

# Remediation Regulation



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Alberta Environment and Parks

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Alberta

# Outline

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## 1. Introduction

## 2. Remediation Regulation

- Remedial objectives - Guidelines in the Regulation & Tier 2 Compliance
- Q+A
- Duty to Take Remedial Measures - Remedial Action Plan Guide
- Q+A
- Remediation Certificates - Limited and Site-based Guides and Forms
- Q+A

## 3. Next Steps

# Introduction



## Alberta's Remediation Regulation

# Goal

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Support effective contaminated sites management, encourage brownfield redevelopment and provide clarity for stakeholders on risk management and remediation.

# Drivers for Change

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- Stakeholders and Alberta Government staff identified the following barriers to redeveloping brownfields:
  - certainty on whether a property is environmentally available for redevelopment;
  - certainty on regulatory liability;
  - clear requirements for managing contamination;
  - cost of remediation and redevelopment; and
  - efficient and timely decisions on contaminated sites and remediation certificate applications.
- The Alberta Government responded to these barriers by making changes to the *Municipal Government Act* and Remediation Regulation.

# Municipal Government Act

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- The *Municipal Government Act* was amended to add the following definition:
  - *Brownfield property means a commercial or industrial property which is, or possibly is, contaminated; is vacant, derelict or under-utilized; and is suitable for development or redevelopment for the general benefit of the municipality.*
- A council may pass a bylaw on a multiple-year basis to exempt or defer tax collection on brownfield properties, to encourage development or redevelopment for the general benefit of the municipality.
- The amendment came into force April 1, 2018.

# Remediation Regulation

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- On June 1, 2018, an Order in Council was signed to amend the Remediation Certificate Regulation.
- The regulation will be called the Remediation Regulation when the amendments come into effect on January 1, 2019.
- Amendments
  - clearly outline remediation requirements, and
  - incent community renewal by providing certainty for parties on whether a property is available for redevelopment.

# Remediation Regulation

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- Highlights include:
  1. Implement a voluntary site-based remediation certificate;
  2. Further describe the duty to take remedial measures per the *Environmental Protection and Enhancement Act* (EPEA) by
    - Introducing a requirement to either remediate a site within two years or submit a remedial action plan; and
    - Referring in regulation to guidance provided under the contaminated sites policy framework.
  3. Create an administrative closure letter for sites where no remediation is required to meet Alberta Tier 2 Soil and Groundwater Guidelines.
- This regulation is complementary to the Release Reporting Regulation, which outlines the duty to report under EPEA.



# Before and After

Current Regime	Regime as of January 1, 2019
Voluntary area-based remediation certificate.	Voluntary limited remediation certificate and site-based remediation certificate.
Duty to take remedial measures under EPEA.	Further description of duty to provide information to the Director and affected persons and requirement to submit a remedial action plan if a site is not remediated within two years.
Tier 1 and Tier 2 soil and groundwater guidelines referenced in regulation.	Addition of risk management plan guide, environmental site assessment standard and exposure control guide to regulation.
No administrative closure option for sites which did not require remediation to meet Tier 2 guidelines.	Tier 2 compliance letter (does not provide same regulatory closure as a remediation certificate).

# Guidelines in the Remediation Regulation

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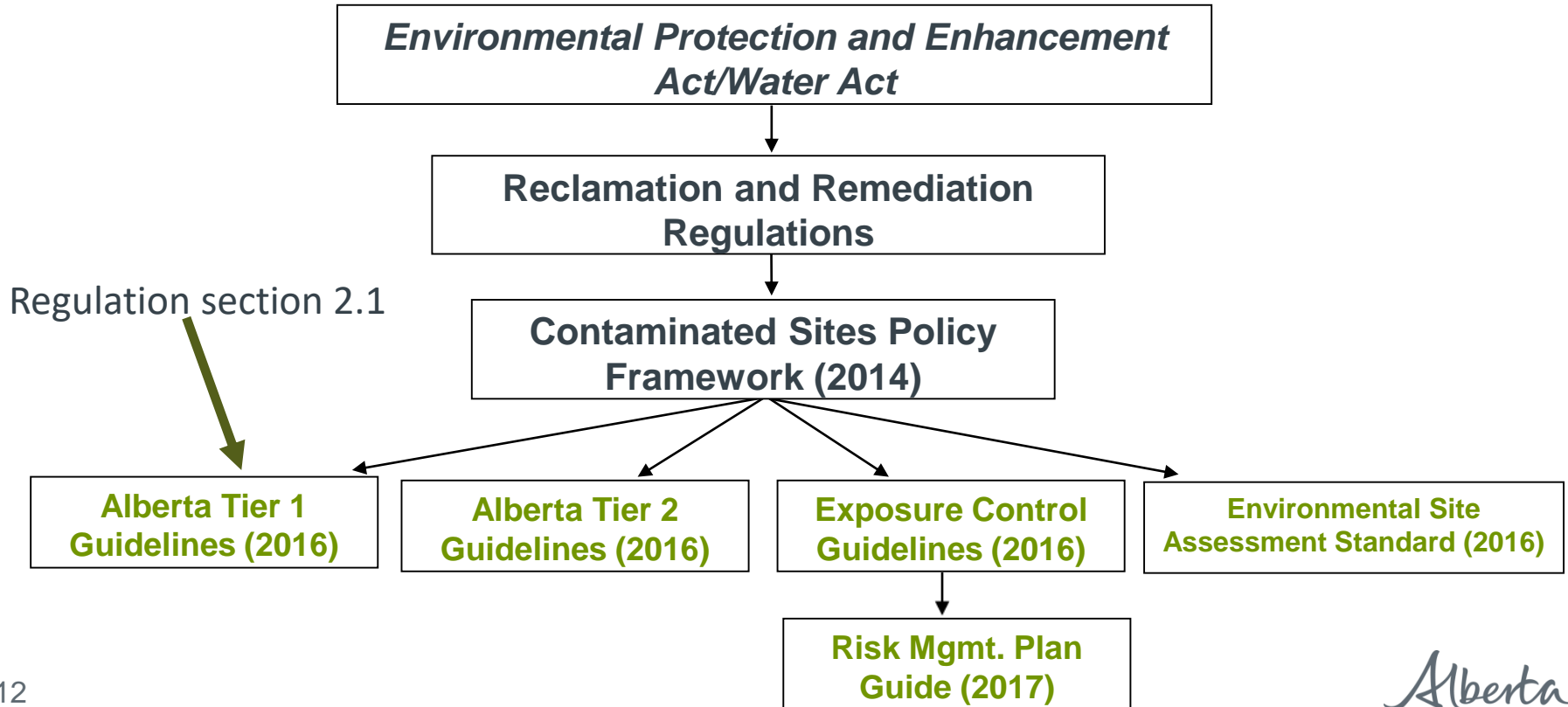
# Duty to take remedial measures, s. 112 EPEA

*Where a substance that may cause, is causing or has caused an adverse effect is released into the environment, the person responsible for the substance shall, as soon as that person becomes aware of or ought to have become aware of the release... shall repair, remedy and confine the effects of the substance... and remediate, manage, remove or otherwise dispose of the substance...*

**AND**

*restore the environment to a condition satisfactory to the Director.*

# Guidelines



# Tier 1 & Tier 2 Guidelines in the Regulation

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- Tier 1 is the standard for “may cause adverse effect” (Section 2.3).
- Tier 2 objectives may be used but are harder to describe generically in regulation because it is site specific (Section 2.4).
- Tier 2 without remediation is eligible for letter of compliance (Section 2.5 & 2.6).

# Tier 1 as mentioned in the Regulation

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*2.3(1) A substance release to soil or groundwater must be remediated to meet the requirements of the Alberta Tier 1 Soil and Groundwater Remediation Guidelines, including all applicable numerical soil and groundwater standards applicable to the land use set out in the Alberta Tier 1 Soil and Groundwater Remediation Guidelines.*

# Tier 2 as mentioned in the Regulation

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**2.4(1)** *A person may remediate area of land or site in accordance with the Alberta Tier 2 Soil and Groundwater Guidelines if,*

- the Alberta Tier 2 Soil and Groundwater Guidelines meets the equivalent protection of the environment and human health as outlined in the Alberta Tier 1 Soil and Groundwater Remediation Guidelines to the satisfaction of the Director, and*
- the area of land or site is remediated to the satisfaction of the Director.*



# Remediation Regulation Tier 2 Compliance Letter

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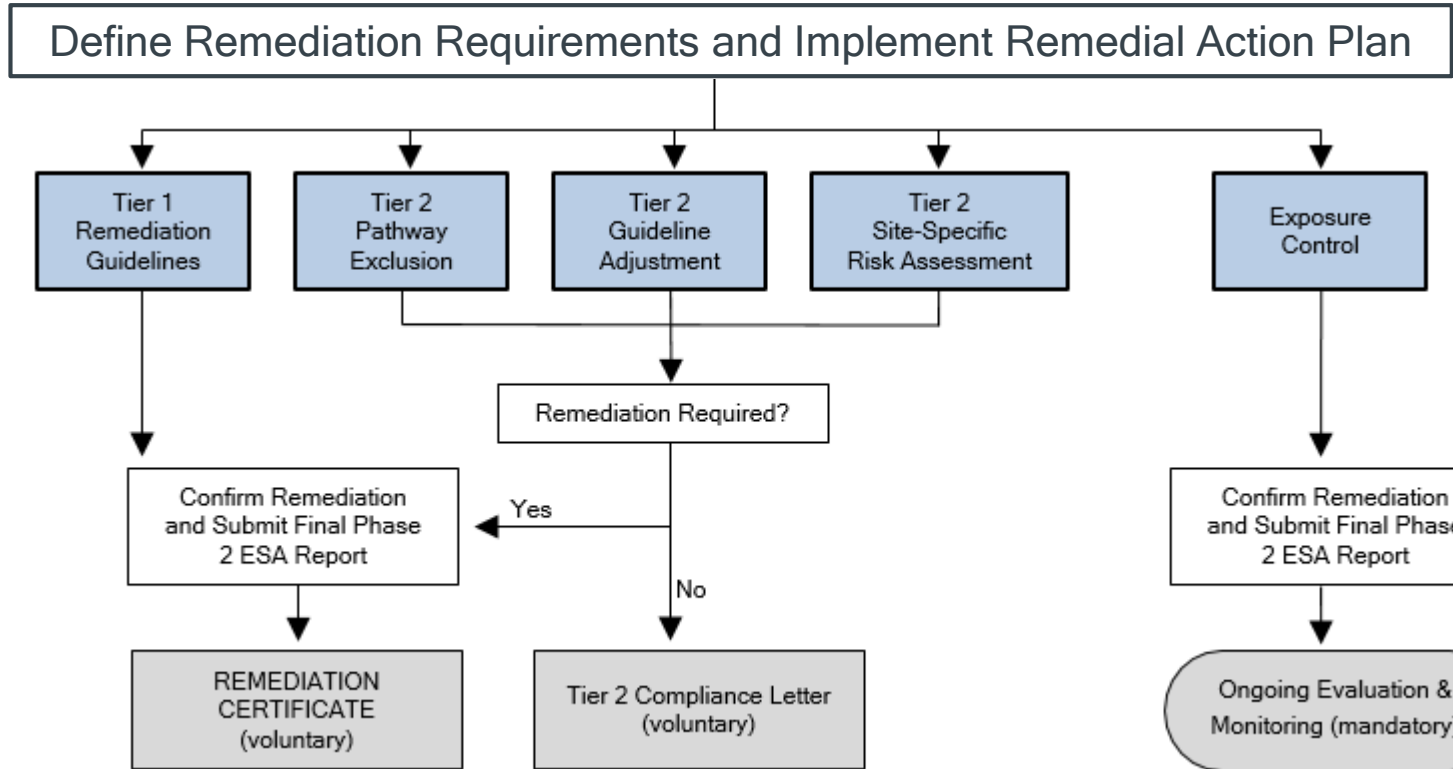


# Tier 2 Compliance in the Regulation

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**2.5(1)** *In this section “Alberta Tier 2 compliance letter” means a letter issued by the Director to a person responsible indicating that the area of land or site meets the Alberta Tier 2 Soil and Groundwater Remediation Guidelines and does not need to be remediated.*

# Tier 2 Eligibility



# Application Requirements in the Regulation

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**2.5(2)** *A person may apply for an Alberta Tier 2 compliance letter if they:*

- *Submit a complete Phase 1 and Phase 2 ESA,*
- *Demonstrate complete delineation, and*
- *Provide a Tier 2 Risk Assessment demonstrating no risk.*

**2.6** *A Director or inspector may issue a compliance letter if they are satisfied that there is no risk and no need for remediation.*

Questions?  
Comments?

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# Remediation Regulation

## *Duty to Take Remedial Measures*

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# Duty to Take Remedial Measures

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- When a person becomes aware, the person must (s. 2.2(1))
  - Submit a phase 2 assessment or,
  - Complete remediation to Tier 1 or Tier 2 and submit a remediation report.
- If remediation is not accomplished within two years of a release, a Remedial Action Plan (RAP) must be submitted that (s. 2.2(2))
  - Is in accordance with the guidelines, and
  - Specifies a timeline for completion.
- Director may modify or waive requirements (s. 2.2(6)).
- Requirement applies to sites reported after regulatory amendments come into effect (s. 2.2(7)).
  - Sites already reported continue to be managed through Director requirements under *EPEA* and a Director may request a RAP for older sites.



# Remediation Regulation DRAFT Remedial Action Plan Guide

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# Introduction: Remedial Action Plans

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- Purpose and Scope
- What are RAPs?
- Administrative Requirements
- Technical Requirements
- Summary



# Purpose and Scope



## Remedial Action Plan Guide

# Goal of a Remedial Action Plan

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- To describe:
  - *What is on the site?*
  - *What am I going to do about it?*
  - *When will I be done?*

***Environmental Protection and Enhancement Act  
Water Act***

**Reclamation and Remediation  
Regulations**

**Contaminated Sites Policy  
Framework (2014)**

**Alberta Tier 1  
Guidelines (2016)**

**Alberta Tier 2  
Guidelines (2016)**

**Exposure Control  
Guidelines (2016)**

**Risk Management  
Plan Guide (2017)**

**Environmental Site  
Assessment Standard  
(2016)**

**Remedial Action Plan  
Guide  
(DRAFT)**

*The Guide is being drafted – we want  
your input!*

# Administrative Requirements



## Remedial Action Plan Guide

# Administrative Requirements

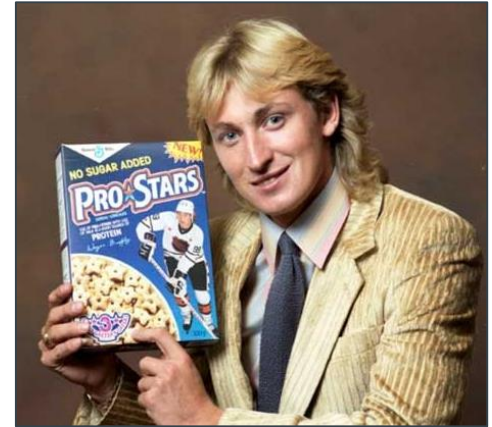
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- Executive Summary
  - Helps reader become acquainted with the site
  - Remediation requirements and site conditions
- Location and site identification
  - Should be self-explanatory, or is it?
- Tracking Info, aka Reference Number
  - File number(s)
  - Incident number(s)
- Person Responsible

# Administrative Requirements (cont.)

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- Environmental Professional
  - Pros know!
- Landowner and occupant
  - Site contacts
  - Those who dwell within
- Record of Site Condition
  - May not apply to all types of sites
- Outstanding legal requirements
  - The unresolved kind, not the exceptional kind



# Technical Requirements



## Remedial Action Plan Guide



# Technical Requirements

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- Guideline selection
  - What are end goals?
- Conceptual Site Model (CSM)
  - Visualization of location
- Contaminants of Potential Concern
  - What contaminants are there?
- Delineation
  - Where do contaminants occur?



# Technical Requirements (cont.)

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- Land use
  - Current and end land use(s)
- Source Control
  - Can re-contamination occur?
- Observation of adverse effects
  - Are there any?
  - Do any remain? (hopefully not)



*RAP Ingredients:  
What's there?  
What will be done?  
By when?*

Questions?  
Comments?

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# Remediation Regulation Remediation Certificates

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# Definition of “Site” (s.1(n))

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**Site** means land used in connection with an activity referred to in the Schedule of Activities in the *Environmental Protection and Enhancement Act* on which a substance is stored, treated, sold or used as a part of a commercial or industrial activity and includes all associated infrastructure;

# Definition of “Site”: Important Features

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- Used mainly for site-based remediation certificates.
- Some commercial activities not specifically named in section 2 but are included if there is a substance release under section 1, schedule of activities.
- Must include entire facility (associated infrastructure) regardless of current legal boundaries.
- **BUT:** cannot include transmission lines, roadways, rail lines, pipelines (3.1).

# Remediation Certificates - Limited

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- Remediation certificates continue to be voluntary. There is no requirement to apply.
- Limited certificate similar to the current area-based remediation certificate.
- Limited certificate is only available option if:
  - Definition of “site” is not met
  - Transmission line, pipeline, road right of way or railway
  - Incomplete Phase 1 or Phase 2 site assessment
  - Incomplete site remediation



# Remediation Certificates – Site-based

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- Applications must account for all areas of potential environmental concern regardless of property boundaries.
- Site based instrument is applicable to an entire activity and therefore must include all associated infrastructure regardless of current parcel of land.
- Off-site risk management may be included, but only if already accepted by Director (4.3).
- Section 3.2(1) allows exemption for site-based instrument for a “parcel of land” if:
  - Person can demonstrate the parcel was not associated with original activity in any way.
  - Person has exemption from Director before application.

*The Guide is being drafted – we want  
your input!*

# Remediation Regulation Remediation Certificate Guide

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# Required Documentation

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- Phase 1 Site Assessment.
- Detailed Phase 2 site assessment with complete delineation.
- Tier 2 risk assessment for any contaminants of potential concern where Tier 2 objectives were used.
- Remediation report that addresses all aspects of the Phase 2.
- Risk management plan for any off-site portion not remediated.
  - Must include letter of Director acceptance.
- Completed Application Form.

# Application Review

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- The Remediation Certificate review process anticipates that information has been submitted concerning the site.
  - If an application is submitted without already having reported a release, the file will be automatically deemed administratively incomplete.
  - If an application is submitted at the same time as a risk assessment, remedial action plan or risk management plan, the remediation certificate application will be put on hold until required reviews are complete.
    - NOTE: Remediation Certificate Reviewer cannot prioritize reviews such as for Tier 2 pathway exclusion, guideline adjustments and site-specific risk assessments.

# Administrative Section

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- Similar in content to previous guide
  - For limited, we are now looking at legal locations of “land that was original source of substance release”.
  - For “site” it must define the entire “site” as per definition
  - Requirement for release reporting reference number (1.0).

# Preliminary Questionnaire

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- Added to ensure reviewer is aware of factors that will influence technical review
  - Regulation section 2.2 allows the reviewer to review a remediation certificate for a “parcel of land” only. Simplifies need for delineation beyond property boundaries.
  - Old Phase 1 and Phase 2 site assessments must be reviewed before including in the application.
    - Not automatically rejected but automatically reviewed for relevance.

# Site Assessment Questionnaire

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- Assumes that Phase 1 and Phase 2 checklists have been submitted with report, information is not repeated.
- Identifies issues that must be completed in the application:
  - Full delineation.
  - Full understanding of site, infrastructure.
  - Complete borehole logs, analytical protocols, confirmatory sampling.



# Remediation Questionnaire

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- Similar to previous application
- Describe whether contaminants moved or treated, whether materials remained onsite, moved to a new location, or moved to a waste management facility
  - If not a waste management facility, specifically asks about status and location of moved materials.

# Risk Management Questionnaire

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- Risk Management is not part of the application review
  - Risk management plans for off-site risks must have been submitted before the application.
  - If application does not include a Director-acceptance letter for the plan, it will not be reviewed until that is received.
  - If a risk management plan is required and not available, the application will be considered administratively incomplete.

Questions?  
Comments?

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# *Next Steps*



# Draft Guides being developed:

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- To be released for public comment Fall 2018 and finalised by January 1, 2019:
  - Limited Remediation Certificate application form and guide
  - Site-based Remediation Certificate application form and guide
  - Tier 2 compliance letter guide
- To be released for public comment 2019:
  - Remedial Action Plan guide and checklist
- Updates also required in 2019:
  - Contaminated Sites Policy Framework, Risk Management Plan Guide, Exposure Control Guide and Environmental Site Assessment Standard.

Questions?  
Comments?

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Thank You!