



**Conducting an Initial Review by  
Council  
October 2020**

This publication was produced by the Hunter Joint Organisation



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#### Disclaimer

The Guide "*Conducting an Initial Review by Councils*" has been coordinated by the Hunter Joint Organisation. It is designed as a Guide for Councils to consider when conducting Initial Reviews for Planning Applications. The content of this Guide is current at the time of publication. While every effort has been made to ensure accuracy and completeness, no responsibility is taken, nor guarantee given, by the Hunter Joint Organisation with respect to errors or omissions in the materials contained in the Guide. The contents do not constitute legal advice, are not intended to be a substitute for legal advice, and should not be relied upon as such. The Hunter Joint Organisation does not accept any responsibility or liability in regard to your use of any information given in this Guide.

## FOREWORD

This document (“the Guide”) provides guidance on the Initial Review for Contaminated Land matters, to be undertaken by Council for Planning Applications.

Implementing procedures for the management of contaminated land through the land use planning process can assist councils ensure they act in “good faith” with their legislative obligations relating to providing and gathering information.

The document was developed collaboratively with staff from Councils participating in the Regional Contaminated Land Capacity Building Program.

The Guide forms part of a series of guides and resources, developed as supporting documents to the *Model Contaminated Land Policy – Land Use Planning* (Hunter Joint Organisation, 2020). Figure 1 presents this Guide in the context of the document series.

*Advisory notes are included in shaded boxes to provide greater clarity and direction to staff when undertaking an Initial Review.*

**MODEL REGIONAL  
CONTAMINATED LAND POLICY -  
LAND USE PLANNING:  
FOCUS AREAS**

**SUPPORTING RESOURCES  
AND GUIDES**

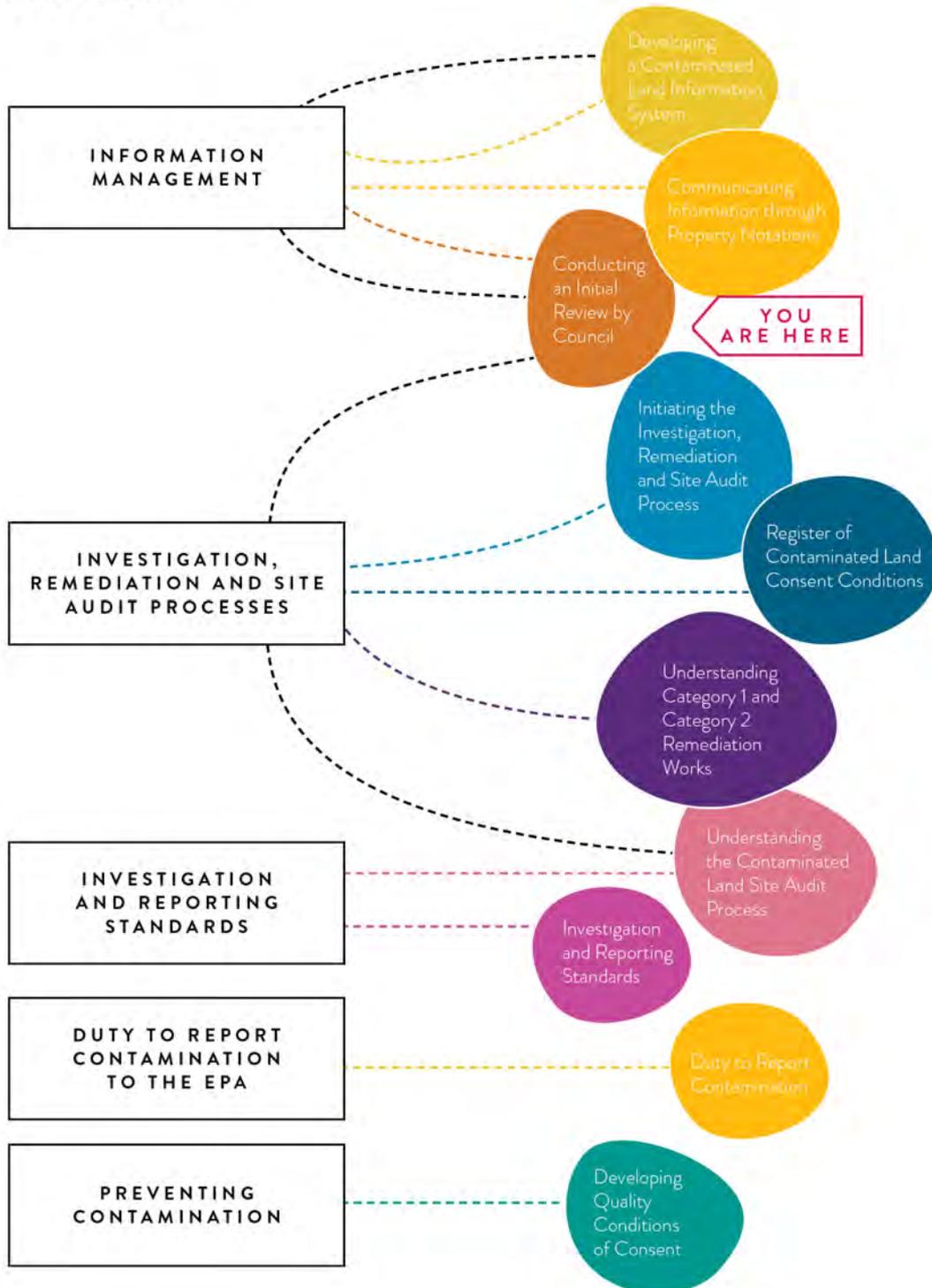


Figure 1. Contaminated Land Resources and Guides, produced as part of the Contaminated Land Capacity Building Program.

## Contents

Key Terms and Acronyms .....	6
Key Legislative Instruments, Regulations, Policies & Guidelines .....	9
1. Introduction .....	10
1.1 What is an Initial Review .....	10
1.2 Links to the Contaminated Land Information System .....	10
2. Procedure to undertake an Initial Review .....	11
2.1 Desktop Review .....	11
2.2 Site Visit .....	11
2.3 Evaluation .....	12
Attachment A - Potentially Contaminating Activities .....	14
Attachment B – List of Considerations for Initial Review .....	18
Attachment C – Information System Review Form .....	19
Attachment D - Site Visit Checklist .....	21
Attachment E - Photographs of Indicators for the Presence of a Clandestine Drug Laboratory .....	30
Attachment F - Photographs of Hydroponic Drug Plantation and Indicators for the Presence .....	41
Attachment G - Photographs of Asbestos .....	42
Attachment H - Photographs of Indicators for the Presence of Underground Petroleum Storage Systems .....	54
Attachment I - Photographs of Items to Note during Site Visits .....	60

## Key Terms and Acronyms

Category 1 Remediation	Remediation works requiring Development Consent
Category 2 Remediation	Remediation works that do not require Development Consent (but must be notified to Council)
Conditions of Consent	Requirements imposed by Council on a development approval to ensure the development complies with required standards. Conditions may apply to both the immediate construction stages of the development and occasionally beyond
Contamination	The condition of land or water where any chemical substance or waste has been added as a direct or indirect result of human activity at above background level, and represents, or potentially represents, an adverse health or environmental impact
Contaminated Land Information Register	A Contaminated Land Register forms part of a Contaminated Land Information System and refers to the register created in a property system to capture data relating to contaminated land
Contaminated Land Information System	A Contaminated Land Information System comprises two components: <ul style="list-style-type: none"><li>• The systematic handling and management of information by Council staff; and</li><li>• A Contaminated Land Information Register.</li></ul>
Contaminated Land Process	<p>The process includes several stages of investigations and actions. The level ultimately required is determined by the circumstances and outcomes from the previous stage.</p> <p>The potential stages of the Contaminated Land Process are:</p> <ul style="list-style-type: none"><li>• Preliminary Site Investigation (PSI)</li><li>• Detailed Site Investigation (DSI): Several reports, such as additional investigations, contamination delineation, monitoring, and/or Site-Specific Risk Assessments may be included in this stage)</li><li>• Remedial Action Plan (RAP)</li><li>• Remediation</li><li>• Validation (including Monitoring if applicable)</li><li>• Ongoing Environmental Management Plan (OEMP) and Monitoring</li></ul>
CLM Act	Contaminated Land Management Act 1997 (NSW)
Detailed Site Investigation (DSI)	An investigation with the objective to define the nature, extent and degree of contamination; assess potential risk posed by contaminants to health and the environment; and obtain sufficient information to develop a Remedial Action Plan (if needed)
Data Quality Indicators (DQI)	Pre-determined indicators used to assess if the data is considered fit for its intended uses in operations, decision making and planning. The typical parameters adopted are Precision, Accuracy, Representativeness, Completeness and Comparability (PARCC)
Data Quality Objectives (DQO)	The DQO Process is a seven-step planning approach used to define the type, quality and quantity of data required to inform a specified decision relating to the environmental condition of a site
Development Application	A development application is a formal request for consent to carry out development and is considered under Part 4 of the <i>Environmental Planning &amp;</i>

*Assessment Act 1979*

Development Consent	Formal approval from Local Councils to proceed with a development. Development Consent is required prior to commencement of any works associated with development governed by Part 4 of the <i>Environmental Planning &amp; Assessment Act 1979</i>
Duty to Report	The duty to report significant contamination to the NSW EPA is a requirement under the <i>Contaminated Land Management Act 1997</i> , with updates provided in the <i>Contaminated Land Management Amendment Act 2008</i> . The triggers for reporting are presented in the <i>Guidelines on the Duty to Report Contamination under the Contaminated Land Management Act 1997</i> (2015)
EPA	Environment Protection Authority
Initial Evaluation	An evaluation undertaken by Council to determine whether contamination is likely to be an issue, and to assess whether further information is required for it to conduct its planning functions in good faith
Land Contamination	Land contamination may be the result of past or current uses. The land may be contaminated by a current or historical land use activity directly on that site or through migration of contamination from adjacent sites. See also definition of “Contamination”
LEP	Local Environmental Plan. An LEP guides planning decisions for Local Government Areas through zoning and development controls, which provide a framework for the way land can be used. LEPs are Planning Instruments from the <i>Environmental Planning &amp; Assessment Act 1979</i>
LGA	Local Government Area
Ongoing Environmental Management Plan (OEMP)	A plan outlining monitoring and management requirements where contamination remains on site, and there is uncertainty as to its potential to migrate; and/or the effectiveness of the management measures implemented to contain the contamination following remediation and validation; and/or monitoring and ongoing management forms part of the remediation strategy
Planning Guidelines	NSW Managing Land Contamination Planning Guidelines – SEPP 55 Remediation of Land (1998)
Planning Application	A Development Application or Planning Proposal made to/by Council in accordance with the <i>Environmental Planning and Assessment Act 1979</i> (NSW)
Planning Proposal	A formal application submitted by Council that proposes to rezone land
POEO	Protection of the Environment Operations Act 1997 (NSW)
Preliminary Site Investigation (PSI)	An investigation to identify any past or present potentially contaminating activities, to provide a preliminary assessment of any site contamination, and if required, to provide a basis for a more detailed investigation
Proponent	The person who puts forward the development application to Council
Quality Assurance/Quality Control Process (QA/QC)	A process used to assess the reliability of field work and analytical results for an investigation
Remedial Action Plan (RAP)	A plan that sets objectives, and documents the process, for remediating a contaminated site
Request for Information	Requests by Council to the Proponent prior to determination of a development application to ensure Council is provided with adequate

	information to determine whether consent can be granted
s10.7 Certificate	Planning Certificate under Section 10.7 of the <i>Environmental Planning and Assessment Act 1979</i> (NSW)
Sampling and Analysis Quality Plan (SAQP)	A document outlining the details for a sampling program, such as the objective(s) and the intended process
SEPP 55	State Environmental Planning Policy No 55 – Remediation of Land
Significantly Contaminated Land	A site is declared Significantly Contaminated Land by the EPA where contamination is considered significant enough to warrant regulation under the <i>Contaminated Land Management Act 1997</i> (with changes made through the <i>Contaminated Land Management Amendment Act 2008</i> ) given the site’s current or approved use
Site Audit	An independent review by a Contaminated Land Auditor, accredited by the NSW EPA, of any or all stages of the site investigation process, conducted in accordance with the requirements of the <i>Contaminated Land Management Act 1997</i>
Site Audit Report (SAR)	A report which summarises the report(s) audited, and provides the Auditor’s opinion and conclusions. A Site Audit Report must be accompanied by a Site Audit Statement
Site Audit Statement (SAS)	A statement which outlines the conclusions of a site audit. A Site Audit Statement must be accompanied by a Site Audit Report
Table 1 of the Planning Guidelines	List of potentially contaminating activities included in Table 1 of the <i>NSW Managing Land Contamination Planning Guidelines</i> (1998)
UPSS	Underground Petroleum Storage Systems are tanks and associated piping, completely or partially buried. Includes piping to or from the tanks to the inlet point of any dispensers. Petroleum also includes ethanol & biodiesel fuels and used oil.
Validation	The objective of the validation stage of the Contaminated Land Process is to demonstrate whether or not the objectives stated in the Remedial Action Plan have been achieved

## Key Legislative Instruments, Regulations, Policies & Guidelines

Contaminated Land Management Act 1997	Sets out the role of the EPA and the rights and responsibilities of parties it might direct to manage land where contamination is significant enough to warrant regulation
Contaminated Land Management Amendment Act 2008	Introduced amendments aimed to allow sites to be cleaned up more efficiently while reinforcing the 'polluter pays' principle
Contaminated Land Management Regulation 2013	Sets out the recovery of administrative costs for the EPA relating to regulated sites and the auditor system. It also sets out timeframes for administrative matters under the <i>CLM Act</i>
Guidelines on the Duty to Report Contamination under the <i>Contaminated Land Management Act 1997</i> (2015)	Details the circumstances that can trigger the requirement to notify the EPA about contamination under Section 60 of the <i>CLM Act</i>
Environmental Planning & Assessment Act 1979	Provides the overarching structure for regulation of planning and development in NSW together with the <i>Environmental Planning and Assessment Regulation 2000</i>
Guidelines produced or adopted by the NSW EPA under s105 of the <i>Contaminated Land Management Act 1997</i>	Provides guidance to stakeholders in the Contaminated Land field on technical, regulatory and management matters. An up-to-date list of guidelines is available on the NSW EPA webpage: <a href="http://www.epa.nsw.gov.au/clm/guidelines.htm">http://www.epa.nsw.gov.au/clm/guidelines.htm</a>
Environmental Planning and Assessment Regulation 2000	Provide the overarching structure for the regulation of planning and development in NSW together with the <i>Environmental Planning and Assessment Act 1979</i>
National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013)	Establishes a nationally consistent approach to the assessment of site contamination to ensure sound environmental management practices by the community which includes regulators, site assessors, site auditors, landowners, developers and industry
NSW Managing Land Contamination Planning Guidelines – SEPP 55 Remediation of Land (1998)	The Planning Guidelines support SEPP55 and address the policy framework, identification and investigation of contamination, the decision-making process, management of contaminated sites and remediation, information management, and principles for proactively preventing future contamination
State Environmental Planning Policy No 55 – Remediation of Land	Ensures planning decisions take into account possible land contamination, and promotes remediation to reduce risk of harm

# 1. Introduction

An Initial Review (also referred to as Initial Evaluation) is to be completed by Council for all land use Planning Applications (which is included as a policy statement in the *Model Contaminated Land Policy – Land Use Planning*, Hunter Joint Organisation, 2020). The Initial Review aims to determine whether contamination needs to be addressed during the assessment of a Planning Application (as required by clauses 6 and 7 of SEPP 55), and to therefore determine whether further information is required for Council to conduct its planning functions in good faith.

## 1.1 What is an Initial Review

An Initial Review is a desktop-based evaluation of readily available factual information provided by the applicant and other information about potential contamination available to Council, and also includes a Site Visit. An Initial Review should be carried out regardless of the nature of the proposed use or the current use. Where needed, Council will then require further information from the proponent if it is unsure that the land is, or can be made, suitable for the proposed land use, re-zoning or development.

## 1.2 Links to the Contaminated Land Information System

In accordance with the *Model Contaminated Land Policy – Land Use Planning* (Hunter Joint Organisation, 2020), Council is to develop and maintain a Contaminated Land Information System. The system comprises both the systematic handling and management of information by Council staff, and a Contaminated Land Information Register.

One of the applications of the Contaminated Land Information Register is to provide Council with easy access to reliable information when undertaking an Initial Review, and to record the outcomes of the Initial review in the system. This will promote accuracy, consistency and efficiency in contaminated land management through the planning process by Council.

It is anticipated that Councils will include their registers as part of their property management systems. Information on the development and requirements of a Contaminated Land Information System is provided in *Developing a Contaminated Land Information System* (Hunter Joint Organisation, 2020).

*Advisory note:*

*The level of information included in Council's Contaminated Land Information Register will vary between Councils. Some Councils may have all information available to it included in the Register, whereas other Councils may have decided to gradually enter the information as the properties are addressed through the planning process. Council officers must inform themselves of their Council's specific approach to understand if they need to seek further sources of information for the Initial Review.*

## 2. Procedure to undertake an Initial Review

There are three parts to an Initial Review:

1. Desktop review
2. Site Visit
3. Evaluation

These are described in below Sections 1.3.1 – 1.3.3.

### 2.1 Desktop Review

The first point of information for the desktop review should be Council's Contaminated Land Information Register. For some Councils, this may be the only source of information they need to go to for the review, whereas for other Councils, further sources may need to be sought. The Contaminated Land Information Register should include clear information relating to what sources have been used for the information about the property. This will allow Council to check if further information sources are needed for the purpose of the Initial Review. According to the *Managing Land Contamination Planning Guidelines 1998*, information sources may include:

- Current zoning and permissible uses
- Records from previous rezonings
- Development applications and building applications for the site
- Property files
- Information provided by the proponent such as a development application or rezoning request or an investigation
- Historic Imagery
- The knowledge of council staff.

Information provided by the proponent should be checked against information held by the Council, including information about adjacent sites.

The *Managing Land Contamination Planning Guidelines 1998*, also provides a list of information to consider in an Initial Review, which forms the basis of the list include in Attachment B.

### 2.2 Site Visit

Council can undertake a site visit as part of the Initial Review, which is a means to obtain further valuable information about the potential contamination status of the site. An information review form for extracting information from an information system is included in Attachment C. A site visit checklist for contamination is included in Attachment D. The checklist contains questions about several types of indicators of contamination, and of contamination types. To assist Council determine if such signs are present, photographs of examples are included in Attachment as follows:

- Attachment E - **Clandestine Laboratories** (mainly methamphetamine): The chemical process of manufacturing illicit drugs can cause contamination of buildings and surrounding areas, and result in significant health risks
- Attachment F - **Hydroponic Drug Plantations**: illegal drug plantations have the potential to cause contamination both in buildings and the surrounding areas
- Attachment G - **Asbestos**: Asbestos was historically used in several building materials, which remain in buildings and structures today. Typical ways of causing asbestos contamination is poor construction, handling, and demolition, or illegal dumping and disposal.
- Attachment H - **Underground Petroleum Storage Systems**: Land and groundwater contamination arising from leaking Underground Petroleum Storage Systems is a common issue, and can be left unnoticed for periods of time due to its underground location.

- Attachment I - **Other items to note on Site Visits:** Other items to look for that are included on the Site Visit Checklist are, for example, groundwater monitoring wells, bore water pumps, presence of uncontrolled fill and slag, and poor storage of chemicals or hazardous materials.

*Advisory notes:*

1. *If any equipment, chemicals, waste materials or operations are identified that are suspected to be associated with a clandestine drug laboratory or hydroponic plantation, the Council Officer should immediately leave the site (without touching or handling anything) and inform the police.*
2. *If the person undertaking the inspection is unsure of the content of bonded materials, then assume it is asbestos. If asbestos material is found, the Council Officer is to leave the Site and contact their supervisor to determine next course of action.*

It should be noted that the *Managing Land Contamination Planning Guidelines 1998* does not suggest site visits as a mandatory requirement for all Planning Application. As such, it is up to each individual Council to determine when a site visit is needed.

## 2.3 Evaluation

Based on the information gathered from the desktop review and site visit (if undertaken), Council is to evaluate if there is sufficient information relating to contamination to determine if the site is, or can be made, suitable for the proposed land use, re-zoning or development.

Where Council identifies that contamination is, or may be present, the Proponent must investigate the Site and provide Council with the information it needs to carry out its planning functions. The extent of the Contaminated Land Process needed will depend on the circumstances and outcomes of each stage, and may involve one or more of the following stages:

- Preliminary Site Investigation
- Detailed Site Investigation (additional investigations such as delineation assessments, Risk Assessments, monitoring etc. may be needed in this stage)
- Remedial Action Plan
- Remediation
- Validation including monitoring if needed
- On-going Environmental Management Plan
- On-going monitoring / management
- Site Audit

The *Register of Contaminated Land Consent Conditions* (Hunter Joint Organisation, 2020) outlines each step of the Contaminated Land Process and provides model wording for “Requests for Information” and “Conditions of Development Consent”. Guidance and procedures for Council to initiate investigations through the planning process are provided in *Initiating the Investigation, Remediation, and the Site Audit Process* (Hunter Joint Organisation, 2020).

*Advisory notes:*

*In accordance with the Managing Land Contamination Planning Guidelines 1998, examples of when Council may need to seek further information are:*

- The subject site or land in the vicinity is, or may be, associated with activities listed in Table 1 (Attachment A) [or other potentially contaminating activities known to Council] but it is not known whether contamination exists*
- The land was, or is, regulated by the EPA or other regulatory authority in relation to land contamination, and there is insufficient information available about the nature and extent of contamination*
- The land has been investigated or remediated but there is insufficient information available about the nature and extent of contamination, or the circumstances have changed*
- There are restrictions on, or conditions attached to, the use of the site by regulatory or planning authorities that are, or may be, related to contamination, but there is insufficient information available about the nature and extent of contamination*
- Council records have demonstrated that the land is associated with complaints about pollution or illegal dumping of wastes, but it is not known whether contamination exists*
- A use such as residential, educational, recreational, hospital or childcare is proposed on the land and records on the site history are unclear about whether the land has been used in the past for a purpose listed in Table 1 (Attachment A) [or other potentially contaminating activities known to Council]. A site history may be 'unclear' if there are significant gaps in historical information, or land uses are not described in sufficient detail to identify the presence or absence of uses listed in Table 1 during periods in which such uses were permissible under the zoning.*

*An example of when Council may **not** need more information to make a decision about previously investigated or remediated land if sufficient information has already been provided. However, proposals on such land should be carefully managed through the planning and development control process. The nature, distribution and levels of residues remaining on the land need to be considered when a planning authority makes a planning decision.*

## Attachment A - Potentially Contaminating Activities

Source: Managing Land Contamination. Planning Guidelines SEPP 55 – Remediation of Land (1998)

**Table A1. Some Activities that may Cause Contamination**

- acid/alkali plant and formulation
- agricultural/horticultural activities
- airports
- asbestos production, disposal and demolition
- chemicals manufacture and formulation
- defence works
- drum re-conditioning works
- dry cleaning establishments
- electrical manufacturing (transformers)
- electroplating and heat treatment premises
- engine works
- explosive industry
- gas works
- iron and steel works
- landfill sites
- metal treatment
- mining and extractive industries
- oil production and storage
- paint formulation and manufacture, including lead paint contamination
- pesticide manufacture and formulation
- power stations
- railway yards
- scrap yards
- service stations
- sheep and cattle dips
- smelting and refining
- tanning and associated trades
- waste storage and treatment
- wood preservation

**Note:** It is not sufficient to rely solely on the contents of this Table to determine whether a site is likely to be contaminated or not. This Table is a guide only. A conclusive status can only be determined after a review of the site history and, if necessary, sampling and analysis.

**Table A2. Activities associated with PFAS contamination due to a risk of fire**

Activity	Description
Airports and aviation infrastructure	On-site firefighting - see also further information below
Aluminium production	On-site firefighting
Battery production	On-site firefighting- see also further information below
Bitumen production	Kerosene use and storage
Brewing, distilling and refining	Ethanol production
Coal works	On-site firefighting
Dangerous goods production	On-site firefighting - likely to use specialised firefighting products and systems due to the presence of a range of hydrocarbons, polar solvents etc.
Explosives production	On-site firefighting - explosions
Food production	On-site firefighting associated with use of bulk oils and solvents - see also further information below
Fuel exploration, assessment, production, transport and storage including petrochemicals, other fossil fuels and renewable liquid fuels	On-site firefighting, also used as a surfactant for gas well stimulation
General chemical storage	On-site firefighting - likely to use a range of hydrocarbons, polar solvents etc.
Generation of electrical power	On-site firefighting - see also further information below
Hardware retailers	Firefighting foam deluge systems - see also further information below on the construction industry
Mining	On-site firefighting
Paints, polishes, adhesives production	On-site firefighting- see also further information below
Petroleum products other than fuels	On-site firefighting, potential use in processing
Underground infrastructure including car parks and tunnels	Firefighting foam deluge systems

**Table A3. Activities associated with PFAS contamination more broadly**

Activity	Description
Agriculture	Potentially used as an adjuvant or active ingredient in fertilisers and pesticides, firefighting foam used in the poultry industry to destroy infected flocks
Automotive industry including retailing, detailing and car wash facilities	Surface treatments including polishing, cleaning, stain and water protection products, lubricants, hydraulic fluids, tubing, oil pan, head gaskets, sealant, wire and cabling, fire retardant and metal plating applications
Aviation, aerospace and defence	As for automotive industry plus aviation-specific products, articles and activities, such as aviation hydraulic fluid
Battery use and disposal	Used in batteries, particularly for high-end use such as lithium-style batteries
Boating and marine supply industry	As for automotive industry plus marine-specific products, articles and activities, such as awnings, painting, waterproofing and sealant applications, and shipboard firefighting
Chrome/metal plating industry	High concentration PFAS mist suppressants used to reduce chromium exposure to workers
Commercial laundries and dry cleaners	Effluent from cleaning of fabrics containing or treated with PFAS
Construction industry	Tile coatings, stone coatings, paints, varnishes, sealants, other architectural coatings for films, facades and infrastructure, rigid foams, silicone rubber, thread sealant tapes and pastes and PPE
Electricity, telecommunication and information technologies	Wireless devices, hard drives, fibre optic cables, dirt-repellent coatings on glass surfaces such as smartphone screens, flame-resistant devices, fittings, coatings and wrappings, semiconductor etching, firefighting at electricity generation sites and in electricity distribution networks with oil-containing equipment such as transformers, reactors, large regulators, circuit breakers, pipe-type cable systems and bulk storage tanks, reported to be in high-end lithium batteries
Firefighting and fire protection sales and services	Storage and disposal of large quantities of firefighting foam associated with formulation, transport, sale and servicing of firefighting and fire protection products and services including refurbishment of deluge systems and fire extinguishers at fire protection retailers, rural supply stores, council depots and outstation service centres
Manufacturing of building products	As for construction industry
Manufacturing of chemicals, fertilisers and pesticides	Equipment and fittings including pipes, tanks and valves, use as an intermediate in the production of other substances, potentially used as an adjuvant in fertilisers and pesticides

Activity	Description
Manufacturing of food, food packaging and food preparation products	Baking paper, aluminium foil, fast food wrappers, non-stick equipment including food processing facility surfaces, pipes, tanks and valves, and firefighting especially at facilities where bulk oil is used
Manufacturing of healthcare products	Surface protection for medical garments, small quantities in X-ray film, charged-coupled devices (CCDs), artificial blood, flexible tubing, needle coatings, denture cleaners, potentially in contact lenses
Manufacturing of household appliances	Heaters, heat lamps, irons, stoves, refrigerators, other flammable components, and high-end (lithium) batteries
Manufacturing of personal care products	Cosmetics, shampoo, shaving cream, dental floss, sunscreen, nail polish, talc, lotions
Manufacturing of textiles, leather, upholstery, carpets, clothing, shoes, outdoor gear	Widespread use of fluorinated compounds to provide stain, water and fire protection
Manufacturing of safety gear	Widespread use of fluorinated compounds to provide stain, water and fire protection for Personal Protective Equipment (PPE) and bulletproof clothing
Manufacturing of paints, polishes, coatings and adhesives	Historically used in sealants, adhesive products, coatings, paint and varnishes
Manufacturing of paper or pulp	Used in internal and surface sizing agents for paper manufacturing
Printing, packaging and merchandising	Used to apply grease, oil and water resistance to packaging product, also used in inks particularly for inkjet and photo printing
Recovery of waste oil	Collection and processing of PFAS-containing waste oil
Soap and detergents production	Household goods such as shampoos and cosmetics, commercial and industrial cleaning products such as floor polishes and vehicle cleaning agents
Solar energy	Used in photovoltaic solar cells to repel dirt and in lithium batteries
Sporting goods manufacturers and suppliers and sports facilities	Ski wax, high performance textiles including outdoor clothing, water-resistant treatments
Waste processing and disposal	PFAS-containing solid and liquid waste and leachate in landfill, high temperature incineration, chemical and other treatment regimes
Waste storage - hazardous, restricted solid, liquid, clinical, asbestos waste	On- and off-site storage and/or collection of waste PFAS-containing products
Wastewater treatment	Inputs from domestic sewage and commercial and industrial wastewater and outputs applied to land or discharged to the environment

## Attachment B – List of Considerations for Initial Review

This list of questions and considerations is a guide to the nature of information appropriate for consideration during an Initial Review and includes the considerations outlined in the *Managing Land Contamination Planning Guidelines 1998*.

- ✓ Is Council aware of any previous investigations about contamination on the land? What were the results, including any previous initial evaluations?
- ✓ Is there an environmental management plan (e.g. on-site containment of contamination or an on-going monitoring of contamination) within the site?
- ✓ Do existing records held by Council show that a potentially contaminating activity listed in Table 1 of the planning guidelines (refer Attachment A), or any known emerging contaminants or contaminating activities has ever been approved or carried out on the subject land? (Note that whilst records held by other authorities or libraries are not required to be sought for an initial review, they may form part of the sources for Councils Contaminated Land Information System and thereby be available to Council during the Initial review).
- ✓ Was the subject land at any time zoned for industrial, agricultural or defence purposes?
- ✓ Is the subject land currently used for a potentially contaminating activity (as per Table 1 of the planning guidelines refer - Attachment A, or any other potentially contaminating activities known to Council)
- ✓ To Council's knowledge was, or is, the subject land regulated through licensing or other mechanisms in relation to any potentially contaminating activity listed in Table 1 of the planning guidelines (refer Attachment A), or any other potentially contaminating activities known to Council?
- ✓ Are there any land use restrictions on the subject land relating to possible contamination, such as orders or notices issued under the *Contaminated Land Management Act 1997*.
- ✓ Does a site inspection conducted by Council suggest that the site may have been associated with any potentially contaminating activities listed in Table 1 of the planning guidelines (refer Attachment A), or any other potentially contaminating activities known to Council?
- ✓ Is Council aware of information concerning contamination impacts on land immediately adjacent to the subject land which could affect the subject land?
- ✓ Are there known to be ambient background levels of substances present that present a risk of harm to human health or to any other aspect of the environment?

Once all the information is gathered and evaluated, the question is:

- ✓ **Is there sufficient information for Council to be confident that the land is, or can be made suitable (during the development process) for the proposed land use or re-zoning?**

If not, more information needs to be requested by the Proponent through the Planning Process.

## Attachment C – Information System Review Form

This review form can be used by Councils as part of the Initial Review process. The form captures information kept in the Contaminated Land Information System (or alternate information system). Once filled out, the document should also be kept in the Contaminated Land Information System (or alternate information system) for future references.

<b>Date:</b>		<b>DA No.</b>	
<b>Address:</b>			
<b>Contaminated Land Information System Ref.</b>			
<b>Land Contamination Category (please tick)</b>	<b>Category 1</b> – No indication of contamination		
	<b>Category 2</b> – Not contaminated		
	<b>Category 3</b> – Decontaminated		
	<b>Category 4</b> – Possibly contaminated		
	<b>Category 5</b> – Contaminated – restricted use		
	<b>Category 6</b> – Remediated for restricted use		
	<b>Category 7</b> – Contamination – no known remediation undertaken		
	<b>Category 8</b> – Regulated by the NSW EPA		

### Applicable Documentation Check:

Document Type	Received (Y/N)	Record Ref.
Preliminary Investigation undertaken		
Detailed Investigation undertaken		
Remedial Action Plan (RAP)		
Evidence of Remediation Efforts		
Validation Report		
Ongoing Environmental Management Plan and Monitoring		

**Further Assessment Required:**

Report Provided by Applicant		Report Type	
Date Received		Record Ref.	
Comment:			

**General comments on the site:**

(e.g. groundwater issues present if digging on site, not suitable for livestock)

## Attachment D - Site Visit Checklist

This checklist can be used by Councils for Site Visits to be undertaken as part of the Initial Review. The checklist captures information relevant to the planning process and asks questions about potential signs of contamination and potentially contaminating activities. Once filled out, the document should be kept in the Contaminated Land Information System for future references. A site Plan and photos should be attached to the document.

<b>Site Visit Checklist: Contamination</b>	
This checklist outlines considerations for Site Visits undertaken by Council as part of the Initial Review of potential Site Contamination for Development Applications and Rezoning Proposals.	
<b>Property Details:</b>	
Address:	
Development Application / Rezoning Proposal reference no:	
Council Inspectors Name:	Date:
<i>To fill out prior to site attendance:</i>	
<b>Site Description:</b>	
Sites current land use (e.g. Residential, agricultural, scrap yard, day care centre, industrial etc):	
Is this an activity either listed in Table 1 of the Planning Guidelines, or is another type of known potentially contaminating activity?	
<input type="checkbox"/> YES <input type="checkbox"/> NO	
Any relevant local sensitive environments on Site (e.g. rivers, lakes, creeks, wetlands, local habitat areas, endangered flora and fauna)?	

**Description of Surrounding Land Uses:**

North:

South:

East:

West:

Are any of these activities either listed in Table 1 of the Planning Guidelines, or are other known potentially contaminating activities?

YES

NO

*To fill out during site attendance (NOTE: Take photos of the site)*

**Weather conditions at time of inspection:**

**Site Description:**

Conditions at site boundary such as type and condition of fencing, soil stability and erosion, signs of migrating contamination across boundaries:

Describe the conditions of buildings and infrastructure:

**Description of Surrounding Land Uses:**

Details of any relevant local sensitive environments discovered during the site visit (e.g. rivers, lakes, creeks, wetlands, local habitat areas, endangered flora and fauna).

**Clandestine Drug Laboratories or Hydroponic Plantations:**

***IF ANY EQUIPMENT, CHEMICALS, WASTE MATERIALS OR OPERATIONS ARE IDENTIFIED THAT ARE SUSPECTED TO BE ASSOCIATED WITH A CLANDESTINE DRUG LABORATORY OR HYDROPONIC PLANTATION, THE COUNCIL OFFICER SHOULD IMMEDIATELY LEAVE THE SITE (WITHOUT TOUCHING OR HANDLING ANYTHING) AND INFORM THE POLICE.***

	Yes	No	Comments (description, location)
Windows blacked out or blocked, and strange or unusual ventilation			
Presence of unusually high level of security			
<b>Clandestine Drug Laboratories (mainly methamphetamine laboratories):</b>			
Sharp, biting odour resembling geranium leaves (can indicate the presence of meth-base)			
Strong odours of acetone, ammonia, solvents or sour "cat urine" type odours			
Heating devices such as camp stoves and hot plates			
Coffee filters, sheets, pillowcases or old clothing with a white pasty substance, red sludge or crystals			
Large number of matches			
Large number of cold and flue tablet packages			
Jars or containers (often modified) filled with clear liquid with white or red solids at the bottom, or containers with two layered liquids (one darker and one more pale)			
Presence of containers either empty or full (labelled as acids, starter fluids, rubbing alcohol, solvents)			
Presence of caustic drain cleaners/openers, iodine containers or crystals, instant cold packs			
Burns, powder residues, crystalline residues on benches			
Propane tanks with fittings that have turned blue			
Presence of various jars, glassware (including round or flat bottom flasks)			
Presence of tubing, pumps, coffee grinder, compressed gas tanks			
Presence of staining in drains, sinks and toilets			
Presence of unusual pH – either very low (from the dumping of acids or acidic waste products which is most common) or high (from the dumping of alkali compounds such as sodium hydroxide)			
Disposal of containers and waste associated with the above descriptions			

<b>Hydroponic Plantations:</b>			
Unusual or offensive odours – a distinctive smell of rotting cabbage or a sweet vegetative odour can indicate the presence of a hydroponic plantation. Sometimes the resident may try to disguise these odours with mothballs and air fresheners			
Heavy condensation on windows and doors			
Unusually bright lights			
Presence of isopropyl or other alcohol			
<i>If you answer “yes” to any of the FOLLOWING, please take, and attach, photos</i>			
<b>Asbestos:</b>			
<i>NOTE: if the person undertaking the inspection is unsure of the content of bonded materials, then assume it is asbestos. When asbestos material is found, the Council Officer is to leave the Site and contact their supervisor to determine next course of action.</i>			
	Yes	No	Comments (description, location)
Existing asbestos structures (sheeting, roofing, pipes)			
A. Flaking, faded or deteriorated paint over asbestos			
B. Asbestos damaged, cracked, pitted or fibrous			
C. Asbestos pipes exposed			
Asbestos materials stored on site			
Pieces of asbestos or bonded fibrous cement materials found on grounds			
<b>Evidence of Underground Petroleum Storage Systems (UPSS):</b>			
	Yes	No	Comments (description, location)
Service station, marina, or emergency services site			
Bowsers, or bowser island with bowsers removed			
Non sewage vent pipes			
Fill point for petrol (can be concreted over)			
Awnings indicating former service stations			
Old Shop front Façade			
Historical post office			
Kerb design with one driveway in and one out			
Sign infrastructure indicating a historical service station			
Cuts in concrete, or different coloured concrete patches			

<b>Site Condition</b> (both on-site and off-site adjacent to site boundary):			
	<b>Yes</b>	<b>No</b>	<b>Comments</b> (description, location)
Presence of surface water / pooling water with signs of contamination (such as an oily sheen on the water surface)			
Bare soil patches			
Disturbed, coloured or stained soils			
Disturbed or distressed vegetation			
Evidence of spills or leaks			
Fill materials containing building rubble, metal, ash, slag, or other unnatural materials			
Gullies or erosion channels on site filled with unclassified / unverified materials			
Evidence of buried waste			
Evidence of fires			
Waste of Industrial origin stored on Site (e.g. ash, slag)			
Stockpiles of unclassified materials			
Staining on concrete slabs			
Cracked concrete slabs			
Saw cuts in concrete and variations in concrete types and colours			
Flaking or cracked lead-based paints			
Evidence of former buildings or structures			
Inappropriately stored chemicals, hazardous goods or materials			
Degraded containers (drums, paint cans, pesticide containers)			
Other:			
<b>Site Contents</b>			
	<b>Yes</b>	<b>No</b>	<b>Comments</b> (description, location)
Sumps (include for what purpose, if known)			
Aboveground storage tanks (include what is stored, if known)			
Bunding around chemical storage areas (include comment regarding the appropriateness of the bunding)			
Grease traps			
Industrial Equipment (identify type, if known)			
Machinery or plant storage areas			

Chemical storage areas (including herbicides and pesticides)			
Sheds or storage areas			
Workshops (i.e. mechanical, wood, painting, fiberglass)			
Groundwater bores for irrigation, or for monitoring (indicate use in the comment section, if known)			
Waste disposal area			
Vehicle graveyard			
Fertilizer storage areas			
Grit blasting areas			
Electrical substation or transformer station			
Other:			
<b>Odours</b>			
	<b>Yes</b>	<b>No</b>	<b>Comments (description, location)</b>
Are there odours on the site?			
A. Sweet (can indicate phenols)			
B. Sweet to sour chemical smelling (can indicate solvents)			
C. Petrol / oil odour (indicate hydrocarbons)			
D. Nail polish remover/cleaning products (can indicate, for example, ammonia)			
E. Mothballs (can indicate naphthalene in, for example, coal tar)			
F. Rotten egg - hydrogen sulphide (can indicate acid sulfate materials, or sewage treatment systems)			
G. Others chemical like odours (describe smell if possible):			

Questions for Land Holder / Staff (former and/or current)			
Name and contact details of person(s) interviewed:			
	Yes	No	Comments (description, location)
Are you aware of any land contamination/pollution events occurring at the site? If so:			
A. Where on site did it occur?			
B. What was the source of pollution?			
C. How was it cleaned up?			
D. Was Council informed?			
E. Were other agencies involved?			
Are you aware of any spills or contamination on the neighbouring properties? If so:			
A. Where on their property did it occur?			
B. What was the source of pollution or contamination?			
C. How was it cleaned up?			
D. Was Council or other agencies involved?			
If agricultural lands; what are the main land uses/crops?			
Do you use, or have historically used, any pesticides, herbicides and/or fertilisers? If so, which type?			
Are there, or were there historically, any chemicals stored on site? If so, what types and where are they stored?			
Have any buildings or structures been demolished? If so, where were they historically located?			
Are there, or were there historically, any known hazardous building materials in buildings on the site. (asbestos, lead, PCBs, etc.)			
Are there, or were there historically, any underground or above ground tanks on the site (sumps, grease traps, petroleum tanks)			
Has fill materials been used on the site?			
Is vehicles/machinery work conducted on this site?			
Is there, or has there historically been, an old pump sheds with diesel pumps or fuel storage located on site			
Has there been a fire on the site? (If so, is it known if fire fighters used foam to extinguish it?)			
Has there been a flood through the site?			
Are ground/surface waters used for irrigation or drinking water (or other)? If so, where are the bores/pumps located			

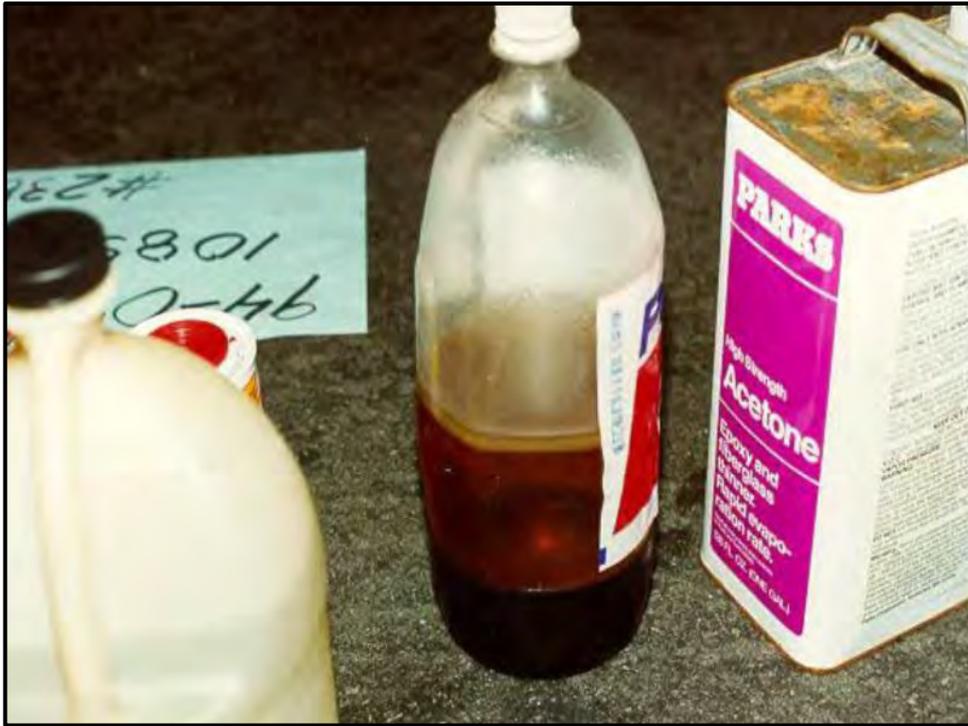


## Attachment E - Photographs of Indicators for the Presence of a Clandestine Drug Laboratory

The following photographs are from *NSW Remediation Guidelines for Clandestine Drug Laboratories and Hydroponic Drug Plantations* (Jackie Wright, Environmental Risk Sciences Pty Ltd and Flinders University, 2015)

### Potential Indicator Indoors:











*Indicators of Potentially Dumped Waste or Manufacturing Outdoors:*















## Attachment F - Photographs of Hydroponic Drug Plantation and Indicators for the Presence

The following photographs are from *NSW Remediation Guidelines for Clandestine Drug Laboratories and Hydroponic Drug Plantations* (Jackie Wright, Environmental Risk Sciences Pty Ltd and Flinders University, 2015)



**Image F1:** Hydroponic drug plantation



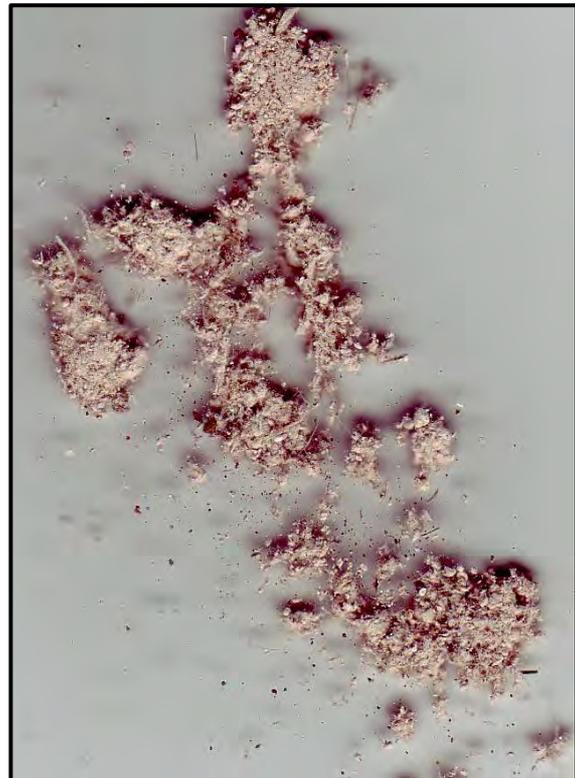
**Image F2:** Moisture and mould damage after a hydroponic drug plantation

## Attachment G - Photographs of Asbestos

The following photos were provided by Linda Apthorpe, Pickford & Rhyder Consulting, Hibbs and Associates, and <http://asbestosawareness.com.au/resources-downloads/downloads/>.



**Image G1:** none friable asbestos



**Image G2:** Friable asbestos insulation



**Image G3:** Asbestos pipes



**Image G4:** Asbestos pipes



**Image G5:** Two types of asbestos roofs and gutter



**Image G6:** Asbestos roof sheeting



Image G7: Broken asbestos in wall



Image G8: Friable asbestos insulation



**Image G9:** Friable asbestos insulation



**Image G10:** Friable asbestos insulation



**Image G11:** Friable asbestos debris after water blasting an asbestos roof



**Image G12:** Friable asbestos debris after water blasting an asbestos roof



**Image G13:** Friable asbestos debris after water blasting an asbestos roof



**Image G14:** Friable asbestos debris after water blasting an asbestos roof



**Image G15:** Illegal dumping of asbestos



**Image G16:** Asbestos pieces on the ground



**Image G17:** Asbestos pieces on the ground



**Image G18:** Asbestos debris on ground



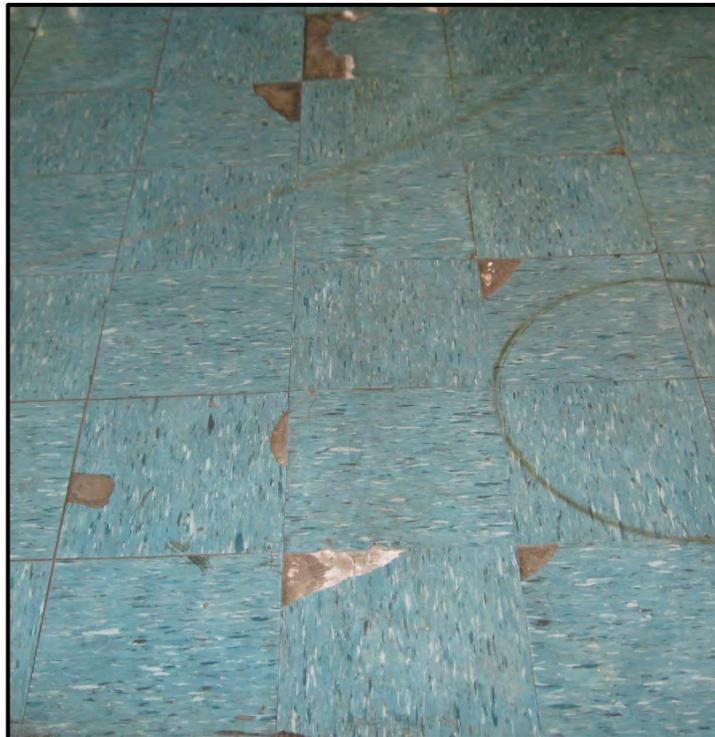
Image G19: Asbestos in electrical board



Image G20: Asbestos containing cement in electricity pits



**Image G21:** Loose fill asbestos



**Image G22:** Asbestos vinyl floor tiles



**Image G23:** Asbestos walls and ceiling



**Image G24:** Asbestos shed



**Image G25:** Molded asbestos sheeting



**Image G26:** Asbestos in glue behind wall tiles



**Image G27:** Asbestos eaves and downpipe

## Attachment H - Photographs of Indicators for the Presence of Underground Petroleum Storage Systems

Photos were collected by the Hunter Joint Organisation or were provided by Dungog Shire Council, and the NSW EPA



Images H1, H2, H3 and H4: UPSS Fill Points



Images H4 and H5: UPSS Vent Pipes



Image H6: Awning, shop front, and kerb design indicate former service station

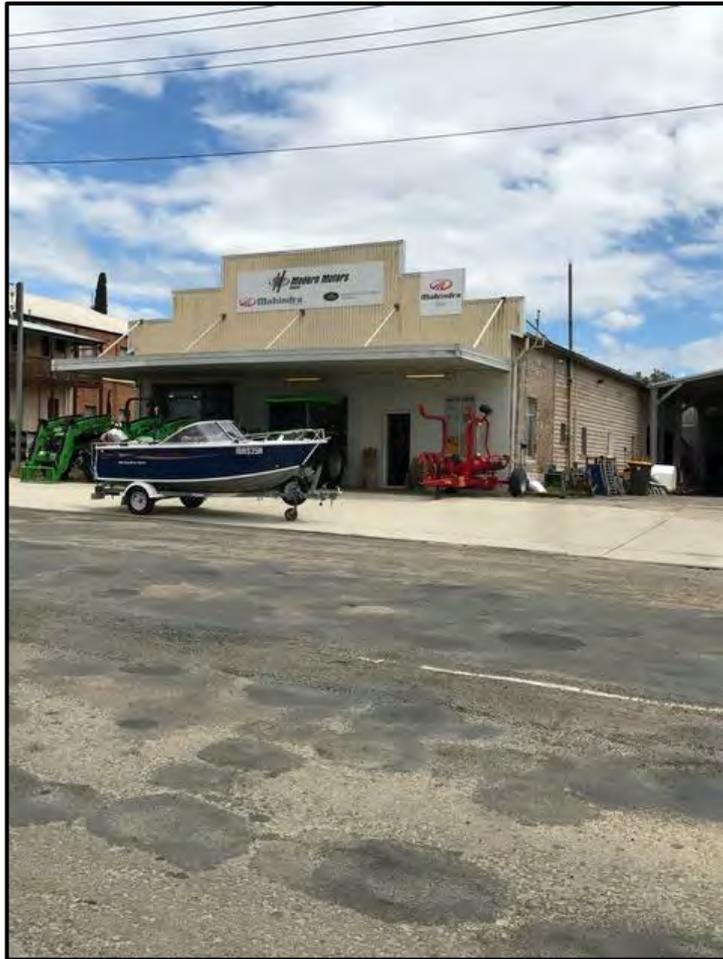


Image H7: Façade, awning and kerb design indicating former service station



Image H8: Fill points on footpath



**Image H9:** Bowser behind shed



**Image H10:** Post offices in small towns historically often sold petrol. Sign infrastructure to the right of the building and fill points in the footpath are further indications of potential UPSS present.



**Image H11:** The awning, former bowser island, and kerb design indicate a former service station, and potential presence of UPSS.



**Image H12:** Façade (shop front), remaining vent pipes and bowser island indicate that UPSS is present.



Image H13: Fill point outside a house

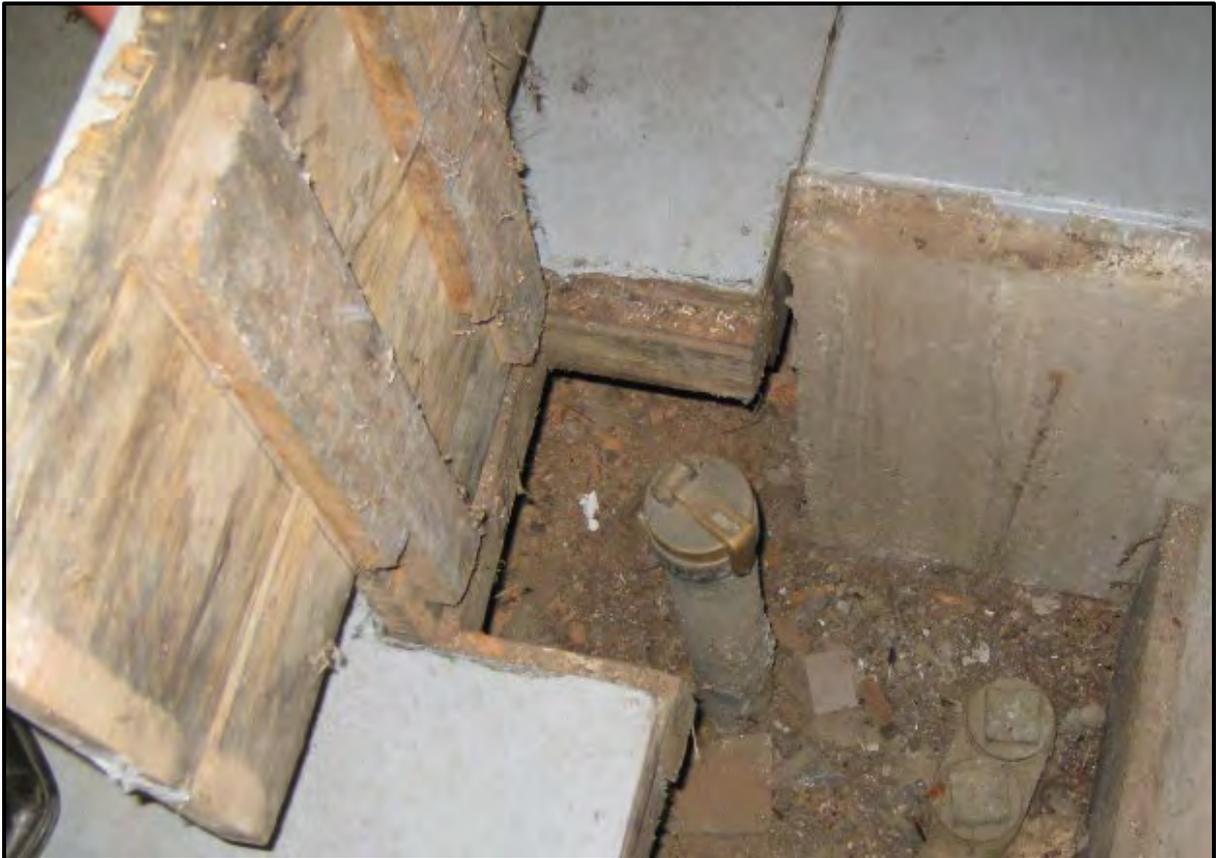


Image H14: Fill point under flooring in a house

## Attachment I - Photographs of Items to Note during Site Visits

Photos collected by the Hunter Joint Organisation, and provided by Lake Macquarie Council



**Image I1:** Hydrocarbon staining on concrete



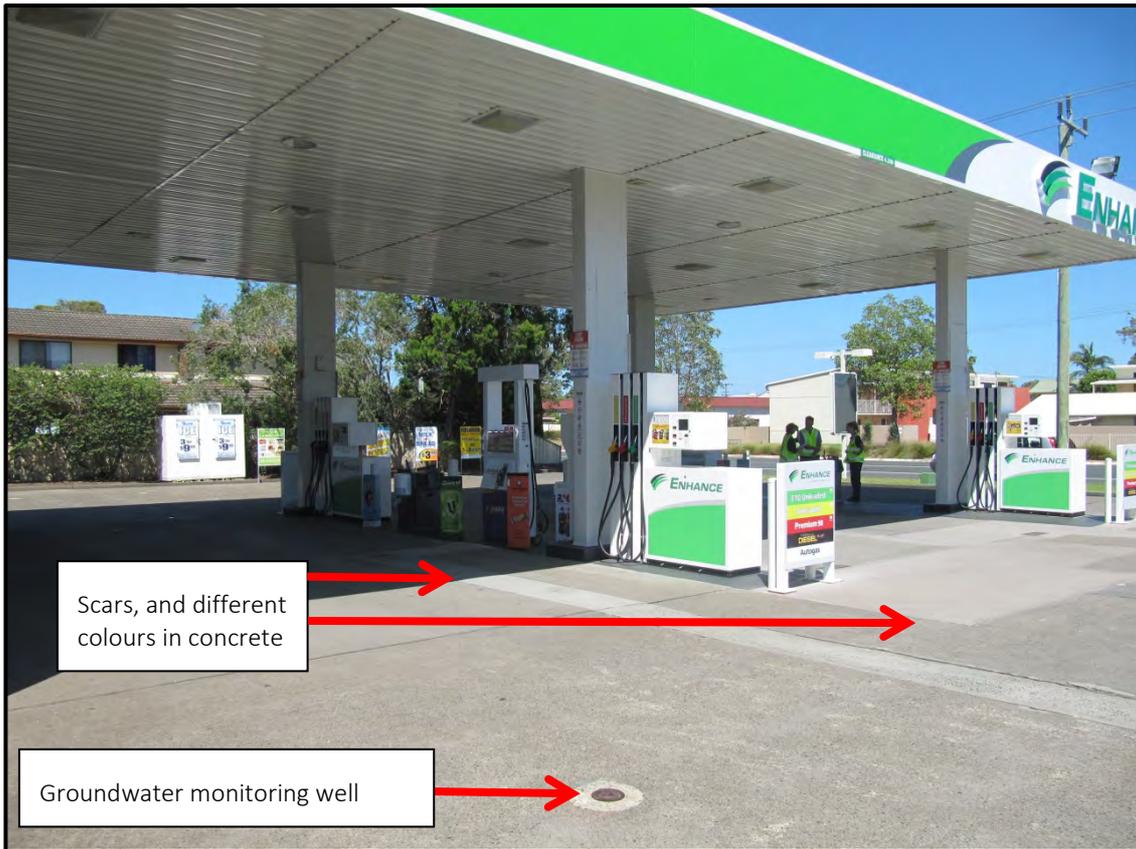
**Image I2:** Hydrocarbon sheen on water and surrounding soil



**Image I3:** Groundwater monitoring wells with monument well covers



**Image I4:** Groundwater monitoring well with flush mounted well cover



**Image 15:** Groundwater monitoring well on service station site. Scar in concrete indicate that work has been done to UPSS infrastructure (pipe work and tanks)



**Image 16:** Exposed black slag used as fill



**Image I7:** Exposed black slag used as fill



**Image I8:** Exposed black slag used as fill



**Image I9:** Slag from metal production



**Image I10:** Asbestos and slag on the ground indicating presence of uncontrolled fill



**Image I11:** Bare ground and disturbed vegetation is a sign of contamination



**Image I12:** Deteriorating drums that are inappropriately stored



**Image I13:** Flaking lead paint