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STANDING COMMITTEE ON COAL AND STEEL (2020-2021) SEVENTEENTH LOK SABHA

MINISTRY OF STEEL

SAFETY MANAGEMENT AND PRACTICES IN STEEL PSUs

TWENTY-FIRST REPORT

LOK SABHA SECRETARIAT

NEW DELHI

AUGUST, 2021/SRAVANA 1943(Saka)

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STANDING COMMITTEE ON COAL AND STEEL (2020-2021)

(SEVENTEENTH LOK SABHA)

MINISTRY OF STEEL

SAFETY MANAGEMENT AND PRACTICES IN STEEL PSUs

Presented to Lok Sabha on 06.08.2021

Laid in Rajya Sabha on 06.08.2021

LOK SABHA SECRETARIAT
NEW DELHI
AUGUST, 2021/SRAVANA 1943(Saka)

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COAL AND STEEL(2020-2021)

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INTRODUCTION

I, the Chairperson, Standing Committee on Coal and Steel having been authorized by the Committee to present the Report on their behalf, present this Twenty-First Report (Seventeenth Lok Sabha) on the subject "Safety Management and Practices in Steel PSUs" relating to the Ministry of Steel.

2. The Standing Committee on Coal and Steel (2020-21) had selected the subject for detailed examination and report to the Parliament. The Committee had oral briefing with representatives of the Ministry of Steel and Steel PSUs on 03.12.2020. Based on the oral and written testimony submitted to the Committee, a report on the subject was prepared.

3. The Committee considered and adopted the Report at their sitting held on 04.08.2021.

4. The Committee wish to express their thanks to the officials of the Ministry of Steel and Steel PSUs for placing before them and in furnishing material/information from time to time as desired by the Committee.

5. The Committee place on record their profound appreciation for the valuable assistance rendered to them by the officials of the Lok Sabha Secretariat attached to the Committee.

6. For facility of reference and convenience, the observations and recommendations of the Committee have been printed in bold letters in Part-II of the Report.

NEW DELHI;
04 August, 2021
13 Sravana, 1943(Saka)

RAKESH SINGH
Chairperson
Standing Committee on Coal and Steel

REPORT

PART-I

CHAPTER-I

ACCIDENTS ANALYSIS AND INVESTIGATION

(i) INTRODUCTORY

The steel Industry has been classified as hazardous process industry as per Chapter I Section-2(cb) of the Factories Act, 1948 (Amended in 1987) as it involves a combination of complex processes and large scale operations which are hazardous in nature. The hazards mainly emanate from extremely high temperature processes involving liquid metal, generation of by-product gases which have toxic and explosive constituents, large amount of material handling/ transporting and manpower intensive multi-unit operations, the hazardous chemicals, electricity, steam, working at height, working in confined space etc. In addition, project activities add to the risks, especially when they are carried out besides the existing operating units.

1.2 The Committee have been informed about the various hazards prevalent in the Steel Making/Processing Industries along with the areas of their presence as under:-

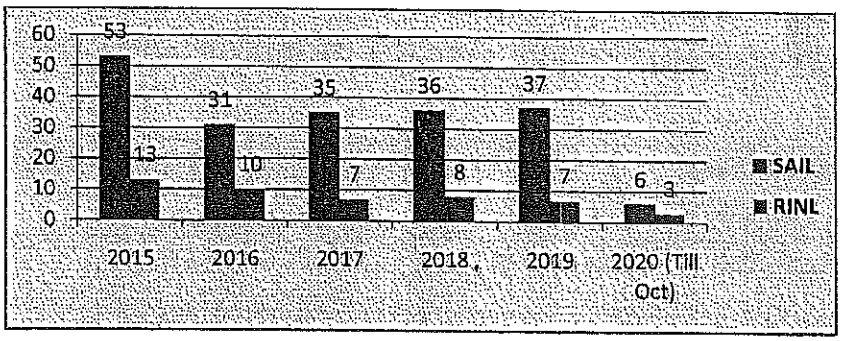
Type of Hazard/Risk	**Major areas where Hazard is faced**
Toxic gases (rich in Carbon monoxide)	All over the plant
Explosive Gases (Rich in Hydrogen and Methane)	All over the plant
Harmful Chemicals	Coal Chemicals plant, Cold Rolling Mill (CRM)
Liquid metal/ slag (burn, explosions)	Blast Furnace, SMS, Continuous casting, Foundries
Extreme Temperature (-180 ^{o}C to 1700 ^{o}C)	Coke Ovens, Blast Furnace, Steel Melting Shop (SMS), Continuous casting, Foundries, Rolling Mills and Cryogenic Oxygen Plant
Fire	All over the plant
Electric Shock, Electrocution, Flash over	All over the plant and project sites
Rail/ Road Traffic Movement	All over the plant and project sites
Moving/ Rotating machines (Hit, Caught, pressed etc.)	All over the plant and project sites
Working at Height	All over the plant and project sites
Dust, noise, heat and Vibration	All over the plant

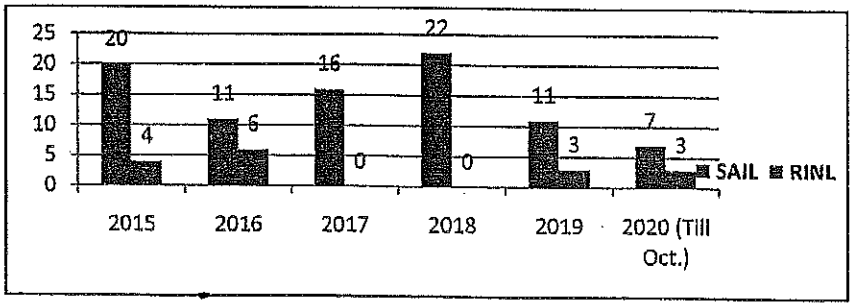
Material Handling	All over the plant and project sites
Confined Space (suffocation/ gas poisoning)	Furnaces, Tanks, Gas Pipelines, Gas holders, Sumps, Pits, Oil cellar, Conveyor/ cable galleries, Silos, etc.
High pressure Steam, Water & industrial gases	All over the plant

(ii) SAFETY PERFORMANCE IN STEEL PSUs

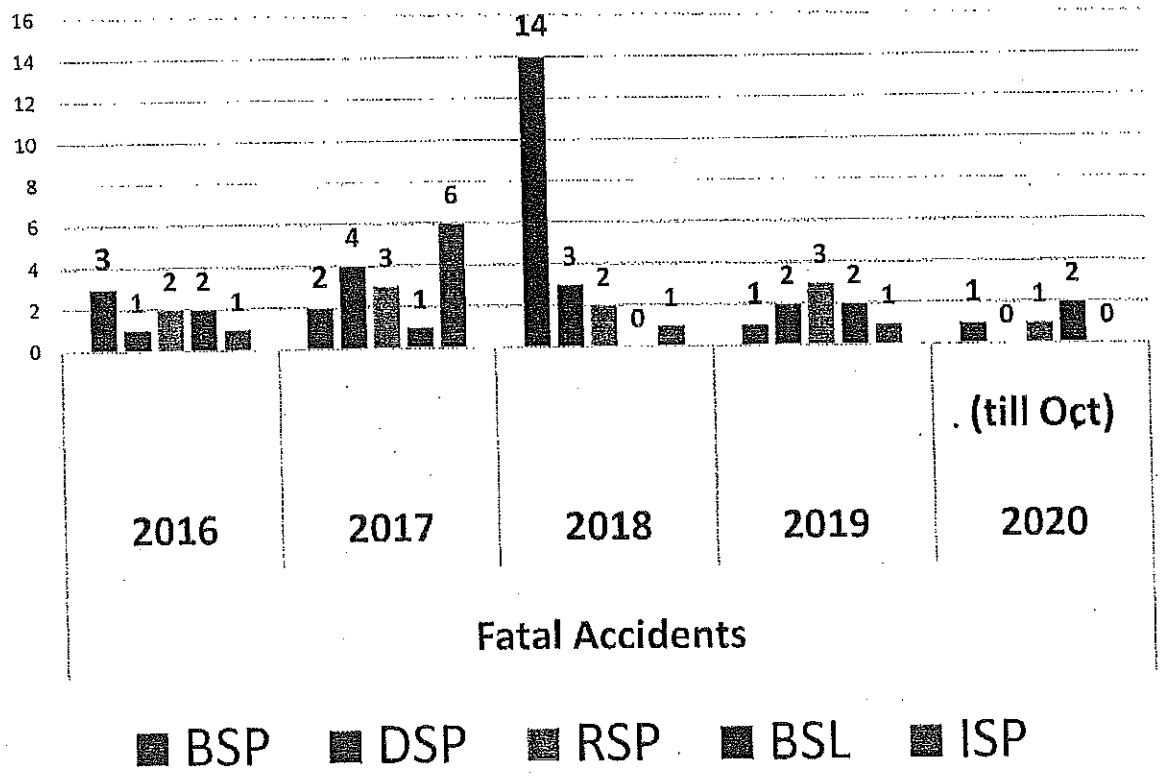
1.3 When asked about the number of fatal and reportable accidents occurred in SAIL and RINL during the last 5 years, the Committee have been informed as under:-

CPSE	Other Reportable Accidents (Excluding Fatal Accidents)						Fatal Accidents (Fatalities)					
Year	2015	2016	2017	2018	2019	2020 (Till Oct.)	2015	2016	2017	2018	2019	2020 (Till Oct.)
SAIL	53	31	34	36	37	6	20	11	16	22	11	7
RINL	13	10	7	8	7	3	4	6	0	0	3	3





1.4 The details with regard to the fatal accidents in 5 main plants of SAIL in last 5 years are given as under:



1.5 Recalling the unfortunate accident occurred in 2018 in Bhilai Steel Plant of SAIL in which explosion and consequent major fire broke out near the coke oven battery and the supply line in the plant, the Committee enquired about the details of the case. In response, it has been informed that on 9th October, 2018, a protocol job was undertaken at Bhillai Steel Plant for de-blanking of a coke oven gas line. After removal of blank plate, when preparation for inserting ring packing was going on, at that moment sudden flame burst out and employees of EMD and Fire Brigade, involved in the job got trapped in the fire. In this accident, lives of 14 regular employees of the Bhilai Steel Plant were lost.

1.6 The Committee learnt that a high level enquiry committee was constituted by the Ministry of Steel to conduct independent inquiry into the causes of the incident. It has

further been informed that the high level Committee's detailed investigation and circumstantial evidences has revealed as under: -

a. BSP's practices of working in live gas lines and ignorance of pyrophoric iron sulphide deposits in gas line are considered to have caused the fire.
b. The investigation revealed that a number of serious lapses like deviation from SOP, design defects, lack of focus on training and safety awareness.
c. This accident was avoidable, if standards developed for Steel Industry were followed.

1.7 As regards action taken by SAIL to fix responsibility on the delinquent officials, it has been informed that based on the report of the High Level Committee constituted by the Ministry, disciplinary action was initiated against three officials of BSP by SAIL. All the three officials had been suspended from duty after the fire incident on 09.10.2018. On conclusion of the disciplinary proceedings, major penalties as per SAIL CDA Rules, 1977 were imposed on all the three officials.

1.8 The Committee have further observed that 3 accidents occurred in VSP during 2020. An accident occurred in on 30-04-2020 at 11:00 hrs. at RH transfer car area in GH bay of SMS – 2 due to uncontrolled lowering of Main hoist of GH Crane -2 resulting in Ladle falling on ground leading to spillage of steel, causing damage to Ladle Transfer Car, Cable Reeling Drum (CRD) and Wire feeder systems of RH Degasser. The reason for the accident was that brakes of MH motor – 2 did not hold due to insufficient holding torque. It has been stated that as the incident occurred mainly due to sudden failure of brake and no failure of specific individual was noticed, no officer was found delinquent. However, the Committee headed by Executive Director level has fixed responsibilities to designated persons for regular monitoring and accountability to avoid recurrence of the incident.

1.9 Further, on 05.11.2020 there was minor accident in CPP-2 of VSP on the C-shift. There was a minor fire in the oil system of turbo generator in CPP-2. The electrical executives noticed fire and smoke in the turbine front end with smoke and flame emitting from the top of TG Noise Hood. As a precautionary measure boiler 1 & 2 were tripped and CISF Fire Wing, Higher Authorities, & Plant Control were informed. The fire was extinguished immediately by CISF . Fire Measures are stated to have been taken to

prevent recurrence of similar incidents; viz. Providing a Fire Hydrant which can be Operated manually at Control room, Providing Hooter at all levels, Providing CCTV in Oil prone areas and check for leakage and ensure cleaning of the areas and Providing a separate ON/OFF switch for manually operating the Pumps and Deluge valve System at Control Room. Also, on 18 December, 2020 few people were injured in an accident at VSP's Steel Melting Shop(SMS) 2, when ladle hooks came out and liquid steel fell on the ground.

1.10 The Committee then enquired about the mechanism in place in SAIL and RINL for reporting of fatal, reportable and near miss cases of accidents and the remedial measures being taken to prevent such incidents in future. In this regard, SAIL has informed that all the incidents like fatal, reportable and near miss cases are reported by respective departments to Safety Engineering Department in a prescribed format as per IOW (Injury on Works) procedure. The details of fatal, reportable and near miss cases are compiled on a monthly basis and circulated among all Plants & Units. In case of a fatal accident, information is shared in the form of a Flash Report to the Ministry of Steel, Inspector of Factories of respective State Government as well as all Plants & Units of SAIL for information.

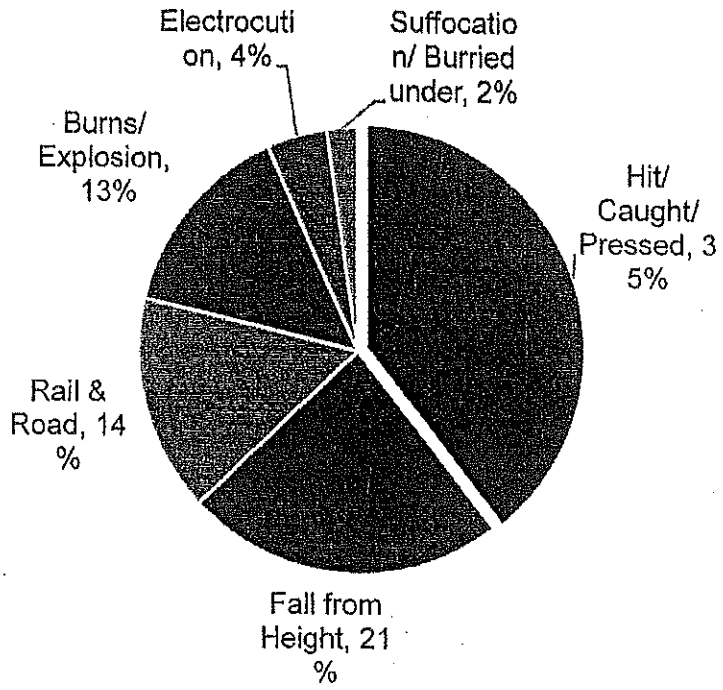
1.11 In this regard, RINL has informed that for all fatal and reportable incidents, dangerous occurrences etc., Form-18 and Form-18A as per AP factory rules is sent to the factories department. Also, all the reportable, fatal and dangerous occurrences are reported to Ministry of Steel. Thorough investigation and analysis of all incidents & near-misses are done and details of the accident analysis and recommendations are communicated to all employees through the Portal of Safety Engineering Department. For every incident including near misses, the incident investigation reports are generated within the time frame and responsibility for the suggested corrective and preventive actions is assigned. Incident Investigation Reports are presented in the Departmental Safety Committee (DSC), Central Safety Committee (CSC) & HOD meetings for deliberation and for taking steps as per the recommendations. Special safety training programs are being conducted for the relevant set of employees such as safety while working at height, confined space, Behavioral safety etc. based on the

cause of the accidents found through the accident analysis. Standing Fatal Accident Committee headed by an officer in the rank of Executive Director enquires into all fatal accidents and suggests the remedial measures.

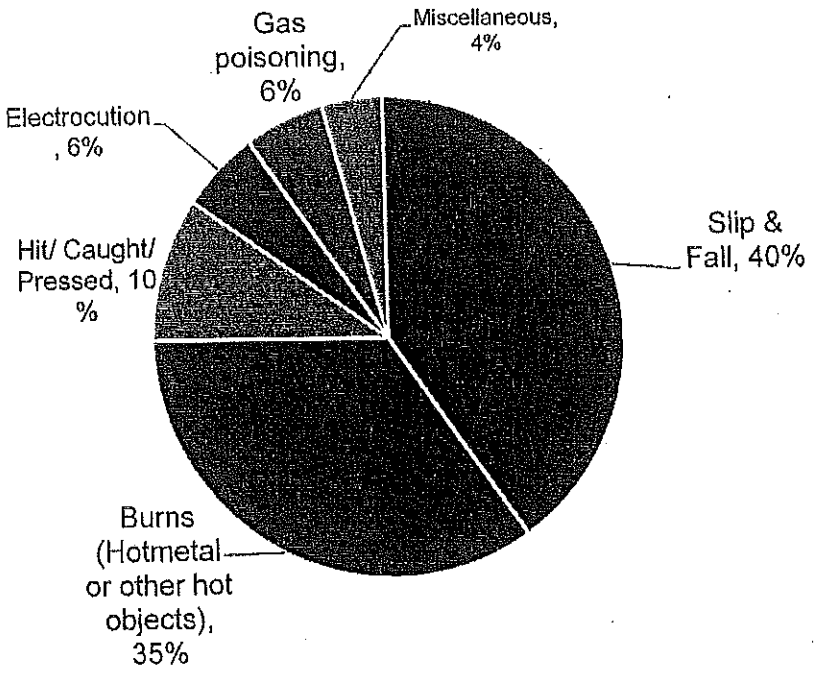
(iii) ANALYSIS OF FATALITIES AT SAIL AND RINL

1.12 On the basis of various hazards prevalent in steel making processes, fatalities analysis of SAIL and RINL is as given below:-

SAIL



RINL



It may be seen from the above that in SAIL, the major reason for fatalities remained moving/rotating machines(Hit, Caught, pressed, etc.)which accounted for 35% of the total fatalities in SAIL, whereas in RINL, the major reason for fatalities had been Slip & Fall, which accounted for 47% of the total accidents in RINL.

CHAPTER-II

SAFETY INITIATIVES FOR THE STEEL INDUSTRY

The Committee had enquired to know about the safety initiatives undertaken by the Ministry of Steel for the Iron and Steel Industry. In reply, the Ministry of Steel has stated that after the unfortunate major accident at Bhilai Steel Plant in October 2018, a need was felt for strengthening the safety ecosystem in the iron & steel sector in the country. A Working Group comprising of experts from the industry and Academia was constituted by Ministry of Steel, with an aim to study the various safety practices followed by the iron and steel industry and evolve comprehensive/common minimum safety guidelines to be followed for ensuring safety of the workers/employees engaged in the sector. A Sub Group of the Working Group comprising of National Institute of Secondary Steel Technology (NISST) and the Industry Associations was also constituted for addressing the specific safety needs of the mini steel sector. Experts from the Safety Department of Indian Industry of Technology (IIT) Kharagpur, also assisted in evolving these guidelines.

2.2 It has been added that as an outcome of the above efforts of the stakeholders, 25 Safety Guidelines for the iron and steel sector were formulated which address specific activities/hazards associated with the steel industry for both the large and small players of steel sector. These guidelines were unveiled by the Hon'ble Steel Minister in the form of the book viz. "Safety Guidelines for the Iron and Steel Sector" on 17th February, 2020 and have also been uploaded on Ministry of the Steel's website. The list of the aforesaid 25 Safety Guidelines for the Iron & Steel sector is as given below:-

(i)	Framework Document for Safety Guidelines
(ii)	Glossary of terms related to Safety
SG-01	Safety Guideline on storage, handling & use of gas cylinders
SG-02	Safety Guideline for Working at Height
SG-03	Safety Guideline for Working in a Confined Space
SG-04	Safety Guideline for Permit to Work (Operation & Maintenance)
SG-05	Safety Guideline for Illumination at workplace
SG-06	Safety Guideline for Lance cutting
SG-07	Safety Guideline for Gas cutting & Gas Welding

SG-08	Safety Guideline for Arc Welding & Arc Cutting
SG-09	Safety Guideline in Equipment & machine Guarding
SG-10	Safety Guideline for Hydraulic System
SG-11	Safety Guideline for Barricading
SG-12	Safety Guideline for Demolition of Building and Structure
SG-13	Safety Guideline for Material handling (manual and mechanized) & storage
SG-14	Safety Guideline for work on Electric Overhead Travelling (EOT) Crane
SG-15	Safety Guideline for Electrical safety
SG-16	Safety Guideline for Fire Safety
SG-17	Safety Guideline during Excavation
SG-18	Personal Protective Equipment (PPE) Management
SG-19	Safety Guideline on Operation and Maintenance of Conveyor Belts
SG-20	Safety Guideline for Oxygen & Nitrogen Gas line
SG-21	Safety Guideline for Handling Fuel Gas
SG-22	Safety Guideline for Energy isolation
SG-23	Safety Guideline for Safe handling of Liquid Metal
SG-24	Safety Guideline for Transportation in steel industry
SG-25	Safety Guideline for Loco Operation

2.3 To a specific query about the safety guidelines being followed in Steel industries in developed countries, it has been replied that these Safety Guidelines are at par with the global standards and are compliant with the requirements of the International Labour Organisation (ILO) Code of practice on safety in the Iron & Steel industry. Inputs in this regard, have also been taken from the World Steel Association's guidance document on "Safety & Health Principles and Definitions".

2.4 The Committee, then enquired about the timelines, if any, fixed for imparting statutory back up to the 25 safety guidelines notified by the Ministry of Steel. In reply, it has been stated that adoption of the aforesaid guidelines are voluntaryas Ministry of Steel do not have the necessary regulations to make them mandatory.The stakeholders from the Indian Steel Industry and its Associations have been urged to adopt these guidelines wholeheartedly to ensure a safe working environment for the workforce. The main legislation pertaining to worker safety and health in the manufacturing sector in India is under the Factory Act, administered by Ministry of Labour and Employment.

2.5 The Committee has been further apprised that the Ministry of Steel has requested the Ministry of Labour in October, 2019 to facilitate mandatory adoption of

the Safety Guidelines by the iron & steel sector. In response, the Ministry of Labour had informed that Safety Guidelines prepared by the Ministry of Steel has been referred for consideration and adoption of the Expert Committee set up for framing standards under Section 18 of Occupational Safety, Health and Working Conditions (OSH &WC) Code.

CHAPTER-III

SAFETY MANAGEMENT AND PRACTICES

(i) SAFETY POLICY

The Committee have been informed that SAIL has a comprehensive Safety Policy, which underlines the commitment of Top Management towards the vital issue concerning the company most valuable resources i.e. Human Resource & Machineries. All Integrated Steel Plants (ISPs) of SAIL are OHSAS-18001 and ISO 45001 certified.

3.2 As regards the safety policy in RINL, it has been stated that the Plant is certified for Safety Management System by the International Standard series since the year 2001. RINL has adopted an integrated policy that includes the Safety & Health Policy in line with National Safety Policy.

(ii) SAFETY SYSTEMS AND PROCEDURES

3.3 Regarding the safety systems and procedures being at SAIL Plants, it has been informed that each Plant/Unit of SAIL has a full-fledged Safety Engineering Department (SED) to take care of entire safety & fire related aspects on day-to-day basis. Each department has a Departmental Safety Officer (DSO) to promote safety and awareness amongst the employees and to bring out unsafe acts and conditions.

3.4 In this context, RINL has informed that the implementation of OHSAS: 18001 ensures Preventive Safety management practices and has facilitated a safe working environment in the organization by bringing significant change in the safety culture and over all standards of safety. The OHSAS 180001 system in RINL ensures Preventive Safety Management practices which covers; formulation of the Safety & Health Policy in line with the National Safety Policy, Hazard Identification and Risk Assessment (HIRA), Periodic Internal & External Audits, Regular Review of the system through periodic meetings by the top management and Conformance to legal and other requirements. As a part of the OHSAS, Standard Work Procedures which include Standard Operating

Procedures (SOPs), Standard Maintenance Procedures (SMPs) and Safe Working Instructions (SWIs) have been prepared for all the major and minor departments of the plant and are being implemented meticulously in each department.

(iii) LEVELS OF SAFETY MONITORING MECHANISM

3.5 Various levels of safety engagement that exist in SAIL for enabling structured monitoring of safety issues are as follows: -

a) **Board level**: There is a Board Sub Committee on Health, Safety & Environment (BSC on HSE) which reviews & monitors the compliances, performance, issues guidelines and apprise the Board.

b) **Corporate level**: At the corporate level, SAIL Safety Organisation (SSO) under Director (Technical, Project and Raw Materials), SAIL, coordinates, monitors & facilitates the safety related activities of Plants/Units and frames guidelines.

c) **Plant Level:** Director in-charge /Head of Unit makes strategies/facilitates implementation of safety measures, statutory requirements through Safety & Departmental Heads.

3.6 Different levels of safety monitoring that exists at RINL are given as under:-

a) **Board Level:**The CMD along with other Directors conduct monthly meeting room for reviewing the Safety Performance and suggesting the measures for improvement.

b) **Corporate Level :** RINL has identified the head of works as an "Occupier" and head of safety department as "Manager" of the factory who coordinate, monitor and facilitate all the safety related activities in the plant.

c) **Plant Level:** The organization of the Safety Engineering Department headed by the GM (Safety) consists of Zonal Safety Officers and Department Safety Officers deployed at every Zone / department who assist, monitor and facilitate all the safety related activities in the individual department.

d) **Department Level:** The Departmental Safety coordinators are identified by every Head of Department (HODs) who liaison and facilitate all the safety requirements of the individual department.

3.7 On being asked whether the safety officers at SAIL and RINL are given free hand in their working, it has been informed that at SAIL, Safety Officers have been given independence to perform their duties diligently. The Safety Officers present their observations and suggestions at to HODs during daily meetings and to CGM (Safety &

Fire Services) during periodic review meetings. During periodic reviews by Director in-charge/CEO and ED (Works), the Safety Officers are also given opportunity to share their salient findings and give suggestions.

3.8 At RINL too, the Safety Officers conduct inspections of identified processes and jobs, Shop-Floors and Equipment in various departments as per the schedule. They also conduct surprise height inspections, work permit inspections, shutdown jobs monitoring, PPE inspections etc. After inspection, they send their Report to the concerned HOD's directly for necessary action/compliance from the department. During inspection, a safety officer is empowered to stop any work being done in an unsafe way or in unsafe conditions.

(iv) SAFETY MONITORING AND AUDITING

3.9 It has been informed to the Committee that at SAIL, Annual Performance Plans (APP) for Safety and Fire Services are formulated for each Steel Plant and all major Capital Repairs/Shutdown jobs are closely monitored round the clock to ensure safe working. Findings of internal and external Safety Audits and inspections are monitored at different level for compliance. Meetings of Heads of Safety and Fire Services of Plants/Units are also organized to monitor & review safety status and compliance of various guidelines including sharing/ learning from good safety practices.

3.10 Further, there is a 3 tier system of Safety Audit in SAIL. At the first level, Internal Audit isdone by the Plant Safety Engineering Department and the Auditors can report directly to CMD and also take orders/guidelines from him. Another level is the audit by SSO in association with sister Plants/Units & compliance audits. Finally, External Safety Audits are conducted once in every two years in Plants through third parties like National Safety Council (NSC), Regional Labour Institutes (RLI) etc.**(PER, Q-16)**The Regional Labour Institutes (RLI) functions under Directorate General of Factories Advisory Services & Labour Institute(DGFASLI),which is a technical arm of Ministry of Labour and Employment, Govt. of India in matters related to Occupational Safety & Health. SAIL has also informed that since the third party Safety Audits are conducted by

credible and reputed agencies, there is no plan to engage International agencies to conduct the same.

3.11 As regards Safety monitoring and auditing in RINL is concerned, it has been informed that at RINL, the Occupational Health and Safety System is reviewed regularly every month by the Chief Executive and Chief Management Representative involving all the departmental heads. Occupational Health and Safety Assessment Series (OHSMS) Internal Audits are conducted once in a quarter in all major departments to improve the safety performance. Surveillance Audits are also being conducted once in six months by an external certifying agency to assess the functioning of the system of safety in various departments of the Plant. All the risks related to commissioning are assessed and mitigation plans are prepared. All the identified Contractual Agency Jobs, Shop-Floors and Equipment in various departments are inspected. The unsafe points identified or the non-conformances noticed are communicated to the concerned HOD for liquidation. Compliance of the same is monitored by the Zonal Safety Officers. Safety during all the major repairs and capital repairs is monitored round the clock and safety officers are deployed exclusively for this purpose.

3.12 When asked about the existing provision in RINL for Third Party Safety Audit, it has been informed that the third party safety audit by external agency is conducted every year as per statutory requirement. To improve the impact of audit, reputed parties are engaged on nomination basis. During 2019, RINL awarded audit contract to M/s National Safety Council on nomination basis. It is an autonomous premier, non-profit, self-financing and tripartite apex body which was set up by the Government of India, Ministry of Labour and Employment to generate, develop and sustain a voluntary movement on Safety, Health and Environment (SHE) at the national level.

(v) SAFETY AWARENESS AND TRAINING

3.13 The Committee have been informed that at all Plants of SAIL, Mass contact and group interaction programmes and workshops on areas of concern are organized regularly. Other programmes like 'Fatality Risk Control' and learning from Each Other (LEO) workshops on areas of concern are organised e.g. Gas Safety, Safety in

Iron/Steel Making, Safety in Rolling Mills, Safety in Traffic Operations, etc. are also held. Besides this, skill oriented job specific safety training is imparted to workers. Safety films are used during training programmes and safety related information is telecast through local TV network of Plants.

3.14 It has further been informed that in every Plant, suitable training hall with audio visual aids & other infrastructural facilities have been provided where accident case studies, safety films, salient DO's & Don'ts etc. are deliberated during training programs on various topics. For regular employees, modular training programs are organized by Plants round the year as per training plan/ calendar. For contract workers, a system of 2 days induction training before issue of gate pass followed by half a day on-the- job safety training & safety talks before start of job, is followed. Three days induction training for newly inducted regular employees has also been started in Plants.For visitors also, safety briefing is done at the Safety Excellence Centre developed in Plants for this purpose.

3.15 Regarding measures taken to inculcate safety habits in every day behavour of employees, SAIL has informed that in order to bring cultural transformation in safety, a Behaviour Based Safety (BBS) programme is being imparted at Bhilai Steel Plant and Bokaro Steel Plant also. Measures like Roko-Toko are taken to inculcate safety in everyday behaviour of the employees.

(PER, Q-7, Reply)

3.16 When asked to furnish the details of Training and Mock Drills conducted during last 3 years in SAIL, it has been informed as given below:-

Nos. of persons covered (i.e. Regular employees & Contractual Workers) in various Safety Training Programmes in SAIL during 2017-2019

Plant/ Unit	Nos. of Persons covered		
	2017	2018	2019
BSP	53,842	49,470	52,791
DSP	21,042	12,210	10,368
RSP	21,646	19,676	18,261
BSL	24,139	23,825	21,517
ISP	12,214	12,898	11,735

ASP	3,409	1,407	2,715
SSP	1,088	805	1,187
VISL	1,901	1,394	1,257
CFP	1,269	1,012	443

Mock Drills conducted in SAIL Plants / Units during 2017-2019

Plant/ Unit	Nos. conducted		
	2017	2018	2019
BSP	65	53	68
DSP	13	15	14
RSP	11	12	7
BSL	18	28	28
ISP	27	25	25
ASP	24	25	24
SSP	13	13	16
VISL	1	0	1
CFP	1	2	3
SAIL Total	**173**	**173**	**186**

3.17 With regard to Safety Awareness and Training Programmes, RINL has informed that regular Safety Training Programmes and Safety Workshops are conducted for regular employees as well as contract workers to inculcate safety awareness amongst them. Special Training Programmes by external safety experts on various topics are also being conducted in co-ordination with Management Development Centre and Technical Training Institute. Refresher safety training is imparted to all the contractor workers and their safety passes are renewed only after such training. Only those workers are permitted to work at site who have undergone Job Specific and Site Specific Safety Training. Height test is conducted for the workers to work at heights. Safety precautions to be taken during painting and roof sheeting jobs etc. are also imparted from time to time. Besides this, awareness training on Behaviour Based Safety Management (BBSM) is also being imparted to the employees.

3.18 On being asked about the details of regular employees and contractual workers who have been trained, RINL has informed as follows:-

Regular employees & Contractual Workers in various Safety Training Programmes in RINL

Type	2018-19	2019-20	2020-21(Up to Nov)
Regular Employees	7043	6455	5200
Contractual Works	19409	20363	13411

Regular Employee Training Details:

Programme Title	2018-19	2019-20	2020-21 (Apr-Nov)
Alignment of Equipments & Safety Aspects	147	86	0
Arc Welding & Safety Aspects	41	15	0
Basics of Mechanical Maint & Safety Aspects	103	11	0
BBSM	196	170	22
Bearing Maint. & Lub & Safety Aspects	56	48	0
Conveyor Belt Safety	117	13	0
Crane Safety	156	81	0
Electrical Safety	219	130	41
Fire Rescue Training	232	287	23
Gas cutting & Safety Aspects	49	41	0
Gas Safety	345	280	31
Gear Box and Couplings & Safety Aspects	85	47	0
General Safety & Road Safety	3445	3830	1109
Health Education	224	84	0
Hoist Maintenance & Safety Aspects	77	28	0
Hydraulics & Safety Aspects	128	25	0
OHSAS Awareness Programme	167	143	95
Safety & Occupational Health Management	195	202	0
Safety in handling Oxygen & LPG	170	207	9
Safety in Material Handling	406	205	0
Valves And Pump Maintanance & Safety Aspect	-	33	2628
Special training programmes	485	489	0
Safety Trainings through Webinar	-	-	1242
Total:	**7043**	**6455**	**5200**

Contract Worker Training Details:

Programme Title	2018-19	2019-20	2020-21 (Apr-Nov)
Capital Repair Training	1723	2059	1708
Fresh Trg. on Gen Safety	3995	3157	931

Height Training & Test	894	1030	896
Private Canteen Workers Trg.	90	183	134
Refresher Safety Training	11918	12811	8799
Special training programmes	256	436	352
Transport(Marketing) Drivers Trg. & VSP engaged vehicle drivers	493	489	191
VSP Canteen Workers Trg.	40	198	249
Others	0	0	151
Total:	**19409**	**20363**	**13411**

No of Mock drills Conducted during last 03 years at department level

Year	No. of departmental mock drills	Plant level mock drills
2018	249	2
2019	267	2
2020	251 (up to November)	3+1(Off site mock drill)

(vi) CHALLENGES IN IMPLEMENTATION OF SAFETY RELATED INITIATIVES

3.19 The Committee have been informed that many challenges are faced in implementation of safety related initiatives like aging workforce, superannuation leading to depletion of skilled manpower, reluctance in behavior transformation and adoption of new technologies etc. Many initiatives have therefore been taken to address these challenges which include spreading safety awareness through training programs & workshops organised with the help of M/s National Safety Council, special training on accidents which have taken place in other similar industries, Conducting special training programmes on Behavioural Based Safety and Legal aspects of Safety, Disaster Emergency Management Plan (DEMP) revised in line with the National Disaster Management guidelines, Safety Audits, Mock Drills, Safety campaigns & Exhibitions etc.

(vii) TIMELY REPLACEMENT OF OBSOLETE AND REDUNDANT SAFETY STANDARDS

3.20 The Committee wanted to know whether any review/study has been conducted or proposed to be undertaken to remove obsolete and redundant safety

standards/practices found during safety audit of plants, on account of adoption of new technology. In reply, the Ministry of Steel has informed the Committee that both technology and equipment in SAIL which have become obsolete, are labour intensive, have high energy consumption & pose danger to the working personnel are identified and replaced with state-of-the art technology and equipment on a regular basis. In this context, RINL informed that Hazard Identification and Risk Assessment (HIRA) are carried out as proactive measures before introduction of a new process, procedure, materials or modification to prevent the occurrence of any untoward incident.

(viii) NEW TECHNIQUES/IT DEPLOYMENT IN SAFETY

3.21 The Committee desired to know the impact of new steel making techniques in reducing hazardous nature of the industry. In reply, the Committee has been informed that as a result of introduction of new steel making techniques which are inherently safer and equipped with in-built safety features, the man-machine interface has reduced considerably. Use of enhanced automation, process interlocks, technology tools like CCTV cameras & gas detectors, hooters at crossings and Vehicle speed monitoring devices etc., has resulted not only in substantial reduction of risk level but also has further strengthened safety standards across the Plants.

3.22 In this context, as regards RINL , the Committee has been informed that the company has adopted new Steel making techniques through Revamping of 3 converters and introduction of Dog Houses in 3 convertors of Steel Melting shop, commissioning of Coke oven Battery-5 with modern facilities, revamping and up gradation of Electrostatic Precipitators of Air cleaning plant and Gas cleaning plant of Sinter M/C-2, revamping and up gradation of 6 no's of Electrostatic Precipitators of Blast Furnace 1 & 2 and Sinter Plant 1, augmentation of Electro Static Precipitator of Thermal Power Plant, installation of dry fog system etc. These techniques have improved shop floor work environment, reduced manual intervention, reduced environmental emission of suspended particles, reduced exposure to heat radiation and explosion hazards and reduced energy & water usage thereby improving working environment by safety point of view.

3.23 It has been added that extensive use of latest IT tools like Web Portal and Safety Monitoring Systems is done for sharing safety related information amongst a cross-section of employees. E-magazines and safety digests etc. are brought out for the benefit of Plant Personnel covering salient activities as well as informative articles &case studies. Safety suggestions and near miss cases are also captured through online systems.

CHAPTER-IV

AREAS OF EMPLOYEES CONCERN

(i) EMPLOYEE HEALTH

Reacting to the concern expressed by the Committee with regard to health of the workers employed in the steel plants, the Ministry has informed that each Plant of SAIL has a well established Occupational Health Service (OHS) centre manned by qualified Doctors & Technicians with an objective to protect the employees against health hazards, sickness, occupational disease, and injury arising out of employment. The OHS is operational for 24 hours and the doctors employed there are regular employees of SAIL. Employees engaged in hazardous areas at Plants of SAIL undergo health check-up at intervals not exceeding twelve months as per the provisions of the Factories Act, 1948.

4.2 To a specific query with regard to the ratio of Doctors to Workers (both regular/contractual) engaged in Plants where SAIL is running Hospitals, the information has been given as under:

Plants/Mines	Hospital	Doctors to Workers Ratio
Bhilai Steel Plant	Jawaharlal Nehru Hospital & Research Centre, Bhilai	1 : 71
Durgapur Steel Plant & Alloy Steels Plant	DSP Main Hospital, Durgapur	1 : 93
Rourkela Steel Plant	Ispat General Hospital, Rourkela	1 : 97
Bokaro Steel Plant	Bokaro General Hospital, Bokaro	1 : 63
IISCO Steel Plant	Burnpur Hospital	1 : 203
Salem Steel Plant	SSP Hospital	1 : 124
Visvesvaraya Iron & Steel Plant	VISP Hospital, Bhadravathi	1 : 158

4.3 During oral evidence, the CMD, SAIL admitted to the unsatisfactory ratio of doctors to workers and stated that despite giving lucrative and attractive incentives, ensuring adequate availability of doctors has been a challenge. He informed that a special recruitment of 225 doctors was sanctioned by the SAIL Board and is under

finalization for which SAIL has decided to give special incentives like permission for private practice to both SAIL doctors as well as contract doctors. Their compensation has also been increased and hopefully, such efforts would fetch positive results.

4.4 In this context, RINL has informed that it is registered under Factories Act and as per Rule 61(SC)B(c)(i) of The AP Factories Rules,1950, full time Factory Medical Officer for factories employing up to 500 workers and one more Medical Officer for every additional 1000 workers on part thereof shall be available. RINL is having one doctor for every 160 employees. An Occupational Health Services and Research Centre (OHS&RC) is also provided with state-of-the-art equipment for carrying out activities like periodical medical examination, industrial hygiene surveys etc. Two first-aid stations are located in the plant, with qualified doctors, paramedical staff and Ambulances. Supporting facilities for providing specialist care are available at the 150 bedded Visakha Steel General Hospital (VSGH) located in Ukku Nagaram Township. Further, no worker has been identified with any occupational disease during last 3 years.

4.5 RINL has informed about the frequency of health check-up of their employees as under:-

DEPARTMENTS	PERIODICITY
All workers in Benzol plant section of CO&CCP	Half-yearly
CO&CCP, BF, SMS, SP, TPP, RMHP, CRMP, Foundry unit of engineering shops, RED, and EMD, departments of Works division	once in every year
All canteen contract workers	once in every year
All other departments of works division	once in every 3 years
All departments of non-works division	once in every 5 years

(ii) COMPENSATION POLICY

4.6 The Committee asked about the existing provision for payment of compensation to regular employees as well as contractual workers/labourers in case of accidents. In reply, it has been informed that compensation in case of death or partial/permanent

disablement of employees due to accident arising out of and in course of employment is provided as per the provisions of Employees Compensation Act 1923. SAIL has guidelines for providing compassionate employment to one of the eligible dependents in case of death or permanent total disablement of employees due to accident arising out of and in course of employment and in cases of Medical invalidation of employees suffering from specified debilitating diseases. Further, SAIL also operates an Employee Family Benefit Scheme (EFBS) which provides for monthly payment equal to last drawn Basic Pay + DA of the deceased employee to the dependent till notional date of superannuation of the employee concerned as per the provisions of the Scheme. This is provided in lieu of employment.

4.7 As regards the contractual workers, they are stated to be covered under ESI Act and dependent benefits are extended as per ESI Act, 1948. In case of contract workers, SAIL provides employment to eligible dependent in case of death of the contract labourer due to accident arising out of and in course of employment within the works premises.

4.8 In this regard, RINL has informed that at RINL, regular employees are covered under Workman Compensation Act and Group Personal Accident Insurance (GPAI). Employment is given in RINL to the next of kin of the deceased, in case of fatal accidents. In case of regular employees, option is available to the family to opt either for employment of one dependent or to avail benefits under Employees Family Benefit Scheme. In case of minor injuries, all the contract workers working under various contracting agencies in RINL are being covered under the provisions of ESI Act, 1948. RINL, being the principal employer, ensures 100% compliance of the ESI contribution in respect of the contract workers.

4.9 It has been added that in case of fatal accidents of any contract worker on duty, benefits are being extended to the dependents of the deceased contract workers as per the EPF & MP Act, 1952, ESI Act,1948 and AP Labour Welfare Fund Act,1987. In addition to the above statutory benefits, all contract workers deployed by the contractors in RINL are being covered under Group Personal Accident insurance of Rs.5,00,000 in case of fatal accident while on duty. Provision of employment to the next

kin of the deceased, is at discretion of the contractor based on the tenure of the contract and the availability of suitable person in the family. Compensation is paid timely after relevant documentation work is completed.

(iii) CONTRACTOR WORKERS MANAGEMENT SYSTEM

4.10 It has been informed that there is a provision at SAIL Plants for a 2 days safety induction training for contract workers to enhance awareness amongst them about the hazards prevailing in the Plants. Job specific training of half-a-day duration is also imparted at site before start of job by the executing agency and height pass test/training before start of any height job. Besides this, safety and penalty clauses are inbuilt in terms & conditions of the contracts.

4.11 During the oral evidence, CMD, SAIL revealed that accidents are more prevalent in case of contract workers. It was further informed that as per practice prevalent in many private sector companies, a draft has been prepared at SAIL for a system whereby the contractors will be reviewed through a Contract Workers Management System and they will be given star rating according to their efficacy on various parameters. This draft will be approved by the Committee on Health, Safety and Environment. Nine point guidelines have been made and circulated to the contractors in this regard.

PART-II

OBSERVATIONS/RECOMMENDATIONS

INTRODUCTORY

Iron and Steel Industry involves a combination of complex processes and large scale operations which are hazardous in nature. Hence, it has been classified as hazardous process industry as per the Factories Act, 1948 (Amended in 1987). The hazards mainly emanate from extremely high temperature processes involving liquid metal, generation of by-product gases which have toxic and explosive constituents, large quantity of material handling/ transporting and manpower intensive multi-unit operations, the hazardous chemicals, electricity, steam, working at height, working in confined space etc. Acknowledging the potential dangers inherent in the Steel and Iron Industry, the Committee feel that a safe and healthy working environment is of paramount importance for all employees who work in the Steel Industry. It is, therefore, imperative that continuous and sustained efforts are made by all the Stakeholders in the Steel and Iron Industry to ensure adherence to optimum safety standards as it would go a long way for elimination of fatal accidents and reduction in reportable accidents. This is the area where Safety Management Practices being followed in various Steel PSUs assumes greater significance. The Committee would, therefore, desire that the Ministry of Steel/Steel PSUs should strive hard to bring excellence in all aspects of their operations for safest working environment in all their Steel Plants and make "accident free" environment, an achievable goal.

SAFETY PERFORMANCE IN STEEL PSUs

2. The Committee note that during 2015, 2016, 2017, 2018, 2019 and 2020 , the number of fatal accidents in SAIL were 20, 11, 16, 22, 11 and 7 (upto 5 October, 2020), respectively. The Reportable Accidents during these years were 53, 31, 34, 36, 37 and 6 (up to October, 2020), respectively. Similarly, in RINL, during 2015, 2016, 2017, 2018, 2019 and October, 2020 , the number of fatal accidents were 4, 6, nil, nil, 3 and 3 (upto 5 October,

2020), respectively. The Reportable Accidents during these years were 13, 10, 7, 8, 7 and 3 (up to October, 2020), respectively.

While observing that the number of fatal accidents in SAIL, during the last 5 years, either reduced or remained almost at the same level except in the year 2018 when it rose to 22 from 16 in the year 2017, the Committee find to their satisfaction that in RINL, there were no fatalities for two consecutive years i.e. 2017 and 2018. Again, the number of reportable accidents both in SAIL and RINL are either reduced or remained at the same level. Emphasizing on safety of each and every employee who work in the Steel Plants, the Committee recommend that SAIL and RINL should adopt all protective mechanism/Standard Operating Procedures (SOPs) to ensure eliminating accidents altogether while managing working environments with the highest standards of safety and health conditions. The Committee would also desire that they may be apprised of the number of Reportable accidents and Fatal Accidents in SAIL and RINL during 2020.

3. The Committee find that in SAIL, 35% of the fatal accidents were due to Moving and Rotating Machines (Hit, Caught, Pressed) and 21% due to fall from height. Similarly, in RINL, 40% of the fatal accidents were due to Slip & Fall and 35% due to burns. The Committee while assuming that steel PSUs must have identified the causes of these accidents and taken the remedial measures required also desire that SAIL and RINL should focus on these hazardous activities which are causing more fatalities and take further necessary steps in this direction for eliminating/reducing accidents after reviewing the causes of accidents. The Committee would like to be apprised of the action taken by the Government.

4. The Committee recall the unfortunate accident occurred on 9th October, 2018 at Bhillai Steel Plant in which 14 regular employees lost their lives when a protocol job was undertaken for de-blanking of a coke oven gas

line. After removal of blank plate, when preparation for inserting ring packing was going on, sudden flame burst out and employees of EMD and Fire Brigade involved in the job got trapped in the fire. A high level enquiry committee constituted by the Ministry of Steel to conduct independent inquiry into the causes of the incident revealed that BSP's practices of working in live gas lines and ignorance of pyrophoric iron sulphide deposits in gas line had caused the fire. Further, there were a number of serious lapses like deviation from SOP, design defects, lack of focus on training and safety awareness. It was also revealed that the accident could have been avoided, if standards developed for Steel Industry were followed. While observing that in 2019 and 2020 (till October, 2020), one fatal accident was again reported in each year, the Committee would recommend that identification of the aforesaid lapses in the hazardous activities should be meticulously taken care of and regular monitoring be administered in this regard to avoid any fatality.

SAFETY INITIATIVES BY THE MINISTRY OF STEEL

5. The Committee learn that the Ministry of Steel had constituted a Working Group comprising of experts from the industry and Academia to study various safety practices followed by the Iron and Steel industry and evolve comprehensive/common minimum safety guidelines for ensuring safety of the workers/employees engaged in the sector. The Committee are happy to learn that the efforts of all the stakeholders have borne fruits and 25 Safety Guidelines have been formulated for the iron and steel sector to address specific activities/hazards associated with the steel industry, for both the large and small players of steel sector. The Committee appreciate that the aforesaid Safety Guidelines are at par with the global standards and are compliant with the requirements of the International Labour Organisation (ILO) Code of practice on safety in the Iron & Steel industry. Inputs in this regard, have also been taken from the World Steel Association's guidance document on "Safety & Health Principles and Definitions". The Committee, however, are of the view that mere formulation

of the Safety Guidelines would not serve the purpose unless Safety Guidelines are implemented in letter and spirit. The Committee, are thus hopeful that these Safety Guidelines would serve as a prerequisite for safe working environment to the employees engaged in the Iron and Steel industry and would be implemented with all seriousness to help prevent accidents to the extent possible.

6. The Committee find that the adoption of these guidelines by the Steel Sector is voluntary as the Ministry of Steel does not have the necessary regulations to make the Safety Guidelines mandatory. In fact, the main legislation pertaining to worker safety and health in the manufacturing sector in India is under the Factory Act, administered by Ministry of Labour and Employment. However, the Committee are pleased to learn that the Ministry of Steel had requested the Ministry of Labour in October, 2019 in this regard, which stated that Safety Guidelines have been referred for consideration and adoption of the Expert Committee set up for framing standards under Section 18 of Occupational Safety, Health and Working Conditions (OSH &WC) Code and the matter shall be considered after enactment of the OSH&WC Code. In view of the foregoing, the Committee would desire the Ministry of Steel to vigorously pursue the matter with the Ministry of Labour and accordingly apprise them of the progress made in the matter.

<u>SAFETY MANAGEMENT AND PRACTICES IN SAIL AND RINL</u>

7. The Committee note that SAIL has a comprehensive Safety Policy, which underlines the commitment of Top management towards the vital issue concerning Human Resource & Machineries. Also RINL, has adopted an

integrated policy that includes the Safety & Health Policy in line with National Safety Policy. Further, in SAIL and RINL, safety engagement for enabling structuring monitoring of safety issues is done at Board, Corporate, Plant and Department levels. Though, all these levels are engaged in a common goal of ensuring full proof safety and aiming for a zero accident environment, the Committee are, however, of the considered view that reportable accidents and fatalities in SAIL and RINL in the past would have been even lesser, had there been better coordination and organised monitoring. It clearly reflects lack of commitment at some level. The Committee strongly feel that safety and health issues in Steel Industry require commitment from everyone and most importantly at all levels of management. The Committee are of the strong opinion that safety and health issues should be accorded topmost priority and desire that needful be done in best interest of the people working in Steel PSUs.

EMPOWERING SAFETY OFFICERS

8. The Committee note that at each Plant/Unit of SAIL and at Vishakhapatnam Steel Plant, RINL there is a fully equipped Safety Engineering Department (SED) which takes care of the day to day safety related aspects of the Plant. The Departmental Safety Officers (DSOs) and Zonal Safety Officers posted at the Plant play a crucial role to promote safety awareness amongst the employees as they assist, monitor and facilitate all safety related activities. The Committee feel that DSOs should be given a free hand in discharge of their duties as they have a better idea about the facts on the ground. The Committee desire that suggestions received from the DSOs during the periodic review meetings should be paid adequate attention as it can prove to be a most crucial link in fixing safety issues.

MONITORING/INSPECTIONS

9. The Committee have been informed that the Annual Performance Plan (APP) for Safety and Fire Services are formulated for each Steel Plant of SAIL. All major repairs and shutdown jobs are also closely monitored round

the clock to ensure safe working environment. Findings of internal and external Safety Audits and inspections are being implemented for compliance. Meetings of Heads of Safety and Fire Services of Plants/Units are being organized to monitor & review safety status and compliance of various guidelines including sharing and learning from good safety practices. At RINL too Occupational Health and Safety System (OHSMS) is reviewed regularly. All the risks related to commissioning are assessed and mitigation plans are prepared. The unsafe points identified or the non-conformances noticed are communicated to the concerned Head of Department for liquidation. Compliance of the same is monitored by the Zonal Safety Officers. The Committee believe that besides keeping a check, routine inspections can also be a forum to get feedback from workers. Though, unsafe acts, points and conditions are identified during regular monitoring, there is a need for thorough follow up mechanism to ensure that they are liquidated at the earliest. The Committee desire that recommendations/suggestions made during inspections should be implemented without fail.

AUDITING

10. The Committee are happy to note that there exist a 3 tier system of Safety Audit in SAIL which includes Internal Audit by Plant Safety Engineering Department, Audit by SAIL Safety Organisation (SSO) and External Safety Audits in Plants once in every 2 years through independent third parties like National Safety Council, Regional Labour Institutes etc. At RINL, Safety Audit is being conducted once in six months by the respective Zonal Safety Officers in all the major departments. Occupational Health and Safety System (OHSMS) Internal Audits are also conducted once in a quarter in all major departments to improve the safety performance. The Committee do appreciate the existing provision in SAIL whereby the Internal Auditors can report directly to CMD and can take direct orders/guidelines from him. The Committee are hopeful that findings of all the audit reports are taken

care of by fixing the responsibilities and taking adequate corrective measures.

TRAINING/AWARENESS

11. The Committee note that SAIL and RINL have been conducting Safety Training Programmes at their steel plants from time to time, for regular employees as well as contract workers to inculcate safety awareness amongst them. According to the information provided to the Committee, quite a few regular employees and contact workers were trained under these programmes in different Steel Plants of SAIL and RINL during the last three years. Special Training Programmes by external safety experts on various topics for addressing key risk areas are also being conducted. SAIL imparts safety induction training of three days duration for newly inducted regular employees and of two days duration for the Contract Workers. Besides, in order to bring cultural transformation in safety, a Behaviour Based Safety (BBS) programme is being imparted at Bhilai Steel Plant and Bokaro Steel Plant. Measures like Roko-Toko are taken to inculcate safety in everyday behaviour of the employees. At RINL, refresher safety training is imparted to all the contract workers and their safety passes are renewed only after such training. Only those Workers are permitted to work at site who have undergone Job Specific and Site Specific Safety Training. RINL also imparts awareness training to its employees on Behaviour Based Safety Management (BBSM).

The Committee appreciate that both SAIL and RINL have taken ample measures to provide a safe working environment to all its regular employees and contract workers at Plants. However, the Committee would earnestly desire that SAIL and RINL should impart safety trainings to more and more regular as well as contractual workers. Moreover, when new methods, technologies or processes are introduced in Steel Plants, it becomes a necessity to retrain the staff accustomed with the older methods,

technologies or processes and safety training programmes should be devised accordingly. The Committee further find that induction training for regular as well as contract workers is of a very short duration and therefore desire that the time period for such training programmes should be suitably increased. Besides, refresher safety training programmes should be organised more frequently and the training curriculum should be revised in conforming to the updated risk assessment and hazard identification. The Committee are of the opinion that in view of the operational risk involved in the working of Iron and Steel Industry, cultural transformation of staff is the need of the day. Hence, the Committee recommend that Behaviour Based Safety (BBS) training programme, the one being carried out by SAIL and Behaviour Based Safety Management (BBSM) training programme, the one being imparted by RINL should invariably be extended to all the workers in Steel Plants of SAIL and RINL and should be held more frequently to establish a safer working environment.

OVERCOMING CHALLENGES

12. The Committee note that Steel PSUs are grappling with many challenges in implementation of safety related initiatives. Major challenges include depletion of skilled manpower, aging workforce, slow rate of behaviour transformation, hesitancy in adoption of new technologies etc. The Committee understand that safety related initiatives by the Steel PSUs would get the desired impetus once the Steel Industry gets over with the above challenges being faced by it. The Committee expect that the administrative mechanisms/systems available both at the level of the Ministry and Steel PSUs for tackling the challenges before them would be addressed by taking appropriate measures.

USING TECHNOLOGY FOR SAFETY

13. The Committee are pleased to note that use of process interlocks and technology tools have resulted not only in substantial reduction of risk level but has strengthened safety standards across the Plants. Further, new

techniques have improved shop floor work environment and have led to reduction of manual intervention, reduced environmental emission of suspended particles, lessened exposure to heat radiation and explosion hazards. The Committee are of the considered view that among the various initiatives being taken by the Steel Industry to provide a safe working environment, there is no denying the fact that use of technology takes the priority. However, with the advent of technology in operations of the iron and steel industry, requirement of technological discipline among the staff working in Steel Plants has grown manifolds. Needless to say, compliance to technological discipline assumes more importance when most of the operations in Steel Plants are hazardous in nature. Therefore, The Ministry of Steel/ Steel PSUs should gear themselves up to meet these challenges. The Committee feel that making all the employees to strictly comply with the technological discipline in their area of working would be an uphill task. At the same time, they trust that Ministry of Steel/Steel PSUs would take all corrective measures to improvise their safety measures and practices, to achieve goals of safety and production.

EMPLOYEES HEALTH

14. The Committee note that each Plant of SAIL has an Occupational Health Centre (OHC) where qualified doctors and technicians sit round the clock for the benefit of employees. SAIL is also running hospitals like Jawaharlal Nehru Hospital & Research Centre, Bhilai for Bhilai Steel Plant, DSP Main Hospital, Durgapur for Durgapur Steel Plant & Alloy Steels Plant, Ispat General Hospital, Rourkela for Rourkela Steel Plant, Bokaro General Hospital, Bokaro for Bokaro Steel Plant, Burnpur Hospital for IISCO Steel Plant, SSP Hospital for Salem Steel Plant and VISP Hospital, Bhadravathi for Visvesvaraya Iron & Steel Plant. The ratio of doctors to Workers in these hospitals are 1:71, 1:93, 1:97, 1:63, 1:203, 1:124 and 1:158, respectively. The CMD, SAIL admitted to the unsatisfactory ratio of doctors to workers despite lucrative offers and attractive incentives. The Committee, however, note with satisfaction that in order to increase the ratio of Doctors

to Workers in the Plant/Unit Hospitals, SAIL Board has sanctioned recruitment of 225 Doctors in the Human Resource Plan for 2020-21. It has been decided to give special incentives like permission for private practice to both SAIL doctors as well as contract doctors and their compensation has also been increased. The Committee would like to be apprised of the latest position of recruitment of doctors at SAIL in this regard and how it has affected Doctors to workers ratio in its Plants.

15. Further, RINL is registered under Factories Act and as per Rule 61(SC)B(c)(i) of The AP Factories Rules,1950 and accordingly, RINL is having one doctor for every 160 employees. It also provides for an Occupational Health Services and Research Centre (OHS&RC) with state-of-the-art equipment for carrying out activities like periodical medical examination, industrial hygiene surveys etc. Two first-aid stations are located in the plant, with qualified doctors, paramedical staff and Ambulances. Supporting facilities are also available at the 150 bedded Visakha Steel General Hospital (VSGH) located in Ukku Nagaram Township. The Committee are glad to note that in RINL, no worker has been identified with any occupational disease during last 3 years.

The Committee further note that employees engaged in hazardous areas at SAIL Plants undergo health check-up once in a year as per the provisions of the Factories Act, whereas in RINL, periodicity of health check up of employees varies from half yearly to once in 5 years according to the Department they are posted at. The Committee feel that the periodicity of health check up at both PSUs needs to be reviewed to ensure that health check up of all employees posted in hazardous zones is done more frequently.

COMPENSATION POLICY

16. According to their compensation policy guidelines as per the provisions of Employees Compensation Act 1923, SAIL provides compassionate employment to one of the eligible dependents in case of death or permanent total disablement of employees due to accident in course of employment and in cases of Medical invalidation of employees suffering from specified debilitating diseases. Further, SAIL also operates an Employee Family Benefit Scheme (EFBS) which provides for monthly payment to the dependents till notional date of superannuation of the deceased employee concerned in lieu of employment. In case of contract workers, SAIL provides employment to eligible dependent in case of death of the contract labourer due to accident in course of employment within the work premises. At RINL, regular employees are covered under Workman Compensation Act and Group Personal Accident Insurance (GPAI). In case of death of the regular employees, option is available to the family to either opt for employment of one dependent or to avail benefits under Employees Family Benefit Scheme. Contract workers in RINL are covered under GPAI and ESI Act. The Committee are of the opinion that compensation policy will lose its purpose, if the aggrieved family of the employee does not get its due benefits in time. Hence, the Committee urge the Government to ensure that there should not be any delay in dealing with matters relating to sanctioning of the compensation package and desire that as soon as the documentation work is complete, the aggrieved family should not be made to run from pillar to post for what is eventually due to them. A nodal officer be appointed and deputed to aid the family in handling all the necessary paperwork. For any dispute in settlement of claims, the Committee have been informed that in maximum cases settlement is done within 7-10 days. While appreciating the prevalent compensation practices in Steel PSUs, the Committee would like to be apprised of the cases of settlement of compensation and resolving of disputes by SAIL and RINL during the last 3 years. They also desire that the Compensation packages offered should be reviewed periodically.

CONTRACTOR WORKERS MANAGEMENT SYSTEM

17. The Committee have been informed that accidents are more prevalent in case of contract workers. In such a case, the Committee observe that SAIL, in order to elevate the quality of contractors and in a bid to ensure their efficiency, has prepared a draft for a system through which the contractors will be reviewed through a Contract Workers Management System where they would be given star rating according to their efficacy on the basis of various parameters. As has been informed, this draft which would be approved by the Committee on Health, Safety and Environment and guidelines made in this regard have also been circulated to the contractors. The Committee are of the opinion that review with regard to the efficacy of the contract labourers through a Contract Workers Management System would serve as a benchmark for handling various hazardous jobs in Steel Plants and would therefore recommend the SAIL to expedite its efforts in this direction. They also desire that if this system yields positive results, it can be replicated in other Steel PSUs.

NEW DELHI;
04 August, 2021
13 Sravana, 1943(Saka)

RAKESH SINGH
Chairperson
Standing Committee on Coal and Steel

Annexure-I

MINUTES OF THE THIRD SITTING OF THE STANDING COMMITTEE ON COAL AND STEEL HELD ON THURSDAY, THE 03 DECEMBER, 2020 IN COMMITTEE ROOM NO. '1', BLOCK-A, FIRST FLOOR, PHA EXTENSION BUILDING, NEW DELHI.

The Committee sat from 1130 hrs. to 1400 hrs.

PRESENT

Shri Rakesh Singh- Chairperson

Lok Sabha

2. Shri Balubhau Dhanorkar *alias* Suresh Narayan
3. Shri Kunar Hembram
4. Shri Ajay Nishad
5. Dr. Lorho S. Pfoze
6. Shri Arun Sao
7. Dr. Beesetti Venkata Satyavathi

Rajya Sabha

8. Dr. Vikas Mahatme
9. Shri Ram Vichar Netam
10. Shri Samir Oraon

SECRETARIAT

1. Shri Arvind Sharma - Director
2. Smt. Geeta Parmar - Additional Director
3. Smt. Savita Bhatia - Deputy Secretary

WITNESSES

MINISTRY OF STEEL

1. Shri Pradip Kumar Tripathi, Secretary
2. Ms. Rasika Chaube, Additional Secretary
3. Ms. Ruchika Chaudhry Govil, Joint Secretary

STEEL PSUs

4. Shri Anil Kumar Chaudhary, Chairman, SAIL
5. Shri P.K. Rath, CMD, RINL

2. At the outset, the Chairperson welcomed the Secretary and other representatives of the Ministry of Steel, SAIL and RINL to the sitting of the Committee convened to have briefing on the subject, "Safety Management & Practices in Steel PSUs". The

Chairperson also drew their attention to Direction 55 of the Directions by the Speaker, Lok Sabha regarding confidentiality of the proceedings . Recalling the hazardous nature of the working Iron & Steel industry, the Chairperson stressed on the need for concerted efforts by the Steel Companies to prevent/eliminate cases of accidents in various Steel Plants. He also enquired about the steps taken by the Ministry of Steel for mandatory application of 25 Safety Guidelines for Iron & Steel Sector, which were published in the form of a book and released by the Hon'ble Minister of Steel on 17 February, 2020.

3. Thereafter, Secretary, Ministry of Steel briefed the Committee highlighting the safety status in CPSEs, steps being taken by the Ministry to ensure safe working environment to the employees and the implementation aspects of safety practices in CPSEs. Responding to Chairperson's concern, the Secretary, Ministry of Steel informed the Committee that the matter with regard to facilitating mandatory application of the 25 Safety Guidelines for Iron & Steel Sector has been taken up with the Ministry of Labour and Employment. The Ministry of Labour & Employment has constituted an Advisory Board in 19 November, 2020 in this regard. The Secretary, Ministry of Steel assured the Committee that the matter is being pursued, for an early decision.

4. The Additional Secretary, Ministry of Steel also made a brief power point presentation on the subject.

5. The Committee, then sought clarifications on various safety related issues like periodic updation of list of hazardous activities identified in the steel sector, role of new technology in ensuring safe work environment, safety inspection and conduction of third party safety audit of Steel Plants, challenges faced during implementation of various safety mechanisms at workplace, ensuring adequate availability of PPEs, fixing of responsibility for accidents/mishaps at the Plants, compensation policy being followed in case of major injuries or fatal accidents, duration of training programmes to the workers, etc.

6. After that, the Chairman, SAIL briefed the Committee about the performance of SAIL during 2019-20 and 2020-21(till date) and about the various constraints being faced by them to upkeep their performance. He however, expressed hope that due to various proactive initiatives taken by the Government from time to time, SAIL would improve its performance in the current year. He also apprised the Committee about the action taken on the accident that happened in Bhilai Steel Plant on 9 October, 2018.

7. Subsequently, CMD, RINL inter-alia informed the Committee that in the year 2001, the company adopted Occupational Safety and Health(OSH) Management Systems under which they have done Hazard Identification and Risk Assessment for every Department focusing particularly the dangerous departments like Blast Furnace, Steel Melting Shops and Coke Oven. He then elaborated on various other safety practices followed in its Steel Plant.

8. The Chairperson then directed the representatives of the Ministry of Steel to furnish written replies to the queries raised by the Members which remained unanswered during the sitting of the Committee.

A copy of verbatim proceedings of the sitting has been kept on record.

The Committee then adjourned.

Annexure-II

MINUTES OF THE TWELFTH SITTING OF THE STANDING COMMITTEE ON COAL AND STEEL (2020-2021) HELD ON WEDNESDAY, THE 4TH AUGUST, 2021 FROM 1530 HRS. TO 1630 HRS. IN HON'BLE CHAIRPERSON'S CHAMBER, ROOM NO. '210', B-BLOCK, PHA EXTENSION BUILDING, NEW DELHI.

PRESENT

Shri Rakesh Singh - Chairperson

Lok Sabha

2. Shri Balubhau Dhanorkar *alias* Suresh Narayan
3. Shri Vijay Kumar Hansdak
4. Shri Kunar Hembram
5. Shri Chandra Prakash Joshi
6. Shri Saumitra Khan
7. Shri S. Muniswamy
8. Shri Ajay Nishad
9. Shri Basanta Kumar Panda
10. Smt. Riti Pathak
11. Shri S.R. Parthiban
12. Shri Komati Reddy Venkat Reddy
13. Shri Chunni Lal Sahu
14. Shri Arun Sao
15. Shri Pashupati Nath Singh
16. Shri Sunil Kumar Singh
17. Shri Sushil Kumar Singh
18. Dr. Beesetti Venkata Satyavathi

Rajya Sabha

19. Shri Anil Desai
20. Dr. Vikas Mahatme
21. Shri Venkataramana Rao Mopidevi
22. Shri Ram Vichar Netam
23. Shri Prabhakar Reddy Vemireddy
24. Shri B. Lingaiah Yadav

SECRETARIAT

1. Shri Pawan Kumar - Joint Secretary
2. Shri Arvind Sharma - Director
3. Shri Uttam Chand Bharadwaj - Additional Director
4. Smt. Geeta Parmar - Additional Director

At the outset, the Chairperson welcomed the Members to the sitting of the Committee. The Committee thereafter considered and adopted the following Reports without any amendments/with some modifications or changes:-

(i) Draft Report on the subject "Safety Management and Practices in Steel PSUs" relating to the Ministry of Steel;

(ii) ** ** ** **

(iii) ** ** ** **

(iv) ** ** ** **

(v) ** ** ** **

(vi) ** ** ** **

2. The Committee then authorized the Chairperson to finalise the Reports in the light of the factual verification received from the concerned Ministries and present/lay the same in both the Houses of Parliament.

3. ** ** ** **

The Committee, then, adjourned.