

# DRAFT Procedure

## Excavation and Trenching

### 1. Purpose

This procedure provide guidance to effectively manage hazards associated with excavation and trenching activities at Department of Planning, Transport and Infrastructure (DPTI) workplaces.

### 2. Scope

This procedure applies to all DPTI workers.

### 3. Definitions

TERM	DEFINITIONS
<b>Battering</b>	To form the face or side or wall of an excavation to an angle, usually less than the natural angle of repose, to prevent earth slippage.
<b>Benching</b>	The horizontal stepping of the face, side or wall of an excavation.
<b>Brownfield site</b>	Land currently or previously used for industrial purposes or some commercial use, it includes any land that is not a greenfield site. Land within brownfield sites has greater risks of the presence of underground services or contaminated soils.
<b>Competent person</b>	A person who has, through a combination of training, education and experience, acquired knowledge and skills enabling that person to perform a specified task correctly.
<b>Confined space</b>	A confined space is: <ul style="list-style-type: none"> <li>• enclosed or partially enclosed;</li> <li>• at normal atmospheric pressure during occupancy;</li> <li>• not designed or intended for human occupancy; and</li> <li>• poses a risk to health and safety from one or more of the following:               <ul style="list-style-type: none"> <li>○ an atmosphere that does not have a safe oxygen level; or</li> <li>○ contaminants that may cause injury from fire or explosion; or</li> <li>○ harmful concentrations of any airborne contaminants; or</li> <li>○ engulfment.</li> </ul> </li> </ul>
<b>Contaminated Soil</b>	Soil which contains the presence of human made chemicals or other alterations in the natural soil environment. It is typically caused by industrial activity, agricultural chemicals or improper disposal of waste.
<b>Excavation</b>	A hole in the earth, or a face of earth, formed after rock, sand, soil or other material is removed.
<b>Excavation work</b>	Work involving the removal of soil or rock from a site to form an open face, hole or cavity using tools, machinery or explosives
<b>Exclusion zone</b>	An area from which all persons are excluded during excavation work.
<b>Geotechnical engineer</b>	An engineer whose qualifications are acceptable for membership of the Institution of Engineers, Australia and who has qualifications and experience in soil stability and mechanics and excavation work.
<b>Greenfield site</b>	Undeveloped land in a city or rural area either used for agriculture, landscape designs, or left to evolve naturally and which is free of underground services or contaminated soils.



<b>Powered mobile plant</b>	Plant that is provided with some form of self-propulsion that is ordinarily under the direct control of an operator.
<b>Shoring</b>	The use of timber, steel or other structural material to support an excavation in order to prevent collapse so that construction can proceed.
<b>Trench</b>	A horizontal or inclined way or opening: <ul style="list-style-type: none"> <li>• The length of which is greater than its width and greater than or equal to its depth; and</li> <li>• That commences at and extends below the surface of the ground; and</li> <li>• That is open to the surface along its length.</li> </ul>
<b>Trench boxes</b>	A structure with four vertical sides plates permanently braced apart by bracing designed to resist the pressure from the walls of a trench and capable of being moved as a unit.
<b>Tunnel</b>	An underground passage or opening that is approximately horizontal and commence at the surface of the ground or an excavation.
<b>Underground services</b>	A cable, pipe or other thing laid or installed underground for the transmission, transportation or storage of electricity or a substance.
<b>Vacuum excavation</b>	A means of soil extraction through the use of a vacuum.
<b>Worker</b>	Any person who carries out work in any capacity for the department and may include: <ul style="list-style-type: none"> <li>• employee;</li> <li>• trainee;</li> <li>• volunteer;</li> <li>• outworker;</li> <li>• apprentice;</li> <li>• work experience student;</li> <li>• contractor or sub-contractor;</li> <li>• employees of a contractor or sub-contractor; or</li> <li>• employee of a labour hire company.</li> </ul>
<b>Workplace</b>	A workplace is any place where a worker works and includes any place where such a person goes, or is likely to be, while at work.
<b>Zone of influence</b>	The volume of soil around the excavation affected by any external load (for example vehicles, plant, excavation material)

## 4. Procedure detail

### 4.1. Excavation work

Excavation work involves the removal of soil or rock from a site to form an open face, hole or cavity using tools, machinery or explosives. The department must manage risks associated with excavations.

These risks include the following:

- A worker accidentally falling into an excavation.
- A worker being trapped by the collapse of an excavation.
- A falling object striking a worker in an excavation.
- A worker in an excavation being exposed to an airborne contaminant.

In order to manage these risks, the following must also be considered:

- the nature of the excavation;
- the type of the excavation work, including the various ways in which that work could be carried out; and
- entry and exit from excavation sites, where applicable.

### 4.2. Identifying hazards

Managers/supervisors must ensure that hazards related to excavation and trenching are identified in consultation with affected workers and Health and Safety Representative/s (HSR), where applicable, prior to the commencement of works.

Managers/supervisors are required to identify the risks and determine appropriate controls to be implemented to eliminate or minimise associated risks, so far as is reasonably practicable (SFAIRP).

Factors to consider when identifying hazards may include work carried out:

- striking or damaging underground or overhead services;
- the fall or dislodgement of earth or rock;
- falls from heights;
- hazardous manual tasks;
- the instability of any adjoining structures caused by excavation;
- inappropriate placement of excavated materials;
- the instability of the excavation due to works adjacent to the excavation;
- the presence of or possible inrush of water or other liquids;
- contaminated soil or atmosphere in an excavation;
- vibration and hazardous noise.

#### **4.3. Risk Assessment**

The purpose of a risk assessment is to identify appropriate controls that can be implemented to either eliminate or minimise the risks associated with excavation and trenching.

Managers/supervisors must ensure that where hazards are identified, a risk assessment is completed to determine the level of risk that worker/s will be exposed to. Risk assessments must be conducted in accordance with the [Work Health and Safety \(WHS\) Risk Management Procedure](#)

When undertaking the risk assessment, the following must be considered:

- all potential hazards (to workers, the public, assets, the environment etc.);
- the frequency and duration of workers exposure to the hazard;
- the consequence of the hazard;
- environmental conditions which may influence the work activity (i.e. wind, rain, temperature, etc.)
- legislative requirements;
- hierarchy of controls that can eliminate or mitigate the hazard;
- recommended or standard practices applied to similar circumstance at other departmental worksites; and
- practicability of the available risk controls.

Any construction work involving an excavation that is carried out in or near a shaft or trench with an excavation depth of greater than 1.5 meters, or a tunnel is considered to be high risk construction work and a [Safe Work Method Statement \(SWMS\)](#) must be developed prior to the work commencing. The SWMS must be developed in consultation with workers who are carrying out the high risk construction work.

Where specific hazards have been identified, the risk must be controlled SFAIRP. The most appropriate risk controls are to be determined, monitored and reviewed in accordance with [WHS Risk Management Procedure](#).

To eliminate and/or minimise the risks associated with excavation and trenching it is recommended that the following alternatives be considered:

- eliminate the requirement to undertake trenching work through the use of directional boring;
- replace the process, plant or equipment with an alternative i.e. use vacuum excavation instead of using an excavator or backhoe;
- isolate workers from hazards by installing barriers to separate pedestrians from excavation or trenching work; and/or
- design or re-design the process, plant or equipment i.e. utilising shoring equipment to protect workers in a trench.

#### **4.4. Risk Controls**

Where risks cannot be eliminated, effective risk controls may include but are not limited to those detailed in the following sections.

##### **4.4.1 Planning excavation and trenching work**

Adequate work planning must be undertaken for all excavation and trenching work undertaken at departmental workplaces. Work planning must be undertaken to identify the safest and most effective method of undertaking the work.

Work planning must be undertaken in consultation with all stakeholders involved in the work. When planning to undertake excavations or trenching the following must be considered and undertaken:

- development of a JSA/SWMS for the work;
- confirmation of resources, plant and equipment required to undertake the work;
- assessment of the impact that the excavation and trenching work will have on other operations or maintenance activities;
- investigation of potential weather conditions that may impact on the ground conditions and spoil run-off;
- review of all site service plans, site plans and any other drawing that identify underground services located in the area;
- lodgement of an enquiry with 'Dial Before You Dig' (call 1100 or [www.1100.com.au](http://www.1100.com.au));
- consultation with local authorities and/or external asset owners where their services are located near the planned excavation or trench;
- undertake site expectations to confirm site conditions and underground services using site drawings and other visual indicators;
- positively identify underground services near the planned excavation via non-destructive methods;
- investigation of potential environmental effects of the excavation activity and sediment run-off paths onto roads and into drains, catchments and waterways; and
- whether structural and geotechnical engineers need to be consulted to determine specific risk control methods.

It is recommended that an [Excavation Permit](#) be completed by managers/supervisors in consultation with workers prior to the work activity commencing to ensure all hazards have been identified and control measures implemented.

#### 4.4.2 Safe Systems of Work

For all excavation and trenching activities, a safe system of work must be implemented to control risks to health and safety. The following should be considered when determining the most appropriate risk controls:

- methods of excavation and the plant or equipment to be used;
- the location, size and profile of the excavation and trench (i.e. on a steep slope, in a roadway, depth, width, intersecting excavations, etc.);
- soil properties;
- fractures or faults in rocks, clay seams, bedding planes;
- the presence of watercourses, water seepage, flooding, underground water table;
- the proximity of trees;
- the requirement to enter the excavation or trench (i.e. fall risk, falling materials, hazardous atmosphere, engulfment etc.);
- nearby building, poles, roads or other assets that could be damaged (or rendered unstable) as a result of the excavation;
- methods of transport haul routes and disposal materials;
- proximity and location of underground services;
- duration of the work (i.e. the length of time the excavation or trench will be open)
- weather conditions;
- overland water flow paths;
- nearby traffic hazards;
- overhead electricity lines;
- the placement of excavated materials;
- contact with contaminated soil or excavated material;
- run-off of sediment onto roads and into drains and creek/catchment areas; and
- the presence of declared plants or woody weeds (refer to [PIRSA Biosecurity](#)).

Some of the potential risk control measures include:

- having clear and detailed plans of the potential or existing excavation sites. This is essential if the excavation sites are in close proximity to underground or aboveground cables and pipes;
- effective shoring, to minimise any potential trench wall collapses;
- discouraging workers from working alone on excavation sites and constant supervision by a competent person;
- ongoing geotechnical assessments and consulting structural engineers, especially when temporary supports are needed during excavations and suitable backfill after excavation;
- predetermining and clearly marking areas where excavated material is to be placed;
- using appropriate plant and equipment;

- proper material placement and stockpiling, including correct usage, maintenance and storage of PPE, tools and equipment;
- installation of silt fencing or silt socks to protect water quality from sediment in stormwater runoff;
- effective dewatering processes and equipment to eliminate any water seepage or flooding of the excavation sites.

### **4.3 Location of underground services**

#### **4.3.1 Information requirements**

The following information relating to underground services must be obtained before any excavation or trenching work is undertaken:

- whether underground services exist in the area;
- the types of services;
- the exact location, depth and direction of the services;
- isolation points for the services (where required / available);
- conformation of whether services can be de-energised during the work; and
- any specific restrictions to be followed during the work.

#### **4.3.2 On-site location / conformation of underground services**

The following steps must be taken to positively identify the location of underground services prior to commencing excavation or trenching on a brownfield site:

- Detailed review of all available site plans, drawings and 'Dial Before You Dig' information relevant to the planned excavation area.
- An inspection of the planned excavation site and surrounding areas must be undertaken to assess the working environment and identify any other visual indicators of buried services. The following factors should be considered as part of the process:
  - The location of the services in relation to known, fixed assets (i.e. buildings, pits, powered infrastructure such as powered gates, lighting etc.).
  - Evidence of previous excavations (sunken areas, different soil type, previous line marking, cuts to paths and roadways, etc.).
  - Consultation with workers that may have specific information or knowledge regarding underground services at the workplace.

#### **4.3.3 Distribution of information**

All information related to underground services located in the area where excavation or trenching is to occur must be:

- Made available to any worker, principal contractor and sub-contractor.
- Made available for inspecting during the work as required.
- Retained until the excavation or trenching work is completed, if there is a notifiable incident relating to the excavation or trenching work, for at least two years after the incident occurs.

#### **4.3.4 Updating underground services information**

Following the completion of excavation and trenching work, managers/supervisors responsible for supervising the work must ensure that relevant site drawing and underground service maps are updated with accurate information for the services identified.

#### 4.3.5 If damage to underground services occurs

If any damage occurs to underground services during excavation or trenching work, the following actions must be undertaken:

- Ensure workers are safe (where contact is made with electrical services, plant operations should remain in the cabin of the plant until the area is deemed safe).
- Undertake isolations where required/where practicable.
- Notify the relevant manager/supervisor.
- Notify the owner of the underground service.
- Lodge details of the incident in the department [Hazard and Incident Reporting Module](#).

#### 4.4 Overhead electricity lines

Where excavation or trenching work is undertaken in an area containing overhead electrical lines, appropriate risk control measures must be implemented. When establishing risk control measures for managing the hazards associated with overhead electrical lines, the following should be considered:

- the location of the electrical lines in relation to the excavation or trenching site;
- the type of electrical line (i.e. voltage carried, insulated lines etc.);
- the type and size of the plant being used for the excavation or trenching work; and
- the ability to isolate the source of electrical supply to the overhead lines for the duration of the work.

Risk control measures for managing the hazards of overhead electrical lines include:

- establishing an exclusion zone around the overhead electrical lines;
- placing tiger tails or similar highly visibility devices on the overhead lines in the work area;
- placing barriers and signage under the overhead electrical lines;
- including the hazards of overhead electrical lines in inductions and pre-start meetings; and
- including the hazards of overhead electrical lines in all JSA/SWMS developed for the work activity.

#### 4.5 Preventing ground collapse

Ground collapse is one of the primary risks to be controlled when undertaking excavation or trenching work. Ground collapse can occur very quickly and without warning, giving a worker virtually no time to escape, especially if the collapse is extensive.

One or a combination of the following risk control measures must be implemented prior to any person entering an excavation or trench with a depth of 1.5 meters or more, or regardless of depth, for excavations or trenches dug in poor soil conditions where there is a risk of engulfment:

- Benching the walls to form one or a series of steps.
- Battering the walls to a safe angle.
- Shoring up the walls to support the sides.
- Working inside trench shields/boxes or other ground support systems.
- Written advice from a geotechnical engineer that all sides of the trench are safe from collapse.

Additional details regarding the specific requirement and use of these risk controls in the prevention of ground collapse are contained in the [Excavation Code of Practice](#).

## 4.6 Inspections of excavations

All trenches and excavations must be regularly inspected to ensure issues that may impact on workers or surrounding assets are identified. When establishing an inspection schedule for excavation and trenches, the following should be considered:

- where a worker will access an excavation or trench an inspection must be undertaken prior to each entry;
- where an excavation or trench is open for greater than 24 hours an inspections must be completed each day before the start of work;
- inspections should be undertaken as often as necessary due to changes in soil type, condition etc., or changes in weather conditions;
- where vibration occurs from traffic or machinery
- where the method of excavation causes vibration;
- the use of explosives.

All issues identified during an inspection of excavations or trenches must be addresses before the work activity continues.

Managers/supervisors in consultation with workers must complete an [Excavation Inspection Checklist](#).

## 4.7 Supervision

All excavation and trenching work must be adequately supervised by a worker with appropriate training and experience in the work being undertaken.

Whilst a worker is in an excavation or trench greater than 1.5 meters in depth, there must be at least one person (spotter) at ground level monitoring the work activity from a safe location.

No workers is to be present in an excavation or trench while that part of the excavation or trench is being mechanically dug.

## 4.8 Barricades and signs

All excavations and trenches greater than 1.5 meters in depth must be protected by barriers and signs to prevent unauthorised access (including in advertent entry).

Where practicable, excavations and trenches less than 1.5 meters in depth should be protected by barriers and signs to restrict entry to the work area.

## 4.9 Exclusion zones

Exclusion zones must be established for excavation and trenching activities. When establishing exclusion zones the following should be considered:

- Plant must not be positioned in an area where exhaust fumes could create an unsafe atmosphere within an occupied excavation or trench;
- No person should be present in an excavation or trench where there is a risk of harm from plant falling into an occupied area;
- All soil and debris must be stored away from the edge of an excavation or trench;
- Heavy loads must not be positioned within the 'zone of influence ' of the excavation or trench unless the ground support system installed has been designed by a competent person.
- A minimum separation distance to be maintained between any live buried services.
- Exclusion zones must be maintained around overhead electricity lines

The established of exclusion zones must be clearly defined and conveyed to all workers entering the excavation or trenching areas.

#### **4.10 Covers**

Where practicable, covers should be placed over excavations or trenches that are:

- Likely to be accessed by unauthorised personnel (i.e. in public areas).
- In highly traffic areas.
- The excavation or trench will be left open for more than 24 hours.

Covers must be designed and installed to sufficiently support the weight of any traffic that will potentially access the cover (i.e. covers used in roadways must be able to support any vehicle likely to travel across the cover).

#### **4.11 Manual Work**

Manual excavation methods are generally used for small shallow excavations (for example less than 1.5 meters deep) in soft soils.

When working in close proximity, workers should be kept sufficiently far apart to prevent injury from the use of picks or other hand tools. This applies particular to work in trenches and small excavations.

Manual work may increase the risk of musculoskeletal injuries and must be managed in accordance with [Hazardous Manual Tasks Procedure](#).

#### **4.12 Powered mobile plant**

The following risk controls must be implemented to manage the hazards associated with powered mobile plant utilised during excavation or trenching activities:

- High risk work license.
- Traffic management plans including signs to indicate traffic direction and locations of hazards.
- Effective communication systems between plant operator and ground workers.
- Effective warning devices fitted to plant (reversing alarm and revolving lights).
- Identification of blind spots.
- Exclusion zones for ground personnel.
- So far as is reasonably practicable, the type of bucket or mechanical digging component should be selected to minimise potential damage in the event of accidental contact with live buried services.
- Inductions.
- High visibility clothing and other PPE as required.

Powered mobile plant must be operated and maintained in accordance with the [DP050 Plant and Equipment Policy](#).

#### **4.13 Access and egress**

Where workers are required to enter an excavation or trench, a safe means of access and egress must be provided, such as having trench shields with guard rails attached and safe access provided by a tied off ladder.

#### **4.14 Managing risks of falls**

Where any work activity is undertaken in a location where, if a worker was to fall, an injury is reasonably likely to occur, appropriate risk controls must be implemented to eliminate or mitigate

risk. Hazards associated with working at heights must be managed in accordance with the [DP046 Working at Heights Policy](#).

The risk of a fall into an excavation or trench can be controlled by:

- Using trench box extensions or trench sheets with a height greater than the trench depth;
- Installing guard rails or covers on trench shields;
- Inserting guard rails and toe boards into the ground immediately next to the supported excavation side;
- Installing landing platforms or access structures such as scaffold towers inside excavation sides;
- Installing effective barriers or barricades
- Providing clearly defined pedestrian detours; and/or
- Fencing around excavations or trench shields.

#### **4.15 Personal Protective Equipment (PPE)**

When selecting PPE for entering and working in an excavation or trench, the following must be taken into account:

- The work to be undertaken.
- The conditions within the excavation or trench (i.e. wet, slippery, hot).
- The size and location of entry points.
- The impacts PPE may have on work in the excavation or trench and rescue from the excavation or trench.

All workers involved in excavation or trenching work must be supplied with and trained in, the use of appropriate PPE for the task to be undertaken. For further information refer to [Personal Protective Equipment Procedure](#).

#### **4.16 Environmental Services**

Manager/supervisors must consult with [Environmental Services](#) prior to undertaking excavation and trenching work in areas where the following has been identified:

- declared plants or woody weeds;
- cultural heritage areas;
- contaminated soils; and/or
- environmental permits and licences are required.

#### **4.17 Managing overland water flow and ground water**

If there is a likelihood of an inrush of water into an excavation or trench, risk controls must be implemented and remain in place for the duration of excavation or trenching activities.

These may be in the form of but no limited to:

- spoon drains;
- earth dams;
- dewatering systems;
- temporary piping.

#### **4.18 Controlling sediment run off**

Sediment run-off as a result of undertaking excavation or trenching work can be cause significant environmental and safety issues. All disturbed soil must be managed to reduce the risk of

sediment run-off entering drains, catchments and waterways or spreading across paths and roadways.

Following completion of trenching and excavation work, sediment controls must remain in place and be maintained until such time as all disturbed soil is protected from erosion.

#### **4.19 Contaminated atmosphere**

Excavations and trenches may become contaminated with gases that create a hazardous atmosphere including the following:

- Contamination from exhaust gasses.
- Contaminated soil.
- Sewer leaks.
- Use of substances in or near the excavation.
- Naturally occurring emissions from disturbed soils.

Where gas monitoring or risk assessment outcomes indicate there is a potential for an excavation or trench to contain an unsafe atmosphere, the excavation or trench must be treated as a confined space and risk controls must be implemented in accordance with the [Confined Space Procedure](#).

#### **4.20 Controlling dust**

The generation of dust as a result of undertaking excavation or trenching work can cause significant environmental and safety issues. All work areas must be managed to eliminate or reduce the generation of dust.

The following risk controls must be used to prevent or mitigate the effects of dust when undertaking excavation or trenching:

- Use water trucks or water hoses to reduce dust generation.
- Where possible, use established roadways to move around excavation or trenching sites.
- Develop traffic management plans to restrict access to and control movement within the excavation and trenching site (including speed limits).

#### **4.21 Reviewing risk controls**

Existing risk controls for managing works involving excavation or trenching must be monitored and reviewed to ensure they remain effective. Existing risk controls must be reviewed:

- when implemented control measures are not effectively controlling the risk;
- before a change at the workplace that is likely to give rise to a new or different health and safety risk that control measures may not effectively control;
- when a new hazard or risk is identified;
- if consultation indicates that a review is necessary;
- if a health and safety representative requests a review; and/or
- if new information becomes available indicating that current controls may no longer be the most effective.

#### **4.22 Incident Notification**

Any hazards, near misses, incidents or injuries that occur as a result of excavation or trenching must be recorded in the department [Hazard and Incident Reporting Module](#).

If a notifiable incident occurs the manager/supervisor must notify Manager, Safety who will ensure that statutory reporting obligations are fulfilled. For further information refer to [WHS Incident and Injury Reporting Procedure](#).

### 4.23 Emergency Requirements

An emergency plan that deals with unexpected incidents, such as ground slip, flooding, contact with underground services and the rescue of workers from an excavation must be developed in consultation with workers prior to work commencing. The emergency plan must:

- SFAIRP help the engulfed person be rescued and provided with first aid;
- Be enacted immediately after a person becomes, or is likely to become engulfed.

When developing an emergency plan for excavation and trenching the following factors should be considered:

- the nature of the work activity;
- the location of the work activity;
- communications from within the excavation and trench to other workers;
- communication from the location of the work to emergency services;
- rescue and resuscitation equipment and the availability of trained workers;
- the physical capabilities of rescuers;
- environmental conditions;
- appropriate first aid equipment and the availability of trained workers; and
- the ability for local emergency services to respond and provide assistance in emergency situations.

## 5. Training

Managers and supervisors in consultation with workers must determine training need in relation to excavation and trenching in partnership with [Organisation Performance and Development](#).

## 6. Record management

Any records and documentation pertaining to this procedure must be maintained in accordance with legislative and DPTI record keeping processes. Refer to the [DP009 Recordkeeping Policy](#) for information regarding records management.

## 7. Roles and responsibilities

ROLE	RESPONSIBILITIES
Managers/Supervisors	Must: <ul style="list-style-type: none"> <li>• identify potential risks and implement appropriate controls to eliminate or minimise risks related to excavation and trenching work activities;</li> <li>• undertake adequate planning in consultation with all stakeholders involved when undertaking excavation and trenching work;</li> <li>• undertake a risk assessment in consultation with workers when undertaking work activities that involve excavation or trenching;</li> <li>• participate in the development of SWMS for excavation works and ensure they are communicated to all relevant workers and followed onsite;</li> <li>• regularly inspect all trenches and excavation to ensure any issues that may impact workers or surrounding assets are identified.</li> <li>• provide information, instruction and training to workers and ensure that individuals hold all necessary certification;</li> <li>• ensure a competent person is designated to supervise excavation work;</li> <li>• ensure exclusion zones are established for any excavation and trenching activities;</li> <li>• environmental services are consulted prior to undertaking excavation</li> </ul>

	<p>and trenching work;</p> <ul style="list-style-type: none"> <li>• ensure all hazards, near misses, incidents or injuries resulting from excavation or trenching work activities are reported; and</li> <li>• ensure emergency procedures are developed, in place and understood by all workers.</li> </ul>
<b>Workers</b>	<p>Must</p> <ul style="list-style-type: none"> <li>• participate in the identification and development of risk controls associated with excavation and trenching work activities;</li> <li>• protect their own health and safety and not adversely affect the health and safety of other persons in or near excavations;</li> <li>• follow any reasonable instructions provided to them by their manager/supervisor in relation to excavation and trenching;</li> <li>• assist in developing SWMS for excavation work;</li> <li>• actively participate in the training provided to them; and</li> <li>• report and hazards, near misses, incidents or injuries resulting from excavation or trenching work activities.</li> </ul>

## 8. Supporting documentation

- [Excavation Permit](#)
- [Excavation Inspection Checklist](#)
- [DP050 Plant and Equipment Policy](#)
- [Working at Heights Procedure \(Draft\)](#)
- [Confined Spaces Procedure](#)
- [WHS Risk Management Procedure](#)
- [WHS Incident and Injury Reporting Procedure](#)
- [Hazardous Manual tasks Procedure](#)
- [Personal Protective Equipment Procedure](#)

## 9. References

- *Work, Health and Safety Act SA 2012*
- Work Health and Safety Regulations 2012
- SafeWork SA
- SafeWork Australia
- [Code of Practice: Excavation Work](#)
- Australian Standards (available through [DPTI Library](#))

## 10. Document Amendment Record

Date	Version	Revision Description
XX February 2019	1.0	Original Version
<b>Document Review Schedule</b>		3 Yearly