



Canada Energy
Regulator

Régie de l'énergie
du Canada

CER Reported Contaminated Sites

and Remediation Operating Practices Update

Canada 



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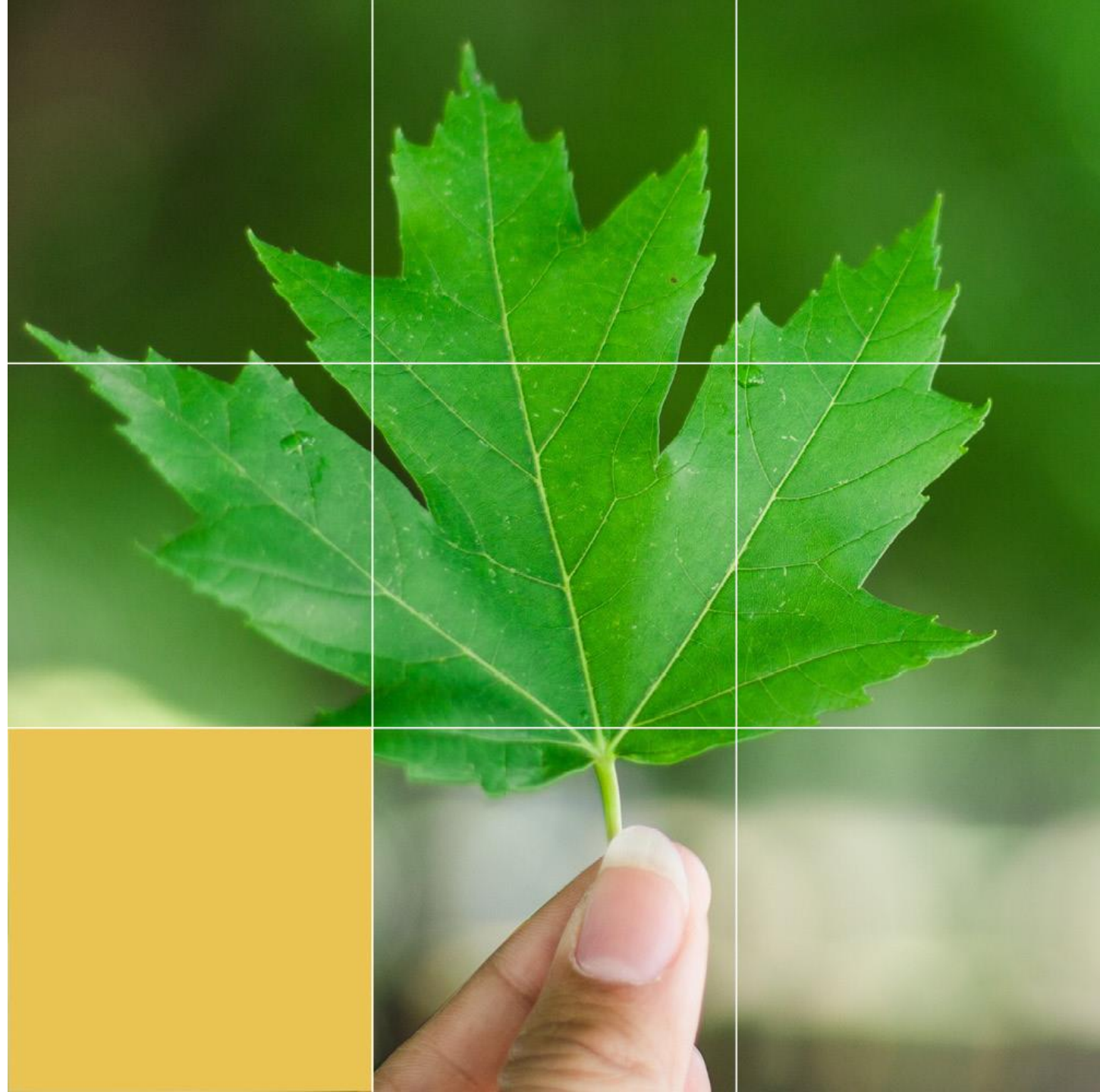
Canada 

RemTech East

Adele Houston

Environmental Protection,
Canada Energy Regulator
(CER)

31 May 2023



Our Mission and what we Regulate

We regulate pipelines, energy development and trade on behalf of Canadians in a way that protects the public and the environment while supporting efficient markets

CER-regulated Infrastructure

- Over 73,000 km of oil and gas pipelines
- 1,400 km of electrical power lines



The map is a graphical representation intended for general informational purposes only. Map produced by the CER - March 2021. Last updated on Mar 13



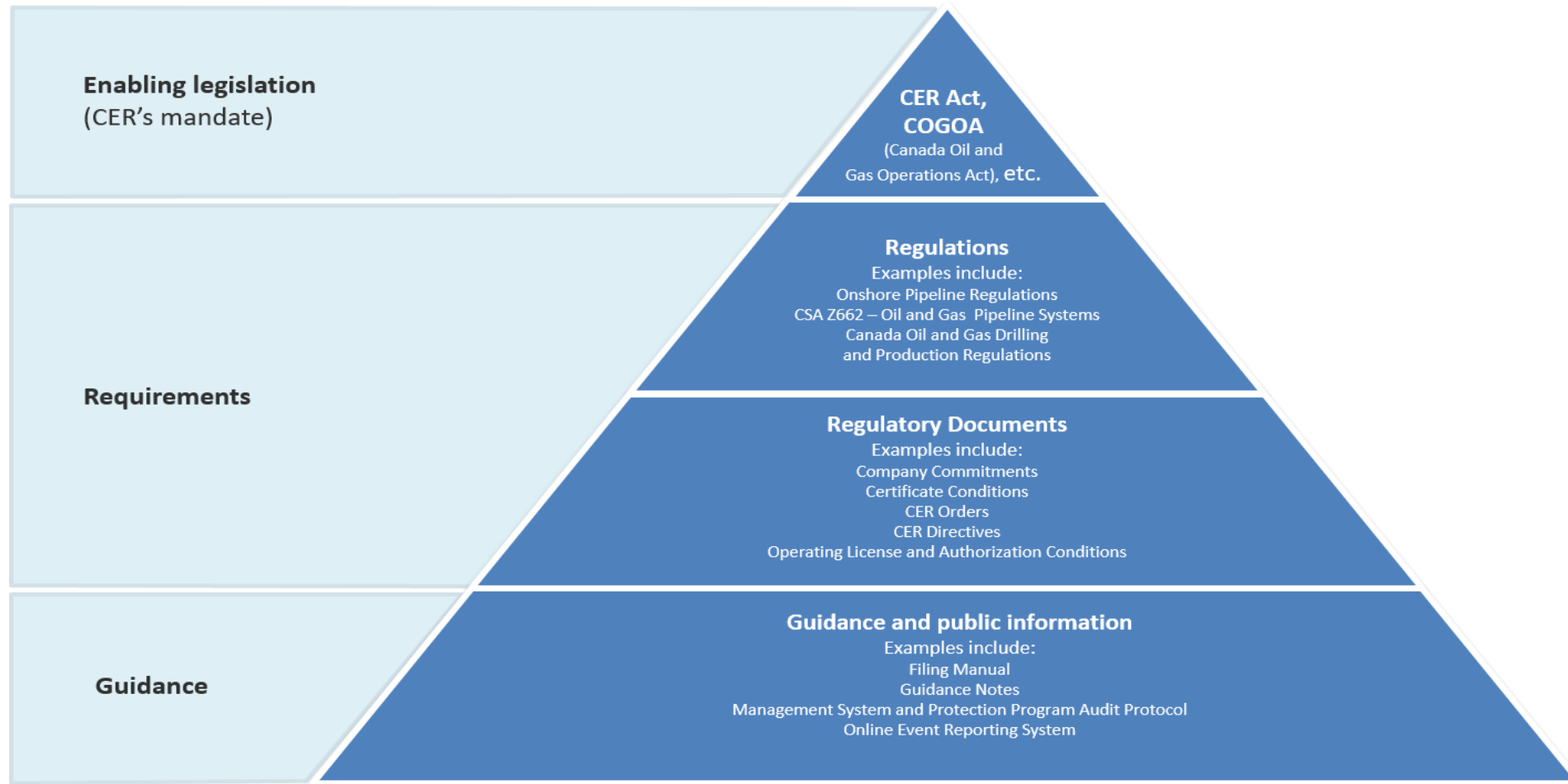
Regulatory Context

CER is responsible for making sure pipelines are constructed, operated, and abandoned in a safe and secure manner that protects people, property and the environment

- Canadian Energy Regulator Act (**CER Act**)
- Canada Oil and Gas Operations Act (**COGOA**)
- Oil and Gas Operations Act (**OGOA**)
- Onshore Pipeline Regulation (**OPR**) is performance-based



CER Regulatory Framework



Onshore Pipeline Regulations (OPR) - Environment

Section 48

A company shall develop, implement and maintain an environmental protection program that anticipates, prevents, manages and mitigates conditions that could adversely affect the environment

Section 6.5 (1)

Management System Elements

- Identify hazards, evaluate and manage potential risks, manage and mitigate contamination, etc.

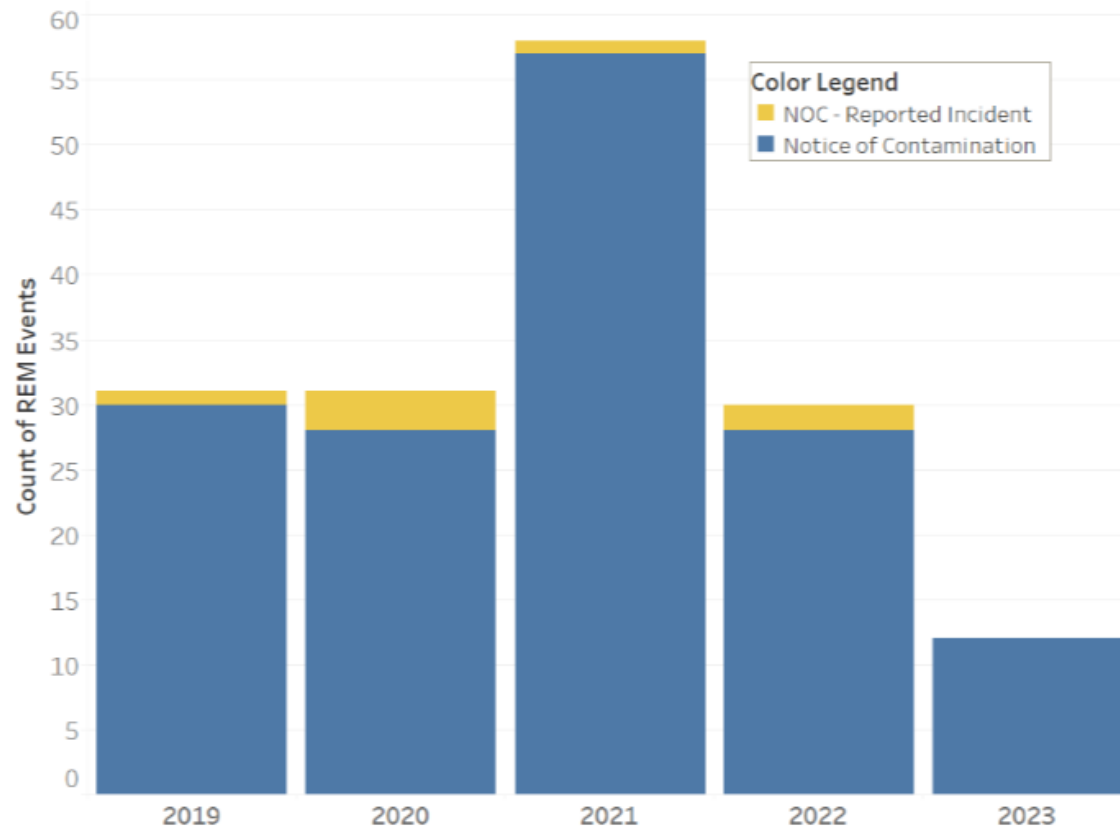
Compliance Verification

- Compliance meetings, inspections, report reviews, audits

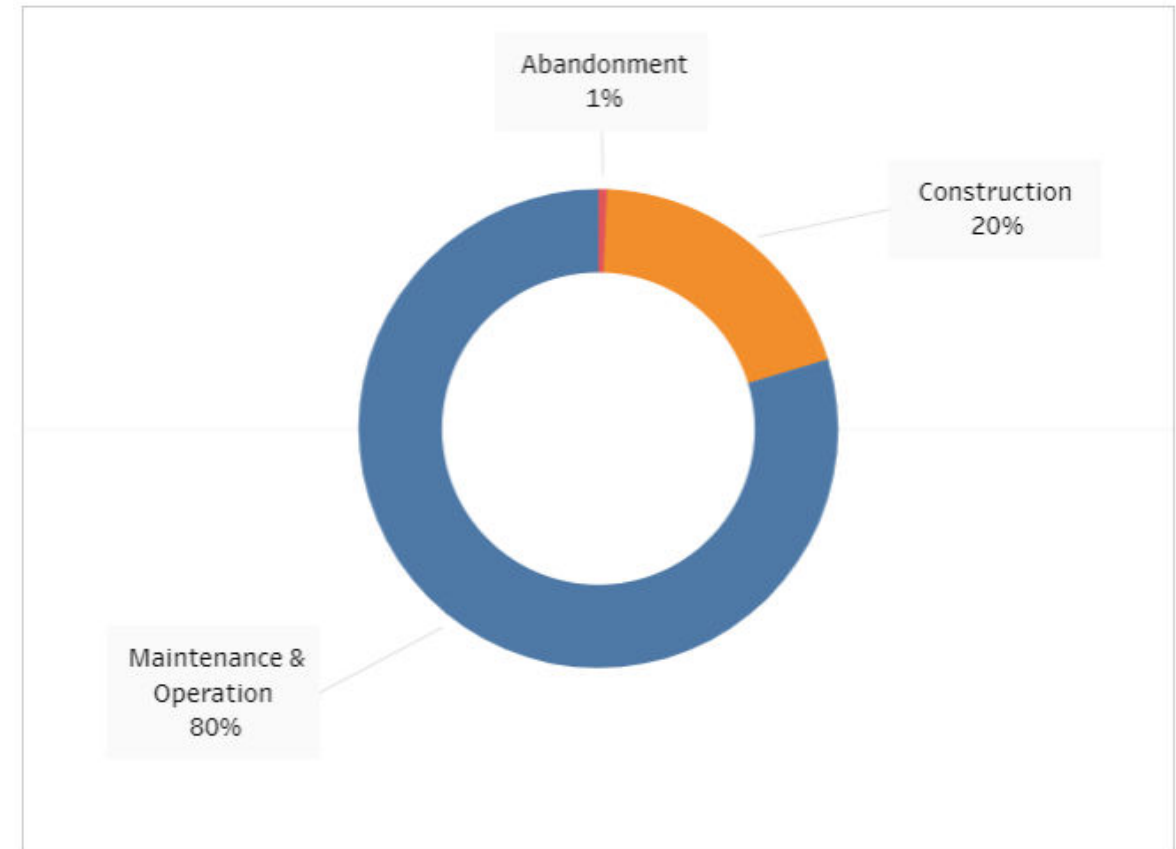


Contamination Reported to the CER

REM STATS by Year Reported



Reported Activity when Contamination Discovered



Contaminated Sites Information

[Pipeline Profiles](#)

[RegDocs](#)

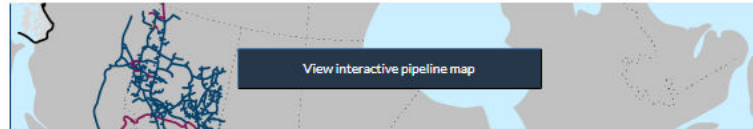
[Interactive Pipeline Map](#)

[CER Remediation Webpage](#)

Contaminated Sites Information

Pipeline Profiles

Explore key data and information for pipelines regulated by the Canada Energy Regulator, including use, safety and environment, tolls, and financials.



Select a pipeline profile to explore

Oil and Liquids

- [Aurora](#)
- [Cochin](#)
- [Enbridge Bakken](#)
- [Enbridge Line 9](#)
- [Enbridge Mainline](#)
- [Enbridge Norman Wells](#)
- [Express](#)
- [Genesis](#)
- [Keystone](#)
- [Milk River](#)
- [Montreal Pipeline](#)
- [Southern Lights](#)
- [Trans Mountain](#)
- [Trans-Northern](#)
- [Wascana](#)
- [Westspur](#)

Natural Gas

- [Alliance](#)
- [Emera Brunswick](#)
- [Foothills](#)
- [Many Islands](#)
- [Maritimes & Northeast](#)
- [NOVA Gas Transmission Ltd. \(NGTL\)](#)
- [TransCanada's Canadian Mainline](#)
- [Trans Québec & Maritimes](#)
- [Vector](#)
- [Westcoast](#)



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[CER Home](#) / [REGDOCS Home](#)

Explore BERDI


The Canada Energy Regulator's new [BERDI search tool](#) provides easy access to regulatory data on Canada's land and water, weather and wildlife, species at risk, environmental protection, public safety, and more.

Welcome to REGDOCS

REGDOCS is a regulatory database for activities and transactions conducted at the Canada Energy Regulator.


Search by Keyword(s):

Type the keyword you are searching for here

 Search

Exclude Receipts

Search by Document Number:

 Search

Examples: A12345, A12345-9, A1A1A1

Contaminated Sites Information

Interactive Pipeline Map

We have a vast network of pipelines in Canada that transport millions of litres of oil and gas every day. Any pipeline that crosses a provincial or international border falls under the federal regulation of the CER.

What this map shows

The map below shows the location of pipelines and data we have been collecting on incidents since 2008 that were reported to us under the [Onshore Pipeline Regulations](#) and [Processing Plant Regulations](#). The pipeline data shown represents the majority of federally regulated pipelines (about 90% of operating pipelines as of March 2017). The map will be updated to show additional pipelines as more digital location data becomes available.

A number of terms we use in our illustrations and graphics are common in industry and have specific meanings. Learn more in our [glossary](#) for this section.

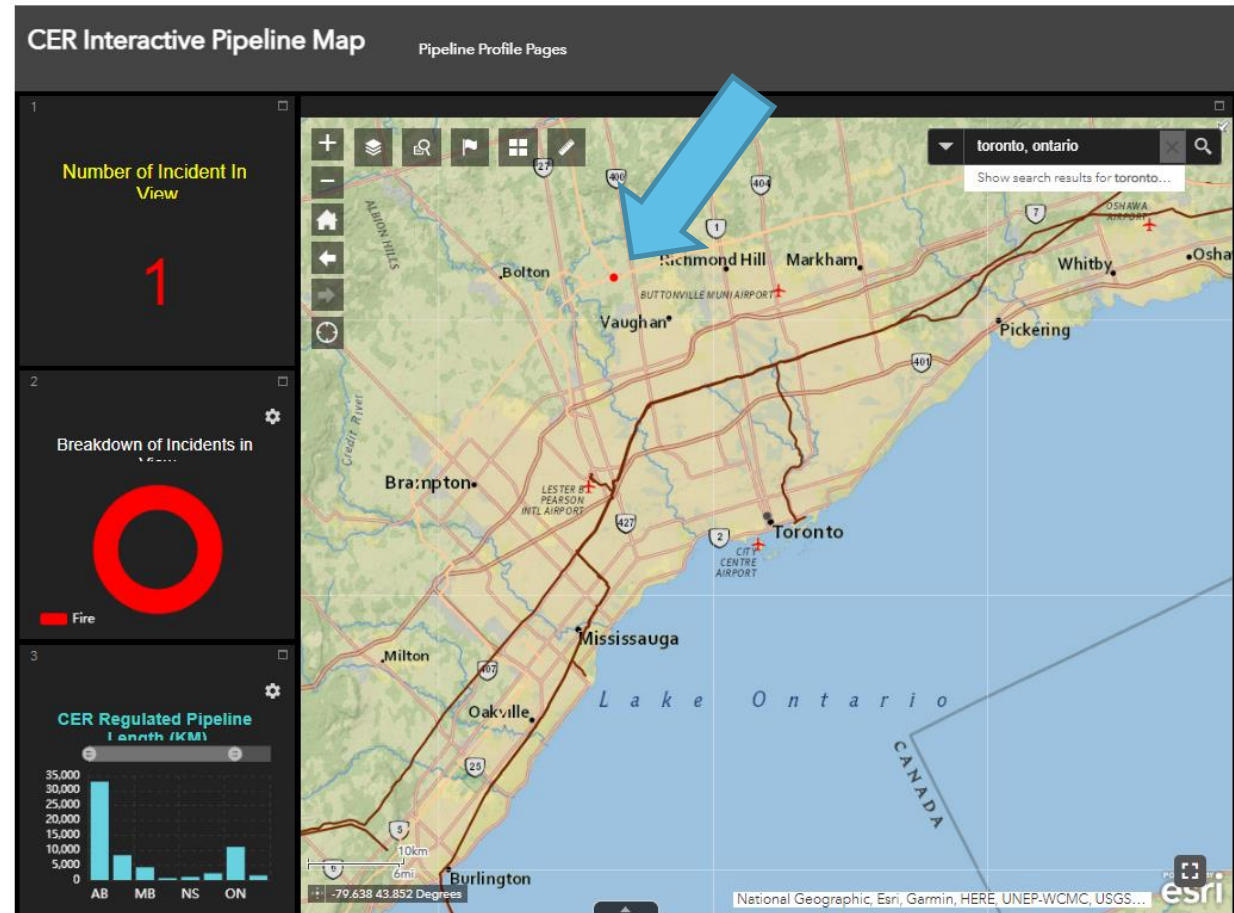
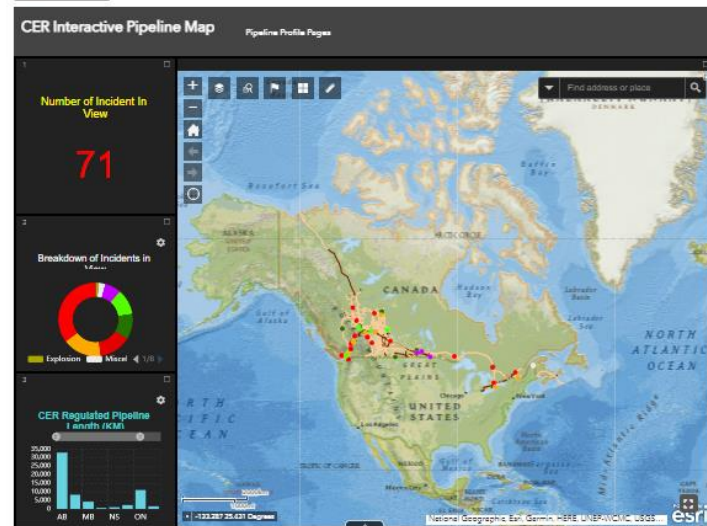
Download the incident data

The incident data used to create this map is available for people to conduct their own analysis and research. Visit the [Incident Data page](#) to download data from the current year or previous years.

View this map in the full browser window

Please note this will take you to a new page.

[Open the full map](#)



Contaminated Sites Information

Reporting

We require companies to report contamination they encounter. The CER 2020 Remediation Process Guide further explains what needs to be reported and what activities need to take place after contamination is reported.

To learn more about the Notices of Contamination that have been submitted to the CER, click on the button below.

[View the Notices of Contamination](#)

If a release occurs, companies need to follow the CER [Event Reporting Guidelines](#).

[Learn more about reporting releases to the CER.](#)

- To view the NOCs and annual updates that have been submitted to the CER visit [REGDOCS](#).
 - You can search by **Company – Notification of Contamination (Featured Item) – Year**. This will bring you to the list of NOCs and annual updates submitted by a company that calendar year. To search for all annual updates linked to the NOC, search using the REM number (ex. REM2021-000).
- NOC submitted since 15 August 2018 are also available as a [data set on Canada Open Government](#). The dataset is updated monthly. Where applicable, the dataset has been integrated with the CER's pipeline information product Pipeline Profiles (see the Safety and Environment section).

Remediation Process Guide (2020)

Important to have technical guidance to go along with performance-based regulation

RPG provides the **framework** by which companies can show they are meeting our requirements for environmental protection related to contamination

Remediation Process Guide



Contaminant Remediation Process

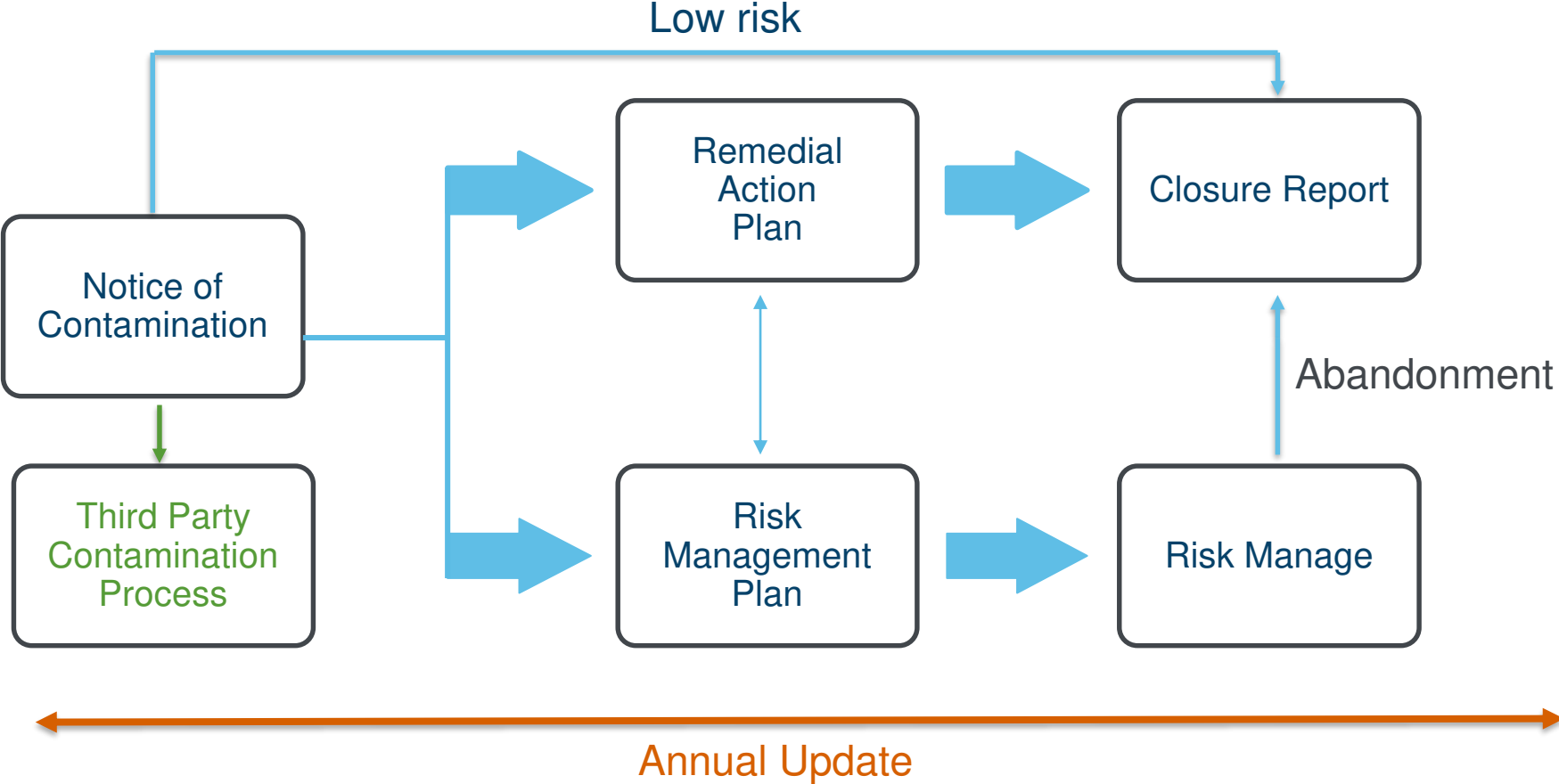
How the process begins:

- **Contamination is reported** to the CER in a notice of contamination (NOC) in the online event reporting system (OERS).

Two circumstances for submitting an NOC:

- Contamination is identified/encountered and **confirmed** by analytical testing
- Contamination associated with an incident **cannot be remediated** within 12 weeks of incident being reported

Remediation Process



Remediation Process

Notification and Engagement

- Companies **establish** a systematic and proactive approach to project-specific engagement with potentially affected persons and communities
- A **Record of Engagement** is a component of remedial action plans, risk management plans and closure plans

Annual Updates

- All **active** sites
- Submitted to the CER by **30 June** every year

Remediation Process

Supplemental Guidance

Bulletin 1: Third Party Contamination

- Reporting
- Manage contamination
- Evidence that contamination is third party

Updated Appendix H: Closure Report Worksheet

- Expanded section in background information and remediation criteria
- New section “Demonstration Contamination is Remediated”
- Integrated into document “Concordance Table” section

Remediation Process

Third Party Checklist

Third Party Contamination Checklist for Completing Reporting Requirements

Task	Response		Explanation / Justification for response
	Yes	No	
Section 9.1 Report Contamination			
1a. Has the entity which the reporting company believes to be responsible for the contamination been identified?	<input type="checkbox"/>	<input type="checkbox"/>	
1b. Has this entity been notified? If Yes, provide a record of notification with this checklist submission.	<input type="checkbox"/>	<input type="checkbox"/>	
2a. Has the contamination been reported to any other regulatory authorities since the submission of the NOC? If Yes, please provide the contact name(s) and regulatory authority or authorities in the notes. If No, provide further context / justification in the notes.	<input type="checkbox"/>	<input type="checkbox"/>	
2b. Has a record of notifying other regulatory authorities been provided to the CER? (i.e., a copy of an email or notes from a phone call to regulatory authority including date, time, name of individual contacted and file number).	<input type="checkbox"/>	<input type="checkbox"/>	
Section 9.2 Manage Contamination			
3. Were all reasonable precautions taken to ensure (i) worker safety and (ii) safety of other persons at or near the contaminated site while work was performed? Please provide a description of the precautions taken in the Notes.	<input type="checkbox"/>	<input type="checkbox"/>	
4. Will contaminated soils and/or liquids that were/will be transported off-site be disposed of pursuant to applicable laws, unless otherwise specifically exempted from such requirements pursuant to permits issued by regulatory authorities.	<input type="checkbox"/>	<input type="checkbox"/>	
5. Confirm that uncontaminated soil was/will be confirmed (with analytical data) to meet regulatory Remediation Criteria before being used to replace any contaminated material removed from the site.	<input type="checkbox"/>	<input type="checkbox"/>	

Remediation Process

Closure Report Worksheet

Appendix H Closure Report Worksheet Version 2.0

A company can seek a Remediation Closure Letter by submitting a Closure Report to the Canada Energy Regulator (CER). The Closure Report must demonstrate that acceptable Remediation Criteria and any site-specific conditions have been met, remedial measures or risk management controls are no longer required, and there are no potential adverse effects on people or the environment. The Closure Report should be standalone and contain sufficient supporting information and detail to demonstrate remediation has been achieved. The worksheet below replaces the Closure Report Worksheet published in Appendix H of the CER's [2020 Remediation Process Guide](#). Read more about Site Closure in Section 14.

Requirement	Response		Description	Reference location in Closure Report
	Yes	No		
Administrative				
Declaration Letter	<input type="checkbox"/>	<input type="checkbox"/>	The <i>2020 Remediation Process Guide</i> Appendix I provides a template for the Declaration Letter to be submitted with all Closure Reports submitted 01 January 2021 onward.	
Background				
Site background	<input type="checkbox"/>	<input type="checkbox"/>	Summarize site history, setting, source(s) of contamination and previous site investigations.	
Maps, figures and supporting documentation	<input type="checkbox"/>	<input type="checkbox"/>	Include site maps and figures relevant to the remedial activities, as applicable. Some examples include: <ul style="list-style-type: none"> • Site location • Site topography or drone imagery depicting topography • Previous extent of contamination and/or excavation footprint(s) • Sampling locations for all affected media • Final wall and base excavation drawings showing confirmatory sample locations • Cross-sectional diagrams to show geology and vertical and lateral contaminant delineation • Treatment/monitoring well locations • Groundwater contours and estimated flow direction • Borehole logs with monitoring well completion 	



Advancements

**Engagement
requirements
work toward
reconciliation
with
Indigenous
peoples**

**Continued
work with
provinces/
territories in
overlapping
jurisdictions**

**OERS and
Public posting
of
contaminated
sites
information**

**Third Party
Contamination
Process and
expanded
Closure
reporting
guidance**

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**Thank you to Lianne Germaine,
Andrew Benson, and Jennifer
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Questions?

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