



Module 6.1.3 GENERAL ACTION PLAN

HEALTH AND SAFETY ACTION PLAN FOR REPAIR AND CONSTRUCTION PROJECTS AT THE JOHN H. CHAPMAN SPACE CENTRE

1. First aid

The Space Centre has a nurse who is present from 7:30 a.m. to 4 p.m., Monday through Friday, except for holidays. The infirmary is in room 1E-101A.

When the infirmary is closed, there is a first aid kit in the central security control room, room 1E-104.

Other first aid kits are permanently available to workers. In the technical rooms and workshops, the location of the kits is indicated by a pictogram (white cross on a green background).

The Space Centre maintenance vehicles, tractors and carts also carry first aid kits.

The central security control room is manned 24/7 by a security guard with emergency training. The guard can contact available qualified resources or public emergency organizations, as necessary. There are telephones in easy-to-find locations in most engineering rooms in the Space Centre. Telephones are indicated by visible pictograms and their location is marked on the evacuation plans near the emergency exits. Use the "URGENCE/EMERGENCY" button to speak directly with the central security control room.

The project's emergency communications are as follows (those with checkmarks apply to this action plan):

- A worker with a radio linked to the central security control room is on the worksite at all times.
- A security guard with a radio linked to the central security control room is on the worksite at all times.
- A security guard with a valid first aid certificate and a radio linked to the central security control room is on the worksite at all times.
- The workers are confined to a technical room without a security guard or a radio. The project manager must indicate the location of the emergency telephones, first aid kits and fire extinguishers, and provide instructions in case of emergency.



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2. Personal protective equipment (PPE)

Anyone entering a construction site or doing repair or maintenance work at the John H. Chapman Space Centre must wear at least the following personal protective equipment: *(those with checkmarks apply to this action plan)*. The contractor and his employees may decide to wear additional PPE, even though not specified in this action plan.

2.1. Protective headwear: Safety helmet compliant with CSA Standard Z.94.1

- Class G, General helmet
- Class E, Electrical helmet
- Class C, Conductive helmet

2.2. Eye and face protection

- Safety glasses
- Safety glasses with side shields
- Goggles
- Goggles equipped with a hooded or indirect breathing device

2.3. Face protection

- Face protector
- Welder's mask

2.4. Hearing protection

- Soft, pre-molded or customized molded earplugs
- Headband with ear plugs
- Ear muffs



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2.5. Protection for the: a) hands

- Insulated, protective gloves suitable for the voltage
- Acid-resistant gloves
- Waterproof gloves
- Leather or heavy canvas gloves
- Disposable gloves

b) skin

Where there is a hazard of injury or disease to or through the skin at a worksite, the employer must provide to every person granted access to the worksite one of the following:

- A protective shield or screen
- A skin protection cream
- Protective clothing

2.6. Foot protection

- Safety shoes compliant with CSA Standard Z 195
- Class 1 safety shoes (green triangle)
- Class 2 safety shoes (yellow triangle)

2.7. Fall-arresting systems and safety harnesses

- A fall-arresting system capable of withstanding a force of 18 kN
- Safety harnesses



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2.8. Outdoor operations

- Reflective safety vest

2.9. Respiratory protection

- Disposable half-face mask
- Reusable half-face mask with filter
- Self-contained breathing apparatus or compressed air-supplied respirator

3. Fire prevention

The Space Centre is equipped with automatic sprinklers, and smoke detection, heat detection and fire alarm networks.

Portable fire extinguishers are indicated by white pictograms on a green background.

Workers who see a fire break out or whose work starts a fire must promptly trigger the closest manual fire alarm. If they are able to control the fire, they must use the closest portable fire extinguisher. If the fire cannot be controlled, they must quickly leave the premises through one of the emergency exits.

The fire control safety measures are ensured by one of the following (those with checkmarks apply to this action plan):

3.1. Informing the contractors and workers

- The project manager has shown the contractor and workers the location of the portable fire extinguishers, manual fire alarms and telephones linked to central security control room, and pointed out the emergency exits.
- The project manager has shown the contractor and workers the location of the portable fire extinguishers, manual fire alarms and telephones linked to central security control room, and pointed out the emergency exits. The project manager has also placed one or more portable fire extinguishers near the worksite.



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3.2. Presence of a guard

- A guard, who has a radio and who knows the location of the portable fire extinguishers and manual fire alarms, is present on the worksite at all times.
- A guard, who has a radio and a portable fire extinguisher and who knows the location of the manual fire alarms, is present on the worksite at all times.

Welding activities must be conducted as per the fire safety sheet entitled “Hot Welding”.

All activities requiring welding must be coordinated with the Agency’s project manager. The contractor must notify the Agency’s project manager and wait for approval before starting welding work.

On completion of the welding work, notify the Agency’s project manager. All hot welding must be done in the presence of a security guard with a radio.

4. Site maintenance

The contractor must keep the public passages and building entrances and exits clean, and free of stored materials, piles of waste or items of equipment at all times.

Waste must be removed from the site according to one of the following procedures (those with checkmarks apply to this action plan):

- Materials and waste must be transported at the start and end of each work shift, after 4:30 p.m. The workers must be accompanied by a security guard.
- Materials and waste must be transported as needed. The workers will be accompanied by a security guard.
- Materials and waste must be transported as needed. The workers will not be accompanied by a security guard.
- The contractor must hang electrical cables and hoses high enough so that people can move freely beneath them. The contractor must also protect any cables on the floor.



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5. Access and signage

5.1. Worksite access

General

Before starting work, the contractor must restrict access to the construction site as described in the specifications or according to the project manager's instructions. Construction work may not begin until access has been restricted. Noisy work or activities likely to inconvenience Agency employees and visitors must be done after 5 p.m. or on weekends.

Access to the construction or worksite must be restricted by one of the following:

- Where the access is already restricted, no additional measures are required.
- Work in an unrestricted area must be done after 5 p.m. or on the weekend.
- For work to be done during the day in an occupied area, workers must take care to disturb the activities of Agency employees and visitors as little as possible.
- The contractor will clean all surfaces affected by the work.

5.2. Signage on the worksite

Signage on the construction or worksite must comply with one of the following methods:

- No signage required.
- Men-at-work signs must be set up close to the construction site or work area.
- The contractor must erect a sign at each access point indicating "This is a construction site" and giving instructions on the personal protective equipment to be worn on the site.

Barriers redirecting Agency employees and visitors must be installed as per the project manager's instructions before begins work. A security guard must be stationed on-site to redirect Agency employees and visitors.



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6. The worksite and the public

Work must be coordinated with Space Centre employees and visitors as follows (those with checkmarks apply to this action plan):

- The work will be done in a part of the building closed to the public.
- The work will be done during the day in a public area or in a restricted area or where there are people nearby. Noisy work, dusty work or work requiring the use of substances that release odours or gas must be done outside regular working hours.
- The work will be done outside regular working hours when Agency employees and visitors are no longer present. Work likely to create dust or that requires the use of substances that release odours or gas must be stopped at least one hour before employees and visitors return to the area.

7. Training and information

Work must be coordinated with the contractor or the contractor's manager as follows (those with checkmarks apply to this action plan):

- The contractor does not require instructions to do the work. The job to be done poses no health or safety risk to the workers or the public.
- The project manager must call the contractor and give instructions on the work to be done and the health and safety instructions.
- The project manager must meet with the contractor and workers before the work to give them instructions on the work to be done and the health and safety instructions.
- The project manager must schedule a meeting with the contractor, subcontractors and workers to give them instructions on the work to be done and the health and safety instructions.

8. Skills

Workers must have the certificates of qualification required by current legislation in Quebec. Workers may only do tasks for which they have the skills, according to recognized procedures, methods and standards.