

## **PART 1 - GENERAL**

### **1.1 DESCRIPTION**

- .1 Fire Safety Requirements
- .2 Hot Work Permit

### **1.2 RELATED WORK**

- .1 Section 01 35 29 - Health and Safety Requirements

### **1.3 DEFINITIONS**

- .1 Hot Work defined as:
  - .1 Welding work
  - .2 Cutting of materials by use of torch or other open flame devices
  - .3 Grinding with equipment which produces sparks.

### **1.4 SUBMITTALS**

- .1 Submit copy of Hot Work Procedures and sample of hot work permit to Departmental Representative for review, within 14 calendar days after notification of acceptance of bid.
- .2 Submit in accordance with the Submittal General Requirements specified in Section 01 33 00.

### **1.5 FIRE EXTINGUISHERS**

- .1 Supply fire extinguishers, as scaled by Fire Chief, necessary to protect work in progress and contractor's physical plant on site.

### **1.6 FIRE SAFETY REQUIREMENTS**

- .1 Implement and follow fire safety measures during work. Comply with following:
  - .1 National Fire Code, latest edition
  - .2 Fire Protection Standards FCC 301 and FCC 302.
  - .3 Federal and Provincial Occupational Health and Safety Acts and Regulations as specified in section 01 35 29.

## 1.6 FIRE SAFETY REQUIREMENTS (cont'd)

- .2 In event of conflict between any provisions of above authorities the most stringent provision will apply. Should a dispute arise in determining the most stringent requirement, Departmental Representative will advise on the course of action to be followed.
- .3 Fire Department Briefing. Departmental Representative will coordinate arrangements for contractor for briefing on Fire Safety at pre-work conference by Fire Chief before work is commenced.

## 1.7 HOT WORK AUTHORIZATION

- .1 Obtain from Fire Chief a "Hot Work" permit for work involving welding, burning or use of blowtorches and salamanders, in buildings or facilities.
- .1 Obtain Departmental Representative's written "Authorization to Proceed" before conducting any form of Hot Work on site.
- .2 To obtain "Authorization to Proceed" submit to Departmental Representative Hot Work Permit containing concurrence from Fire Chief:
  - .1 Contractor's typewritten Hot Work Procedures to be followed on site as specified below.
  - .2 Description of the type and frequency of Hot Work required.
  - .3 Hot Work permit to be used.
- .3 Upon review and confirmation that effective fire safety measures will be implemented during performance of hot work, Departmental Representative will provide authorization to proceed as follows:
  - .1 Issue one (1) written "Authorization to Proceed" covering the entire project for duration of work; or
  - .2 Separate work, or segregate certain parts of work, into individual entities. Each entity requiring a separately written "Authorization to Proceed" from Departmental Representative. Follow Departmental Representative's directives in this regard.
- .4 Requirement for individual authorization based on:
  - .1 Nature or phasing of work;
  - .2 Risk to Facility operations;
  - .3 Quantity of various trades needing to perform hot work on project; or
  - .4 Other situation deemed necessary by Departmental Representative to ensure fire safety on premises.
- .5 Do not perform any Hot Work until receipt of Departmental Representative's written "Authorization to Proceed" for that portion of work.

### 1.7 HOT WORK AUTHORIZATION (cont'd)

- .6 In tenant occupied facility, coordinate performance of Hot Work with Facility Manager through the Departmental Representative. When directed perform Hot Work only during non-operative hours of Facility. Follow Departmental Representative's directives in this regard.

### 1.8 HOT WORK PROCEDURES

- .1 Develop and implement safety procedures and work practices to be followed during the performance of Hot Work.
- .2 Procedures to include:
  - .1 Requirement to perform hazard assessment of site and immediate hot work area for each hot work event in accordance with Hazard Assessment and Safety Plan requirements of Section 01 35 29.
  - .2 Use of a Hot Work Permit system for each hot work event.
  - .3 Permit shall be issued to Contractor's site Superintendent, or other authorized person designated by Contractor, granting permission to worker or sub-contractor to proceed with hot work.
  - .5 Provision of a designated person to carry out a Fire Safety Watch for a minimum of 30 minutes immediately upon completion of the hot work.
  - .6 Compliance with fire safety codes and standards specified herein and occupational health and safety regulations specified in Section 01 35 29.
- .3 Generic procedures, if used, must be edited and supplemented with pertinent information tailored to reflect specific project conditions. Clearly label as being the Hot Work Procedures applicable to this contract.
- .4 Hot Work Procedures shall clearly establish worker instructions and allocate responsibilities of:
  - .1 Worker(s).
  - .2 Authorized person issuing the Hot Work Permit.
  - .3 Fire Safety Watcher.
  - .4 Sub-contractors and Contractor.
- .5 Brief all workers and sub-contractors on Hot Work Procedures and Permit system established for project. Stringently enforce compliance.
  - .1 Failure to comply with the established procedures may result in the issuance of a Non-Compliance Notification at Departmental Representative's discretion with possible disciplinary measures imposed as specified in Section 01 35 29.

### 1.9 HOT WORK PERMIT

- .1 Obtain from Fire Chief concurrence for Hot Work procedures (Hot Work Permit) for work involving welding, burning or use of blowtorches and salamanders, in buildings or facilities.
- .2 Hot Work Permit to include, as a minimum, the following data:
  - .1 Project name and project number;
  - .2 Building name, address and specific floor, room or area where hot work will be performed;
  - .3 Date when permit issued;
  - .4 Description of hot work to be performed;
  - .5 Special precautions required, including type of fire extinguisher needed;
  - .6 Name and signature of person authorized issue the permit;
  - .7 Name of worker(s) (clearly printed) to whom the permit is being issued;
  - .8 Time duration that permit is valid (not to exceed 8 hours). Indicate "Start" time & date and "Completion" time & date
  - .9 Worker signature with date and time upon hot work termination;
  - .10 Specified period of time requiring Safety Watch;
  - .11 Name and signature of person designated as Fire Safety Watcher, complete with time and date when safety watch terminated, certifying that the surrounding area was under continual surveillance and inspection during the full time period specified in permit and commenced immediately upon the completion of Hot Work.
- .3 Permit to be in typewritten form. Industry Standard forms shall only be used if all data specified above is included on form.
- .4 Each Hot Work Permit to be completed in full and signed as follows:
  - .1 Authorized person issuing Permit before hot work commences;
  - .2 Worker(s) upon completion of Hot Work;
  - .3 Fire Safety Watcher upon termination of safety watch and;
  - .4 Returned to Contractor's Site Superintendent for safe keeping.

### 1.10 FLAMMABLE AND COMBUSTIBLE LIQUIDS

- .1 Handling, storage and use of flammable and combustible liquids governed by current National Fire Code of Canada.
- .2 Keep flammable and combustible liquids such as gasoline, kerosene and naphtha for ready use in quantities not exceeding 45 litres provided they are stored in approved safety cans bearing Underwriters' Laboratory of Canada or Factory Mutual seal of approval. Storage of quantities of flammable and combustible liquids exceeding 45 litres for work purposes requires permission of Fire Chief.

### 1.10 FLAMMABLE AND COMBUSTIBLE LIQUIDS (cont'd)

- .3 Transfer of flammable and combustible liquids is prohibited within buildings or jetties.
- .4 Transfer of flammable and combustible liquids will not be carried out in vicinity of open flames or any type of heat-producing devices.
- .5 Do not use flammable liquids having flash point below 38 degrees C such as naphtha or gasoline as solvents or cleaning agents.
- .6 Store flammable and combustible waste liquids, for disposal, in approved containers located in safe ventilated area. Keep quantities minimum and Fire Department is to be notified when disposal is required.

### 1.11 HAZARDOUS SUBSTANCES

- .1 Work entailing use of toxic or hazardous materials, chemicals and/or explosives, or otherwise creating hazard to life, safety or health, in accordance with National Fire Code of Canada.
- .2 When Work is carried out in dangerous or hazardous areas involving use of heat, provide fire watchers equipped with sufficient fire extinguishers. Determination of dangerous or hazardous areas along with level of protection necessary for Fire Watch is at discretion of Fire Chief. Contractors are responsible for providing fire watch service for work on scale established and in conjunction with Fire Chief at pre-work conference.
- .3 Provide ventilation where flammable liquids, such as lacquers or urethanes are used, eliminate sources of ignition. Inform Fire Chief prior to and at cessation of such work.

### 1.12 FIRE INSPECTION

- .1 Coordinate site inspections by Fire Chief through Departmental Representative.
- .2 Allow Fire Chief unrestricted access to work site.
- .3 Cooperate with Fire Chief during routine fire safety inspection of work site.
- .4 Immediately remedy unsafe fire situations observed by Fire Chief.

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**1.13 DOCUMENTS ON SITE**

- .1 Keep Hot Work Permits and hazard assessment documentation on site for duration of work.
- .2 Upon request, make available to Departmental Representative or to authorized safety representative for inspection.

**END OF SECTION**