



Contractors' Safety Responsibilities



United States Steel Corporation

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FOREWORD

Contractors performing work on United States Steel Corporation premises, either pursuant to a standard construction contract or to a purchase order with attached conditions, assume complete responsibility for the safe performance of such work. The contractor assumes that responsibility under the following clause:

The safety of all persons employed by seller and his subcontractors on purchaser's premises, or any other person who enters upon purchaser's premises for reasons relating to this contract, shall be the sole responsibility of seller. Seller shall at all times maintain good order among his employees and shall not employ on the work any unfit person or anyone not skilled in the work assigned to him. Seller shall confine his employees and all other persons who come onto purchaser's premises at seller's request or for reasons relating to this contract and his equipment to that portion of purchaser's premises where the work under this contract is to be performed, or to roads leading to and from such work sites, and to any other area which purchaser may permit seller to use.

Seller shall take all reasonable measures and precautions at all times to prevent injuries to or the death of any of his employees or any other person who enters upon purchaser's premises. Such measures and precautions shall include, but shall not be limited to, all safeguards and warnings necessary to protect workmen and others against

any conditions on purchaser's premises which could be dangerous and to prevent accidents of any kind whenever work is being performed in proximity to any moving or operating machinery, equipment, or facilities, whether such machinery, equipment, or facilities are the property of, or are being operated by, the seller, his subcontractors, the purchaser, or other persons.

This responsibility for the safe performance of the work extends both to United States Steel Corporation employees and property and to the employees of contractor, his subcontractors, and other persons coming on the premises in connection with the work. In the proper discharge of this responsibility, the contractor will meet with designated representatives of the Corporation to view the premises and become completely aware of existing conditions and hazards if any.

Prior to beginning work, the contractor will again meet and consult with designated representatives of the Corporation to discuss the discharge of his responsibilities under the contract.

Pittsburgh, Pennsylvania
November 1, 1958

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PART I

GENERAL REQUIREMENTS FOR THE PROTECTION OF CORPORATION PERSONNEL AND PROPERTY BY CONTRACTORS

Part I of Contractors' Safety Responsibilities outlines the precautions to be taken by the contractor for the protection of Corporation personnel and Corporation property. It is based on actual experience in the Steel Industry and is given to the Contractor at the time he inspects the site prior to submitting his bid, with the understanding that these practices represent minimum safety requirements only and in no way relieve the contractor of the responsibility for such additional requirements for the safe performance of work as may be necessary for the protection of Corporation personnel and Corporation property. If clarification is necessary, the contractor should consult with the Construction Engineer of the plant where work is to be performed.

1.0 GENERAL

1.1 All safe practices on construction work outlined in the latest edition of the "Manual of Accident Prevention in Construction", as published by The Associated General Contractors of America, Inc., shall be followed. A copy of this manual shall be on the job site at all times and all contractors' personnel shall have a working knowledge of it.

1.2 Contractor shall recognize that work in the construction may be performed while the mill is in operation and that he is responsible to establish necessary safe practices to permit the performance of work under operating conditions without endangering Corporation personnel and property.

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1.3 Where work of contractor must be integrated and coordinated with Corporation operations or with work of other contractor, such integration and coordination shall be undertaken only as authorized by the Engineer.

1.4 The term "Engineer" as used shall be the plant Chief Engineer or his authorized representative assigned to the contract.

1.5 Before entering any Operating Department to perform work, the contractor shall obtain permission from the Engineer after consultation between the Engineer, Operating Supervisor, and Safety Department. A prescribed form of *Certification of Instructions* to contractors shall be signed by each and a copy obtained by contractor before starting work in each department. Intermittent operations shall be cleared with Engineer before work is resumed.

1.6 Contractors shall comply with all safety codes, laws, or ordinances applicable to any public authority.

1.7 Construction of all temporary buildings and trailers, including wiring and heating facilities, shall be approved by the Engineer.

1.8 The contractor shall report all injuries sustained while on the property of the United States Steel Corporation to the Engineer who will forward to the plant Safety Department.

2.0 TRANSPORTATION

2.1 Contractors' vehicles operating within the plant shall be kept in safe operating condition. This includes brakes,

horns, lights, etc. If back-up horns and lights are not provided, a man shall walk behind any vehicle backing up in areas where Corporation personnel are located to warn personnel. Trucks moving in mill buildings must be preceded by a man on the floor.

2.2 All trucks and vehicles operated by the contractor in the plant shall adhere to plant regulations and shall observe all warning and traffic signs.

2.3 Contractors' employees shall not operate locomotives, cars, trains, elevators, other moving equipment, or tools owned by the Corporation unless authorized by the Engineer.

3.0 PERSONAL CONDUCT

3.1 Contractors and their employees shall observe all parking restrictions, access restrictions, and regulations.

3.2 Contractors' employees shall not use sanitary stations and wash houses of the plant except as approved by the Engineer.

4.0 HOUSEKEEPING AND FIRE PROTECTION

4.1 The job site shall be kept clean and orderly at all times.

4.2 Lumber, pipe, and other materials shall be piled where they will not interfere with operations or create hazards. Piles shall have at least six feet clearance between closest track rail, roadways, buildings, and edge of pile. Location of piles to be approved by the Engineer.

4.3 All scrap and waste material shall be

disposed of promptly as directed by the Engineer.

- 4.4 Upon completion of contract, work site shall be cleaned up to the satisfaction of the Engineer in accordance with plant standards.

- 4.5 Procedure in handling flammable liquids shall be approved by the Engineer.

- 4.6 Motor fueling locations and procedures shall be approved by the Engineer and plant Fire Department.

- 4.7 Contractors' personnel shall become familiar with fire protection and gas alarm facilities, including "turning in" of alarms.

- 4.8 A minimum of 15 feet clearance around all fire hydrants shall be maintained with entrance to same.

4.8.1 Contractors' employees shall not use fire hydrants for any other purpose unless approved by the Engineer.

- 4.9 Contractors' employees shall obey all fire control and no-smoking signs.

- 4.10 Contractors shall use only the type sawmowers and locations approved by the Engineer.

4.10.1 Contractors' employees shall extinguish all open fire heating units when unattended.

- 4.11 Disposal of paints and solvents within the plant shall be approved by the Engineer.

5.0 UTILITIES

- 5.1 Contractors' employees shall not make any connection to operating electric,

cal, gas, steam, air, oxygen, acid, water, or process line unless authorized by a written procedure signed by the Engineer, Operating Supervisor, and contractor and then only when the Engineer has so cleared.

- 5.2 Contractors' employees shall not turn on or off any of the above lines. All operating valves or switches shall be operated by the responsible Operating Department unless authorized by a written procedure signed by the Engineer.

- 5.3 Contractors' employees shall not act in motion any mill machinery without the approval of the Engineer.

- 5.4 All valves or switches shall be locked out by both the contractor and the Operating Department or Engineer.

- 5.5 Contractors shall not make inaccessible any control valve or switch.

- 5.6 Contractors shall report any unusual conditions that may be found immediately to the Engineer and stop all work until approval to continue is granted.

- 5.7 Pneumatic and Hydraulic Equipment and Lines

5.7.1 Contractors' employees shall not use piped oxygen in place of compressed air.

5.7.2 Contractors' employees shall not break any hydraulic line under pressure.

5.7.3 Contractors' employees shall not burn or weld on existing hydraulic lines without approval of the Engineer.

5.8 Utilities - Electrical Equipment and Lines

5.8.1 Power-driven mill machinery requiring shutdown shall be made inoperative jointly by the Engineer and the contractor.

5.8.2 Contractors' employees shall not operate or tamper with any existing power-driven mill machinery.

6.0 OVERHEAD WORK INCLUDING PAINTING AND SCAFFOLDS

6.1 Overhead Work

6.1.1 Contractors shall be responsible for barricading ground or floor when working above ground level to protect Corporation personnel. The protection shall be equal to that described in the A.G.C. Manual or in accordance with written plan procedures furnished to the contractor. Signs shall be placed warning of danger of falling objects. Warnings shall be placed if required by Engineer.

6.1.2 Contractors' employees shall not leave tools and equipment when working overhead so that they may fall.

6.1.3 Contractors' employees shall not leave loose material overhead.

6.1.4 Contractors' employees shall not take glass bottles on roofs or elevated areas.

6.2 Painting

6.2.1 Painting by spray gun shall be done on approval of the Engineer. Spray painting signs should

be posted and consideration be given to wind direction, location of roads, parking lots, etc.

6.2.2 Contractors shall not paint over or smear safety signs.

7.0 CRANES

7.1 Contractors' employees shall not operate any of the Corporation's electric overhead traveling cranes except as approved by the Engineer.

7.2 Contractors shall not carry crane lifts over the heads of Corporation employees.

7.3 Contractors shall not use defective chains or slings in making lifts.

8.0 EXPLOSIVES

8.1 Handling of explosives shall be in accordance with existing plan procedures furnished the contractor at time of bidding.

8.2 Contractors shall not use explosives without approval of the Engineer.

8.3 Contractors shall not drive explosive-driven studs into structural members until approved by the Engineer.

8.4 Use of powder-actuated tools shall conform to standards developed by the Engineer.

9.0 GAS

9.1 Contractors' employees shall not work in doubtful areas until tests for combustible gases, carbon monoxide, and other harmful gases have been made.

9.2 Tests shall be taken before contractors work in pits or oxygen-enriched atmospheres.

9.3 Purging of oxygen, acetylene, and gas lines shall be performed by the plant.

9.4 Contractors shall not use internal combustion engines inside buildings where personnel are at work unless adequate ventilation is provided.

10.0 SEWERS AND EXCAVATIONS

10.1 Contractors shall protect open manholes, catch basins, pits, and excavations with adequate barricades and red lights.

10.2 Contractors shall replace manhole covers promptly when work is suspended.

11.0 WELDING AND BURNING

11.1 Contractors' employees shall not burn holes in or weld to structural members unless approved by the Engineer.

11.2 Contractors' welders shall not weld without protecting Corporation employees from the arc's rays.

11.3 Contractors' employees shall ground all weldments so that individuals or equipment are not exposed to ground circuit.

11.4 Work areas where burning or welding is done shall be approved for fire protection. Adequate fire prevention equipment shall be on hand.

11.5 Oxygen and gas cylinders shall be returned promptly to storage area

after use.

11.6 Oxygen and gas cylinders shall be kept away from heat, open fires, and hot metal.

11.7 Oxygen and gas cylinders shall be stored separately and at least 6'-0" from each other.

11.8 Contractors' employees shall not use oxygen or gas cylinders at ground level in horizontal position. Cylinders shall be used in vertical position and secured to prevent falling.

11.9 Contractors' employees shall not drop or roll oxygen or gas cylinders.

11.10 Caps shall be kept in position except when gauges are attached.

11.11 Cylinders shall not be moved from one location to another with gauges attached.

11.12 Cylinders shall be transported only when secured in a vertical position.

PART II

MINIMUM REQUIREMENTS FOR THE PROTECTION OF CONTRACTORS' EMPLOYEES AND THIRD PERSONS WHILE WORKING ON CORPORATION PROPERTY

Part II of Contractors' Safety Responsibilities sets forth minimum requirements which the contractor must adopt and enforce for the protection of contractors' employees and third persons while working on Corporation property. These minima are based on actual experience in the Steel Industry and set forth only minimum safe practices for the protection of contractors' personnel and third persons coming on the premises. They are not intended in any way to be

inclusive or to relieve the contractor of all or any part of his responsibility for the safe performance of work. If clarification is necessary, the contractor should consult with the Construction Engineer of the plant where work is to be performed.

1.0 GENERAL

1.1 Contractor shall recognize that work in the construction may be performed while the mill is in operation and that he is responsible to establish necessary safe practices to permit the performance of work under operating conditions without endangering contractors' personnel and property or third parties.

1.2 Contractor shall comply with all safety codes, laws, or ordinances applicable to any public authority.

1.3 Before entering any Operating Department to perform work, the contractor shall obtain permission from the Engineer after consultation between the Engineer, Operating Supervisor, and Safety Department. A prescribed form of *Certification of Instructions* to contractors shall be signed by each and a copy obtained by contractor before starting work in each department. Intermitent operations shall be cleared with Engineer before work is resumed.

1.4 Construction of all temporary buildings and trailers, including wiring and heating facilities, shall be approved by the Engineer.

1.5 Hard hats shall be worn by contractors' employees, and eye protection shall be worn in designated eye protection areas.

2.0 TRANSPORTATION

2.1 Contractors' employees shall not enter any building, pit, or tunnel unless work requires them to do so and then only after permission is obtained as outlined in 1.3. Contractors' employees shall not visit other departments or other sections of the same department; when entering and leaving the plant, they shall use only assigned entrances and exits; within the plant they shall use only established walkways, roads, and crossovers in going to and from job site.

2.2 Contractors' employees shall not ride upon Corporation locomotives, cars, trains, elevators, or other moving equipment unless authorized by the Engineer.

3.0 PERSONAL CONDUCT

3.1 Contractors' employees shall keep off mill tables, conveyors, and equipment unless their work requires and then only after drives are locked out.

4.0 UTILITIES

4.1 Contractors' employees shall not work on any hot wire or line under pressure unless authorized by the Engineer.

4.2 Contractors shall maintain minimum clearances between men or equipment and high voltage to conform to applicable state codes and standard plant practice.

4.3 Contractors shall consult with Engineer before working on or around high voltage, electric wires, or power circuits.

4.4 Lock-out of electrical equipment shall

be at the main disconnect switch controlling the circuit or machine.

- 4.5 Locks on main disconnects shall be removed only by the person who places the lock.

- 4.6 Contractors' employees shall not enter motor rooms or substations unless required and then only after clearance with the Engineer.

- 4.7 Contractors' employees shall not use electrical wires, cables, or collector rails as scaffold supports.

- 4.8 Contractors' employees shall not make any connection to utilities or plug or connect into any plant electric circuit until released by the Engineer.

- 4.9 Contractors' employee shall not ride upon any power-driven mill machinery.

- 4.10 Contractors' employees shall consider all electric lines hot until cleared by the Engineer.

- 4.11 All cranes, mobile equipment, jacks, mowers, concrete busters, etc., operating in areas where they may come in contact with live wires shall be grounded.

5.0 OVERHEAD WORK

- 5.1 Contractors' employees shall not go on roofs without approval of Engineer. It is the contractor's responsibility to check the bearing capacity of the roof in its present condition to support his equipment and personnel and provide necessary safe conditions.

6.0 CRANES

- 6.1 Contractors' employees shall not go onto any overhead crane runway of an

operating facility for any purpose until authorized by the Engineer through written procedure.

- 6.2 Contractors' employees shall not go onto any overhead crane runway operated by the contractor and not released for mill operation unless safety precautions have been taken for their personal protection.

- 6.3 When it is necessary to work on crane, crane runway, or when contractors' employees might be endangered by the movements of cranes, the runway must be protected by bumpers and red lights. If cranes must continue to operate past the area, the contractor must place a watchman on each side of the area as well as a man in the cab of each operating crane.

- 6.4 Contractors' employees shall keep in the clear of all crane lifts.

- 6.5 Contractors' employees shall not pass or work under the boom of any crane or power shovel.

- 6.6 Contractors' employees shall not stand near chains or slings being pulled from under a load nor near a load being raised.

- 6.7 Contractors' employees shall not ride crane loads.

7.0 GAS

- 7.1 Contractors' employees shall not work in doubtful areas until tests for combustible gases, carbon monoxide, and other harmful gases have been made.

- 7.2 Fuel, steam, and air lines shall be blanked off before working in furnaces.

8.0 SEWERS AND EXCAVATIONS

- 8.1 Contractors shall take precautions to prevent cave-ins.
- 8.2 Contractors shall check all manholes or underground pits for gas before entering.
- 8.3 Contractors shall know hazards of gas and liquid level in sewers, take necessary precautions, and maintain gas checks.
- 8.4 Contractors shall make gas tests before working in valve pits, trenches, or other doubtful areas.
- 8.5 Contractors shall not excavate in vicinity of electrical duct lines, sewers, water lines, gas lines, or railroad tracks until approved by the Engineer.
- 8.6 All protruding nails, tie-rods, and wires shall be removed from foundations as soon as forms are stripped.
- 8.7 Nails from cranes or foundation forms shall be bent over or removed.

PART III

SUGGESTED SAFE PRACTICES FOR ADOPTION BY CONTRACTORS TO INSURE SAFETY OF CONTRACTORS' EMPLOYEES AND THIRD PERSONS

Part III of Contractors' Safety Responsibilities contains suggestions which the contractor may wish to incorporate in his safety program for the protection of his personnel and property and third persons coming on the premises in addition to those minima set forth in Part II. The plant safety Department, when requested by the contractor, and acting under the provisions of the Construction Contract, will counsel the con-

tractor in the elements of an effective program for the safe performance of work.

1. Establish a schedule of safety meetings conducted by contractor's foreman for discussing specific topics, such as safety rules, hazards of specific jobs, safe practices, etc.
2. Establish a plan for contractor's foreman to contact each employee under his supervision at least once per week on safety.
3. Establish a procedure for the prompt investigation of all injuries by contractor's management.
4. Establish a schedule for periodic inspection by contractor's management of "housekeeping" of job site.
5. Establish a plan for the periodic inspection of tools and equipment by contractor's management.
6. Develop basic safety rules for job, instruct employees, and enforce compliance.
7. Incorporate applicable items of Part I into Contractor's Safety Rules (item 6 above).
8. Establish standards for wearing eye protection.
9. Establish standards for using safety belts.
10. Establish standards for use of portable ladders, giving consideration to the use of "safety feet", lashing ladders at top and bottom, or ladders not lashed being steadied by another employee.
11. Establish standards for scaffolding or

staging to assure that it is securely lashed and provides adequate clearance to moving equipment.

12. Establish the practice that scaffolds more than 7'-0" from the ground will be provided with toe board and railings and conform to Section 18 of the A.G.C. "Manual of Accident Prevention in Construction".

13. Establish requirements for the wearing of foot protection.