

Draft Manual 021: Contamination Manual (released October 2021)

Stakeholder Feedback and AER Response



This document summarizes the feedback we received on the draft manual. All the feedback was evaluated. In some cases, changes were made to the manual. In others we tried to clarify here in this document. Even if feedback did not result in changes to the manual, it has been shared within the organization and with Alberta Environment and Parks for consideration in the future.

Stakeholder Feedback – Issue	Stakeholder	AER Response
1. Scope of the Contamination Management Manual		
What sectors does the manual apply to?	Industry	<p>Text in section 1.2 of the manual has been modified as follows:</p> <p>While the regulatory requirements described in the manual apply to all activities regulated by the AER, the report and closure application submission process described in sections 7 through 11 is specific to oil and gas, in situ, and pipelines activities.</p>
Can release reporting requirements and process be incorporated into this manual and OneStop?	Industry, Industry associations	<p>While summarized in the manual for completeness and convenience, assisting with the understanding of requirements and expectations for substance release reporting is not within the scope of the manual, which has been written in response to the <i>Remediation Regulation</i>.</p> <p>The duty to take remedial measures applies regardless of industry’s assessment of their duty to report a substance release.</p> <p>Any updates to the AER’s release reporting mechanisms and information on reporting thresholds will be communicated separately.</p> <p>Comments received regarding the interplay with reporting to the Canada Energy Regulator has been forwarded to them.</p>

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What is the AERs ability to set policy or requirements under <i>EPEA</i> ?	Indigenous community/organization.	<p>Under the <i>Responsible Energy Development Act (REDA)</i>, the AER administers and implements existing regulations and Government of Alberta policy. We work closely with AEP to assist in policy development, but policy is ultimately set by the Government of Alberta.</p> <p>The purpose of this manual is to assist industry in understanding the regulatory requirements and expectations for remediating contamination related to activities regulated by the AER. It does not set requirements or policy.</p>
How is “contamination” defined in the manual?	Industry associations, Industry	For the purposes of the manual, “contamination” refers to substances released into the environment that may cause, are causing, or have caused an adverse effect on soil and groundwater.
How are “Remedial Measures” defined? For example, an environmental site assessment is underway, and it has yet to be determined if remediation is necessary.	Industry associations, Industry, Indigenous community/association	<p>The steps taken as part of assessment and management of a released substance are collectively called remedial measures. As such, plans to carry out further environmental site assessments (ESAs) would form part of a remedial action plan. “Remediation” is a “remedial measure.”</p> <p>Under <i>EPEA</i>, persons responsible are required to take remedial measures when a substance that may cause, is causing, or has caused an adverse effect is released into the environment. This duty applies as soon as they become aware of or ought to have become aware of the release and until it is demonstrated that remedial measures are no longer required.</p>
How does the manual tie into the Canada Energy Regulator’s <i>Remediation Process Guide</i> ?	Industry, Industry associations	Some operators in Alberta may be involved in activities regulated by other bodies (e.g., the Canada Energy Regulator and Indian Oil and Gas Canada). It is recommended that operators undertake situation-specific dialogue with the relevant regulators. Information and contact details are provided on the following webpage: https://www.aer.ca/providing-information/news-and-resources/external-resources .

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2. Size / Layout of the Manual		
The manual is large. Could format changes such as an increased use of appendices be considered?	Industry, Industry associations	<p>The AER sees value in the material as presented. This includes</p> <ul style="list-style-type: none"> • a summary of pre-existing requirements from across many relevant regulatory documents and • advice on how to efficiently demonstrate to the AER that those requirements have been met. <p>The manual has been structured to provide a summary of key concepts and regulatory requirements followed by a description of the stages. Examples are given in an appendix.</p> <p>While some sections are on the lengthy side, we feel they are commensurate with the length and complexity of the subject matter.</p>
It is not clear to me when certain requirements apply at a site.	Industry	Often outcomes from multiple stages can be achieved simultaneously. These overlapping activities are shown in the time bars on the right of figure 1.
3. Transparency of Information / Stakeholder Engagement		
Sharing information with landowners and other stakeholders at the time of discovery may be inefficient and overwhelming.	Industry, Industry associations	<p>Section 2.1 of the <i>Remediation Regulation</i> requires that new information about the impact of a released substance to a person or land be reported to the affected person at the time of discovery.</p> <p>A conceptual site model supports an assessment of the risk to human health and the environment posed by contamination and can assist in communication with landowners and other stakeholders.</p>

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<p>How does the AER assist with stakeholder engagement?</p> <p>Is contamination management information publicly available?</p>	<p>Indigenous community/association, Industry, Industry associations, Private individuals</p>	<p>It is the duty of the “person responsible” to engage with “affected persons.”</p> <p>Public accessibility to contamination information is covered in section 13 of the manual.</p> <p>Information on spills and complaints is made publicly available via the AER Products and Services Catalogue:</p> <p>https://www1.aer.ca/ProductCatalogue/215.html</p> <p>Since July 2021, the AER Record of Site Condition and associated reports are in OneStop and can be accessed through the application query:</p> <p>https://www1.aer.ca/PubDocs/#/application-query</p> <p>Before July 2021, contamination-related information was made publicly available through the Environmental Site Assessment Repository (ESAR):</p> <p>https://www.alberta.ca/environmental-site-assessment-repository.aspx#jumplinks-2</p>
<p>4. When AER expects additional details</p>		
<p>Why should “new information” be reported to the AER? This is not an effective use of resources.</p>	<p>Industry, Industry associations</p>	<p>This reporting is required under section 2.1 of the <i>Remediation Regulation</i>.</p> <p>The Record of Site Condition aids in the efficient reporting of new information and is now available on the OneStop platform.</p>

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Why does the AER require more detailed Remedial Action Plans and Risk Management Plans in certain situations (e.g., presence of light non-aqueous phase liquids)?	Industry, Industry associations	Sections 8.3 and 9.2.1 of the manual lay out the desired outcomes of remedial action and risk management plans. The level of detail of the plan should be proportionate to the complexity and seriousness of the situation. Section 8.3, specifically, lists examples of situations where additional detail is likely warranted.
5. AER review of Tier 2 guidelines		
How is “land use” defined? How does traditional land use factor into assessment of risk?	Private individuals, Indigenous community/association	<p>Categories (e.g., agricultural, commercial) and exposure assumptions are defined in the Alberta Tier 1 Soil and Groundwater Remediation Guidelines.</p> <p>The following text (in red) has been added to section 3 of the manual: Where site assessments identify the presence of other influential exposure pathways, including consideration of traditional knowledge and land use associated with Indigenous communities and populations, Tier 2 guidelines may need to be developed. This is drawn from the draft GoA SSRA guide.</p>

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When does the AER provide assurance that Tier 2 guidelines have been appropriately applied?	Industry, Industry associations	<p>Section 3.3 of the manual, “Understanding Risk of Adverse Effect to Human Health and the Environment,” has been revised to improve clarity around timing of AER reviews. Refer to section 3.2 for information on competency of environmental professionals and AER reliance on submissions.</p> <p>The onus is on the licensee to ensure guidelines are applied appropriately along with supporting documentation when using the more prescriptive Tier 2 guideline option for pathway exclusion and guideline adjustments.</p> <p>The AER will provide assurance that Tier 2 guidelines have been applied appropriately and that there is adequate supporting evidence in the following circumstances:</p> <ul style="list-style-type: none"> • Tier 2 site-specific risk assessment (upon request via Onestop) • upon receipt of applications for Tier 2 compliance letters or remediation certificates <p>Section 11.5.1 provides specific details on the AER’s evaluation of contamination information for reclamation certificates.</p> <p>General questions regarding the use of the Tier 2 guidelines can be submitted to csusubmissions@aer.ca.</p>
How will the AER further facilitate use of Tier 2 guidelines?	Industry, Industry associations	We are exploring options with Alberta Environment and Parks; these may include training workshops, enhancements to web material, and other educational approaches.
6. General Points of Clarification		
Suggestions were given for improvements to figure 1.	Industry	Edits were made to better show the relationship between exposure control and remediation and to give more information on report submission mechanisms.

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Concern that Tier 1 guideline exceedances are being newly interpreted as a triggering duties under section 112 of <i>EPEA</i> .	CAPP & EPAC	<p>Section 3 of the manual reiterates the existing contents of the <i>Contaminated Sites Policy Framework</i>: “Where a substance has been released that causes an exceedance of the Alberta Tier 1 guidelines in soil or groundwater, it has the potential for adverse effect, unless otherwise demonstrated through the Alberta Tier 2 process in a manner acceptable to the Director that there is no potential for adverse effect.”</p> <p>Additional text has been added to section 4 regarding the discovery stage for suspected and known substance releases – as shown on figure 1.</p> <p>If there are outstanding remedial measures, a remedial action plan (RAP) may be used to describe plans to further assess a situation.</p> <p>In many circumstances, further environmental site assessment work, including an evaluation against background conditions or using the Alberta Tier 2 Soil and Groundwater Remediation Guidelines can show that remediation is not required. Plans to further assess a site can be illustrated in a conceptual site model.</p>

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<p>Concern that Tier 1 guideline exceedances are being newly interpreted as a triggering the duty to report a release pursuant to section 110 of <i>EPEA</i>.</p>	<p>CAPP & EPAC</p>	<p>As set out in the manual, the requirements under section 112 of <i>EPEA</i> (duty to take remedial measures) and the <i>Remediation Regulation</i> are in addition to release reporting requirements. While release reporting requirements are discussed in the manual at a high level, they are not the focus of the manual. Furthermore, the manual is provided for information purposes only and does not create, modify, or waive regulatory requirements.</p> <p>Section 3 of the manual simply reiterates the existing contents of the Government of Alberta’s <i>Contaminated Sites Policy Framework</i>: “Where a substance has been released that causes an exceedance of the Alberta Tier 1 guidelines in soil or groundwater, it has the potential for adverse effect, unless otherwise demonstrated through the Alberta Tier 2 process in a manner acceptable to the Director that there is no potential for adverse effect.”</p> <p>Additional text has been added to section 4 regarding the discovery stage for suspected and known substance releases – as shown on figure 1.</p> <p>If there are outstanding remedial measures, a remedial action plan (RAP) may be used to describe plans to further assess a situation.</p> <p>In many circumstances, further environmental site assessment work, including an evaluation against background conditions or using the Tier 2 guidelines can show that remediation is not required. Plans to further assess a site can be illustrated in a conceptual site model.</p>

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CAPP and EPAC reference an Alberta Provincial Court decision <i>R. v. Edmonton (City of)</i> in connection with their assumption that Tier 1 guidelines are a “guidepost” whereby licensees evaluate the substance release using professional judgement to assess the likelihood of adverse effects.	CAPP & EPAC	<p>Where industry may previously have kept their “due diligence” work in house, the <i>Remediation Regulation</i> requires the AER be updated in real time as remedial measures for substance releases are undertaken; this includes environmental site assessments.</p> <p>Combined with the stand up of contamination management in the IDA framework (the Record of Site Condition on OneStop, for example), a key outcome of the manual is to enable the efficient provision of this important information to the AER.</p> <p>While undertaking remedial measures in response to a substance release to the environment, industry may also determine that the release is reportable.</p>
What is the connection between regulatory requirements for known substance releases and those that are suspected and then confirmed, timing of source control, for example?	Industry, Industry associations	<p>According to section 112 of <i>EPEA</i> (and further reiterated in sections 1.1 and 3.1 of the manual), the duty to take remedial measures is triggered when the person responsible becomes aware of, or ought to have become aware of, a substance release. This is further illustrated as the “Discovery” stage in figure 1.</p> <p>Section 6.2 applies to source control during the initial response stage, and section 8.2.1 applies to source control during the contamination management stage.</p>
Where are the requirements to delineate a substance release defined?	Industry	Requirements for understanding the distribution of contaminant mass in the environment (delineation) are given in the <i>Environmental Site Assessment Standard</i> , Alberta Tier 1 guidelines, and the <i>Contaminated Sites Policy Framework</i> . The manual only summarizes them.
The submission of both remedial action plans and risk management plans is inefficient.	Industry	A RAP that describes an acceptable strategy for contamination management will also demonstrate that adequate exposure control measures are in place. The elements of a RAP can be presented in a risk management plan (RMP), so where a situation requires a RMP to be submitted to the AER, a RAP is not expected to be presented separately (provided all the elements of a RAP are present).

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Are there requirements to remediate within a certain timeframe? Why does the AER require risk management plans?	Industry	<p>While the <i>Remediation Regulation</i> does not set timelines for remediation, they must be included as part of a RAP. As long as risk is adequately understood and managed, conducting remediation at end-of-life may be appropriate. As detailed in section 9.2.1, in certain circumstances, we may request an appropriately scaled RMP be submitted via OneStop.</p> <p>Note: sites with ongoing risk management (i.e., restrictions on land use) are not eligible for closure.</p>
Aside from contamination management, including remediation, what other duties are there to restore a substance release?	Private individual, Industry, Industry associations, Indigenous community/association	As described in section 1.1 of the manual, under <i>EPEA</i> , along with duties to take all reasonable measures to repair, remedy, and confine the effects of a substance, and remediate, manage, remove, or otherwise dispose of the substance to prevent an adverse effect or further adverse effect, industry must also restore the environment to a satisfactory condition. This might include ensuring an adequate diversity of vegetation species in a substance release affected area, for example.
Where can the remediation regulation closure instruments described in the manual be used?	Industry	Remediation certificates and Tier 2 compliance letters are described in section 11 of the manual and are the contamination closure options that are available for land as described in the <i>Remediation Regulation</i> . This includes areas affected by a substance release along pipeline rights-of-way.
What is the AERs compliance assurance approach to contamination management?	Private individual	See section 12 of the manual.
The Public Notice of Application tool and the Publication of Decision tool are difficult to use.	Private individual	We are looking at these tools and will do what we can to make them easier to use. Further information on public access to information is described in section 13.
Appendices – more examples would be useful	Industry	Additional materials may be developed in the future, including web copy, fact sheets, workshops, etc.