Environmental Management Plan

Guideline on the management of potentially contaminated land

Document information

Document ID	PR-GL 003
VicTrack ref	PR-GL-00003
Version	3.0
Approved date	21 June 2023
Next review date	20 June 2025
Security	OFFICIAL

Contents

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1. Purpose

VicTrack land has the potential to be contaminated from historic railway practices, or other former land uses such as fertiliser or petroleum storage. During soil disturbance activities on VicTrack owned land, there is a potential for people to come into contact with contamination. There is also the potential to expose or bring contaminated soil and groundwater to the surface that, if not handled appropriately, may impact the surrounding environment.

This Environmental Management Plan (EMP) outlines potential exposure to contamination and provide guidance on environmental management measures to minimise risks to human health and the environment from potential contamination during soil handling or soil disturbance activities and occupation of VicTrack land.

This EMP has been prepared for use by VicTrack employees, third parties who occupy or access VicTrack land (e.g. rail operators, tenants, licensees), contractors, visitors, workers or tradespeople, and anyone conducting any general soil disturbance activities on VicTrack owned land, where there is potential for contamination.

For this EMP, soil disturbance activities include any activity that may involve the movement and/or handling of soil, such as installation of underground services, construction, earthmoving, boring, excavation works, site levelling, or other intrusive maintenance works, and general gardening or landscaping works.

2. Context

This EMP has been prepared for implementation during occupation and/or when undertaking any soil disturbance activities on VicTrack land to manage the potential for contamination.

This EMP outlines requirements for the management of potentially contaminated soils or groundwater on VicTrack land and provides information on the following:

- The type of contaminants that may be present on or beneath the land
- How you may become exposed to potential contaminants
- Practical measures to be implemented to manage risks from potential contamination
- Guidance on responsibilities and obligations of relevant parties in managing potential contamination and administering this EMP.

This document does not intend to address the following items:

- Toxicity information on the type of chemicals that may exist on the land
- Site-specific information or site-specific environmental management plans, where one is required
- Replace conditions within any existing contract agreement between VicTrack and the Site Occupier. Where an agreement exists, such as a Head Lease Agreement, licence or access agreement, all conditions within that agreement will prevail
- Identification of hazards, risks and controls from your specific activities and your potential to contaminate the land
- Risk management measures that apply to the handling of potentially contaminated material under a more Sensitive Use, e.g., residential use or playground. For these situations, other documentation should be referred to (e.g. PR-GL-005 Sensitive Sites Environmental Management Plan).

Where site-specific EMPs or Construction Environmental Management Plans (CEMPs) are required to be developed, the information detailed within this generic EMP may be referred to. This EMP does not preclude the conduct of any additional environmental management measures not specifically mentioned.

2.1. Legal Context

A person in 'management or control' of land (who may include VicTrack as the owner of the land, a tenant or sub-tenant, an occupier (under an agreement), or a principal contractor), has duties under the Environment Protection Act 2017 (the Act) to manage contamination and minimise risks of harm to human health and the environment from contamination (or potential contamination) as far as reasonably practicable.

The Duty to Manage contaminated land includes identifying of contamination hazards, outlining measures to minimise the risk, and providing information to people who may be affected by the contamination or who could reasonably be expected to manage or control the land. The provision of and implementation of this EMP is a tool to meet the Duty to Manage obligations under the Act.

This responsibility works alongside the general environmental duty obligations of the Act, where you are required to understand the risks from your activities and to reduce the risk of harm to human health and the environment from your activities, pollution or waste.

There are additional duties under the Act in relation to responding to pollution, notifying EPA Victoria of pollution and certain contamination, and duties relating to industrial waste and priority waste. You can read more about the duties on the EPA Victoria website: epa.vic.gov.au.

If you are a tenant, occupier or contractor, there may also be other obligations contained within your contract agreement (e.g., Head Lease Agreement and deeds of variation, contract of works) that stipulate requirements to manage contamination or site-specific management plans. Please refer to your agreement or relevant communication from VicTrack.

3. Definitions

Definitions commonly used throughout this document are provided in the following table:

Term	Definition
Contamination	A waste, chemical substance or prescribed substance present in on or under the surface of the land in a concentration above background level and creates a risk of harm to human health or the environment. This may include soil or groundwater at concentrations above the relevant human health criteria for a particular use (NEPM, 2013).
Environmental Management Plan (EMP)	A plan that sets out management measures to minimise risks to human health and the environment from exposure to potentially contaminated soil.
Lease, Licence or Access Agreement	The contractual agreement in place between the Site Occupier and Site Owner that describes the permitted use and conditions around how the land should be managed.
Potentially Contaminated Soil	Includes naturally contaminated soils, fill material or other soils that may be impacted from historical or current use.
Sensitive Use	Land used for residential use, childcare, pre-school, primary school, secondary school, play areas or public open space use. A Sensitive User has the equivalent meaning but refers to the person, e.g., resident, children, recreational user.
Site Occupier	A person or company that occupies or accesses the land and may include VicTrack employees, third parties (rail operators, tenants or licensees), contractors, visitors or tradesmen.
Site Owner	The custodian of the land, in this case VicTrack.
Soil Disturbance Activities	An activity the involves the movement and/or handling of soil. This may include installation or maintenance of underground services, other intrusive maintenance works, construction, earthmoving, site levelling, boring or excavation works, and general gardening or landscaping works.

4. Responsibilities and accountabilities

To ensure the successful implementation of the EMP, the following stakeholders are required to assume responsibility for the actions below:

Role	Responsibility
Site Owner (VicTrack)	Overarching responsibility for the communication of the requirements of the EMP • Provision of this EMP to staff, third parties and contractors conducting soil disturbance works on VicTrack land that has the potential to be contaminated, where no site-specific EMP exists. • Ensure that a copy of this EMP is provided to any person who proposes to become an occupier of land with potential to be contaminated, that may conduct soil disturbance works, where a site-specific EMP is not available. • Conduct compliance auditing of implementation of the EMP from time to time if soil disturbance works have been organised by VicTrack, or on land occupied by VicTrack. • Duty to Notify contamination in accordance with the *Environment Protection Act* 2017, for land VicTrack is in management and control, or for legacy contamination
Site Occupiers (Tenants / Licensees / Rail Operators)	During tenancy/occupation responsibility for the implementation of this EMP, ensuring controls are put in place to limit soil exposure to potentially contaminated soil. • Ensure compliance with all applicable legislation and guidelines relevant to management of the environment and potentially contaminated soil and groundwater. • Sign onto the acknowledgement register prior to soil disturbance activities. • Provision and induction of this EMP (including sign onto the acknowledgement register) to workers, employees, contractors and visitors who are likely to be in contact with soil or groundwater at the site, and ensure compliance with the requirements of this EMP. • Ensure the control measures for the protection of human health (i.e., PPE) are adhered to for workers handling potentially contaminated soil or groundwater. • Conduct compliance auditing of implementation of the EMP from time to time. • Ensure appropriate management/disposal option for surplus soils generated at the site during intrusive sub-surface works (in accordance with the EPA Regulations), and/or appropriate soil reuse subject to written approval from VicTrack in accordance with VicTrack's PR-GL 004 *Soil Reuse Guideline*. • Report any pollution incidents, complaints, non-conformances and corrective actions taken to VicTrack, and where required under Law to EPA. • Duty to Notify contamination in accordance with the *Environment Protection Act* 2017, for land it is in management and control of.
Workers / Contractors (e.g., Construction / Maintenance Workers or Tradespeople)	Perform any soil disturbance works in the manner specified in this EMP. • Comply with all applicable legislation and guidelines relevant to management of the environment and potentially contaminated soil and groundwater. • Ensure that all employees, sub-contractors it engages and any other personnel accessing the site whilst under its control comply with the requirements of this EMP. • Ensure the control measures for the protection of human health (i.e., PPE) are adhered to for workers handling potentially contaminated soil and groundwater. • Arrange for the appropriate management/disposal option for surplus soils generated at the site during intrusive sub-surface works (in accordance with EPA Regulations), and/or appropriate soil reuse subject to written approval from VicTrack in accordance with VicTrack's PR-GL 004 *Soil Reuse Guideline*.

- Minimise risks of harm to human health and the environment as far as reasonably practicable including ensuring works do not result in contamination of surrounding areas.
- Report any pollution incidents, complaints non- conformances and corrective actions taken to the Site Occupier or VicTrack for which they are working, and the EPA where required by Law.
- Undertake site inspections during soil disturbance projects of periods greater than two (2) weeks.
- Sign onto the acknowledgement register prior to soil disturbance activities.

5. Potential contaminants on rail land

This section summarises the types of potential contaminants that may be encountered during soil disturbance works on rail land.

It is important to note that the contaminants listed below are those commonly found within the rail environment and have been listed for the purpose of preparing this EMP. It does not mean that all, or any, of these contaminants are actually present on the land or in groundwater. The list has been provided as a precautionary measure in order to inform you of typical rail type contaminants that may be present on and beneath the land.

VicTrack does not guarantee the condition of land for any use and occupiers, workers or users of VicTrack land should satisfy themselves of the condition of the land prior to occupation or use.

The person occupying/accessing the site to undertake soil disturbance works should satisfy themselves of the type and nature of contaminants of potential concern at the site, if any.

Should you believe that any of the potential contaminants listed below are present at potentially hazardous concentrations on VicTrack land, then VicTrack should be contacted for guidance on understanding the risk, if any, and how to manage the risk that may be present.

When identifying contaminants of potential concern for a particular area or piece of land, the historical land use of that area should be reviewed to compile a more detailed list of contaminants of potential concern. Any information held by VicTrack which may provide information about contaminants of potential concern for a site can be disclosed by VicTrack upon request.

You should also be aware that other contaminants specific to the historical use of the land (i.e., not commonly encountered on VicTrack land) may be present. If you are in doubt, you should contact VicTrack for further information.

5.1. Soil

The soil on rail land generally consists of imported fill material (e.g., road base gravel, or material brought to the site to build up site levels) overlying the natural soils of the area. Typically old fill material/soil is more likely to contain contaminants than natural soils.

Contaminants typically found in fill material/soil and generally found on rail land include:

- Heavy metals - heavy metals are associated with paints, pesticide use, imported fill material from unsuitable sources and other historical uses. Metals that are commonly found in elevated concentrations include arsenic, chromium, copper, lead, nickel and zinc.
- Polycyclic aromatic hydrocarbons (PAHs) - PAHs encountered are often associated with ash and partially burnt coal and diesel particulate. They include chemicals such as benzo(a)pyrene and naphthalene.
- Herbicides - herbicides have been used along the rail corridor to control weeds. Many different types of herbicides are likely to have been used over previous decades.

- Petroleum hydrocarbons - are often associated with spilt or leaking fuel, commonly diesel. They include chemicals such as benzene, toluene, ethyl benzene, xylene and heavy end total petroleum hydrocarbons (TPHs).
- Volatile chlorinated hydrocarbons (VCHs) – VCHs are associated with solvents and degreases, commonly found around current or former workshop areas.
- Creosote - sleepers used under railway tracks were commonly soaked in creosote to preserve them.
- Inorganic Nutrients - inorganic nutrients such as nitrate and ammonia are commonly encountered in soil and groundwater, often associated with historical waste disposal practices.
- Oils and greases - from localised pollution sources such as track greasers and oil spills.
- Asbestos containing materials (ACM) - ACM such as cement sheet fragments have been observed on VicTrack land associated with buildings built between the 1950s and 1980s, brake pads and waste materials.
- Waste materials - such as glass, wood, brick and metal shavings.
- Acid sulphate soils within the naturally occurring geology in some parts of Melbourne (e.g., Docklands areas).

5.2. Groundwater

Contaminated groundwater may be encountered during soil disturbance activities during deep excavations such as for foundations or basement construction particularly where groundwater is shallow or perched groundwater is present in the area.

Groundwater contamination can occur from seepage or leaching of contaminants through soil, or pollution events occurring underground such as from a leaking pipe or tank. For the purposes of this EMP, groundwater contamination from point underground sources (such as a tank) are not considered, or presence of any non-aqueous phase liquid, rather this EMP addresses contaminants that may be typically found in groundwater beneath rail land.

Contaminants typically found in groundwater and generally found on rail land include:

- Heavy metals - associated with former uses (paints, pesticide use) and leashing through fill material or soil, or may be naturally occurring in the regional groundwater, or be associated with regional contamination issues such as elevated arsenic and other heavy metals in Bendigo from historical mining. Metals that are commonly found in elevated concentrations include arsenic, copper, lead, nickel and zinc.
- PAHs - associated with ash, partially burnt coal and diesel particulate. They include chemicals such as benzo(a)pyrene and naphthalene.
- Petroleum hydrocarbons - are often associated with spilt or leaking fuel, commonly diesel. They include chemicals such as benzene, toluene, ethyl benzene, xylene and heavy end TPHs.
- Inorganic Nutrients - inorganic nutrients such as nitrate and ammonia are commonly encountered in soil and groundwater, often associated with historical waste disposal practices, or fertilizer use, handling and storage, or wastewater management system failure.

6. Exposure to contamination

You should be aware of the different ways you may come into contact with contaminants. These are called exposure pathways. Common exposure pathways are provided in the following table:

Exposure pathway	Description

Ingestion (Eating) of soil, sediment, dust	Exposure to contaminants in soil, sediment, or dust by accidentally ingesting them (i.e., contaminants on hands or food) or if they are breathed in via dust. Young children are more susceptible to exposure through these pathways through playing and often consuming soil.
Ingestion of groundwater and surface water	Exposure to contaminants by drinking groundwater or surface water, or accidentally ingesting it while swimming or handling groundwater (such as during dewatering or encountering groundwater during excavations).
Inhalation of air	Some of the potential contaminants may be able to be breathed in vapours or particulate matter.
Skin absorption of soil, water	Exposure to contaminants in soil, sediment, dust, water or groundwater if it comes into direct contact with the skin. The pathway here is via absorption directly through the skin.
Ingestion of edible produce	Exposure to contaminants in soil by the consumption of produce that has been grown (e.g., fruit, herbs, vegetables) or raised (e.g., chickens and eggs) in contaminated soil. The pathway here is a secondary pathway whereby certain contaminants may be absorbed into the produce and is then subsequently consumed by people.

7. Management controls for contaminated land

Disturbance to potentially contaminated soil and groundwater should be avoided wherever possible.

If ground disturbance is required, activities must be carried out in accordance with the *Worksafe Victoria Industry Standard Contaminated Construction Sites* (2017), EPA publication 1834: Civil construction, building and demolition guide (2021) and / or applicable regulation or guidance at the time of the activity to reduce exposure to contamination.

The following sections describe minimum control measures to minimise exposure to potentially contaminated material.

7.1. General controls

At a minimum the following control measures and procedures should be adopted for any type of ground disturbance of potentially contaminated material:

- Incorporate hazard identification and associated controls for potential contamination (soil and/or groundwater) into your risk assessments, Safe Work Method Statements (SWMSs) and / or Job Safety Analysis (JSAs), where relevant.
- Communicate the hazard to workers (e.g. during toolbox or kickoff meetings), and have all workers with potential to encounter or handle contaminated soil or groundwater sign onto the acknowledgement register in Attachment B.
- Establish a safe work zone around the work areas that clearly defines the work zone and restricts public access and intruders after hours (i.e., fencing).
- Provide adequate signage at the boundary of the safe work zone to deter entry.
- Minimise physical contact with the soil or groundwater and be rigorous in matters of personal hygiene during and following activities involving potentially contaminated material, e.g., wash any liquid, dirt or dust particles from skin and clothing before eating, drinking and smoking.
- Use personal protective equipment (PPE) to minimise direct contact with soils/water and inhalation of dust generated during the handling of contaminated soil (see Section 7.2 below).
- Provide first aid, washing and toilet facilities away from work areas.

7.2. Use of personal protective equipment (PPE)

The appropriate selection of PPE is an essential part of ensuring the health and safety of personnel. The use of inappropriate or improperly fitting equipment can result in the lack of protection from the hazard, potentially causing injury or adverse health effects.

Where contractors and site personnel are required to handle or come into direct contact with potentially contaminated soils, the following PPE should be worn:

- Full length pants and long sleeve shirts in accordance with AS/NZS 4501, or other applicable standard, as amended.
- Safety footwear complying with AS/NZS 2210, or other applicable standard, as amended.
- Elbow-length PVC or nitrile gloves or leather gloves in accordance with AS/NZS 2161, or other applicable standard, as amended.
- Protective eyewear with brow and side shields in accordance with AS/NZS1337:1992 Light Chemical Use (No splash), or other applicable standard, as amended.
- If dust is generated, avoid breathing dust by using a Class P1 or P2 particulate respirator complying with AS/NZS 1715 and AS/NZS 1716, or other applicable standard, as amended.

7.3. Stockpile management controls

Unmanaged contaminated soil stockpiles (for example generated from excavations) can lead to exposure to sediment and dust, as well as cross contamination to the environment. The following control measures must be implemented for any stockpiling of potentially contaminated soil on VicTrack land:

- Use dust suppression techniques, such as spray water on exposed soil and stockpiles to control dust generation during intrusive works (see Section 7.4 below).
- Stockpile on paved surfaces (i.e., asphalt or concrete) or plastic sheeting to prevent cross contamination of underlying soils.
- Stockpile excavated soil away from existing drainage lines and, if possible, where they can be protected from wind.
- If rainfall is expected, provide a suitable barrier around stockpiles to minimise sediment runoff during rainfall.
- Fully cover and protect exposed stockpiles with plastic sheeting when the work area is not occupied and provide a suitable barrier around stockpiles to minimise sediment runoff during rainfall.

7.4. Dust suppression

Inhalation of dust is considered to be the primary exposure pathway, as dust is commonly generated during below-ground excavation works and high-wind days. Dust generation poses a potential inhalation risk to site workers, but also to neighbouring site occupants. Techniques to address dust may include:

- Apply water or dust suppressants to exposed soils, stockpiles, and below-ground work areas, whilst ensuring that potentially contaminated water runoff is not created.
- Cover stockpiles with plastic sheeting or tarpaulins.
- Modifying the use of equipment to minimise generation of dust.
- Limit the size of an exposed works area.
- Ensure that a water supply is available during excavation works so that it can be applied as necessary.
- The need for dust suppression may be minimal during the winter months, but contingencies should be provided if significant dust is generated.

- For soil surfaces that form dust regularly/expose soil, install a surface covering such as mulch, hardstand gravel, concrete, asphalt or top soil (clean) and seed/turf

7.5. Groundwater and surface water management controls

In the event of heavy rainfall or unintentional pipeline fracturing, surface water may collect within an excavation or stockpile areas with contaminated soil. Shallow groundwater may be intercepted in the event of deep excavations.

Water intercepted or accumulated must be managed including:

- Groundwater must not be used for any purpose (irrigation, dam filling, drinking etc.), unless appropriate approvals have been obtained and water is of suitable quality (confirmed by laboratory analysis)
- Manage water intrusion into open excavations with the use of pumps or other appropriate removal methods. Removal of potentially contaminated water accumulated within such areas should be undertaken in accordance with any relevant requirements of authorities with consideration of documents listed in Section 12 (or as updated).
- Control surface water run-off in an appropriate manner to prevent discharge of sediments to stormwater drains.
- Manage extracted groundwater within sealed or contained storage vessels, prior to appropriate disposal (see Section 8.3 below).
- Irrigation of accumulated suspected stormwater for dust suppression purposes may only occur where run-off is not generated from the site.

8. Waste management

Waste generation should be to the minimum extent necessary.

You must consider the management and disposal of waste before undertaking an activity, including:

- Type of waste
- How it will be stored and managed
- Waste removal options, including recycling or disposal, or reuse where appropriate

Excess spoil or wastewater generated during subsurface excavation works at the site is to be handled, transported and disposed of in accordance with the regulatory requirements.

This section outlines the management measures that must be adopted during any soil disturbance works for the handling, characterisation and off-site disposal of contaminated soil surplus to needs.

8.1. Classification of waste for off-site disposal

Where surplus soil is required to be disposed off-site, the soil/material is required to be sampled and classified in accordance with the Environment Protection Regulations 2021 and EPA Publication 1968.1 Guide to classifying industrial waste, by an experienced environmental professional. Disposal must only occur to a lawful place licenced to accept the waste and the costs of disposal must be borne by the site occupiers or contractors.

All EPA waste tracker records should be retained by the waste producer.

Other chemically impacted wastes identified for disposal should be classified for disposal, in accordance with the Environment Protection Regulations.

8.2. Groundwater de-watering and surface runoff

Where wastewater is collected for off-site disposal, it must be removed by an appropriately licenced contractor and disposed of at an appropriately EPA licenced disposal/treatment facility. All EPA waste tracker records should be retained by the wastewater producer.

No wastewater should be discharged into existing stormwater or trade waste systems without a discharge licence/trade waste agreement and/or consent from the local water authority. Discharges to these systems are likely to require sampling and sediment removal.

8.3. Soil reuse

If soil reuse of potentially contaminated soil (i.e. either contaminated natural soils or fill soils greater than 5 m3 in volume moved from the original in situ location to another area of the site), is proposed, an application to VicTrack must be made via the Soil Reuse Application form, in accordance with the VicTrack PR-GL 004 Soil Reuse Guidelines for the reuse of potentially contaminated or contaminated soil on VicTrack land. All areas of the application form are to be appropriately addressed.

Soil reuse must only occur after written approval from VicTrack is obtained.

8.4. Asbestos

Asbestos containing material (ACM), if encountered, must be managed in accordance with relevant legislation and guidance, as well as the requirements of the Victorian WorkSafe Authority (WorkSafe) which administers the control and management of asbestos under the Occupational Health and Safety Act 2004 (OHS Act) and the Occupational Health and Safety Regulations 2017 (OHS Regulations). WorkSafe Publication Guidance Note – Asbestos-contaminated soil, October 2010 provides advice for any person inspecting, removing, transporting and disposing of asbestos-contaminated soil. Refer to Section 9 for general advice re unexpected finds.

The National Occupational Health and Safety Commission (NOHSC) also provide codes of practice for the Management and Control of Asbestos in Workplaces and the Safe Removal of Asbestos.

8.5. Environmental permissions

Under the Environment Protection Act 2017, an activity that may present a risk to human health or the environment where assurance is needed that the risks from the activity are being effectively managed, must be regulated by EPA by obtaining a permission for that activity.

There are three types of permissions:

- Licences are used for high-risk or high complex activities. There are development licences, operating licences, and pilot project licences
- Permits are for medium-risk activities
- Registrations are used for low-risk activities

Prescribed activities that need an environmental permission are outlined in Schedule 1 *Prescribed permission activities and fees* (refer to column 3) of the Environmental Protection Regulations, 2021. Some examples as they relate to soil disturbance and waste management (but not a complete list) include:

Table 1. Example prescribed activities requiring a permission

Example of prescribed activities that require a permission		
Receiving, storing, or processing waste generated at another site	Immobilising, thermally degrading or incinerating waste	Reportable priority waste management: Storing, treating, reprocessing, containing or disposing any reportable priority waste generated at another site
Supplying or using reclaimed wastewater	Containment on a project site of Category D waste soil generated at that project site	On site retention of contaminated soil (other than fill material) in a structure designed to contain at least 1000m3 of the soil and to prevent further contamination

Example of prescribed activities that require a permission		
Supply or use of any waste classified as reportable priority waste	Temporary (no more than 60 days) non-friable asbestos storage of less than 10m3 not generated at the site	Temporary on site industrial waste treatment
Temporary (<60 days) storage of designated waste (1000 L or less) not generated at the site	Waste transporting	Operating outside of hours or extended operations

There are more activities that require a permission. Please refer to the Environmental Protection Regulations, 2021 for more information on prescribed permission activities and refer to EPA Publication 1799.2 *Permissions scheme policy* for further information on how each permission type works.

Permission ensures certain standards and conditions are met, and a permission holder must comply with the conditions stipulated in their permission.

If your activity requires a permission from the EPA, a copy of that obtained permission should be kept on site, along with any requirements from the EPA to monitor or control your hazards from your activity.

If you are unsure if your activity needs a permission, you can complete a permission pathway form available on the EPA website.

9. Contingency Plan

9.1.1. Unexpected Finds

Any excavated/exposed soils or groundwater should be treated as potentially contaminated, with the controls and requirements outlined in this EMP followed.

Signs of possible contamination include stained material with a visible sheen, odorous soils (e.g., solvent, petrol like odours), vegetation stress, buried waste or suspected asbestos.

Where unexpected contamination or buried waste is suspected or identified, stop work, make the area safe and secure, then contact VicTrack.

VicTrack will discuss with you likely next steps and will assist with determining if the EPA requires notification. You may need to engage an environmental professional to assess the risks associated with the unexpected contamination or hazardous materials.

9.1.2. Notifiable Contamination

The Environment Protection Act 2017 requires certain types of contamination to be notified to the EPA by the person in management or control of the land, called notifiable contamination. Under the Environment Protection Act 2017, you have a duty to notify EPA as soon as you become aware or ought to have been aware of notifiable contamination.

The thresholds and descriptions of notifiable contamination are defined in Part 2.1 of the Environment Protection Regulations 2021 and include the following areas that may be notifiable:

- Soil contamination, including if it has moved or is likely to move onto adjacent land
- Friable asbestos in or on soil
- Actual or likely contamination of groundwater or surface water that is being used or may be used
- Presence of any non-aqueous phase liquid in soil, surface water or groundwater
- Soil vapour contamination above certain thresholds

- On site retention of soil (other than fill material) from contaminated land sourced on-site that is not an activity for which an environmental permission is required

Please refer to the Environment Protection Regulations 2021 and EPA for further information and a complete description of notifiable contamination.

If contamination is confirmed, and you are in management and control of the land (e.g., lease the site from VicTrack, a Principal contractor) and that contamination meets the threshold for notifiable contamination as defined in the Environment Protection Act 2017, then:

- If the contamination is agreed to be pre-existing to your occupation of VicTrack land, VicTrack will notify the EPA that the land is contaminated.
- Where the contamination has been caused or contributed to by you or your organisation (or your predecessor, including by assignment), you must first inform VicTrack (via your VicTrack project manager, property manager or equivalent) of that contamination, and then you will be required to notify the EPA that the land is contaminated. If you do not know who your representative (property manager, project manager, utility and services representative) from VicTrack is, you can contact customer.service@victrack.com.au, or call 03 9619 8889.

Further details surrounding notifications for contamination can be found in EPA *Publication 2008.2 Notifiable contamination guideline: Duty to notify of contaminated land*, found on EPA Victoria's website.

10. Emergency Response and Incident Reporting

10.1. First aid measures

First aid measures are as follows:

- For any potential skin exposure, the affected area will need to be washed immediately and thoroughly with soap and water.
- For eye contamination, emergency eyewash facilities should be provided within the immediate work area and the potential injury treated accordingly, as soon as the incident occurs.
- For ingestion, refer to Material Safety Data Sheet (MSDS) for instruction. The MSDS may recommend consuming large amounts of water and seeking medical assistance if ingestion leads to vomiting.
- For inhalation of dust, move the victim to fresh air and seek medical assistance if coughing persists.

MSDSs have not been provided for individual contaminants, as they are relevant to the contaminants in pure form, not as trace components in a pollutant mixture in soil/groundwater. MSDSs for specific contaminants can be sought from a site location contact or from http://www.msds.com.au/.

In the event of exposure to contamination, prepare an incident investigation to review effectiveness of controls in place to prevent exposure, and make modifications to controls as needed to minimise the risk.

10.2. Environmental pollution incident

In the event of an environmental incident, the first priority should be the safety of site personnel and the community that may be potentially affected. All steps should then be taken to minimise the risk of environmental damage. Typical first response to an emergency may include:

- Ensure site personnel can be removed safely from the emergency location.
- Containment of any pollution using booms, silt fences, absorbents, bunding or interceptor traps.
- Temporary repair or isolate failed source (e.g. plant, pipework, vessel).
- Sampling the impacted material (e.g. soil, groundwater or surface water).

Corrective action should include the development of a work plan to remediate the impacted area. This plan would detail testing requirements to define the nature and extent of impacts; methods for recovery; general handling, storage and treatment of impacted materials; disposal and reuse options; and personnel protective equipment.

If an environmental incident, accident, hazardous situation, unsafe exposure or pollution event happens on VicTrack land, or has the potential to impact VicTrack land, you must notify the site occupier (where relevant) and VicTrack within 24hrs (in writing), or as soon as reasonably practical.

If a pollution event causes or threatens harm to human health or the environment, you are required under the Environment Protection Act 2017 to contact the EPA as soon as practical.

Emergency procedures and contact telephone numbers should be displayed in a prominent area during site works.

VicTrack's 24 hour emergency response telephone number is (03) 9619 1111.

EPA's telephone number is 1300 372 842.

11. Check controls

It is assumed that the control measures implemented will avoid generating dust and surface water run-off from contaminated materials, and therefore, no personal or environmental monitoring is considered necessary.

However, general site inspections should be undertaken to ensure controls put in place to prevent risks are working as intended. It is recommended that you undertake regular site inspections to monitor the condition of your site, confirm monitoring requirements are being undertaken and check the effectiveness of controls. It is recommended that this be undertaken weekly during a soil disturbance project that takes two (2) or more weeks to complete.

Inspections should be documented and recorded, including any actions required to rectify any issues observed or areas of improvement. A general environmental site inspection checklist is provided in **Attachment A**.

If significant dust or odours are generated and cannot be controlled with the above control measures, work should cease until alternative control measures are adopted, or personal / environmental monitoring confirms there are no unacceptable risks to human health.

If unidentified contamination is encountered, the area should be isolated, and the need for personal or environmental monitoring should be assessed before works can recommence.

12. Legislative and regulatory framework

Key Victorian legislation and regulations that apply to the protection of the environment, in particular the Contamination of land, are provided below.

It is the responsibility of all parties working on or occupying VicTrack land and/or using this document to ensure works comply with all relevant legislative requirements and guidance, and whether any approvals or permissions are required in connection with any works undertaken on the land.

This EMP is not intended to override or replace any statutory obligations or requirements which exist in relation to dealing with Potentially Contaminated Soils and VicTrack expects full compliance with the relevant statutory and regulatory regime in relation to such dealings.

Acts of legislation, standards or regulations to which this document relates:

- Environment Protection Act, 2017
- Environment Protection Regulations, 2021
- Environmental Reference Standards including:
    - Ambient air
    - Ambient sounds
    - Land

  - Water
- Occupational Health and Safety Act, 2004
- Occupational Health and Safety (Asbestos) Regulations, 2003
- Occupational Health and Safety Regulations, 2017
- Dangerous Goods Act 1985
- National Environment Protection (Assessment of Site Contamination) Amendment Measure 2013 (No. 1).Australian Standard (AS 4482.1) - Guide to the Investigation and Sampling of Potentially Contaminated Soil, Part 1: Non-volatile and Semi-volatile compounds (Standards Australia, 2005).
- Australian Standard (AS 4482.2) - Guide to the Sampling and Investigation of Potentially Contaminated Soil, Part 2: Volatile Substances (Standards Australia, 1999).
- EPA Publications:
  - 668.1 – Hydrogeological Assessment (Groundwater Quality) Guidelines, 2022
  - 669 – Groundwater Sampling Guidelines, 2022.
  - 888.4 – Guidelines on the design, installation and management requirements for Underground Petroleum Storage Systems (UPSSs), 2015.
  - 1834 – Civil contraction, building and demolition guide, 2020
  - 1968.1 - Guide to classifying industrial waste
  - 2008.2 – Guide to the duty to notify of contaminated land, 2022
- Ministerial Direction No 1 – Potentially Contaminated Land, 2001.
- Department of Sustainability and Environment's (2005) General Practice Note "Potentially Contaminated Land".
- Worksafe Publications:
  - Industry Standard Contaminated Construction Site – Construction and Utilities, 2017.
  - Asbestos-contaminated soil – Guidance Note, 2010.
- AS 5488.1-2019 Classification of subsurface utility information, Part 1: Subsurface Utility Information.

Before use of EPA publications, readers are encouraged to check that the relevant document has not been updated or replaced. Details can be obtained from the EPA's website: www.epa.vic.gov.au.

13. Reference documents

This procedure should be read and applied in conjunction with the following documents:

Document ID	Document Title
PR-GL 004	Soil Reuse Guidelines
-	Lease, licence or access agreement in place between VicTrack and the Site Occupier (where applicable)

14. Document review and approval

Delegation	Name	Position	Version	Date
Owner	Narelle Simons	Group Manager, Environment	3.0	21 June 2023
Reviewers	Narelle Simmons	Environmental Programs Manager	3.0	8 May 2023
	Mo Daud	Environmental Compliance Manager	3.0	12 April 2023
Approver	Narelle Simmons	Group Manager, Environment	3.0	21 June 2023

15. Document history

Version	Amendment description	Author	Date
Version 1.0	Creation and endorsement of document	Environmental Services Group	18/11/2016
Version 2.0	General update of definitions, legislation and regulatory framework. Update of document format / template. Inclusion of responsibilities and emergency response procedures.	Eunjee Vella	08/07/2020
Version 3.0	Update to align with legislation, inclusion of inspection checklist	Madelyn Nunn	23/03/2023

16. Review period

This document will be reviewed at least every two (2) years by the Document Owner, or amended as appropriate.

The content of this document is uncontrolled when printed. The current version of this document is available on The Loop.

Attachment A – Site inspection checklist for soil disturbance works

Inspection Register	
Date:	Time:
Name:	Title/role:
Signature:	

Inspection Details

Attribute	Issue observed (Y/N/NA)	Description/comments	Action required (Y/N)
Has safety documentation been prepared for handling potentially contaminated material?			
Is a copy of the EMP available on site, and workers inducted?			
Has the work zone been defined and secured from public access?			
Are hand washing facilities available?			
Is appropriate PPE being used to minimize direct contact with contaminated material?			
Are any stockpiles being stored: **-away from drains** **-on an appropriate surface** **-in a way to prevent erosion, if rainfall is expected**			
Are wastes stored appropriately? Will the waste be appropriately disposed of offsite?			
No surplus waste? Stockpiled material / soil?			

Attribute	Issue observed (Y/N/NA)	Description/comments	Action required (Y/N)
No dust is escaping the site? **Is dust suppression available, if needed?**			
Have any environmental incidents occurred, and have they been reported to VicTrack and the EPA?			
Have all environmental permissions and agreements been obtained for the site activities? Are the conditions of these (if any) being complied with?			

Action record

Action Item	Person Responsible	Date Action Item completed	Signature

Attachment B - Acknowledgement Register

By signing the below you:

- acknowledge that the land may be contaminated.
- acknowledge you have read and understood the requirements of this EMP
- will implement the requirements of the EMP for soil disturbance works and as required by law

Name	Date	Signature