


INTER PLANT STANDARD – STEEL INDUSTRY		
 IPSS	<b>SAFETY IN CONTRACT WORKS IN MINES</b>	<b>IPSS: 1-11-010-14 (First Revision)</b>
	Corresponding IS does not exist	1-11-010-01

## 0. FOREWORD

- 0.1 This Inter Plant Standard formulated by the Standards Committee on Personnel Safety Appliances & Procedures, IPSS 1:11, with the active participation of the mining and safety engineers/officers of the Raw Materials Departments from various steel plants, was adopted in May 2001 and first revision done in October, 2014.
- 0.2 This is one of the series of Inter Plant Standards in the area of safety in mines involved in raw material supply to the steel plants and providing guidance to all concerned in accident prevention.

## 1. SCOPE

- 1.1. Safety is the responsibility of the Contractor and his staff / employees / workmen engaged/deployed for execution of work under the Contract, individually and collectively. For this purpose, the Contractor staff means and includes all its Associates/Sub-contractors/Vendors/Sub-vendors and their staff/employees/ Workmen deployed for execution of the work covered under the Contract. The Contractor shall ensure that his workmen participate in the safety awareness programmes, health care programmes and safety training programmes whenever such programmes are organized by the employer or the contractor.

## 2. PROCEDURE

### 2.1. General Requirement

- 2.1.1. Contractor shall ensure that a copy of the Safety Codes is handed over to Associates/Sub-contractors/Vendors/Sub-vendors working under his control for the execution of the contract and this will also be available with the safety coordinator. The contractor shall also ensure that its Associates/Sub contractors/vendors/sub-vendors shall abide by the safety codes, safety rules and instructions of the employer as per statutory act, rules, regulations & Circulars applicable in Mines
- 2.1.2. The Contractor and his Associates/sub-contractors/vendors/sub-vendors shall observe all precautions and provide adequate supervision pertaining to safe working and safety of their staff/employees/workmen on the work and also safety of assets and

employer's equipment while executing the work. Statutory supervision shall be provided by the employer/his representative in mines.

- 2.1.3. The Contractor shall ensure that their staff/employees/workmen function effectively towards their own safety as well as safety of their co-workers and other persons working in the area, including the areas in the vicinity which may become unsafe due to their activities.
- 2.1.4. The contractor shall designate either himself or a person as SAFETY COORDINATOR who shall maintain regular liaison with the Employer (Engineer i.e. person appointed by the employer in the manner provided in contract and to perform the duties delegated by the Employer and Safety Engineering Department of employer) to ensure the implementation/compliance of the Safety Codes and existing as well as latest instruction of the employer on safety.
- 2.1.5. The contractor shall, in accordance with prescribed procedure, obtain Gate Passes from the competent authority who shall make it available to the contractor and his staff/employee/workmen to enter the work-area. The Validity of photo pass shall be applicable till the duration of contract.
- 2.1.6. The contractor shall be fully responsible for accidents caused due to his or his agent's or workmen's negligence or carelessness in regard to the observance of safety requirements and shall be liable to pay compensation for injured person.
- 2.1.7. The contractor shall motivate and encourage his employees/workmen to make personal contribution towards enhancing safety on the basis of their knowledge and experience.
- 2.1.8. The contractor shall have adequate number of pocket sized safety cards containing safety instructions prepared on the basis of employer's model safety book for contractor's workers in Hindi or regional languages as may be required and shall issue them to all his employees/workmen and ensure that they read it before commencing the work. The safety instructions from the safety card shall be read and explained by the contractor or his representative to those employees/workmen who are illiterate and cannot read and ensure that these have been understood.
- 2.1.9. The contractor shall ensure that drums or other make-shift arrangement are not used in place of ladder or work benches or supports for any job.
- 2.1.10. The contractor shall ensure that compressed air/ Oxygen/ any other pressurized line are not used for removing dust from one's clothes. Compressed air/ Oxygen/ any other pressurized line shall not be blown against anyone as it may injure or even kill him/her.

- 2.1.11. The contractor shall ensure that if a workman, in the course of his work, encounters condition of unusual hazard with which the worker is not familiar, he shall contact the supervisor for advice before proceeding further.
- 2.1.12. The contractor shall particularly ensure that the contractor himself or his workmen do not operate any equipment, if not authorized. The contractor shall not start the work without a written permit from the engineer or his authorized representative (ENCLOSURE - A).
- 2.1.13. The Contractor shall follow all special safety precautions issued by the Executing Authority or his site Engineer from time to time.
- 2.1.14. Whenever working at height is involved, the contractor shall adhere to IPSS:1-11-005-14 'Procedure for working at height for contractor's workers and IPSS: 1-11-006-14 'Guidelines for working in a Confined Space'.

## **2.2. PPE & SAFETY APPLIANCES**

- 2.2.1. The contractor shall provide all the PPE (Personal Protective Equipment) and Safety appliances required to carry out the job to all the workmen deployed by the contractor and also ensure that his workmen use those PPE and safety appliances while on the job.
- 2.2.2. The standard of PPE and safety appliances supplied by the contractor must conform to any one of the following (in order of preference):
- a) DGMS
  - b) BIS/ Equivalent International Standard
  - c) IPSS
  - d) As per advice and design by the Safety Deptt. of the Company.
- 2.2.3. Arrangements of supply of proper type of PPE and appliances shall be made by the contractor prior to the actual start of the job and Safety Deptt. of Company will physically check the same.
- 2.2.4. If at any stage, the contractor fails to provide proper type of PPE and safety appliances, the Company may procure and distribute the same as per requirement, with prior intimation to the contractor. In such case, the cost of items plus the other cost incurred on procurement shall be deducted from the bill of the contractor.

## **2.3. SITE CLEARANCE**

- 2.3.1. Prior to commencement of work, the contractor shall obtain clearance from the Safety Officer of the Employer and concerned Deptt./ Section of the Employer where the job is to be carried out. The Employer/Engineer shall not permit the contractor to commence the work unless contractor or its representative produces such clearance

certificate. The department concerned shall grant such clearance after ensuring that :

- a) The contractor or his chief representative has undergone Safety Awareness briefing with the Employer's Safety Officers In the preceding twelve months with respect to the awarded work.
- b) The contractor's workers, identified for particular work/department, have undergone basic/refresher Safety Training in the preceding five years.
- c) The contractor has arranged PPE and safety appliances for himself and all his workmen, as required.
- d) The Contractor possesses work permit issued by the Employer or Employer's representative for which the "Work Clearance Form" (ENCLOSURE - C) shall be filled-in triplicate by the Contractor. The Contractor is not permitted to start the job without clearance from Employer's Safety Officer.
- e) The contractor shall possess handling equipment, tools and tackles of adequate capacity and tested quality as per statutory requirement.

2.3.2. The contractor shall obtain specific permission from the Engineer and Safety Officers before commencing the following :

- a) Working in an operating Plant
- b) Working at height
- c) Working in areas expected to have toxic/poisonous gases
- d) Major site activity irrespective of the clearance already obtained
- e) Wherever there are hazards of electricity, moving machinery etc.
- f) Underground working
- g) Any other job as per instruction of Executing Authority.

The contractor shall obtain the copies of the above IPSS procedures from the Engineer/ the Safety Engineering Department/ from IPSS Website.

2.3.3. The executing Deptt. Shall take necessary shutdown of operating Plant before commencement of job in that area.

## **2.4. SKILL & COMPETENCE OF WORKMEN**

2.4.1. The contractor shall be responsible to engage competent and skilled workers.

2.4.2. Before starting the day's job, the Contractor shall ensure that safety briefing has been done to his workers by himself or his supervisors who

have been imparted Safety Induction earlier and also maintain records to this effect.

## **2.5. PHYSICAL FITNESS OF WORKMEN**

- 2.5.1. The contractor shall ensure that his employees/workmen subject themselves to such medical examination as required under the law or under the Company's rules and keep a record thereof.
- 2.5.2. The Contractor shall not permit any employee/workman to enter the work area under the influence of alcohol.

## **2.6. DEALING WITH ACCIDENT**

- 2.6.1. Any accident shall immediately be reported to Safety Officer/Mines official. All other procedure shall be followed as per Mines Act, Rules, Regulations and Circulars.
- 2.6.2. The contractor shall not interfere with the site of accident, unless inspected and/or permitted by the competent authorities.
- 2.6.3. The contractor shall arrange to avoid any sort of commotion at site in the event of an accident.
- 2.6.4. The Contractor shall maintain a safety register, keep records of all minor or major accidents, serious or averted (near miss) accidents, with or without injuries to human beings and shall submit a report about the accidents to the Engineer promptly, on the form prescribed by the Employer.

## **2.7. MISCELLANEOUS**

- 2.7.1. The contractor shall ensure prohibition of smoking or keeping of naked flame near gas lines, valves and any other equipment connected with the gas distribution system and handling of all inflammable material shall strictly prohibited and ensure its compliance.
- 2.7.2. The contractor shall ensure that horse-play of any kind and unauthorized movement is prohibited inside the Mine. No one shall distract the attention of others on work.
- 2.7.3. The contractor shall ensure that no one takes rest/shelter below any pit/excavation, Railway Wagons, overhang/undercuts, parked vehicles, electrical installations etc.
- 2.7.4. The contractor shall ensure the availability of first aid box at the working sites.

2.7.5. Adequate no. of Safety Signage's/ caution board indicating the hazards and their preventive measures to be prominently displayed at the place of work preferably in local languages.

2.7.6. In case shifting of contract workers from one place of work to other place, necessary safety inputs pertaining to the new jobs to be imparted.

**2.7.7. Safety Records (Statutory Records)**

The Contractor shall keep record of:

- i) Test certificates of all lifting M/c tools and tackles, Pressure Vessels, etc.
- ii) Periodical inspection report of Safety appliances.
- iii) Maintaining accident analysis report, in proper format in consultation with Employer's Engineer.
- iv) Safety record as per Mines Act, Rules, Regulations and Circulars or any other statutory provision shall also be maintained. However, necessary help in this regard can be taken from the concerned Safety Organization.

**2.7.8. Electrician/Other Electrical Personnel**

The Contractor shall engage qualified and competent electricians and other electrical personnel while working on electrical lines (which may be High Tension, Medium Tension and Low Tension electrical lines) for safe execution of contract. The electricians and other electrical personnel must possess requisite certificate issued from competent authority.

**Electrical Equipment**

- a) The Contractor shall ensure proper earthing of all electrical equipment/machinery prior to start of the machine. The Contractor shall also ensure daily examination of the earthing of equipment/machinery prior to start of the job in order to avoid electrical hazards.
- b) The Contractor shall ensure use of proper cable (may be welding cable or power cable or control cable). The joints of the cables shall be perfectly insulated. The Contractor shall also ensure the use of proper plugs, sockets and other electrical fittings while executing any contract.
- c) All portable electrical equipment including welding machine shall have provision of ELCB/ RCCB.

**2.7.9. Scaffolding/Lifting/Lowering/Dismantling of Equipment or Fabricated Structures or any other materials**

- i) For safe execution of the contract, Contractor shall make a safety plan for the job, in sequence of steps involved in execution and the required safety measures to be taken during the execution of the job.
- ii) The Contractor shall ensure the use of proper sufficiently strong scaffoldings, working platform, hand railings as per relevant BIS Standard during the execution of the job.

The Contractor shall ensure the use of scaffoldings.

If the scaffolding as per the standard is not found suitable at site, the Contractor shall make necessary modifications to strengthen the same.

For any Civil Engineering job, the Contractor will provide adequate support before casting or any superstructure and provide approach, scaffolding etc, in such a manner that it is safe, easy for movement of men, women and materials.

- iii) The Contractor shall make his own arrangement for the area lighting/spot lighting at Fabrication Yard. The Employer will provide power source at one point only near to the Fabrication Yard.
- iv) The Employer will provide area lighting at erection site only. The Contractor shall make his own arrangement for spot lighting. The source of power supply at the nearest possible point will be shown by Engineer at site.

**2.7.10. House Keeping**

- i) The Contractor shall ensure good house keeping in his working area, fabrication yard as well as at erection site. The safe approach to the working place must be ensured. Place for keeping raw materials, finished materials, semi-finished materials should be clearly marked with proper identification. Machine component shall be kept properly under shed.
- ii) The Contractor shall keep the scrap materials at one place duly barricaded and shall remove the same regularly from the workplace.
- iii) The Contractor shall stack properly the fabricated or any other items and maintain safe stack height in stable condition in consultation with Executing Authority. The stacking shall be

done in such a way that the materials do not cause congestion at site or create unsafe condition for free safe approach.

- iv) The Contractor should put up a board ( 4' x 3') indicating Contact/ Mobile No. the name of the Contractor, details of the job, Order No., starting date and likely completion date of the job. On completion of the job, the Contractor shall clear the site (good materials and scrap). The board so displayed shall be taken out of the site. Any material left after the job is over will be picked up by the Employer and the Contractor will be charged back for the same.
- v) Removal of muck shall be done within 24 hours from road sides.
- vi) The Contractor shall be responsible for removing all unwanted materials/scaffolds from work site.
- vii) The Contractor shall issue written as well as oral instructions from time to time, in addition to the precautions, measures spelt out above so as to ensure that the workers adhere to safety norms specifically needed for the particular job during the execution of the work.

**2.7.11. Barricade**

- i) The Contractor shall ensure barricade of the unsafe area, which can lead to accident to any person working in that area. In order to remove unsafe condition and prevent accident, The unsafe area such as trench/pit/foundation, any type of opening made or left in any floor of the building including staircase etc must be barricaded.
- ii) The hand railings shall be immediately provided in all the floors, stairs, etc before proceeding for further erection/dismantling.

2.7.12. The contractor shall ensure that compressed air is not used for removing dust from one's clothes. Compressed air shall not be blown against anyone as it may injure or even kill him/her.

2.7.13. The contractor shall provide, maintain and arrange for periodical checking of adequate numbers of fire extinguishers of appropriate type and other facilities (e.g. sand buckets, asbestos covering etc) in fire prone areas.

2.7.14. The contractor shall provide clearly demarcated access and exits at work site to take care in case of outbreak of fire or any other eventuality.



- 2.7.15. The contractor shall ensure that smoking or keeping of naked light near gas lines, valves and any other equipment connected with the gas distribution system and handling of all inflammable material is strictly prohibited.
- 2.7.16. The contractor shall ensure that all person deployed by him are confined to the designated place and duration of work.

## **2.8. LIABILITY**

- 2.8.1. The Contractor shall abide by the provisions of all statutory acts and rules as applicable and maintain Register & Documents, submit periodic Reports & Returns, furnish information/report relating to accidents occurring in the area of work to competent authority in time .
- 2.8.2. The Contractor shall be liable for prosecution and penalty in accordance with and as prescribed under law of the land, terms & conditions of Contract as well as rules of the Company relating to safety, for not observing those provisions by the Contractor or its employees/workmen.
- 2.8.3. The Contractor shall keep the Company indemnified against all losses/claims due to accidents/injuries/damages caused at the Contractor's works site. He shall be fully responsible for accidents caused due to the Contractor or his agents' or workmen's negligence or carelessness in regard to the observance of the safety requirements and shall be liable to pay compensation for injuries.
- 2.8.4. The Engineer or the Head of the Safety Department or their authorized nominees, upon their satisfaction that the Contractor is not conforming to the Safety requirements, may direct stoppage of work and direct the Contractor to remedy the defects or supply the facility/equipment as the case may be. The Contractor shall not proceed with the work until he has complied with such directions to the satisfaction of the Engineer/Safety Department.
- 2.8.5. If a driver or any staff of the Contractor is caught in theft case or in any unauthorized movement of materials or in the activity which is punishable under the law or not authorized by the Plant, the Contractor shall bear the full responsibility for the loss and other consequences which may result to the Plant due to such illegal/unauthorized acts besides the action to terminate the contract by the Plant.
- 2.8.6. The Contractor shall be responsible to ensure that vehicles belonging to him are not driven in reckless or rash manner so as to become a potential threat to the safety of the traffic in the

plant or township area. The drivers of the vehicles shall be made to adhere to the speed limits wherever applicable. Failure to comply with the above, may result in the termination of the contract.

- 2.8.7. In case of accident or injury or damages caused by the Contractor's vehicle or staff to any person or property, the financial responsibility to compensate be borne solely by the Contractor and this amount may, at the discretion of the competent authority of the Plant, be recovered from the bills or security or other deposits of the Contractor.
- 2.8.8. The Contractor shall ensure that all his employees/workmen are covered under 'ESIC Act' and shall pay compensation to his workmen as and when the eventuality for the same arises.
- 2.8.9. To ensure effective enforcement of the rules and regulations relating to safety precautions, the arrangements made by the Contractor shall be open to inspection by the Engineer or his representatives, Safety Engineer & Labor Officer.
- 2.8.10. The Contractor shall enclose along with his first bill a true copy of the Safety Induction Form (ENCLOSURE-B) duly certified by the Executing Authority regarding use of safety appliances, following of safety instructions and observance of all safety laws, failing which the bill will not be processed for payment.
- 2.8.11. Monetary Penalty will be imposed on the contractor on account of Safety Violation including fatal accident as per extent penal provision made for the purpose.

**ENCLOSURE – A**

**PERMIT TO WORK ON EQUIPMENT**

I, \_\_\_\_\_, do hereby authorize Shri \_\_\_\_\_ And his workers of M/s \_\_\_\_\_ to work on (name & location of equipment/machine) from \_\_\_\_\_ AM/PM on \_\_\_\_\_ (date) to \_\_\_\_\_ AM/PM on \_\_\_\_\_ (date) .

I have taken all necessary precautions for the shutdown.

Signature  
(Contractor/his representative)

Signature of Engineer \_\_\_\_\_

Name \_\_\_\_\_

Designation \_\_\_\_\_

Date \_\_\_\_\_

Contact/ Mobile No. \_\_\_\_\_

Copy to :

1. Contractor
2. Engineer
3. Office copy – for record.

**SAFETY INDUCTION FORM**

Name of Mine/Unit

Safety Induction to the Contractor for starting a job

1. Name, address & Contact No. of the Contractor
2. Contract/Award Letter/Work Order No.
3. Name of Department awarding Contract
4. a) Probable date of starting job  
b) Duration
5. Place & Nature of work
6. Name & Designation of supervisors  
  
Departmental (1) (2)  
Contractual (1) (2)
7. Necessary safety precautions explained
8. Safety appliances advised for usage to the Workers

Safety Officers

I have gone through the Safety Rules Book for Contractors and received a copy of the same. I shall follow all safety precautions/instructions given to me and shall be responsible for safety of my staff/employees/workmen.

Signature of the Contractor

Certified that requisite Safety Appliances are available with workers and Contractor is permitted to start the work.

Signature of Engineer

Certified that the requisite Safety Appliances are being used and safety precautions/measures are being adopted.

Safety Officer of Employer

Copy to:

1. Safety Department
2. Operation/Works Department
3. Contractor with one spare copy.

Name of the Mine/Unit

**WORK CLEARANCE FORM FOR CONTRACTORS**

1. Name of Contractor's firm with address & Contact No. :
  2. Engaged by which Department :
  3. Name of the Representative/Supervisor :  
of the Contractor supervising the job
  4. Precise nature of work to be carried :  
out/work order reference
  5. Precise location of work :
  6. Proposed date & time of :  
commencement of work
  7. Expected number of days required :  
for the work
  8. Whether Contractor's workers are :  
to be engaged in G/A/B/C shifts and  
No. Of people engaged
- A. I accept responsibility for ensuring that all men under my control shall observe the statutory safety requirements and follow the safety instructions of the mine.

Date:

Signed  
Contractor

- B. Certified that the Contractor has been engaged by us for the work described above.

[Certificate to be given by the Engineer]

Date:

Signed  
Engineer

- C. You are authorized to carry out the work described below:

[Certificate to be given by the Deptt/Section where work is to be carried out]

Date:

Signed  
Employer

**NOTE:** The form shall be filled-in in TRIPLICATE by the Contractor for the record of (i) Safety Officer (ii) Deptt/Section granting clearance (iii) Contractor

These certificates are not a substitute for the Electrical Permits and do not give permission to use masked lights or work in gas hazardous areas or enter closed vessels or for explosives, which shall be taken separately wherever required.

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