

 CHAMBERS ENGINEERING	IMS Standard Procedure			IMS- SP-13
	Emergency Preparedness & Response			
Issue No:	1.0	Issue date:	01 Mar 2018	

Why

Preparation for emergency situations aims to minimise the nature and extent of injuries, damage to property and harm to the environment that might ensue from an emergency situation.

The purpose of emergency preparedness is making sure that emergency procedures actually work in the event of an emergency. This requires:

- Testing emergency procedures for effectiveness
- Reviewing procedures after an emergency
- Training personnel in emergency response.

Preparing for emergencies generally raises safety awareness and may reduce the likelihood of an emergency situation occurring.

Scope and limitations

This procedure covers emergencies in construction works sites. Office-based staff are covered by their buildings' emergency procedures.

Who

The Project Manager or Site Supervisor is nominally the 'emergency controller' in the event of an emergency. In the absence of either the Project Manager or Site Supervisor, the most senior officer on site is the emergency controller. The emergency controller is authorised to:

- Order the site to be evacuated.
- Declare that the emergency is over.

The Project Manager, with the Site Supervisor, is the 24-hour emergency contact on a project. In addition, Project Managers shall:

- Identify foreseeable emergencies in the Risk assessment process; review and update the assessment periodically. (See identifying likely emergencies below.)
- Arrange for training if the type of emergency requires it (see Emergency response training below).
- Ensure that all personnel are trained in responding to foreseeable emergencies.
- Ensure that all staff participates in emergency drills and that test drills go as planned.
- Maintain training competency and associated records.

- Develop an emergency plan for training purposes and display at the workplace. (See Emergency response plan below.)
- Make other preparations as required. (See preparing for emergencies; and emergency preparedness checklist below). Ensure that:
 - emergency response resources are in place, for example, fire extinguishers, first-aid kits, spill kits, evacuation assembly signs.
 - emergency response equipment is in good working order and undergoes regular inspection
 - emergency equipment matches the types of emergencies identified in the Risk assessment. In particular, first aid resources are suitable for predicted potential injuries.
- Plan to test the emergency procedure. (See testing emergency preparedness below.)
- Arrange employee assistance and counselling services as required

How

Identifying likely emergencies

The Project Manager oversees a hazard analysis in the project risk assessment, which identifies likely emergencies. A list of foreseeable emergencies is included in the **OHS & Environmental Risk Assessment** procedure (IMS-SP-03); however, this list is not exclusive. There are both general and specific emergencies that must be considered. Examples of each include:

- General: medical emergency, serious injury, fire on site, environmental impacts.
- Specific: fall from heights; plant rollover, confined space, major burns, etc.

Preparing for emergencies

The Project Manager develops an emergency response plan for the project. (See below the emergency response plan for details). Typical preparations for general emergencies include:

- Contacting local emergency services, Worksafe NT or EPA NT (if required) before the project begins and letting them know the location of the work site, how to get there quickly and the type of work being done there.
- Establishing the location of the nearest emergency facility (for example, hospital with casualty facilities) that can treat the most likely injuries.
- Ensuring that emergency equipment is maintained.

Follow **Form 207 Emergency Preparedness Checklist** for a complete guide to emergency preparedness.

First Aid arrangements

Providing immediate and effective first aid to workers or others who have been injured or become ill at the workplace may reduce the severity of the injury or illness and promote recovery. In some cases, it could mean the difference between life and death

Due to the nature of our business (construction works), first aid kits are available at each of our construction workplaces and every vehicle. Our Organisation is responsible for:

- The provision of first aid equipment and ensure each worker at the workplace has access to the equipment; and
- Ensuring access to facilities for the administration of first aid.

Project managers and work supervisor are responsible for:

- Assess the first aid needs of their area and staff, including the appointment of a First Aid Attendant(s).
- Ensure that the First Aid Attendant is trained.
- Conduct a risk assessment for any special needs item prior to inclusion into the first aid kit.

The number of first aid trained staff is determined by a risk assessment approach; this depends on the nature of the work, the type of hazards, the workplace size and location, as well as the number of people at the workplace.

First aid attendant contact numbers are shown to all workers at the site induction and are also displayed on relevant notice boards at the work site.

First Aid Attendants are responsible for the timely maintenance of first aid kits including ordering stocks/re-stocking, cleanliness and suitability of the kit, and availability

The emergency response plan

Foreseeable emergencies identified at the project Risk assessment are addressed in the Workplace Emergency Response Plan (Refer Project Management Plan for the project). The Workplace Emergency Plan includes:

- Emergency contacts, including first-aid officers and local emergency facilities
- Site arrangements for how the alarm is raised
- Site-compound map showing escape routes and assembly point. Note: make sure the escape route avoids hazards like chemical or fuel store areas.
- A locality map showing the project site in relation to the local area.
(Tip: this can usually be sourced from Google Maps.)

When completed, the plan is a resource for induction to project personnel; the plan is printed and displayed on site's notice boards.

Response procedures:

Emergency response procedures are detailed in the Emergency response plan for the project (see PMS Management plan); typical response procedures are detailed below:

Response to any incident

1. First check that you are not in danger yourself.
2. Notify your works Supervisor or most senior management person on site immediately
3. The works Supervisor or most senior management person handles the emergency according to response procedures (see flowchart in the last page).

Response to fire incident

1. Warn & rescue any person in immediate danger - **only if safe to do so!**
2. Call the fire brigade on 000
3. Extinguish the fire using the right fire extinguisher if safe to do so
4. Evacuate to the emergency assembly area if directed or in danger.
5. Remain at assembly area & ensure everybody is accounted for

Response to chemical spill

Spills on the worksite are most likely to be hydraulic oil or engine oil spilled from plant items. If a spillage occurs the following procedure is to be followed:

1. Immediately identify the spilled material and notify the works supervisor. Subcontractors are to notify site personnel.
2. Contain the spill as soon as possible so it doesn't spread. Refer to Safety Data Sheet (SDS) for personal protective clothing needed
3. If containment is required, contain using earth mound and/or absorbent socks/spill kit. If you can't do this let your supervisor know.
4. Use the relevant clean up procedure as instructed by the SDS
5. Once the spill has been contained, your supervisor will arrange removal and disposal as soon as possible. Dispose of material using a licensed contractor and keep records of disposal on site.
6. Complete an incident reporting **Form 302 Environmental Incident Report** and forward it to the Project Manager

Notification to OHS Regulator

Serious incidents must be notified to OHS Regulator (NT WORKSAFE) and EPA NT in the instance of an Environmental incident. These trigger requirements to preserve the incident site pending further direction from them. The Directors make the decision whether an incident must be notified.

Serious incidents are those which involve a person dying, losing a limb, serious eye or head injury, getting badly burnt, being put on life support, being made unconscious or getting trapped or there is a major damage to property or the environment. If the site must be preserved the incident is a 'Notifiable' incident.

Serious incidents – 'Non-disturbance' provisions

'Non-disturbance' provisions may apply to serious incidents; in such cases, the site must be not be disturbed until an inspector of NT WORKSAFE arrives at the site or directs otherwise, except to prevent additional danger to life or property.

Requirements to preserve the incident site apply to any plant, substance, structure or thing associated with the Notifiable incident. This means that any evidence that may assist an inspector to determine the cause of the incident is preserved.

An incident site may be disturbed:

- To assist an injured person
- To remove a deceased person
- To make the site safe or to minimise the risk of a further Notifiable incident
- To facilitate a police investigation, or
- After an inspector has given a direction to do so either in person or by telephone.

The sooner NT WORKSAFE is notified, the sooner the site can be released. If, however, after arriving at the incident site an inspector considers that it should remain undisturbed in order to facilitate investigation of the incident they may issue a non-disturbance notice. This notice must specify the period for which the notice is to apply – no more than seven days.

“Penalties apply if an individual or organisation fails to preserve a site.”

Emergency preparedness training

Personnel who have the role of emergency controller (Project Managers, Site Supervisors) must have appropriate training in preparing for and dealing with emergencies. Generally, wardens training is considered adequate.

Emergency response training

Elements of basic emergency response are addressed at site induction and are covered in the site inductions. These include location of the emergency assembly area, types of alarms in use, identity of first-aid officers, location of first-aid kits and spill-kits and fire-fighting equipment.

Training resources

- The *Emergency Response Plan* is the basis for toolbox talks and inducting site personnel into emergency procedures; and must be displayed at the project site.

Training requirements for specific emergencies

- Specific emergencies require specific training, for example, first-response fire fighting and material-spill response.
- Fall-arrest rescue and confined-space rescue have mandatory training requirements that apply when at-heights or confined-space work is going on.

Testing emergency preparedness

The Project Manager must test emergency preparedness to ensure that response plans are effective:

- A test evacuation is staged within a month of the site compound being established.
- **Form 208 Emergency Evacuation Test Record** is used for recording results of the test.
- An observer witnesses the test: the local OHS Representative is an appropriate choice of observer. Note that evacuation exercises without notice are not recommended.
- Other emergency procedures tests may be conducted as appropriate, for example, testing response to a serious injury. This program is part of the Site Emergency response plan

If it is not possible or appropriate to test emergency procedures, training may be an acceptable alternative. The Project Manager must be able to demonstrate that the training was effective.

Before the first emergency test takes place all workers (including subcontractors) need to be briefed. Each emergency test is preceded by an announcement that indicates it is a test only. The objectives for emergency tests include the following:

- Team Leaders to initiate emergency procedure without waiting for instructions
- Team Leaders to respond to alarm within 60 seconds.
- Simulated call to emergency service as appropriate
- Team Leaders to control any vehicle movements during emergency procedure

- Emergency assembly point to be staffed (if evacuation is required)
- Evacuation to commence within two minutes
- Evacuation to be completed within ten minutes
- A person nominated by the Emergency Controller to be at the entry point to the site to meet responding emergency services

Debriefing session

Immediately after an emergency test, the Emergency Controller, Site Supervisor, Team Leaders, and other key personnel attend a debriefing session. The observer's checklist (**Form 208 Emergency Evacuation Test Record**) is provided for discussion at the debriefing.

The main purpose of the emergency drill is to identify and correct any deficiencies in the emergency procedures or their implementation

Testing requirements for specific emergencies

Certain emergencies may require specific testing (e.g. fall-arrest rescue and confined-space rescue).

Reporting

All OHS incidents are reported and investigated as per **IMS-SP-20 Incident Investigation & Injury Management** procedure.

All environmental incidents are managed and reported using **Form 302 Environmental Incident Report**.

Any incidents on site, which are likely to cause material harm to the environment, will be immediately reported to the Principal Contractor or Client's Representative.

The Environmental Protection Authority (EPA) will be notified of pollution incidents on or around the site which have occurred in the course of the works, in the following instances:

- The actual or potential harm to the health or safety of human beings or ecosystem is not trivial
- The actual or potential loss or property damage (including clean up costs) associated with a pollution incident exceeds \$10,000.

Associated documentation

- Form 207 Emergency Preparedness Checklist
- Form 208 Emergency Evacuation Test Record
- Form 302 Environmental Incident Report
- Form 210 Hazardous Substances Register
- Procedure IMS-SP-03 OHS & Environmental Risk Assessment
- Procedure IMS-SP-20 Incident Investigation & Injury Management

Statutory and non-statutory requirements

This procedure addresses:

- Clause 4.4.7 of AS/NZS 4801:2016 Occupational health and safety management systems;
- Clause 8.2 of AS/NZS ISO 14001:2004 Environmental management systems requirements; and
- WHS Regulations 2011, clause 43 Duty to prepare, maintain and implement emergency plan.