accident in Eastern Coalfields Limited's Rajmahal Opencast Project, Jharkhand during each of the last three years and the current year, company and State-wise;
- (b) the number of workers died and injured in these accidents and compensation provided to them during the said period along with the outcome of the investigation conducted into these accidents, company and State-wise;
- (c) the funds allocated by the Government for the modernization of coal mines in the country during the said period, company-wise; and
- (d) whether the instructions issued for ensuring the safety in coal mines in the country are reviewed from time to time and if so, the details thereof along with the steps being taken to check the recurrence of such incidents in future?

ANSWER

MINISTER OF STATE (INDEPENDENT CHARGE) IN THE MINISTRY OF COAL, POWER, NEW AND RENEWABLE ENERGY AND MINES (SHRI PIYUSH GOYAL)

(a) & (b) As per the information furnished by the office of Directorate General of Mines Safety (DGMS), the company-wise, State-wise and year-wise number of fatal accidents & fatalities and serious accidents & serious injuries during last 3 (three) years from 2014 to 2016 are furnished in **Annexure – I**.

Details of the amount of compensation paid to the next of kin of deceased employees in case of fatal accidents as per Employee's Compensation Act - 2010 in last three years, year-wise and company-wise in Coal India Limited (CIL) and NLC India Limited (NLCIL) is given in **Annexure-II and IIA**.

The details of the outcome of the investigations (persons responsible and cause of accident) are furnished in **Annexure III & IV**.

(c) Year wise Capital expenditure made by CIL for modernisation of coal mines under various heads like purchasing of HEMM, purchasing of other P&M items including underground mines, mine development and R&D are given below:

YEAR	HEAD	(Rs. in crore)
2013-14	HEMM	1461.31
	Other P&M items including UG mines, CHP etc	820.08
	Railway Siding	50.16
	Mine Development	322.17
	R&D	11.55
2014-15	HEMM	1504.13
	Other P&M items including UG mines, CHP etc	1206.93
	Railway Siding	95.01
	Mine Development	247.06
	R&D	13.52
2015-16	HEMM	804.18
	Other P&M items including UG mines, CHP etc	1519.11
	Railway Siding	118.72
	Mine Development	252.16
	R&D	4.88

Further, in case of NLCIL the existing system of equipment i.e. Bucket Wheel Excavators, Spreader and conveyors used for Lignite Production and transportation of Lignite are already modernized. Details of the expenditure incurred for modernisation are furnished below.

In Rs. crore				
S. No	Details	2014-15	2015-16	2016-17
1	Delineation of buried sub surface objects and hard band in opencast mines	0.92	0.57	0.024
2	Dynamic loading of conveyor drive heads in Mines	-	0.20	0.68
3	Providing Surveillance camera in Specialised Mining Equipment	-	0.16	0.70
	Total	0.92	0.93	1.404

(d) The provisions of Mines Act, 1952, Subordinate Rules and Regulations made thereunder are being administered for ensuring the safety in coal mines by DGMS. Coalmine owners are responsible for implementing these provisions. These provisions are reviewed from time to time by DGMS taking inputs from experience of officials of DGMS, industry & academic institutions and the recommendations of the tripartite committees.

To check the recurrence of such incidents in future the following steps have been taken by the Government:

- (i) Safety audit of all the coalmines has been taken up.
- (ii) Strengthening of Internal Safety Organisations (ISO) in coalmines/coal companies.
- (iii) To promote and propagate safety awareness in mines, National Safety Awards (Mines), National Conference on Safety in Mines is organized by DGMS. The recommendations of National Conference on Safety in Mines go a long way in enhancing safety of mine workers.
- (iv) Workers participation and sensitization in matters of safety are ensured through training in safety and by initiatives like celebration of safety week and safety campaigns, etc.
- (v) Safety training programmes are organized among Managers and Supervisors for improving safety standards in mines.
- (vi) CIL has taken up a training programme with Safety in Mines Testing and Research Station (SIMTARS) of Govt of Queensland, Australia for training of trainers.
- (vii) Facilitates introduction of Risk Assessment Techniques aimed at elimination of risks and to ensure safety of workmen.
- (viii) Facilitates introduction of standard operating procedures to avoid unsafe practices in mines.
- (ix) A special safety awareness campaign has been launched to increase awareness of mine workers. i.e., 'Safety is My Responsibility' and steps have been taken to propagate the same.
- (x) Time to time, DGMS Circulars are issued as guidelines for safer operations in identified thrust areas.
- (xi) Risk based inspection system through Shram Suvidha Portal has been implemented for coal mines and for metal mines is under progress.
- (xii) Adoption of online safety monitoring systems, establishment of geo-technical cells, installation of gas chromatographs for monitoring and analysing underground mine gases, installation of proximity warning devices to avoid collision of heavy earth moving machinery, environmental tele-monitoring systems in all degree-III gassy mines, slope monitoring systems for overburden benches and OB dumps etc. are some of the other important steps taken by coal companies for improving safety of miners and mining operations in the coal mines.

Annexure - I**Number of accidents in coal mines in the country during 2014 – 2017**

State	Company	Year	Fatal			Serious	
			No. of Fatal Accidents	Fatalities	S/Inj.	No. of Serious Accidents	S/Inj.
Andhra Pradesh	SCCL	2014	4	5	0	99	100
		2015	4	4	0	185	185
		2016	10	12	1	169	170
		2017	0	0	0	2	2
Assam	NEC	2014	0	0	0	1	1
Chhattisgarh	SECL	2014	7	7	1	27	27
		2015	8	8	2	9	9
		2016	2	2	0	7	7
	PIL	2014	1	1	0	0	0
	MIL	2014	0	0	0	2	2
	JPL	2014	0	0	0	1	1
	HINDALCO	2015	0	0	0	1	1
Gujarat	GMDC	2015	3	3	1	0	0
		2016	0	0	0	1	3
Jharkhand	BCCL	2014	8	8	0	21	22
		2015	7	7	1	10	12
		2016	12	12	0	5	5
	CCL	2014	4	4	0	4	4
		2015	3	3	0	9	9
		2016	7	7	0	7	7
	ECL	2014	2	2	0	2	2
		2015	1	1	0	1	1
		2016	2	19	0	0	0
	IISCO	2016	1	1	0	0	0
	TISCO	2014	1	1	0	4	4
		2015	0	0	0	3	3
		2016	2	2	2	1	1
	ELCALTD	2016	0	0	0	1	1
Madhya Pradesh	NCL	2014	3	3	0	4	4
		2015	1	1	0	12	13
		2016	3	3	0	9	9
	SECL	2014	4	5	0	7	7
		2015	2	2	0	5	6
		2016	8	9	1	6	6
	WCL	2014	1	1	1	7	7
		2015	2	2	0	4	4
		2016	1	1	0	3	3
	SASAN	2015	1	2	1	0	0
		2016	1	1	0	0	0
	PRISM	2015	1	1	1	0	0

State	Company	Year	Fatal			Serious	
			No. of Fatal Accidents	Fatalities	S/Inj.	No. of Serious Accidents	S/Inj.
	JPASSOC	2016	0	0	0	2	2
Maharashtra	WCL	2014	8	9	0	24	25
		2015	5	5	3	13	13
		2016	5	5	0	13	13
Orissa	MCL	2014	1	1	0	11	11
		2015	2	2	0	4	4
		2016	1	1	0	4	4
Rajasthan	VSLPL	2015	1	1	0	0	0
	BLMCL	2014	2	2	0	0	0
Telangana	SCCL	2014	4	4	1	123	132
		2015	3	3	0	2	2
		2016	2	2	0	4	4
Tamil Nadu	NLC	2014	2	2	0	2	2
		2015	1	1	0	3	3
		2016	2	2	0	0	0
Uttar Pradesh	NCL	2014	4	4	0	0	0
		2016	1	1	2	0	0
West Bengal	ECL	2014	3	3	0	40	40
		2015	7	7	0	20	21
		2016	9	10	0	18	18
	IISCO	2016	0	0	0	1	1
	SOVA	2015	1	1	0	0	0

Note : Data for the year 2016 & 2017 are provisional. Data upto 20.01.2017.

Annexure –II

Details of the amount of compensation paid to the next of kin of deceased employees in case of fatal accidents as per ECA- 2010 Year -2014

SI No	Victim's Name & Designation	Accident Date	Mine	Compensation in Rs
	ECL			
1	Ibrahim Ansari, Dresser	17/01/2014	Kumardhubi	657280
2	Nemai Chandra Sutradhar, Mining Sirdar	21/01/2014	Kendra Colliery	469640
3	P.Pratap Kr Sharma, Cont.CM Operator	08/03/2014	Shyamsundarpur	704660
4	Bharat Prasad Singh, Sr Mechanic	21/05/2014	Chitra B OCP	570720
5	Prabodh Kr Bhattacharjee, Face Worker	24/06/2014	Bhanora West Block	Under Process
	BCCL			
1	Jamuna Rajak, Cont. Blasting Mazdoor	22/05/2014	Jamunia OCP	967400
2	Madan Lal Passi, Dumper Operator	14/06/2014	Dhansar OCP	788240
3	Hare Ram Yadav, Sand Stowing Crewman	24/06/2014	Gopalichuck	702160
4	Manohar Kahar, Surface trammer	01/07/2014	Bastacolla	498800
5	Barun Kr Chaudhary, Foreman-Incharge	28/08/2014	Block IV OCP	513320
6	Dilip Kumar, EP Fitter	23/09/2014	Muraiddih OCP	665000
7	Mangar Bhuia, General Mazdoor	21/10/2014	Maheshpur Colliery	768650
8	D Nonia, Cont. Operator	21/11/2014	Basantimata	
	CCL			
1	Mahesh Chauhan, Cont Payloader Operator	07/08/2014	Piparwar OCP	500000
2	Kaila Ganju, Conveyor Operator	17/10/2014	Raybachra	695080
3	Kishun Singh, Dozer Operator	19/11/2014	Govindpur Phase II OCP	Under Process
	NCL			
1	Varun Kumar, Cont. Payloader Operator	04/02/2014	Jayant Project	823920
2	Brihaspati Vishwakarma, Cont. Driver	28/02/2014	Nigahi Project	200000
3	Lokh Ram. Dumper Operator	07/06/2014	Krishnashila Project	657280
4	Raju Gupta, Cont. Tipper Driver	11/10/2014	Krishnashila Project	861120
5	S A Okil, Sr Dumper Operator	11/11/2014	Bina Project	513320
6	N C Muneyya, Cont. Driver	09/12/2014	Amlohri Project	725480
7	Mahendra Saket, Tipper Operator	15/02/2014	Khadia Project	
	WCL			
1	Venkatesh Sellammattu	15/01/2014	Durgapur OC	900800
2	Rajendra Jairam Randive, Trainee SDL-LHD	08/02/2014	Gauri Expansion	702180
3	Ramesh Rudhaji Nikhade, Dumper Operator	09/04/2014	Durgapur OC	556520
4	Raju N Korekar, EPG Helper	27/05/2014	Hinustan Lalpeth OC	612360
5	Ashok Bhurewal, Cont Worker	17/07/2014	Makardhokda OC Mine	Under Process
6	Pramod Nagrare, EP Fitter	17/07/2014	Makardhokda OC Mine	625880
7	R V Yadav, Grader Operator	16/08/2014	NavinKunda OC(A)	570720
8	Hiralal, General Mazdoor	10/10/2014	Shobhapur	598680
9	Brijlal Patel, Mechanic, Cont Worker	13/10/2014	Gondegaon OC	839680
	SECL			
1	Ramlal, Explosive Carrier	29/01/2014	Bartarai Colliery	747600
2	Ram Kr Dewangan, EP Fitter	03/02/2014	Gevra OC	665160
3	Mohan Nayak, Cont. Worker	11/02/2014	Dipka(NO. 1A) OCM	670750
4	Chandrika, Electrical helper	11/04/2014	West Chirimiri Colliery	527800
5	Ferai, Driller Cat V	28/05/2014	Palkimara UG Mine	584800
6	Hetram, Loader working as dresser	10/06/2014	Damini UG Mine	540000
7	Hari Singh, Support Mistry	16/06/2014	Jamuna 9 & 10	556520
8	Khajanti Gupta, EPGH	01/07/2014	Dhanpuri OC	639200
9	Ramashankar vishwa, Cont Worker	01/07/2014	Dhanpuri OC	576748

SI No	Victim's Name & Designation	Accident Date	Mine	Compensation in Rs
10	Deolal, Dresser	06/08/2014	Mahamaya UG Mine	498800
11	Fulsai, Cat- IV Dresser	08/12/2014	Churcha MNE RO	Under Process
12	Shyambar, Dresser	25/12/2014	Rehar UG	Under Process
	MCL			
1	Subrat Sahoo, Cont. Driver	26/10/2014	Ananta OC	

2015

S N	Victim's Name & Designation	Acc Date	Mine	Compensation in Rs
	ECL			
1	Naresh Bouri, Cont. Worker	29.01.2015	Khottadih UG	736360
2	Nanku Bhuia, Contractor Worker	19.03.2015	Shyamsundarpur Colliery	831920
3	Rajib Turi, Cont' Dumper Operator	10.05.2015	Bonjemehari OCP	250000
4	Dhananjoy Kumar Rai, UG Face Worker	28.06.2015	Kumardhubi Colliery	Under Process
5	Alam Mallah, Line Mistry	16.08.2015	Kumardihi 'A' Colliery	Under Process
6	Ramadhar Bhar, Spary Mazdoor	12.11.2015	Khas Kajora Colliery	652280
7	Chandra Nahak, General Mazdoor	19.12.2015	Shankarpur Colliery	498800
	BCCL			
1	Ganga Prasad Sonar, Electrical Helper	31.01.2015	New Akaskinaree Colliery	811640
2	Manoranjan Pradhan, Cont. Operator	01.03.2015	Dahibari Basantimata OCP	500000
3	Satnarayan Bouri, Shovel Operator	05.08.2015	Rajapur OCP	639200
4	Dashrath Pandit, Line Mistri	05.09.2015	South Balihari	Under Process (Alleged suicidal case)
5	Anjan Kumar Teli, Pump Khalashi	20.10.2015	P B Project	626000
6	Somar Mahato, General Mazdoor	23.10.2015	Jeenagora OCP	513320
7	Dilip Saw, Contractor Operator	05.12.2015	AKWMC	520000
1	Puna Raja, EP Helper	01.01.2015	Giddi-A	758240
2	Madhu, Dozer Operator	05.01.2015	Kargali OCP	Not entitled
	NCL			
1	Prayag Lal Shaw, Contractor Welder	19.12.2015	Amlohri Project	815400
	WCL			
1	Nathu Lattari Pal, Haulage Driver	24.01.2015	Durgapur Rayatwari Colliery	667824
2	Shankar Shivram Aglaw, EP Auto Electrician	23.02.2015	Gouri Expansion OCP	589800
3	Jaykumar M Khandar, Foreman	03.04.2015	Gouri Expansion	603680
4	Krishna Rao, LHD Operator	21.06.2015	Tawa-2 Mine	584800
5	Sarnath Bapuji Dhole, Subordinate Engineer	21.06.2015	Chanda Rayatwari Colliery	633360
6	Sitaram Vithoba Nikumbe, Cableman	06.08.2015	Durgapur Rayatwari Colliery	598560
7	Vinod Moreshwar Titre, Contractor Tipper Driver	29.08.2015	Kolarpimpri	752100
8	Kesnath Mehangee, Clipman	03.12.2015	Tandsi UG Mine	556520
	SECL			
1	Uday Lal Gabhel, Mech. Fitter, Cat-V	30.01.2015	Bagdewa UG Mine	665160
2	Bipro, Support Mistry	24.03.2015	NCPH R-6 Mine	498800
3	Vijay Kumar, Dumper Operator	07.04.2015	Chirimiri OCM	513320
4	Sunder Hembram, Contractor Worker	23.04.2015	Amgaon OCP	896000
5	Deolal, Support Mistry	15.05.2015	Rajnagar RO	561520
6	Gopal Singh, S. B. A	13.06.2015	Kumda 7/8 Inclines	508320
7	Dinesh Kumar Mishra, Sr. Overman	15.06.2015	Kusmunda OCP	690080
8	Horilal Kewat, Blasting Crewman	19.06.2015	Damini UG Mine	788240
9	Uday Raj Singh Baghel, Cont. Payloader Operator	26.08.2015	Kusmunda OCP	665100
10	Sukesh Kumar Singh, Contractor Worker	26.11.2015	Churcha RO UG Mine	831920
	MCL			
1	Golekha Bihari Pradhan, Cont. Driver	02.01.2015	Bhubaneswari OCP	665160
2	Somraj Sahu, Contractor Worker	29.09.2015	Samleshwari OCP	500000
3	Balram Bauri, Contractor Helper	22.11.2015	Bharatpur OCP	100000

2016

Sl No	Victim's Name & Designation	Accident Date	Name of Mine	Compensation (in Rs)
	ECL			
1	Juria Nahak, Cableman	11.01.2016	Bankola Colliery	598680
2	Rambalak Gope, Surface Trammer	24.02.2016	Manderboni-Southsamla	652280
3	Mohan Kumar Sen, Cont. Worker	26.03.2016	North Searsole	1400000
4	Mohanlal Keshari, Fan Khalasi	18.06.2016	Chora 7&9 Pit Colliery	598680
5	Kushna Chandra Nahak, Tyndal	24.07.2016	Amrit Nagar Colliery	Under process
6	Sukumar Bauri, Cat.-1 Mazdoor	18.08.2016	Kunustoria Colliery	Under process
7	Bhagirath Mondal, Mechanical Fitter	26.10.2016	Shyamsundarpur	Under process
8	Manilal Tudu, UG Loader	16.11.2016	S S Incline Colliery	Under process
9	Hari Kishore Yadav, Cont. Operator	29.12.2016	Rajmahal OCP	861120
10	Javed Akhtar, Cont. Operator	29.12.2016	Rajmahal OCP	896000
11	Rajendra Yadav, Cont. Operator	29.12.2016	Rajmahal OCP	847160
12	Brijesh Yadav, Cont. Operator	29.12.2016	Rajmahal OCP	879800
13	Sanjay Kr. Sahi, Cont. Driver	29.12.2016	Rajmahal OCP	778560
14	Md. Nurul, Cont. Driver	29.12.2016	Rajmahal OCP	861120
15	Jai Prakash Rai, Cont. Driver	29.12.2016	Rajmahal OCP	758240
16	Nageshwar Paswan, Cont. Driver	29.12.2016	Rajmahal OCP	839680
17	Ajit Patel, Cont. Operator	29.12.2016	Rajmahal OCP	854280
18	Sakil Khan, Cont. Driver	29.12.2016	Rajmahal OCP	861120
19	Vikash Patel, Cont. Driver	29.12.2016	Rajmahal OCP	839680
20	Sunil Vhengra, Cont. Driver	29.12.2016	Rajmahal OCP	839680
21	Ajay Kumar Kushwaha, Cont. Operator	29.12.2016	Rajmahal OCP	896000
22	Md. Julfar, Cont. Driver	29.12.2016	Rajmahal OCP	867640
23	Md. Jamir, Cont. Driver	29.12.2016	Rajmahal OCP	847160
24	Raj Kamal Goswami, Cont. Driver	29.12.2016	Rajmahal OCP	867640
25	Sanjit Viswakarma, Cont. Driver	29.12.2016	Rajmahal OCP	867640
26	Laddu Yadav, Cont. Operator	29.12.2016	Rajmahal OCP	831920
	BCCL			
1	Chandradeo Nonia, Dozer Operator	22.02.2016	Salanpur Colliery	665160
2	Bhola Nonia, Dozer Operator, Trainee	29.02.2016	AKWMC	702160
3	OM Prakash Kewat, Sr. Overman	22.03.2016	Bastacolla Colliery	702160
4	Mohan Rawani, Cont. Worker	22.04.2016	Block-II OCP	800000
5	Rama Nand Jaiswara, Mazdoor	25.05.2016	NT-ST Jeenagora OCP	570720
6	A Diwakar, Cont. Worker	05.08.2016	Dobari OCP	800000
	CCL			
1	Awdhesh Upadhyay, Dumper Operator	09.04.2016	Amlo Project	484200
2	Chandra Shekhar Singh, Private Security Guard	01.06.2016	Gidi "A" Project	Under process
3	Santosh Kumar, Cont. Driver	30.08.2016	AKK OCP	800000
4	Md. Yusuf, Grader Operator	05.09.2016	Ashok OCP	634200
	NCL			
1	CH. Yaswant Rao, Cont. Supervisor	23.01.2016	Nigahi Project	778560
2	Munilal Kushwaha, Dumper Operator	18.03.2016	Nigahi Project	584800
3	Md. Firoj Ansari, Cont. Worker	02.06.2016	Khadia OC Mine	867640
4	R. Laxamana, Cont. Operator	10.09.2016	Block-B Project	879800
	WCL			
1	Wasudeo Kubde, Cont. Worker	14.02.2016	Sasti OCP	547240
2	Prakash Bihare, Explosive Carrier	12.03.2016	Chattarpur Mine No. 1	736680
3	Nirmal Shukla, Cont. Driver	06.04.2016	Kolarprimpri OCP	778560
4	Sarif Ahemad Nizamuddin, Blasting Crew	18.04.2016	Silewara UG Mine	699200

5	Anandrao Namdeo Dadma, SDL Helper	16.07.2016	Durgapur Rayatwari Colliery	498800
	SECL			
1	Mohammad Kasim, Support Mistry	27.03.2016	Bangwar UG Mine	561520
2	Mukesh Tripathi, Overman	09.04.2016	Piparia	793240
3	Dayaram, Cableman	09.04.2016	Piparia	561520
4	Jai Singh, Driller, Cat-V	26.04.2016	Bagdewa UG Mine	542240
5	Jaimangal, Dresser, Cat-V	19.04.2016	Churcha RO UG Mine	741680
6	Ram Kripal, Overman	17.06.2016	Kanchan OC	513320
7	Shiv Kumar Sahu, Driller	26.11.2016	Vindhya UG Mine	612360
8	Brijesh Pratap Singh, Mining Sirdar	28.11.2016	Pali Colliery	513320
9	Ram Bahor Pandey, Subordinate Engineer	27.12.2016	Amlai OCM	Under process
	MCL			
1	Ramesh Chandra Sahoo, Driller	19.10.2016	Nandira Colliery	556520
2	Gautam Kumar Singh, Cont. Driver	02.12.2016	Bharatpur OCP	873880

Note:

- Eighteen cheques of above mentioned amount against fatalities at Rajmahal, during 2016, have been submitted to Labour Court, Deoghar for payment. In addition, Special relief of Rs. 7.00Lakh will be paid to next of kin of eighteen deceased.
- Apart from the amount under the Employees Compensation Act, 2010, the following additional amount and employment to the kin of the deceased employees of the coal companies is also provided:
 1. Rs. 5 lakhs is paid to the dependent of deceased departmental employee as a special relief / ex-gratia.
 2. Immediate payment of lump sum amount (generally Rs 20,000) to the family of deceased for funeral, transport expenses etc.
 3. Monetary benefits under Life Cover Scheme (LCS) of Rs 1,12,800/ w.e.f. 1.2.2012 as per NCWA-IX.
 4. Ex-gratia amount of Rs 84,600/ in case of death or permanent total disability resulting on account of accident arising out of and in course of employment w.e.f 1.2.2012 as per NCWA-IX.
 5. Gratuity on the basis of the length of service (maximum ceiling Rs 10, 00,000)
 6. Other benefits like P.F as per CMPF rule, Pension as per CMPS, 1998, Encashment of EL etc. as company (CIL) rules.
 7. Employment is offered to the dependent of deceased departmental employee. In case there is no eligible person for employment, monetary compensation per month is paid to the family of the deceased in lieu of employment.

Annexure IIA**Year wise Compensation paid for fatalities in NLCIL**

Sl. No	Year	No. of persons died	Name of Mines	Name of victim, Age in years Shri	Compensation paid Rs. In lakhs
1	2014	1	Mine-IA	K.V.Gurusubramanian, 51	12.89
2	2014	1	Mine-IA	P. Sivakumar, 47	9.50
Total		2		Total for the year 2014	22.39
3	2015	1	Mine-IA	K. Vetrivel Murugan, 27	11.54
Total		1		Total for the year 2015	11.54
4	2016	1	Mine-II	M. Kumar, 46	9.77
5	2016	1	Mine-II	T. Kumaravel, 52	14.84
Total		2		Total for the year 2016	24.61

Outcome of the investigations of accidents – Persons responsible
in coal mines during 2014 to 2017

Person Responsible as per the Enquiry conducted by DGMS	No. of cases
Coworker	12
Coworker & Deceased	8
Deceased	18
Management	18
Management & Contractor's Worker	1
Management & Coworker	13
Management & Deceased	3
Management & Shotfirer	1
Management & Sub. Sup. Staff(SSS)	35
Management, Coworker & Deceased	2
Management, SSS & Coworker	9
Management, SSS & Deceased	6
Management, SSS & Shotfirer	1
Management,SSS & Coworker	1
Management,SSS,Coworker,Deceased	3
Misadventure	4
Others	26
Sub. Sup. Staff & Coworker	2
Sub. Sup. Staff & Deceased	4
Sub.Sup.Staff, Coworker & Deceased	4
Subordinate Supervisory Staff(SSS)	10

Note : Data for the year 2016 & 2017 are provisional. Data upto 20.01.2017.

Annexure IV**Outcome of the investigations of accidents – indicating cause of accident in coal mines during 2014-17**

Cause of accident as revealed during the enquiry by the	No. of cases
Aerial Ropeway	1
Buried in Sands, etc.	3
Conveyors	2
Drilling Machines	1
Drowning in Water	5
Dumpers	42
Energized Machines	1
Explosion/Ignition of Gas/Dust etc.	1
Fall of Objects incl. Rolling Objects	7
Fall of Overhangs	3
Fall of Person from Height/into Depth	12
Fall of Persons on the Same Level	1
Fall of Roof	22
Fall of Sides (Other than Overhangs)	9
Falls of Persons from Cages, Skip etc.	1
Irruption of Water	1
Landslide	2
Loading Machines	15
Occurrence of Gas	1
Other Accidents due to Dust/Gas/Fire	2
Other Combustible Material	1
Other Electrical Accidents	1
Other Heavy Earth Moving Machinery	11
Other Non-Transportation Machinery	3
Overhead Lines	5
Rope Haulage	7
Secondary Blasting Projectiles	1
Shovel, Draglines, Frontend Loader, etc.	3
Solid Blasting Projectiles	1
Switch Gears, Gate End Boxes, Pommel, etc.	1
Unclassified	5
Wheeled Trackless (Truck, Tanker, etc.)	10

Note : Data for the year 2016 & 2017 are provisional. Data upto 20.01.2017.