Hot Work Policy

Applicable Legislation:

O. Reg. 851, Industrial Establishments, Section 78 Ontario Fire Code (O.Reg. 388/97), Section 5.17, "Welding and Cutting"

Intent:

To promote awareness of hazards associated with hot work and the requirements for hot work permit procedures.

Definitions:

<u>hot work</u>

any trades activity that uses or produces flames, sparks, or heat that would act as an ignition source for any flammable or combustible material. (e.g. brazing, cutting, welding). This definition does not apply to the controlled laboratory uses of flame or hot plates.

hot work permit

the supervisor's written authorization to perform trades operations capable of providing a source of ignition.

Requirements of O. Reg. 851, Industrial Establishments, Section 78

78.(1) Subject to subsection (2), where repairs or alterations are to be made on a drum, tank, pipeline or other container, the drum, tank, pipeline or other container shall,

(a) have internal pressures adjusted to atmospheric before any fastening is removed;

(b) be drained and cleaned or otherwise rendered free from any explosive, flammable or harmful substance; and

(c) not be refilled while there is any risk of vaporising or igniting the substance that is being placed in the drum, tank, pipeline or other container.

Requirements of the Ontario Fire Code

Section 5.17.3.1.

(1) Welding and cutting operations in buildings shall be carried out in areas that are free of combustible and flammable contents, and that have walls, ceilings and floors of noncombustible construction or that are lined with noncombustible materials.

(2) When it is not practical to undertake welding and cutting operations in areas described in Sentence

(1), combustible and flammable materials shall either be kept at least 11 m from the work area or

otherwise protected against ignition by sheet metal, asbestos blankets or other noncombustible materials.

Section 5.17.3.3

(3) Suitable portable extinguishers shall be provided in conformance with Section 6.2 where welding or cutting operations take place.

Policy:

- 1. Supervisors and employees are responsible for identifying and controlling workplace hazards before hot work is performed.
- 2. Hot work permit procedures shall be mandatory for contractors. (See Safety Policy <u>851.01.08</u>concerning Contracting Work.)
- 3. Hot work permit procedures shall be used at the supervisor's discretion and shall be required when hot work takes place in confined spaces, or near activities involving volatile materials. Hot work is prohibited on foam-insulated metal wall, roof and ceiling panels.
- 4. Operational units shall design and implement their own hot work permit procedures as appropriate for their hot work tasks and workplace environments. Copies of the procedures shall be filed with the department (local) joint health and safety committee and with Environmental Health and Safety.
- Combustible materials shall be removed to a safe distance (i.e., 11 meters) or protected. Enclosed equipment shall be cleaned and purged of combustible vapours and checked with an explosion meter.
- 6. Openings or cracks in walls, floors, or ducts within the work site shall be tightly covered with fire-resistive tarpaulin or metal shields.
- 7. Appropriate fire extinguishing equipment shall be verified to be operable and positioned for immediate use.
- 8. Nearby personnel shall be evacuated or otherwise protected from hot work activities.
- 9. A fire watch shall be maintained for 60 minutes after hot work is finished to detect and extinguish any smouldering fire. The workplace shall be monitored for four hours after the job is completed, including areas adjacent, above, and below.
- 10. The supervisor shall identify the personal protective equipment (PPE) to be worn and other safety equipment to be used for hot work activity.
- 11. The supervisor shall sign the hot work permit and forward a copy to Environmental Health and Safety.

- 12. Employees shall conduct hot work activity in compliance with safety procedures appropriate for other hazards such as confined space, fall protection, lockout/tagout, etc. Incidents shall be reported to the hot work supervisor.
- 13. The hot work permit system and employee training shall be reviewed annually by the departmental (local) joint health and safety committee.

Guidelines:

Hot work permits shall be issued at the discretion of the job-site supervisor or the construction project co-ordinator. Situations which warrant hot work permits include (but are not limited to) industrial welding and cutting indoors, torch work in congested spaces and in combustible structures, etc. For due diligence reasons (such as property insurance audits), records shall be retained by supervisors for 12 months concerning the hot work permits issued.

Hot work permits are available from the Fire Division.

Effective: September 2000