

Contaminated Land Standard

Approval

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Contaminated Land Standard

1. Purpose

This Standard outlines the requirements for the identification, assessment and management of potentially contaminated land and water within and adjacent to areas where TasNetworks are undertaking work.

The Standard aims to:

- Minimise impact to the environment from the mobilisation of contaminated land and water
- Minimise workers, and current and future site users exposure to contaminated material
- Ensure contaminated soil and water is handled, disposed of and transported in line with relevant legislation.

2. Scope

This Standard applies to everyone working for, or on behalf of TasNetworks with requirements relating to management of potentially contaminated land and water, with the following parameters:

- Soil or water that has been identified as potentially contaminated before planned work is undertaken
- Soil or water that is identified as potentially contaminated during work
- Land that is identified as requiring remediation following a spill or leak from an asset or discovering unanticipated contamination during planned work.

The following situations are outside the scope of this Standard:

- Initial response and clean up to spills from TasNetworks assets that occur during planned work or unplanned (fault) work. This is covered in TasNetworks Spill Response Standard (R0002438322).
- Undertaking unplanned (fault) work, with the exception of implementing the Unanticipated Contamination Finds Procedure as required.

3. Definitions

For the purpose of this Standard, the following definitions have been adopted:

Contamination – A condition or state that represents or potentially represents an adverse health environmental impact because of the presence of potentially hazardous substances

Potentially contaminating activities – activities that have a potential to cause contamination due to the use of potential contaminants during operations.

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Potentially Contaminated Land – land or water that has been impacted by potentially contaminating activities through historical or current activities.

Suitably qualified person – a professional that has the necessary qualifications and experience to assess contaminated land and ensure that risks to human health and the environment have been appropriately managed. To determine how to identify and engage a suitably qualified person, contact the Environment & Sustainability Team.

4. Pre-work assessments & investigations

4.1 Existing reports & information

A customer or land owner may have undertaken contamination studies or assessment reports as part of their development approvals or due diligence. There may also be management plans relating to the work area which outline specific controls to manage the risk of contamination.

These documents can provide important information to TasNetworks and in some cases, TasNetworks may be required to work in accordance with measures prescribed within the documents.¹

TasNetworks and its contractors should endeavour to obtain any documents relating to the identification, assessment or management of contaminated land from customers/landowners prior to works commencing.

The review of these documents must be undertaken by the Environment & Sustainability Team in accordance with the Contaminated Land Risk Assessment Procedure (R0002405017).

4.2 Contaminated Land Desktop Review

A Contaminated Land Desktop Review must be undertaken for ground breaking works with greater than 1m³ of soil removal, in one or more of the following scenarios:

- Works adjacent to or within 20m of potentially contaminated land (refer NetMaps Layer)
- Works within 10m of a TasNetworks ground mounted, oil filled asset that has previously been identified as leaking
- Works on land where the land manager or customer has information relating to potential contamination within or near the work site.

The Contaminated Land Desktop Review can be undertaken by TasNetworks and must consider the following:

- Sources of potential contamination
- Pathways of potential contamination to ecological and human receptors

TasNetworks Contaminated Land Risk Assessment Procedure outlines to process for undertaking a Contaminated Land Desktop Review.

Works where approval is required under the Tasmanian *Land Use Planning and Approvals Act 1993* or the *Major Infrastructure Development Approvals Act 1999* must follow the requirements prescribed under the Act in relation to the identification, assessment and investigation of

¹ Provided these reports/documents align with TasNetworks Standards and legal requirements.

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potentially contaminated land. Therefore, section 4.2 and 4.3 of this Standard do not apply to these works.

4.3 Contaminated Land Assessment

If the Contaminated Land Desktop Review identifies a high risk of intercepting and/or mobilising contaminated land, a Contaminated Land Assessment (**CLA**) must be undertaken by a suitably qualified, external consultant. TasNetworks Contaminated Land Assessment Procedure outlines the criteria for when a CLA is required.

A CLA must include a Preliminary Site Investigation (**PSI**) or site risk assessment. If deemed as required by a consultant, a Detailed Site Investigation (**DSI**) may also be prepared. A PSI and DSI should follow the guidelines for site investigations as outlined in the *National Environment Protection (Assessment of Site Contamination) Measure 1999 (NEPM)*.

Mitigation measures and construction requirements must also be included in a CLA.

4.4 Cost considerations

Management of contaminated material during construction can be costly. To ensure effective management, project costs must reflect the construction & management requirements specified during a Contaminated Land Desktop Review or a CLA.

For customer connections, customer agreements (e.g. Letter of Offer) should reflect the cost responsibility of assessing, investigating, monitoring, sampling and disposing of both expected and unexpected contamination.

5. Construction requirements

A Contaminated Land Desktop Review or CLA may specify site specific construction requirements and mitigation measures. These measures must be included in a site specific Construction Environmental Management Plan (**CEMP**), an environmental considerations report or an addendum to an environmental considerations report.

If no site specific requirements or mitigation measures are specified, or no pre-work assessment or investigation was required (e.g. for work near oil filled assets), the general requirements outlined in this section must be implemented where applicable. These construction requirements may be superseded by a site or work specific risk assessment only when advised by a suitably qualified person.

5.1 Safety

Workers must be aware of the potential safety hazards and risks associated with working near potentially contaminated land prior to starting work. The pre-task risk assessment must document these safety risks and controls. Controls, such as PPE, atmospheric monitoring or alternative work methods may be required so that the risk can be reduced to an acceptable limit. The Unanticipated Contamination Finds Procedure must be implemented as required to manage both the safety and environmental risks associated with encountering unexpected contaminants during work.

5.2 Work near potentially contaminated land

The nature and extent of contamination can be highly variable from site to site. Therefore, where the risk of intercepting potentially contaminated land is high, a site specific environmental

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document (e.g. **CEMP**) will outline the construction requirements and controls to manage the site specific risk.

Where a Contaminated Land Desktop Review deems the risk to be low and/or no site specific controls are deemed necessary, the requirements in [TasNetworks Environmental Handbook](#) must be implemented for the duration of works.

5.3 Work on or near TasNetworks ground mounted assets

TasNetworks ground mounted, oil filled assets may have contaminated the surrounding environment through spills, leakages or failed bunds over the life of the asset. Assets, especially older assets, may have also been constructed on fill material, which itself has the potential to contain contaminated material. This section applies for upgrading, augmenting, replacing or decommissioning oil filled ground mounted asset.

In addition to the requirements outlined in Section 5.1, for ground breaking earthworks involving greater than 1m³ of excavation under, on or within a) **1 m of a ground mounted oil filled asset** or b) **1m of an oil containment system** or 3) **2 m of a SPEL tank**, the soil is considered potentially contaminated and the requirements outlined in this section (5.2) must be implemented.

If the Unanticipated Contamination Finds Procedure is triggered during work, the requirements of the procedure must be followed and soil be managed as deemed appropriate by a suitably qualified person.

The soil removed within the defined distance can be reused at the same depth and location it is removed from. If the soil is not reused, the soil must be sampled by a suitably qualified person (i.e. waste contractor, environmental consultant) and classified in accordance with the Tasmanian EPAs *Information Bulletin No.105, Classification and Management of Contaminated Soil for Disposal (IB105)*.

Soil may be classified before works are undertaken (i.e. in-situ waste classification) under the guidance of a suitably qualified person.

The minimum construction requirements for managing potential contaminated near ground mounted assets are outlined in the Soil Management Near Ground Mounted Oil Filled Assets Work Practice (IMS-WPI13-91).

5.4 Work near Old Town Gas

A number of locations within Tasmania are reticulated with old town gas mains.

Ground breaking works on roadways or footpaths within some suburbs in the City of Hobart, City of Launceston and City of Glenorchy have the risk of intercepting reticulated Old Town Gas mains. Broken Old Town Gas pipes can release cyanide and other harmful gases. The soil around Old Town Gases can also become contaminated.

The following controls must be implemented when undertaking ground breaking work (greater than 1m³) within the Old Town Gas Layer on NetMaps or where other sources have indicated Old Town Gas may be present:

- Gas monitoring for Volatile Organic Compounds (VOCs) and cyanide must be undertaken by a suitably qualified person for the duration of ground breaking works
- Soil that is not reused at the same depth it was removed from must be sampled by an **waste contractor** or **environmental consultant** for classification

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- Excavation must be undertaken using Non Destruction Drilling (NDD) to reduce the risk of damaging Old Town Gas pipes.

In addition to these controls, the management of Old Town Gas risk must be informed but the requirements outlined in the [Consumer, Building and Occupational Services Gas Standards & Safety technical regulation](#).

5.5 Unanticipated Contamination

TasNetworks defines Unanticipated Contamination Finds as contaminated material, land or water that is mobilised or observed during ground breaking works that was not confirmed as being present in a CEMP, CLA report or similar project environmental report prior to work being undertaken.

The Unanticipated Contamination Finds Procedure is required to be implemented to mitigate potential environmental and human health impacts associated with mobilising unexpected contamination and asbestos during work. This Procedure requires work to cease until the risk has been appropriately managed.

6. Waste classification & disposal

Classification and disposal must be undertaken in accordance with the Tasmanian EPAs *Information Bulletin No.105, Classification and Management of Contaminated Soil for Disposal (IB105)*.

Waste must be stored in a secure vessel whilst classification is being undertake as per the requirements in TasNetworks Waste Management Procedure (R0000502101).

Soil/spoil classified as Level 1 material following sampling can be reused on site (within the site land parcel boundaries). A risk assessment must be undertaken by the Environment & Sustainability Team where Level 1 material is proposed to be reused off site.

Where material classified as Level 2 or above is proposed to be reused on site, a formal risk assessment against the relevant NEPM criteria must be undertaken by a suitably qualified person (i.e. environmental consultant) and approval from the EPA is required.

6.1 Transporting contaminated waste

TasNetworks personnel and vehicles must only transport material contaminated with mineral oil or CCA Ash. TasNetworks Controlled Waste Transport Work Practice (IMS-WPI-00-88) must be followed during transportation.

Other contaminated material must be transported by a suitably qualified and licenced person in accordance with the Tasmanian *Environmental Management and Pollution Control (Waste Management) Regulations 2020*.

7. Site Remediation

A site may require remediation if TasNetworks owns land that is identified as being contaminated or if the land is owned by a third party and if the contamination is identified as being caused by TasNetworks operations or assets. Site remediation requirements may be prescribed by the EPA

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as a Remediation Notice or may be recommended by a suitably qualified person (i.e. environmental professional) following a site assessment or risk assessment.

Site remediation must be undertaken under the advice and guidance of a suitability qualified person and should follow the NEPM *Key Principles for Remediation & Management of Contaminated Sites*.

Site remediation reports may be required to be submitted to the EPA by TasNetworks or the third party. All documentation associated with site remediation must be saved in TasNetworks Information Management System.

8. Reporting

8.1 Internal reporting

Any event involving Unanticipated Contamination Finds must be reported within one hour to the Environment & Sustainability Team. These events may be entered in to SAP as an incident as per the requirements in the HSE Incident Management Procedure.

For works near TasNetworks ground mounted, oil filled assets, any waste classification results that detect Level 2 or above must be reported as a potentially contaminated site to the Environment & Sustainability Team. TasNetworks HSE team or a suitably qualified consultant may recommend that a CLA be undertaken or that the site be remediated.

All waste disposal certificates must be saved against the relevant Functional Location (FLOC) in SAP.

8.2 External reporting

Under section 74B of the *Environmental Management and Pollution Control Act 1994* (EMPCA), TasNetworks is required to report contaminated sites to the EPA. A contaminated site is defined under section 74(A) and is paraphrased as:

- Land that contains a pollutant in a concentration above naturally occurring levels, which is (or is likely) to be causing serious or material environmental harm or environmental nuisance
- Land that contains a pollutant in a concentration above naturally occurring levels which is likely to cause serious or material environmental harm or environmental nuisance in the future if not managed appropriately.

These requirements are different from those under section 32, which relate to incidents or process malfunctions resulting in a pollution event. These reporting requirements are captured in TasNetworks Spill Response Standard.

The Environment & Sustainability Team must be notified and consulted prior to reporting to the EPA by any TasNetworks employee.

9. Assurance & Training

9.1 Assurance

Inspections and audits will be undertaken periodically against the requirements outlined in this Standard.

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9.2 Training

Relevant TasNetworks team members will be provided with training and awareness to implement their responsibilities as per this Standard. The training will be reflected in the ESI Competency Matrix and the E&S Training and Awareness Framework. It is the responsibility of Team Leaders to ensure their team members participate in the required training.

Contractors must ensure all their employees are competent and educated to implement the requirements in this Standard and must undertake the required TasNetworks training as per TasNetworks Learning Management System.

10. Related Documents and Compliance Requirements

10.1 Internal documents

Document Number	Document Title
R0000112530	Environment Handbook
R0002403267	Unanticipated Contamination Finds Procedure
IMS-WPI-13-91	Soil Management Near Oil Filled Assets Work Practice
R0002405017	Contaminated Land Risk Assessment Procedure
R0000502077	Hazardous Substances Management
R0000502101	Waste Management Procedure
R0001602080	Incident Management Procedure
R0000112684	Personal Protective Equipment Procedure
R0000793081	Excavation Procedure
R0002302565	ESI Competency and Authorisations Implementation Manual
R0002333457	Environment & Sustainability Training & Awareness Framework

10.2 Compliance requirements

Document Title, Section or Part
Tasmanian <i>Environmental Management and Pollution Control Act 1994 (EMPCA)</i>
Tasmanian <i>Environmental Management and Pollution Control (Waste Management) Regulations 2020</i>
Information Bulletin No.105 – Classification and Management of Contaminated Soil for Disposal, Tasmania EPA

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Document Title, Section or Part
<i>National Environment Protection (Assessment of Site Contamination) Measure 1999 (NEPM).</i>

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11. Document Control

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