HUNTER JOINT ORG.

Developing a Contaminated Land Information System

October 2021

This publication was produced by the Hunter Joint Organisation

Acknowledgements

This project has been funded by the New South Wales Government through the EPA's Contaminated Land Management Program

Address for Correspondence:

Environment Division
Hunter Joint Organisation
PO Box 3137
THORNTON NSW 2322

Phone: (02) 4978 4020
Fax: (02) 4966 0588
Email: rppd@hunterjo.com.au

Suggested Bibliographic Citation: Hunter Joint Organisation, 2021. *Developing a Contaminated Land Information System*. Hunter Joint Organisation.

FOREWORD

The development and maintenance of a corporate Contaminated Land Information System is the primary tool through which Councils may ensure they act in "good faith" with their legislative obligations *under the Contaminated Land Management Act 1997* relating to the gathering and providing of information to relevant stakeholders.

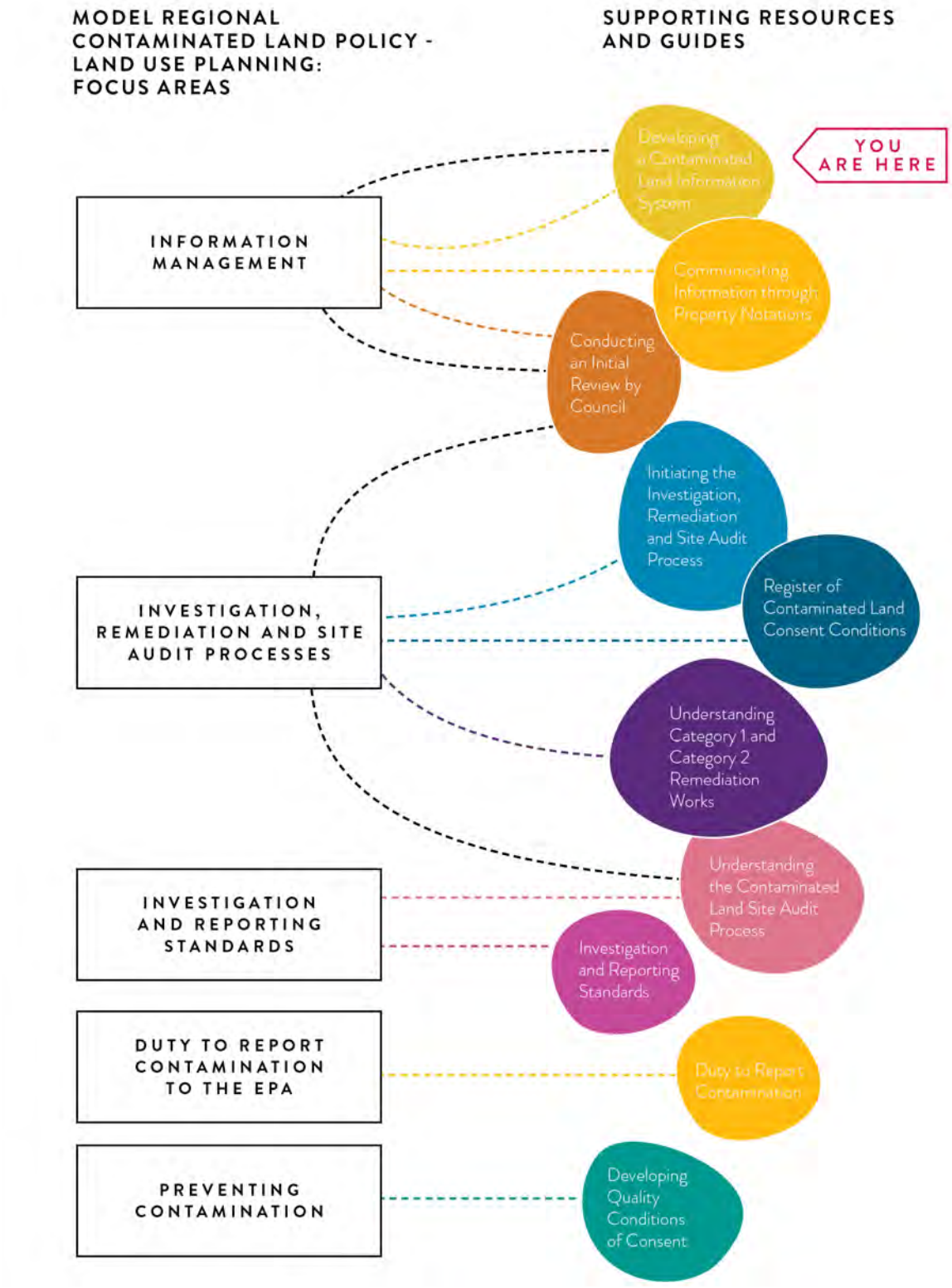
This purpose of this Guide is to:

- Provide guidance to Councils when designing, implementing and maintaining a Contaminated Land Information System
- Define the various functions that the system must provide (both statutory and practical)
- Identify the nature of contamination information to be included in the system
- Provide a contaminated sites categorisation system and associated criteria
- Inform procedures for the systematic handling and management of information by Council staff; and
- Define the needs and quality assurance processes necessary for a corporate Contaminated Land Information System

This Guide has been developed collaboratively with staff from Councils participating in the Regional Contaminated Land Capacity Building Program (Hunter Region and Central Coast).

The Guide forms part of a series of guides and resources, developed as supporting documents to the *Model Regional 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 adapting and implementing a Contaminated Land Information System.


MODEL REGIONAL CONTAMINATED LAND POLICY - LAND USE PLANNING: FOCUS AREAS
SUPPORTING RESOURCES AND GUIDES
INFORMATION MANAGEMENT
INVESTIGATION, REMEDIATION AND SITE AUDIT PROCESSES
INVESTIGATION AND REPORTING STANDARDS
DUTY TO REPORT CONTAMINATION TO THE EPA
PREVENTING CONTAMINATION
Developing a Contaminated Land Information System
YOU ARE HERE
Communicating Information through Property Notations
Conducting an Initial Review by Council
Initiating the Investigation, Remediation and Site Audit Process
Register of Contaminated Land Consent Conditions
Understanding Category 1 and Category 2 Remediation Works
Understanding the Contaminated Land Site Audit Process
Investigation and Reporting Standards
Duty to Report Contamination
Developing Quality Conditions of Consent

Contents

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 systematic, dynamic, and quality controlled environment for the recording, organisation, retrieval, and use of information on land contamination. An information system is far more than a register as it forms part of Councils broader information management systems and can inform actions through designated work flows.
Contaminated Land Process	The process includes several stages of investigations and actions. The level ultimately required is determined by the circumstances and outcomes from the previous stage. The potential stages of the Contaminated Land Process are: 1. Preliminary Site Investigation (PSI) 2. Detailed Site Investigation (DSI): N.B. Several reports, such as additional investigations, contamination delineation, monitoring, and/or Site-Specific Risk Assessments may be included in this stage 3. Remedial Action Plan (RAP) 4. Remediation 5. Validation (including Monitoring if applicable) 6. Ongoing Environmental Management Plan (OEMP) and Monitoring
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 *Environmental Planning & 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 *Environmental Planning & Assessment Act 1979*
Duty to Report	The duty to report significant contamination to the NSW EPA is a requirement under the *Contaminated Land Management Act 1997*, with updates provided in the *Contaminated Land Management Amendment Act 2008*. The triggers for reporting are presented in the *Guidelines on the Duty to Report Contamination under the Contaminated Land Management Act 1997* (2015)
EPA	Environment Protection Authority
Initial Review	A review 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 *Environmental Planning & Assessment Act 1979*
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 *Environmental Planning and Assessment Act 1979* (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 or planning proposal 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 *Environmental Planning and Assessment Act 1979* (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 *Contaminated Land Management Act 1997* (with changes made through the *Contaminated Land Management Amendment Act 2008*) 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 *Contaminated Land Management Act 1997*
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 *NSW Managing Land Contamination Planning Guidelines* (1998)
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 *CLM Act*
Guidelines on the Duty to Report Contamination under the *Contaminated Land Management Act 1997* (2015)	Details the circumstances that can trigger the requirement to notify the EPA about contamination under Section 60 of the *CLM Act*
Environmental Planning & Assessment Act 1979	Provides the overarching structure for regulation of planning and development in NSW together with the *Environmental Planning and Assessment Regulation* 2000
Guidelines produced or adopted by the NSW EPA under s105 of the *Contaminated Land Management Act 1997*	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: http://www.epa.nsw.gov.au/clm/guidelines.htm
Environmental Planning and Assessment Regulation 2000	Provides the overarching structure for the regulation of planning and development in NSW together with the *Environmental Planning and Assessment Act* 1979
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 consider possible land contamination, and promotes remediation to reduce risk of harm

1. Introduction

Council has an important role in managing risks associated with contaminated land. When making planning decisions, managing contamination on Council land, supplying the community with information regarding land use history, land contamination, site restrictions, and remediation activities, the systematic management of available information is essential to ensure accurate and up to date information can be readily accessed. The development and maintenance of a corporate Contaminated Land Information System is the primary means through which to achieve this.

From a practical perspective, having information readily accessible and organised will reduce both the time needed for Council staff when seeking information about a site, and the likelihood for errors and omissions in decision making due to absent, inaccurate or out of date contaminated land information.

A corporate Contaminated Land Information System considering the factors outlined in this Guide will support Council to meet its statutory and policy obligations for managing contaminated land, and assist Councils to act in good faith when making decisions based on the information included in the system.

Key statutory functions and responsibilities that are directly supported by a Contaminated Land Information System are identified in Table 1.

Table 1. Key Statutory Functions and Responsibilities supported by a Contaminated Land Information System

Legislation / Policy	Council Function
Contaminated Land Management Act 1997 (Section 59)	Information provided to Council by either the NSW EPA or Accredited Auditors must be noted on certificates issued for the purposes of s10.7 of the *Environmental Planning and Assessment Act 1979*
Environmental Planning and Assessment Regulation 2000 (Schedule 4)	Council must include on certificates issued for the purposes of s10.7 of the *Environmental Planning and Assessment Act 1979*, whether there is a policy adopted by Council or any other public authority that restricts the development of the land, in this case due to actual or potential contamination
Environmental Planning and Assessment Act 1979 (Section 145)	Outlines the "good faith exemption", which exempts Council of liability if they have acted in good faith. In the context of providing information, Council must show that there is a real attempt to manage and access records when demonstrating it has acted in good faith (reflected in case law: Mid Density Developments Pty Ltd v Rockdale Municipal Council [1993] FCA 408). Systematic failure of an information management system can also prevent Council from being exempt from liability (reflected in case law: Port Stephens Council v Booth and Ors [2005] NSWCA 323). Hence, it is not just important to have a Contaminated Land Information System in place, but to ensure that the system is maintained and used consistently and correctly
Government Information (Public Access) Act 2009	Requires Councils to provide information held in the Contaminated Land Information System to the public, including making publicly available and free of charge land contamination consultant's reports filed in the system. The types of information release defined by the Act include: 1. *Mandatory proactive release* – Council must make public certain information free of charge. This includes information specified in schedule 1 of the *NSW Government Information (Public Access) Regulation 2009*, which includes information submitted with a development application that specifically includes "*land contamination consultant's reports*". As such, the following documents, if submitted with a development application, may be "open access documents": o Site investigation reports (including preliminary investigation reports, detailed investigation reports, remedial action plans,

	validation and site monitoring reports) or any other contamination assessment reports o Site audit reports o Site audit statements 2. *Authorised proactive release* – a Council may choose to make information available (s7). In these circumstances a Council could decide to make reports including site investigation reports, site audit reports and statements, or any other contamination assessment reports (other than those already publicly available because they were submitted with a development application) publicly available as "open access documents". However, s7 provides that such a decision may only be made by, or with the authority of the General Manager 3. *Informal release* – information can be released informally upon request. 4. *Formal access application* – information can be released subject to a formal access application.
Managing Land Contamination: Planning Guidelines 1998 (Section 5)	Provides guidance on the recording and use of contaminated land information in an information management system
Model Regional Contaminated Land Policy – Land Use Planning (Hunter Joint Organisation, 2020):	Includes the policy statement: "*Council will develop and maintain a Contaminated Land Information System to facilitate compliance with statutory obligations, support its planning functions, and provide relevant and accurate information on contaminated land to the community in accordance with the NSW Government Information (Public Access) Act 2009*"
Civil Liability Act 2000	The Act outlines principles for the Duty of Care, and for breaches of statutory duty (e.g. considerations when issuing s10.7 certificates). The Act operates to limit a council's liability according to the financial and other resources available to it. Accordingly, if a Council implements and maintains an information management system which is commensurate with the size and resources of that council, it is likely that this defence would be available to it to avoid liability.

2. Establishing a Contaminated Land Information System

It is important when developing a Contaminated Land Information System to recognise that it is more than just a list or "Register" of sites that are known to be contaminated or potentially contaminated. A Contaminated Land Information System informs a broad range of routine functions and services across Councils portfolio, and is representative of the best information known to Council at any point in time. While a Register forms a core component of any corporate information system, the broader governance frameworks for managing this information throughout Council are central to ensuring a consistent, high quality and accurate corporate wide approach to the acquisition, updating and application of contaminated land information held by the Council.

Advisory Note:

1. The nature and extent of the Contaminated Land Information Management System to be established by Council should be clearly defined, and reflect the organisations capacity to develop and maintain such a system.

2.1 Governance and Management

Governance frameworks for Contaminated Land Information Systems are particularly important given that within Council the responsibility for identifying, managing and disclosing contaminated land information occurs across a range of functions and services, including:

- Land Use Planning
- Environmental Management, Health and Compliance
- Customer Service
- Community Land Management
- Asset and Infrastructure Management
- Waste Management
- Section 10.7 Notifications

Ensuring contaminated land information held within the organisation is consistently managed, accessible to, and applied across these functional areas is central to assisting Council ensure it is meeting its legislative and policy obligations regarding contaminated land.

Given the broad corporate reach and application of any Contaminated Land Information System, it is recommended that the first step in establishing an Information System is to engage broadly with staff across Council and New South Wales State Government (EPA and Department of Primary Industries) to identify and confirm:

- The type, quality and currency of contaminated land information already held by staff or agencies, or to which they require access (e.g. sites with notification under CLM Act, 1997 and suspected cattle tick dip sites)
- Existing systems for managing, recording, applying and communicating contaminated land information
- Quality Assurance Processes - who will be responsible for verifying and/or entering information to be included in the System (e.g. a single officer or multiple user access) and at what frequency will quality control measures be actioned
- The frequency and processes for updating information included in the System (e.g. will it be ongoing or completed on agreed periodic basis)
- Corporate responsibilities for ongoing maintenance and updating of information generated across different Council functional areas
- Preferred technology platforms / corporate systems for managing information, including active links between systems (e.g. Property Information and GIS systems) to ensure each system reflects current knowledge in accordance with Council records
- The opportunity or need for further investigation works to be undertaken

Table 2 provides examples of those roles and responsibilities who may typically need to be included in the design process, noting that these may vary between Councils. Figures 2, 3, 4 and 5 provide examples of how some of these roles interact under different circumstances.

Table 2. Examples of Roles and Responsibilities in Developing and Maintaining the Contaminated Land Information Management System

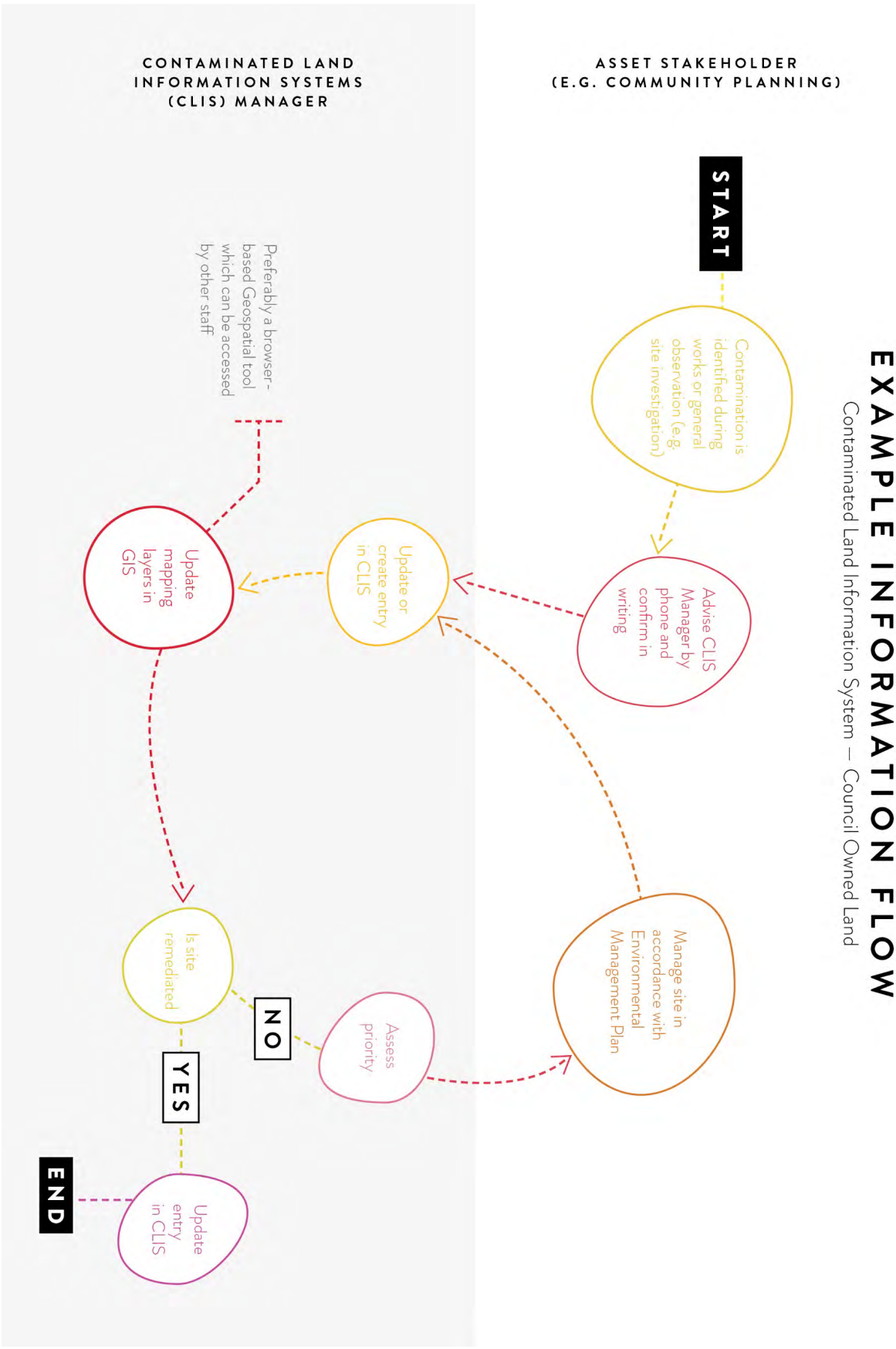
Role	Responsibility
Executive Management Sponsor	Responsible for: • Providing Executive Management Support for development and implementation of the Contaminated Land Information System • Liaising with Executive Management Team to ensure responsibilities of all Councils Division and Departments are complied with • Providing senior management support and guidance to staff involved in designing and maintaining the Information System
Contaminated Land Information System Manager (CLISM)	Responsible for: • Overall management of the Contaminated Land Information Management System • Entering data in the Contaminated Land Register and deciding on the appropriate category of a site • Entering spatial data into GIS mapping tool to delineate known contamination on Council sites • Ensuring Council staff are trained in using the system to obtain information, and know when to provide information for input to the system • System changes, if needed, to reflect updates in legislation and guidance
IT Officer	Responsible for: • Setting up and maintaining the register functions • Ensuring it is set up in collaboration with the GIS officer to allow for direct links between corporate information systems • Ongoing maintenance and quality control of IT issues and amendments of the system when needed
GIS Officer	Responsible for: • Ensuring the register is set up with consideration of direct links to the GIS system. • Maintenance of the GIS system, regular quality control audits and amendments when needed. • Provision of mapping tool allowing for delineated contamination to be displayed on GIS system • Entering spatial data into GIS mapping tool to delineate known contamination on Council sites
Audit Officer	Responsible for regular quality controls and audits of the system

Role	Responsibility
Customer Service staff	Responsible for • Reporting relevant data to the appropriate staff member • Capturing appropriate customer data and issuing response request to appropriate staff member • Communicating information in response to customer requests NB it is recommended that feedback be communicated directly back via CLISM
Environmental Health and Compliance Officers / Rangers	Responsible for: • Reporting relevant data to the Contaminated Land Information Manager • Using the system to inform themselves of any contamination issues that could create a risk in or from their work
Development and Strategic Planners Assessors / Re-zoning Officers	Responsible for: • Accurately using the register or engaging the Contamination Land Information Manager to retrieve relevant information for the Initial Reviews • Providing information from their initial review (including site visits) and from the planning application process, to the Contaminated Land Information System Manager for input to the register
10.7 certificate Officer	Responsible for the accurate use of the register to provide advice on s10.7(2) and s10.7(5) certificates
Risk Management	Responsible for ensuring that the risk to Council's finances, assets, reputation and liability is adequately considered in Corporate Risk Management Systems
Compliance Auditors	Responsible for: • Accurately using the register to retrieve relevant information for a compliance audit • Providing information relating to the nature and frequency of audits, including any documents outlining the requirements, and information from their audits, to the Contaminated Land Information System Manager for input to the register
Building Inspectors	Responsible for: • Reporting relevant data to the Contaminated Land Information Manager • Using the system to inform themselves of any contamination issues that could create a risk in or from their work
Asset / Waste / Community Land Management	Responsible for: • Reporting relevant data to the Contaminated Land Information Manager • Using the system to inform themselves of any contamination issues that could create a risk in or from their work
Contaminated Land Specialist	Assist in the interpretation of data, and categorisation of sites when needed

Role	Responsibility
Corporate Communications / Community Engagement Officer	Responsible for: • A stakeholder engagement strategy • Sending notifications to land owners and other relevant people that could be affected (if any) where land is included in the register in a way that could restrict t the development of their land • Be the contact for any calls or concerns resulting from the notifications, or define a suitable person for the task
External Support (e.g. NSW EPA, Department of Land)	Assist, where needed, in the decisions relating to contaminated land information.

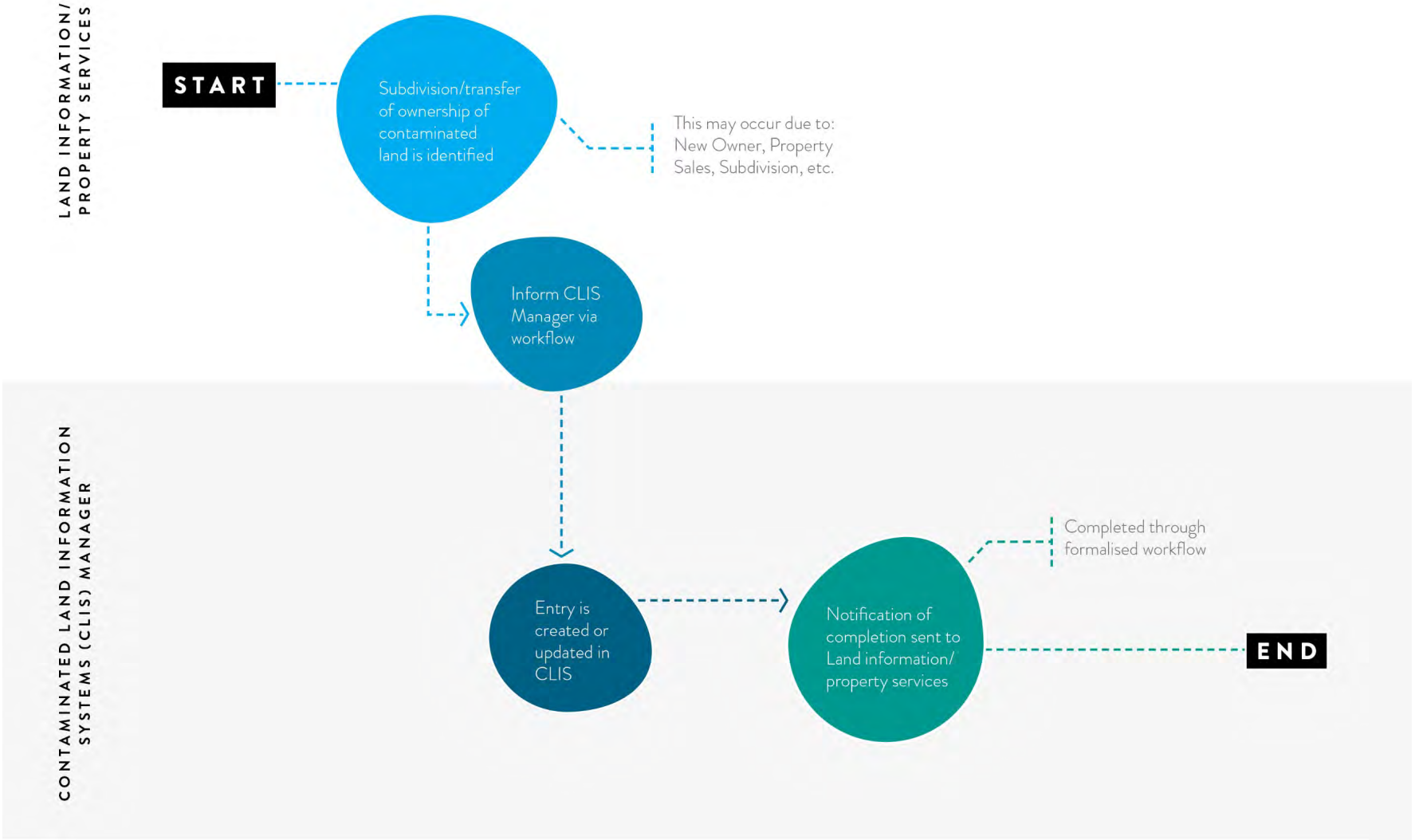
EXAMPLE INFORMATION FLOW

Contaminated Land Information System – Council Owned Land



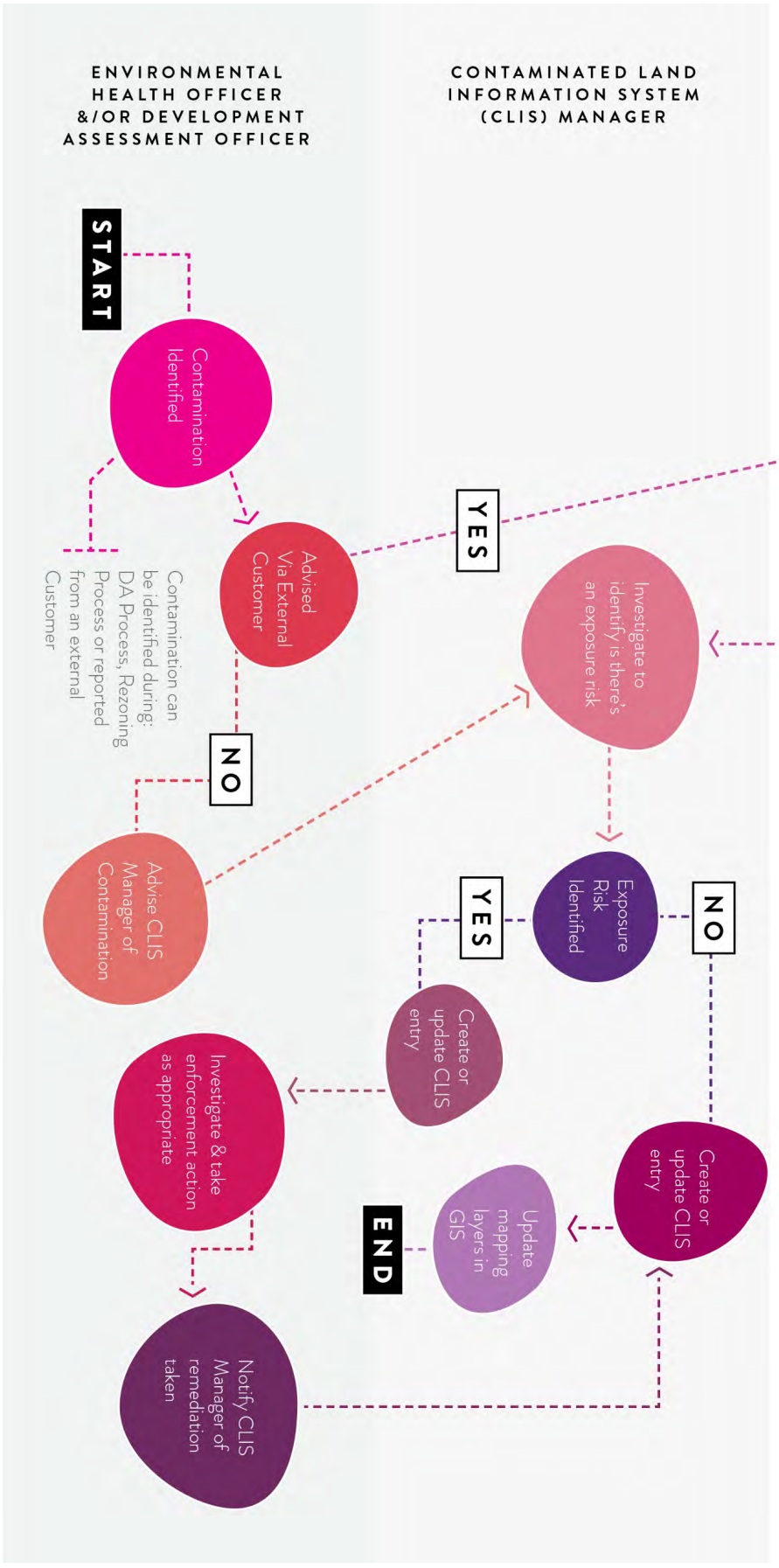
EXAMPLE INFORMATION FLOW

Contaminated Land Information System—New Entries for New Owners / Subdivisions



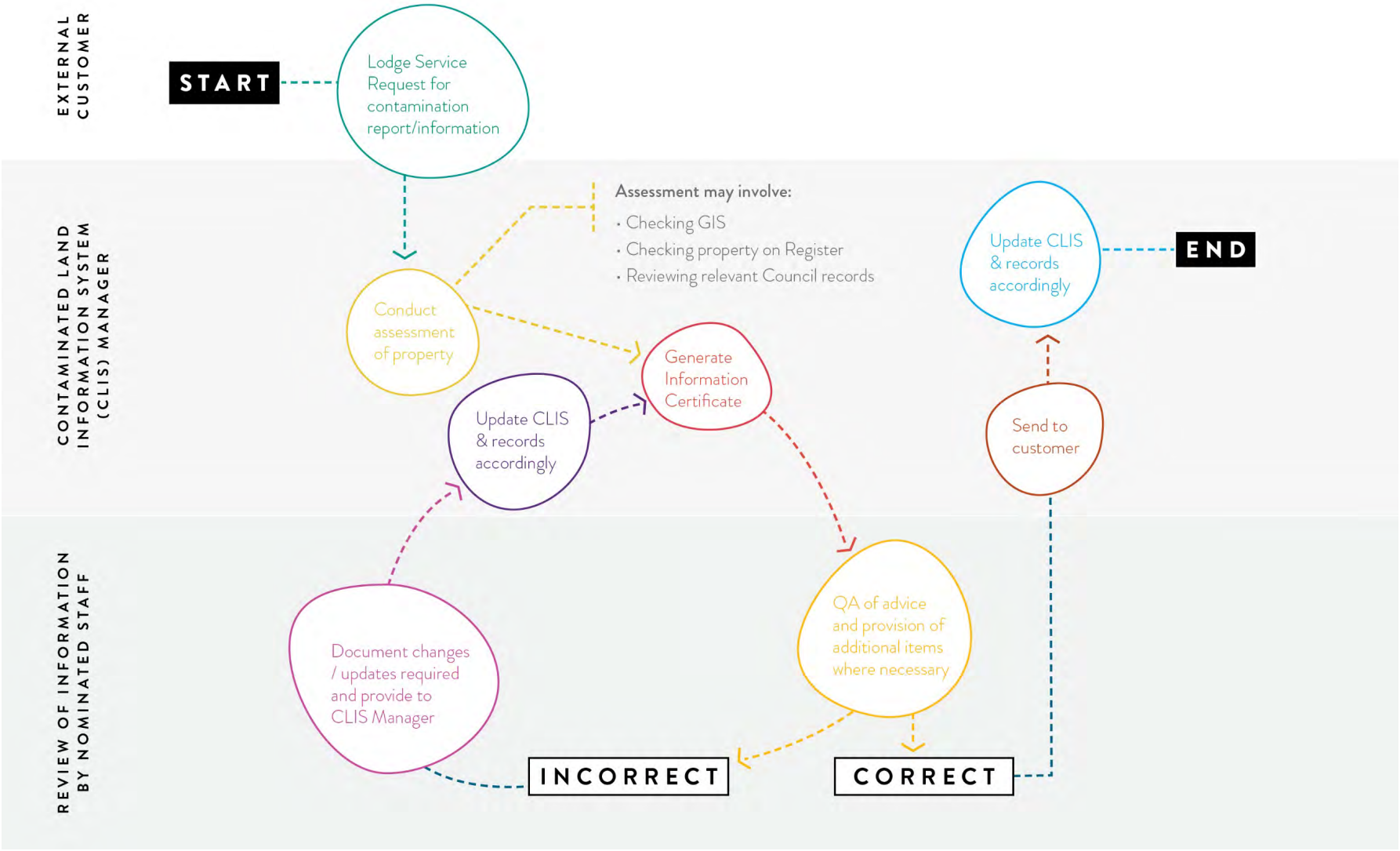
EXAMPLE INFORMATION FLOW

Contaminated Land Information System – Privately Owned Land



EXAMPLE INFORMATION FLOW

Contaminated Land Information System—Property Enquiry / Information Certificate



2.2 Quality Control / Quality Assurance

Central to the governance and management arrangements surrounding any Contaminated Land Information System are those related to Quality Control. Data quality control and quality assurance procedures must be defined and implemented to ensure a high quality of the system. Contamination is often dynamic in nature, both naturally and through management actions, and as such, it is essential that the accuracy of information in the Register is maintained as the information is continuously updated. To maintain a high standard of data quality the following objectives should be considered with the aim to maintain or improve the precision of data that is entered in the Register:

- Data entry: Any entry of information into the Contaminated Land Information System is to be done through a singular source of access (i.e. the Contaminated Land Information System Manager) in order to avoid duplication of work. Data entry is to be facilitated by an established workflow or series of questions which ensure an identical process is followed for each entry.
- Data sourcing: The source is to be defined in the Contaminated Land Information System and its credibility is to be assessed. Credibility of Consultants' reports increases with the use of certified Consultants, and by involving an Accredited Site Auditor
- Data correctness: There are to be regular quality control checks of the data in the Register. The frequency of the checks or audits is to be defined in the system procedures. As well as standalone checks, there is opportunity to incorporate quality control checks into any instance where the information system is interacted with (e.g. Assessing an entry within the database as part of Initial Review considerations for land-use planning).
- Data standardisation: The information in the Register is to be entered in a standardised format to avoid bias, minimise impacts of staff changes and streamline communication outputs.
- Incident management: Procedures are to be in place to deal with findings of incorrect data to ensure that any impacts are reviewed and rectified.

2.3 Contaminated Land Register

A core component of any Contaminated Land Information System is the Contaminated Land "Register". This is a centralised list of properties / land / assets that are known by Council to be contaminated, or on which activities have occurred which are likely to result in contamination. In the context of developing a Contaminated Land Information System, the Register provides a single point of accurate and up to date corporate information on contaminated land that can be drawn on by the various Council functions and services.

To ensure that the Contaminated Land Information Register is functional and reliable, all information relating to contaminated land obtained by Council must be entered into the register. By managing access to information through a centralised register Councils are more easily able to meet the general objectives discussed within the *NSW Managing Land Contamination Planning Guidelines - SEPP 55 Remediation of Land (1998)*:

- Record information in a manner appropriate to current legislation, and which assists planning authorities to carry out planning functions in the context of land use history
- Ensure a fair and equitable means of informing stakeholders, especially potential purchasers or occupiers, of the presence of, or potential for, contamination on specific parcels of land
- Provide relevant information which facilitates the control of land use, to minimise the risk to health and the environment
- Encourage an approach which does not unnecessarily place restrictions on land or otherwise unnecessarily affect its value
- Acknowledge any limitations on information, such as its degree of uncertainty and accuracy, and the purpose and time it was collected

More specific functions of a Contaminated Land Register are discussed within Section 3 of this Guide.

Advisory Notes:

1. It is important to note that a Contaminated Land Information Register may not be a complete list of contaminated sites, and should not be presented as a complete list. The sources of information used in each Local Government Area (LGA) should be clearly defined to avoid misunderstandings as to what the basis and completeness of the information is.
2. The nature and extent of the Contaminated Land Information Management System to be established by Council should be clearly defined, and reflect the organisations capacity to develop and maintain such a system.
3. Inclusion of a property in the Contaminated Land Information Register does not necessarily imply the actual existence of contamination on the property. This can only be determined as a result of an investigation, sampling and analysis program carried out in accordance with requirements of the relevant Guidelines made or approved by NSW EPA in accordance with the CLM Act (Source: *Managing Land Contamination Planning Guidelines, 1998*).
4. The list of sites included in the Register will be prepared in good faith in the interests of responsible planning and will be used as a first point of reference by Council. It will not necessarily be comprehensive or definitive and may not deal thoroughly with the issue of contamination of properties listed or properties adjacent to those listed. As such it should be viewed as one starting point for more detailed investigations and will necessarily evolve as more information comes to hand from third parties or from detailed investigations of particular sites (Source: *Managing Land Contamination Planning Guidelines, 1998*).

2.4 Links with Corporate Systems

It is essential that the Contaminated Land Information System is flexible and able to accommodate the dynamic nature of land contamination management. To remain flexible while consistently representing the best information available at the time to Council it is essential that relevant corporate systems are linked to the Information System.

2.4.1 Mapping Systems

The Contaminated Land Information Register is to include links to a contaminated land layer in Councils Geographical Information System (GIS) mapping. As a minimum, the GIS layer should provide the category of the site, and a reference or direct link to the information in the database.

Council may also wish to include details such as contaminating activity or even develop tools to allow for delineation of known contaminants on Council land if it would assist in Councils work.

To avoid errors caused by double handling of data, the database should be directly linked to GIS so that any updates to relevant information in the database are automatically transferred into the GIS mapping system.

2.4.2 Property Information Systems

The Contaminated Land Information Register is to include links to a property information system. Property information systems are used to handle various types of information and enquiries, such as site address, owner, contact details, history of planning action and Section 10.7 certificates. As a minimum, the property information system must reflect the information within the contaminated land database relating to land contamination (particularly contamination category) and similarly the Contaminated Land Information Register must reflect information in the property information system (particularly owner and address)

It is anticipated, that the Contaminated Land Information Register is to be created within Council's property management system, which will require specific consideration of how to deal with sites that are not defined as properties such as roads, railways and rivers.

2.4.3 Records Management System

The Contaminated Land Information Register is to include links to a records management system. All supporting documentation, photographs, reports, correspondence and general evidence associated with an entry in the Information Register must be stored within a records management system. The entry within the records management system must be linked accordingly with the relevant Information Register entry.

It is anticipated that when an entry is created within the Contaminated Land Information Register that this will create a corresponding folder within Council's record management system whereby all supporting documentation will be stored.

2.5 Information Fields

The Contaminated Land Information System is to include general data fields for various property attributes that may assist Council with its understanding and management of the site. The System should also have the capacity to facilitate specific data fields which enable appropriate functionality for the relevant stakeholders described within Section 2.1.

Suggested attributes for inclusion are provided within Appendix B, however it is noted that individual Councils may choose to reduce or expand these attributes depending on the focus and breadth of their Contaminated Land Information System.

It is essential that any content entered into the Information System or Register is timestamped, never deleted (only made historic/obsolete) and includes reference to supporting evidence for any decision made.

2.6 Stakeholder Engagement and Communication

When creating a Contaminated Land Information System for the first time, or updating an existing system, it can result in a significant increase in the number of properties registered as contaminated or potentially contaminated, in some cases by orders of magnitude. In many cases this may also represent the first time that a property owner becomes aware that their property is potentially affected by contamination and accompanying development constraints or health risks. This can lead to considerable angst and outrage, both at an individual and potentially broader community and political levels.

To avoid community anxiety or outrage developing and to reduce the significant impact on Council resources that this typically generates, it is recommended that a strategic approach to effectively engaging affected landowners, other affected people including occupants and the polluter, and the broader community in general be developed and implemented when establishing a Contaminated Land Information System.

This process includes developing a Stakeholder Engagement Plan that identifies staff responsible for the notification and engagement process, resource requirements, the nature and format of information to be provided and communication techniques, and the timing of consultation activities. The Plan should also include links and information sharing with other government organisations, such as NSW EPA and Department of Lands, and consider the potential need to use external communications or contaminated land specialists where this expertise is not available in-house.

The need for stakeholder engagement is reinforced by the fact that while there is no legislative requirement for Council to even inform a landowner of their properties inclusion in a Contaminated Land Information System, it may be possible for a landowner to argue that the Council acted negligently or possibly that it did not offer procedural fairness if they are not notified of the inclusion. Notifying the landowner provides the opportunity for them to establish that the land is not contaminated and therefore should not be included, or alternatively, to manage or undertake remediation of the land prior to selling at some point in the future.

Section 8.2 of the *Model Contaminated Land Policy – Land Use Planning* (Hunter Joint Organisation of Councils, 2020), also states that inclusion of a property in the Contaminated Land Information Register in a way that has the potential to restrict the development of the land, should be notified to the landowner.

When notifying landowners of their properties inclusion in a Contaminated Land Information System, it is recommended that the following information be provided at a minimum: Introduction to the Contaminated Land Information System and what the inclusion of a property on the system means

- Category in the system
- Criteria for the categorisation
- Reason for the applied category
- Any restrictions if applicable
- Details of how to get further information
- Details of how to investigate contamination, if needed

3. Developing a Contaminated Land Register

This section provides guidance on the factors that should be considered by Councils when developing and maintaining a Contaminated Land Information Register, specifically identifying the requirements that need to be met by the Register for each of the following functions:

- Contaminated Land Category
- Source of Information
- Informing the Initial Review undertaken by Council during the land use planning process
- Providing information for inclusion on s10.7 planning certificates
- Council Works, Activities and Land
- Risk-assessment, Ranking and High-Risk areas
- Identifying contaminated sites regulated by the EPA
- Identifying Sites Notified to the NSW EPA
- Identifying Sites Regulated under the Protection of the Environment Operations Act 1997
- Site management attributes
- Identifying at which stage in the Contaminated Land Process the site has reached
- Informing when and how monitoring of compliance with on-going management plans, consent conditions, or other legislative requirements, is required by Council
- Providing links to contaminated land documents
- Assisting Council in the Duty to Report contamination to the NSW EPA
- Noting restrictions on land use
- Noting sites where the *Underground Petroleum Storage System (UPSS) Regulation 2014* apply.

3.1 Contaminated Land Category

A contaminated land register typically includes a series of information fields which relate to a parcel of land (refer to Section 3). These information fields are common for each entry within a contaminated land register. A contaminated land category's purpose is to represent these information fields, based on both the existence and content of relevant records.

When determining the category of contaminated land, it is essential that a consistent and replicable approach is undertaken across all register entries so that all information received is represented by an output that has been subject to an identical level of scrutiny. A demonstrably consistent and replicable approach is particularly important as the categorisation of land often heavily influences important decisions, such as:

- Land-use
- Capital works projects
- Purchasing of land
- Selling of land

A well described and justified definition of a contamination category assists in establishing and managing the expectations when communicating contaminated land information to either internal (e.g. Land-use planners) or external stakeholders (e.g. S10.7 Certificate or general information enquiry). The process by which contaminated land is managed within NSW is stipulated by various instruments, such as the *Contaminated Land Management Act 1997,* and it is reasonable to state that there is a finite number of contamination states by which land can be described and that Council need to consider. As such, it is essential that a contaminated land database broadly captures each possible state of contaminated land within its categories while ensuring that an adequate description is provided to enable the data recipient to understand the categories meaning.

It is important to note that the contamination category for land captured within the database is subject to change pending review of any new or relevant information as Council becomes aware of it. Table 4 includes recommended categories for Councils in the Hunter Region to consider when to classifying contaminated sites in their Contaminated Land Register. These categories and their associated descriptions and criteria are adapted from the system described by the Western Australian *Contaminated Sites Act 2003*.

Table 4. Contaminated Land Information Register Categories and Associated Criteria

Category	Sub Category (where applicable)	Description	Criterion (supporting documents)
1. *Possibly contaminated*		There are grounds to indicate possible contamination of the site	Initial evaluation, Council records or site inspection identify a potential contaminant
2. *Not contaminated*		After Consultant's investigation(s), the site is found not to contain concentrations of known contaminants above the investigation levels	Preliminary and detailed site investigation undertaken by Consultant
3. *No indication of contamination*		The site was categorised as *Possibly Contaminated* and Council has since undertaken an Initial Evaluation, and no reasons were identified to indicate possible contamination of the site	Relevant Council record identifying a possible contaminant Initial Evaluation undertaken by Council which revealed no indication of contamination
4. *Decontaminated*	a. *Subject to an ongoing environmental management plan*	The site has been remediated and is suitable for all uses in accordance with management plan	Preliminary site investigation, detailed site investigation, remedial action plan, validation and site monitoring and site audit statement (if deemed necessary)
5. *Remediated for restricted use*	a. *Subject to an ongoing environmental management plan*	The site is contaminated but has been remediated so that it is suitable for restricted use (e.g. industrial or commercial)	Preliminary site investigation, detailed site investigation, remedial action plan, validation and site monitoring and site audit statement (if deemed necessary)
6. *Contaminated - restricted use*	a. *Subject to an ongoing environmental management plan*	The site is contaminated but suitable for restricted use (e.g. industrial or commercial)	Preliminary site investigation, detailed site investigation, remedial action plan, validation and site monitoring and site audit statement (if deemed necessary)
7. *Contaminated - no known remediation undertaken*		The site is contaminated and there is no remediation known to have been undertaken.	Preliminary site investigation, detailed site investigation
8. *Contaminated – Regulated by the NSW EPA*		The contamination is considered Significant Enough to Warrant Regulation (SEWR) and is regulated by the NSW EPA	Site is listed within the NSW Environmental Protection Authority (EPA) Register of Significantly Contaminated Land

Advisory Note

- Each category would warrant inclusion on a 10.7 certificate as they may influence development of the site.

When Council receives information about a contaminated site, its category is to be determined based on the information available at that time. The standard of reports obtained by Council is therefore crucial to the quality of the system. As such Council may wish to establish internal and/or external support staff to assist in the categorisation of unclear cases

3.2 Sources of Information

When establishing a Contaminated Land Register, it is important to consider the potential sources of contamination information which may indicate if land is potentially contaminated, such sources include:

- Previous investigations / notifications of remediation / site audit statements / pollution events kept on the current filing system
- Approved development applications (DAs), building applications (BAs) for uses listed in Table 1 of the Planning Guidelines, or other potentially contaminating uses, and ones refused based on contamination matters
- Rezoning proposals refused based on contamination matters
- Aerial photographs, including historical aerial photographs
- Dangerous goods searches
- Chronological list of Site uses by title searches, or Council records of actual and permissible uses
- Initial Review notes
- Site visit notes and photographs
- Information provided through a development application / rezoning proposal
- Anecdotal information (prompting investigation into the reliability of the information). This can include information from interviews with historical societies, local residents, and former or current workers at a potentially contaminating activity, and interviews with Council staff with in-depth knowledge and long history in the area
- Complaints or concerns from the public (after investigation into the reliability of the information)
- EPA regulated sites registers
- EPA notified sites registers
- Unhealthy Building Land List
- Other agencies information systems such as Department of Land, NSW Police (eg. former clan or hydroponic labs)
- Organisations and programs such as the Derelict Mines Program (Department of Planning and Environment), Cattle Dip Site Locator (Department of Primary Industries), UPSS Program (NSW EPA), water authorities, etc.

The sources of information should be noted in the system, as per Section 2.4.3, to ensure that the credibility of the information can be assessed by anyone using the system in the future.

System Requirements:

Where documents or processes (such as risk assessment tools) are held in separate systems, the register is to include links and clear references.

3.3 Initial Review Processes

When carrying out planning functions under the *Environmental Planning and Assessment Act 1979*, Council must consider the possibility that the previous and/or current land uses, and/or a nearby land use, has caused contamination of the site, and the potential risk to human health and the environment from that contamination. Council does this by undertaking an Initial Review for all land use Planning Applications (as required by clauses 6 and 7 of SEPP 55), and based on that determines whether further information is required for Council to conduct its planning functions in good faith. The Initial Review process is further described in *Conducting an Initial Review by Council* (Hunter Joint Organisation of Councils, 2019), which includes a checklist for site visits.

System Requirements:

The Contaminated Land Information System is to inform the land use planning process by providing available information to land use planning staff during the Initial Review, and ensure that information obtained through the process can be appropriately stored and be easily accessed.

This can be achieved by allowing viewing access of the register to relevant staff, or by establishing "information request" workflows which are sent to the Contaminated Land Information System Manager. Where further information, general interpretation or guidance is required it is beneficial for staff to utilise consistent request templates, such as that found within Appendix A.

3.4 Section 10.7 Certificates

Planning Certificates are issued in accordance with Section 10.7 of the *Environmental Planning & Assessment Act 1979*. The s10.7 Certificates are used by Council to notify the public (on request) where restrictions apply to land due to the known or potential presence of contamination. Notifications included in s10.7 planning certificates do not in themselves restrict the use of lands, but are there to notify the reader that restrictions apply.

The requirements of information, both statutory and recommended, to be included on s10.7 certificates is presented in the *Model Contaminated Land Policy – Land Use Planning* (Hunter Joint Organisation of Councils, 2020), with further detail presented in the guide *Communicating Information through Property Notations* (Hunter Joint Organisation of Councils, 2019). Recommended standard property notations are also provided within those documents.

Planning Certificate	Information to be included
10.7(2)	• Information on matters prescribed under Section 59(2) of the *Contaminated Land Management Act* 1997 that are relevant to the property • Whether any adopted policy of Council or any other public authority restricts the development of the land (the subject of the certificate) because of the likelihood of any risk of contamination
10.7(5)	• Information that is provided to Councils by the NSW EPA in accordance with s 58 of the *Contaminated Land Management Act 1997*, that is not already included in a s10.7(2) Planning Certificate • If Council is aware that a site has been notified to the NSW EPA under S.60 of the *Contaminated Land Management Act 1997*, but is currently in various stages of being reviewed by the NSW EPA to assess if the contamination is significant enough to warrant regulation, information should be included to this effect. • Where Council has a Contaminated Land Information Management System in place, the following additional information included in the system will be provided on Section 10.7(5) Planning Certificates • Contamination category • Any activities listed in Table 1 of the Planning Guidelines that Council records show have occurred on the land • Any information to Council's knowledge, that indicates the property may be affected by emerging contaminants or contaminating activities of concern • References to any site investigations included in the register • Any notifications of remediation

System Requirements:

Information recorded in the Contaminated Land Information Register is to be categorised so that relevant information is directly transferable for reporting on both s 10.7(2) and 10.7(5) Certificates. This will maximise accuracy, consistency and efficiency in managing and communicating contaminated land information by Council.

3.5 Council Works, Activities and Land

Council has a responsibility to appropriately manage contamination on land it either owns or operates on. The Contaminated Land Information Register is to be set up in a way that assists Council perform this task, particularly the ability for staff to quickly assess the type and severity of contamination present.

Unexpected finds typically lead to dramatic changes to a projects timeline and budget, and can often be avoided through an appropriate initial review process. By understanding the risk associated with Contamination on Council Land, staff may proactively identify the need for adjusting scopes of works or requesting additional funds.

To identify how Council land, works and activities may be impacted, it is important to capture basic information which allows for the categories within Section 2.5 to be populated.

System Requirements:

There are a few considerations that the register is to meet to support this application:

- Allow Council to obtain a list of all its Sites
- Allow Council to obtain lists of its sites with similar potential or actual contamination history
- Link to, or include, a contamination risk assessment and risk ranking system
- Allow access of relevant information to Council staff maintaining the sites, such as restrictions on access or personal protective equipment needed when accessing the site
- Allow Council to see where in the Contaminated Land Process the site is up to
- Allow Council to enter and search information relating to other potential stakeholder or reliable parties for the contamination

3.6 Risk Assessment, Ranking and High-Risk Areas

During the process of establishing a Contaminated Land Information System, Council is likely to identify areas of high risk based on potentially contaminating history and sensitive land uses. This will be particularly likely in the set-up stages of the Contaminated Land Information System since information not previously identified will be obtained.

To determine the risk ranking of a potentially contaminated site Council must assess the pathways, receptors and impacts of contamination on the site. Table 5 considers what these may be.

Table 5. Pathways, receptors and impacts of contamination on potentially contaminated sites

Risk	Queries
Safety	Is the site secure?
	Are site users frequently exposed to soils?
	Do people consume things grown on the site?
Environmental	Is there surface water present? (on or adjacent to the site)
	Is groundwater extracted and used? (on or adjacent to the site)
	Are there any known sensitive flora/fauna/ecological communities? (on or adjacent to the site)
Reputational	Is there known public interest in the site/ or likely future public interest?
	Is the site poorly maintained (aesthetics)?

	Is there any political interest in the site?
	Is the site in a densely populated area?
Compliance	Is the site currently or formerly regulated under the CLM act or POEO Act?
	Have any regulatory notices been issued in relation to the site?
	Is there any regulator interest in the site?
Service Delivery	Is the site of operational importance to Council?

Further assessment of this risk may be achieved through use of *The Hunter Joint Organisations Contaminated Land Risk Assessment Tool, 2019*.

System Requirements

- The Contaminated Land Information Register is to link to, or include, a risk assessment and ranking tool to allow Councils to identify sites where contamination is likely to be significant enough to warrant regulation by the NSW EPA rather than waiting for action through the land use planning process. A list of such sites can then be discussed with the EPA to decide on the appropriate approach.
- The Contaminated Land Information Register is to include a field identifying the risk rating for the site

3.7 Sites Regulated by the NSW EPA under the Contaminated Land Management Act 1997

Sites that are considered Significant Enough to Warrant Regulation (SEWR) by the NSW EPA under the *Contaminated Land Management Act 1997* are listed on the EPA website (http://www.epa.nsw.gov.au/prclmapp/searchregister.aspx). The EPA is required by legislation to notify Council of the location of these sites.

System Requirements:

- The Contaminated Land Information Register is to include a specific field for sites regulated by the NSW EPA.
- The Register can also be set up to capture what type of order the NSW EPA has issued (i.e. preliminary investigation order, voluntary management proposal, or a management order).

3.8 Sites Notified to the NSW EPA under the Contaminated Land Management Act 1997

When a contaminated site is notified to NSW EPA, it is listed on a public register on the NSW EPA website (http://www.epa.nsw.gov.au/clm/publiclist.htm). Once on a public register it is established if the contamination is significant enough to warrant regulation by the EPA. The site will remain on this public register regardless of the outcome. It is important to note that the EPA is not required to notify Council of sites included on the Register.

The register includes a "site status" for each notified site which defines at what stage in the process it is at, and if it is, needs to be, or was, regulated by the EPA. The status of the sites is continuously updated and should be considered by Councils in this process.

System Requirements:

The Contaminated Land Information Register is to include a field or tick box specifically identifying if the site is notified to the NSW EPA.

NB. Since Council will not be notified by the NSW EPA if a site is included on this register, Council will need to identify in the Register filed how often the EPA register is checked, or when it was last checked, to ensure the limitations of the information are understood by Register users.

3.9 Sites Regulated under the Protection of the Environment Operations Act 1997

Sites that are regulated under the *Protection of the Environment Operations Act 1997* either by NSW EPA (for scheduled, and some non-scheduled, activities) or Council (non-scheduled activities) can be noted in the Contaminated Land Information Register. Information about the sites regulated by the NSW EPA, and links to their registers, is available on the NSW EPA website (http://www.epa.nsw.gov.au/prpoeo/)

System Requirements:

- The Contaminated Land Information Register is to include a field or tick box specifically identifying if the site is regulated under the *Protection of the Environment Operations Act 1997* and if so, if Council or NSW EPA is the Regulatory Authority.
- The register can also be set up (e.g. via an additional field) to capture more detailed information to the type of regulation (e.g. clean-up notice, environmental protection licence, etc)

3.10 Site Management Attributes

The ability to obtain lists of sites with certain attributes can assist Council manage contamination more efficiently by allowing quantification of sites with similar issues.

System Requirements:

The Contaminated Land Information Register is to include specific fields for various property attributes that may assist Council with its understanding and management of the site. Recommended attributes include:

- Site Owner
- Address
- Zoning
- Historical potentially contaminating activities (eg. Table 1 of the Planning Guidelines, and other known activities)
- Current land use

3.11 Stage in the Contaminated Land Process Life Cycle

Recording information in accordance with the stages of the contaminated site assessment and remediation process can be a useful tool, particularly in the management of contamination on Council land.

System Requirements:

The Contaminated Site Information Register is to include a field, or link to a "Life Cycle" page where information can be recorded under the relevant stage of the process:

1. Initial Evaluation
2. Preliminary Site Investigation
3. Detailed Site Investigation
4. Supplementary Site Investigation(s)
5. Site Specific Risk Assessment
6. Remedial Action Plan
7. Planning Approvals for Remediation
8. Remediation and Validation
9. On-going Environmental Management and Monitoring
10. Site Audit (include field to identify the purpose of the audit, eg. land use suitability, identify if the investigation has appropriately delineated the contamination, etc)

- The Register should allow Council to note progress for each stage (eg. "in progress" or "complete"), and link to reports and information under the relevant stage.
- The register should allow for several life cycles under each property as it is possible that further assessment and remediation may be needed in the future.

3.12 Ongoing Management - Compliance Monitoring

Where an Ongoing Environmental Management Plan applies to a site, there may be requirements for reports to be sent regularly to Council. Council may also be responsible for regular inspections of a site to ensure it complies with requirements and / or regulations.

System Requirements:

The Contaminated Land Information Register should provide the ability for reminders to be sent when compliance audits are due, and when Council should expect to receive regular monitoring reports from a proponent. Information relating to the specific requirements is to be included in, or linked to, the reminder.

3.13 Contaminated Land Documents

Documentation relating to contamination may be obtained by council from a variety of sources including the land use planning process, NSW EPA, or through Council's own investigations. There is considerable benefit in including references or links to these documents in the Contaminated Land Register, to assist with managing the contaminated land process for a site, or to assist Council in responding to requests for information under GIPA. Property systems used by Councils typically cannot store documents, but can include links to stored information.

System Requirements: The Contaminated Land Information Register is to include references (and preferably electronic links) to any document that is available for the Site relating to contamination.

3.14 Duty to Report Contamination

For Council owned and managed land, Council has a duty to report contamination to the NSW EPA if it triggers the criteria outlined in the *Guidelines on the Duty to Report Contamination under the Contaminated Land Management Act 1997* (NSW EPA, 2015). Any documents relating to the notification are to be recorded against the relevant entry within the Information System.

In accordance with the *Model Contaminated Land Policy – Land Use Planning* (Hunter Joint Organisation of Councils, 2020), Council will also notify the EPA for possible action under the *Contaminated Land Management Act 1997* where Council considers that contamination on a site triggers the duty to report contamination, and it is not clear if the polluter or site owner has reported the contamination.

3.15 Restrictions on Land Use

Contamination may cause restriction on land uses or activities undertaken at the site. Such restrictions could be on the use of groundwater, excavation, or access to certain areas. It may also include restrictions on what type of land use is permissible on the site (e.g. commercial or industrial only).

System Requirements:

The Contaminated Land Information Register is to include specific fields and/or tick boxes to identify any restrictions on land use or activities that may in place for a site due to actual or potential contamination.

3.16 Underground Petroleum Storage Systems

As of 1 September 2019, the regulatory responsibility for Underground Petroleum Storage Systems (UPSS) has been transferred from the NSW EPA to Councils. This will require Councils to undertake regular compliance audits of sites containing active UPSS. To support Councils with this new regulatory responsibility and to ensure UPSS systems are effectively managed through both Council compliance and land use planning activities, it is recommended that sites including UPSS be identified in the Contaminated Land Register.

System Requirements:

The Contaminated Land Information Register is to include a field or tick box for sites to which the UPSS Regulation applies.

NB If the box is ticked, then information (or links to information) relating to risk assessments, frequency of audits, status in the risk ranking system and other relevant details should be prompted to be included in the Register.

3.17 Further Considerations

Other considerations when setting up a Contaminated Land Information System include:

- Partial lot contamination may be considered an issue where only a small portion of the site is considered contaminated. This could be situations like a cattle tick dip on a large rural property
- Sites adjacent to contaminated / potentially contaminated sites need to be considered since contamination has the potential to migrate
- What level of information to include in the Contaminated Land Information Register. For example, if the contaminants found are defined within the register itself without further context, it could be interpreted as that no other contaminants exist on the site, whereas the reality may be that only a limited number of analytes were assessed in the investigation obtained and the level of other contaminants is unknown
- The inclusion and use of memos where appropriate.
- Potential inclusion of use of water on the property (e.g. groundwater used for irrigation), or locally (e.g. groundwater used as drinking water) could be included in the register where known.

Appendix A – Contamination Land Database Information Request (Land-use Planning)

Date:		**DA No.**	
Address:			
Contaminated Land Information System Ref.			

Land Contamination Category (please tick)	**Category 1** – No indication of contamination	
	Category 2 – Not contaminated	
	Category 3 – Decontaminated	
	Category 4 – Possibly contaminated	
	Category 5 – Contaminated – restricted use	
	Category 6 – Remediated for restricted use	
	Category 7 – Contamination – no known remediation undertaken	
	Category 8 – 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)

Appendix B – Site Management Attributes List

Data Field Heading	Data Field Content
Site Owner	Full Name
Site Address	Full address
Zoning	Land-use Zoning
Current Land-use	Current Land-use
Historical potentially contaminating activity	Relevant activity (if applicable)
Contamination Category	Category type as per Section 3.1
Contamination Details	Type of contaminant (e.g. Heavy metals, asbestos, PFAS, etc.) Contaminant level (e.g. lead-in-soil: 1000 ppm)
Contamination Impacts	Impacted medium (e.g. Soil, groundwater, air, etc.)
Risk Category	Risk rank/category or link to risk assessment
WHS Considerations	Site restrictions and PPE requirements
Regulated by the NSW EPA	Yes or No
Notified to the EPA	Yes or No (if yes, then additional Yes or No as to whether it was notified by Council)
Regulated under POEO Act 1997	Yes or No If Yes, then ask if ARA is NSW EPA or Council
Initial Evaluation	Yes or No
Preliminary Site Investigation	Yes or No
Detailed Site Investigation	Yes or No
Supplementary Site Investigation(s)	Yes or No
Site Specific Risk Assessment	Yes or No
Remedial Action Plan	Yes or No
Planning Approvals for Remediation	Yes or No
Remediation, Validation and Monitoring	Yes or No
Site Audit Statement	Yes or No Purpose of Audit (e.g. land use suitability)
Ongoing Environmental Management Plan and Monitoring	Yes or No
UPSS Regulated site	Yes or No

	If Yes, then ask if ARA is NSW EPA or Council
Ongoing Maintenance	Yes or No
Restrictions on land-use	Specific field or tick boxes