

SAFETY AND RESCUE

In ECL, highest priority is given towards safety, which is considered to be a part of core production process with a goal to achieve 'Zero Harm'. To improve the safety standards, ECL has vigorously pursued several measures during the year 2020-21 under the aegis of mission "SUDESHH".

Accident Statistics for the year of 2020-21:

Sl. No.	Particulars	2020-21*	2019-20*
1.	Fatal Accidents (Nos.)	05	08
2.	Fatalities (Nos.)	06	08
3.	Serious Injuries (Nos.)	17	21
4.	Fatality/Million Tonne output	0.133	0.158
5.	Fatality/3 Lakh Man-shifts	0.137	0.178
6.	Serious Injury / Million Tonne Output	0.378	0.396
7.	Serious / 3 Lakh Man-shifts	0.388	0.447

(* subject to reconciliation with DGMS)

Safety Awareness Activities:

10 Nos. of 2-3 minutes short video clips were prepared for accidents, safe practices and distributed amongst employees to sensitize workers about safety culture.

Pre-shift safety talk in each mine has been mandated. In these talks among other topics, accidents and near misses are discussed with employees along with reasons of accidents / incidents and measures to prevent reoccurrence of any such accidents.

In order to increase awareness amongst employee, twelve (12) Nos. of safety drives were organized, which deliberated on fire and spontaneous heating, prevention of accident due to fall of person, prevention of accident due to blasting of explosives, prevention of accident due to UG non-transport machineries, monsoon preparation and slope/dump monitoring, safe operation of Underground Haulage System, strata control and roof & side support, safe operation of contractual HEMM, electrical installation and apparatus, VT Centre & PME Centre, strata monitoring and roof and side support etc.

A brain-storming session to improve Safety Status of the company was conducted as per the directives of 135th CMDs' meet on 29.09.2020. Suggestions of the session were implemented in all mines.

A day long workshop on "Maintenance and Safe operation of Winding installation" was held in participation of executives from nine UG mining Areas operating Winding Engines on 23.11.2020.

Training program on "Updating, Review and Implementation of Safety Management Plan (SMP) & Job Safety Analysis (JSA)" was conducted by CIL Officials along with ECL Safety Officials from 18.01.2021 to 23.01.2021.

Safety Week observed under the guidance of DGMS from 08.02.2021 to 13.02.2021 in all the mines of ECL, PME Centers, VT Centers along with six captive mines of the region.

ILO day for safety and health at work was celebrated on 28th April, 2020.

Mock rehearsal on different anticipated hazards was organized in different mines during the year.

Major achievements during 2020-21:

There was reduction of 37.50% in fatal accident and 25% reduction in fatalities during 2020-21 in comparison to 2019-20. Also, there was reduction of 21.05% in serious accidents and 19.05% reduction in serious injuries during 2020-21 in comparison to 2019-20.

Safety Action Calendar was prepared in the beginning of 2020, scheduling different safety related activities which were undertaken during 2020-21 and activities earmarked in the calendar were completed with slight deviation due to COVID-19 Pandemic.

Safety Audit of all 76 mines of ECL was completed by 28.09.2020. Additionally, a Special Safety Audit of all operational hired OC patches was conducted from 16.03.2020 to 24.03.2020, under the aegis of mission "SUDESHH".

All the old conventional (lead acid battery) type cap lamps to be replaced by LED Cap Lamps, which are 60% lighter and give more illumination hence improve efficiency and safety of miners. Order was placed for supply of 30,000 LED cap lamps, out of which 14,000 LED cap lamps were already delivered and remaining are expected to be delivered within 1st quarter of 2021-22.

Two (02) years Rate Contract for supply of 1,12,284 pairs Safety Canvas shoe and three (03) years Rate Contract for supply of 49,861 pairs Gumboot were finalized.

13,365 workers (both departmental & contractual) were given training, with special emphasis towards work safety.

1,614 numbers of Initial Medical Examination (IME) and 10,369 numbers of Periodic Medical Examination (PME) were conducted for employees of ECL (both departmental & contractual).

ISO executive of ECL, HQ have made 468 inspections at different mines of ECL during the year to observe and discuss on the safety status of the mines, while adhering to all guidelines for COVID-19 Pandemic.

Based on ISO enquiries eight (08) nos. of safety circulars / recommendations were issued during the year.

Reporting and analysis of near miss incidents has started by the Areas for prioritizing proactive safety.



Sanitisation of Mines & other work place



Vaccination Drive by ECL.

Workers participation in Safety:

74th Company level Bipartite Safety Board Meeting was conducted on 25th August, 2020 adhering to all guidelines for COVID-19 Pandemic.

Company level Safety Board Members, representing the operating trade unions, along with ISO executives have inspected all the mines once during the financial year.

Representatives of contractors' workers were also included in the Safety Committee of the mines.

Special thrust was given to strengthen & empower Safety Committee of the mines. Senior officials (e.g. Area General Managers, Agents & ISO Representatives) are regularly attending the Safety Committee meetings to enhance the importance of the forum.

Monsoon Monitoring:

Special drive in respect to monsoon preparation and slope / dump monitoring was observed from 28.09.2020 to 03.10.2020 by the Nodal Officers / In-charge of Areas of safety department along with the Colliery Management as a part of mission "SUDESHH".

A multi-disciplinary team comprising of officials from Safety, E&M, Excavation & Geotechnical departments inspected 38 numbers of vulnerable mines of ECL from 25th February, 2020 to 22nd July, 2020.

A Control Room was opened at Head Quarter, ECL from 10th June, 2020 to 15th October, 2020 on 24X7 basis, which was manned by executives provided with telephone & vehicle for their movement keeping close liaison with Area Control Rooms operating in all Areas.

Officer in-charge of Monsoon Control Room maintained close liaison with the Chief Engineer (Hydel) of DVC, Maithon for getting 'Flood Warning Messages', whenever Panchet and Maithon dams release water causing rise in the water level of rivers for alerting the mines to be under danger.

Officer in-charge of Monsoon Control Room also maintained close liaison with the Director of Indian Meteorological Department, Alipur, Kolkata and the Director of Area Cyclone Warning Centre, Alipur, Kolkata for obtaining 'Weather Forecast Reports' for alerting the Areas to be affected by heavy rain & thunder storms.

Battling COVID-19 Pandemic:

Various guidelines were issued and circulated from the office of the General Manager (Safety) for preventing the spread of COVID-19 Pandemic.

SOP to combat COVID-19 Pandemic was prepared and implemented in all the mines of ECL.

Implementation status of guidelines issued by CIL, DGMS & Ministries to combat COVID-19 Pandemic was closely monitored by the Internal Safety Organization of ECL.

Rescue Services in ECL:

The Rescue Services have been rendered to all collieries of ECL, Chunch Victoria Area of BCCL, Ramnagar Colliery of IISCO as well as to Civil Administration and Public Authorities (as and when required) through Mines Rescue Station, Sitarampur, Rescue Room with Refresher Training (RRRT), Kenda and Rescue Rooms operating at Jhanjra and Mugma.

During the year Emergency Attended/Rescue Services dealt for fire/spontaneous heating in the following Mines:

Sl. No.	Colliery	Area	Date	Nature of occurrence/job
1.	Moira	Bankola	16.05.2020 to 21.05.2020	Dealt with spontaneous heating at (R-V) Kajora Seam by constructing five (05) nos. of stopping to seal the fire area.
2.	Jambad OCP	Kajora	20.06.2020 to 29.06.2020	Searched and recovered one body buried under the subsided area.
3.	Gourangadih Begunia Project	Salanpur	25.06.2020	One driver was rescued after bogging of two dumpers.
4.	Madhujore	Kajora	25.06.2020 to 26.06.2020	Smoke was coming out from Pit No. 2. Pit and fan drift were sealed completely.
5.	Madhabpur	Kajora	20.07.2020 to 25.07.2020	Rescue team attended Harishpur village after subsidence.
6.	Kunustoria	Kunustoria	09.10.2020 to 17.10.2020	Dealt with spontaneous heating at Kenda (R-V) seam by constructing four (04) nos. of stopping to seal the fire area.
7.	Dubeswari	Sodepur	20.10.2020 to 21.10.2020	Searched one alleged missing person inside the mine.
8.	Khoodia	Mugma	08.12.2020 to 17.12.2020	Rescued two persons after sudden water intrusion at MS seam.
9.	Girmint	Sripur	24.12.2020 to 31.12.2020	Searched one missing person from an abandoned pit of Ajay-II Colliery.
10.	Parascole (West)	Kajora	06.01.2021 to 07.01.2021	Dealt with spontaneous heating at (R-VIII) Jambad Seam by constructing four (04) nos. of stopping to seal the fire area.
11.	Shankarpur Millenium Incline	Bankola	19.03.2021 to 24.03.2021	Dealt with pillar fire at R-VIIA Seam by Direct attack by water followed by constructing 3 (three) nos. of stopping to seal the fire area.

Rescue Training:

Refresher as well as initial training were imparted at Mines Rescue Station regularly as under:

Details	2020-21	2019-20
No. of active rescue trained personnel	474	523
No. of personnel freshly trained	13	30
No. of Refresher practices imparted	2876	4730
No. of Emergencies attended	11	03

Zonal Mines Rescue Competition and All India Mines Rescue Competition (Coal & Metal)

Zonal Mines Rescue Competition, Eastern Zone, for the year 2020-21 and All India Mines Rescue Competition (Coal & Metal) were not organized due to the out-break of COVID-19 Pandemic.

New Apparatus/Equipment Purchased:

During the year 2020-21, Purchase Order was issued for supply of four (04) nos. of Modern Bucket Stretchers and Work Order for 96 KW Solar Power Plant was also issued. Apart from this, procurement of 36 nos. of Self-contained breathing apparatus (SCBA) for an estimated value of ₹ 234 Lakh is under process.

Budget Provision for Mines Rescue Station:

Particulars	Capital Budget (₹ in Lakh)		Revenue Budget (₹ in Lakh)	
	2020-21	2019-20	2020-21	2019-20
Sanctioned	446.00	103.50	1413.00	2,502.26
Expenditure	1.32	28.46	2031.00	2,394.90